EFFECTIVENESS OF PREVENTIVE COUNSELLING IN ADDRESSING PUBLIC SECONDARY SCHOOL STUDENTS' PROBLEM BEHAVIORS IN IGEMBE SOUTH SUB-COUNTY KENYA

HENRY KIAMBATI M'ENG'ANG'A

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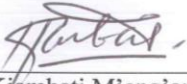
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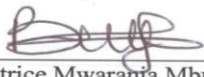
DECLARATION AND RECOMMENDATIONS

Declaration

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

Signature _____ Date 16/09/2019

Henry Kiambati M'eng'ang'a
EMI6/07114/11

Recommendation

This Thesis has been examined, passed and submitted with our approval as University Supervisors.

Signature _____ Date 10/09/2019

Dr Beatrice Mwarania Mburugu
Department of Education
Chuka University

Signature _____ Date 10/09/2019

Dr John Mwithalii Kamoyo
Department of Education
Chuka University

DEDICATION

To God who gave me the physical and mental strength. To my beloved wife Saweria Akui, our children Nkirote, Kinya, Murangiri, Muchui and Mutugi for their love and support. To My dear parents M'eng'ang'a and Kaario who laid the foundation I'm building on.

ACKNOWLEDGEMENT

ABSTRACT

Addressing and dealing with the perennial students' problem behaviors have become a major challenge in secondary schools. The conventional counselling approaches applied deals with the students who already had developed problem behaviors and little done in preventing and reducing the occurrence of the problem behaviors in students. This is indicated by the recurrence of common deviant behaviors like drug and substances abuse; teenage premarital sex and pregnancy; absenteeism, truancy and dropout; dishonesty; violence and arson witnessed in secondary schools. Preventive counselling operate at three levels of problem behaviors where primary preventive approach deals with students having no signs of behavioral problem in order to prevent it from occurring; secondary preventive approach targets students showing early signs and onset of behavioral problems and address them to stop maladjusted behaviors while the tertiary preventive approach concerns those going through the painful consequences of the behavioral problems, rehabilitate and help them to recover, cope and adjust and to positive behavior changes. This study therefore sought to establish the effectiveness of preventive counselling interventions in addressing these common behavioral problems in public secondary school students in Igembe South Sub-County. The study adapted a descriptive survey research design and involved 42 public secondary schools with a total enrolment of 8,017 students. Accessible population of the study was 1,974 form three students from which a sample of 317 respondents was drawn to participate in the study through simple random sampling. Further 15 teacher counsellors and 15 deputy principals from the selected schools were purposively sampled to participate in the study. The study had a total sample of 347 respondents. Data was collected using questionnaires. To ensure validity of the instruments, the researcher sought expert judgement and opinion from the university supervisors and other experts in addition to searching relevant literature in determining the content, construct and face validities. To test the reliability of the instruments, a pilot study was conducted in three sampled secondary schools in Igembe North Sub-County which had similar conditions. Cronbach's alpha coefficient method was used to estimate the internal consistency and reliability of the instruments. The reliability coefficients of 0.903, 0.875 and 0.794 were obtained for the students, teacher counsellors and deputy principals respectively. An average reliability coefficient of alpha scale of 0.857 was arrived at indicating that the instruments used were reliable. Data collected was organised, collated and analysed using the Statistical Package for Social Sciences (SPSS) version 20.0 and presented using frequency tables, percentages, charts and graphs. The findings showed that the three preventive counselling approaches were effective in addressing various aspects of secondary school students' problem behaviors. Primary preventive counselling rated at 78.1%; secondary preventive counselling at 74.7% and tertiary preventive counselling with 75.4%. From the study findings, the researcher recommends empowerment of trained teacher counsellors specifically with more emphasis on the preventive counselling approaches in order to enable them effective address students' problem behaviors. A favourable counselling environment should be set in all secondary schools to make students willingly, comfortably and voluntarily seek guidance and counselling and ensure teacher counsellors efficiently address students counselling needs. The government policy makers should work in consultation with all stakeholders to develop proper framework ensures that all the preventive counselling approaches are effected well in order to address all the students' problem behaviors before they become severe and cause more psychological, social, moral, and physical damage to the students, schools and the society.

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ABBREVIATIONS AND ACRONYMS

AAAPP	American Association of Applied and Preventive Psychology
APA	American Psychological Association
B.O.M	Board of Management
CDC	Centre for Disease Control
CDCP	Centre for Disease Control and Prevention
EFA	Education for All
F.D.S. E	Free Day Secondary Education
F.P. E	Free Primary Education
G and C	Guidance and Counselling
IDPs	Internally Displaced Persons
IOM	Institute of Medicine
MI	Medical Institute
MOEST	Ministry of Education Science and Technology
N.S.N.R.C	National Social Norm Resource Centre
NACOSTI	National Council for Science, Technology and Innovations
NRC	National Research Centre
STIs	Sexually Transmitted Infections
T.S.C	Teachers Service Commission
U. S	United States
U.S. A	United States of America
UNESCO	United Nations Education Scientific and Cultural Organization
W.H. O	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Guidance and counselling is a broad term that generally describes the approaches used to help solve and alleviate the problems affecting the individual's physical, emotional and mental wellbeing to bring about behavior change and transformation of the individual or group (Mutie and Ndambuki, 2004; Wango, 2006). Guidance and Counselling is carried out at various levels of human life. It uses different theoretical approaches, strategies and interventions at each level targeting individuals, groups and populations depending on the behavioral or psychological wellbeing (Mutie and Ndambuki, 2004; Wango, 2006). These include Group Counselling; Peer Counselling; Family Counselling; Crisis Counselling; Bereavement Counselling and Preventive Counselling. Mainly the conventional counsellors offer corrective and rehabilitative solutions rather than preventing the problems behaviors and their consequences to the individuals or society. The interventions only focus on anticipation and avoidance of human psychosocial conflicts and problems (Mutie and Ndambuki, 2004; Wango, 2006)

According to Caplan (1964) preventive counselling is mainly concerned with identifying, handling, addressing and reducing problem behaviors. These are behaviors that are not acceptable by the societal standards, norms, morals, values, and ethics. Such behaviors could be detrimental to the individual or society's wellbeing. Caplan (1964) brought forth three approaches that are applicable to individuals at different levels of the psychological disorders. These approaches are primary, secondary and tertiary prevention that are discussed in detail in this study. The approaches aim to control reduce or stop the problem behaviors from actually occurring as opposed to conventional guidance and counselling approaches that are only applied to remedy or treat problems that have already occurred. When problem behaviors like absenteeism, truancy, drugs and alcohol abuse, adolescent sex and teenage pregnancies, violence and arson happen, they greatly affect the students and the parents directly (Njoroge, 2005; Kyalo, 2010).

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The concept of prevention was initially targeted at the psychological or mental disorders and illnesses (Conyne R.K. 2004). It can also be applied in behaviors to help reduce problem behaviors and enhance positive behavior development in individual students and the society. Effective preventive counselling should not only aim at the classroom setup but also the school-wide environment and programmes. It should focus not only on particular problem behavior but a wide range of problem behaviors of students in secondary schools (Gottfredson, 2001). There is great need to develop resources that directly aim at how to practically apply the preventive approaches in creating effective programmes that help to reduce and prevent the conditions that lead to the students' problem behaviors in secondary schools. As the English saying that prevention is better than cure, Maxim, (1973) puts it that "an ounce of prevention is better than a pound of cure" stressing the importance and need for preventive counselling in addressing problem behaviors.

Globally, the 20th century came with changes and revolutions that were taking place in all circles of human living. These resulted to socio-economic, health, mental and emotional problems, human distress and substances abuses affecting individuals, groups and general population. The education sector also had its share with the changes in policies that resulted to a myriad of problem behaviors in the schools. In Europe and America, school experienced increased physical and arms related violence, crime and thefts, drugs and alcohol abuse and juvenile delinquencies (Nansel, 2001; Gottfredson, 2001). The developments in African education, especially the opportunity for Free and Universal Education, have resulted in a new scale of problems behaviors in schools and the nations at large. Many students have little understanding of themselves, their socio-economic, moral and physical environments and go to school without knowing what they are supposed to do. They also take long to grasp and understand what is taught by the teachers in school. This greatly influences their behavioral development and leads to increased students' problem behaviors.

 In Nigeria, the changes in the policies and education system in the country also brought up challenges that influenced guidance and counselling in the schools. Much effort was put in career guidance and development ignoring the effects of behavior changes that came with it (Aleude, 2005). The country registered increased forms of students'

misbehaviors in schools according to Nakpodia, (2010) and Okiemute, (2011). In South African schools, despite the use of conventional counselling and punishment methods, there have been increased problem behaviors characterized by misbehaviors, school dropouts and violence (Maphosa and Kuttickattu, 2011).

In Tanzania and other East African countries, much emphasis was put in addressing career issues, making good choices of courses, high schools and college placement rather than preventing and overcoming the challenges of behavioral problems. The consequences of ignoring the emerging problem behaviors are mainly seen in increased indiscipline and poor academic results in the schools (Makinde, 1998; Sima, 2004).

In Kenya, more attention and funding was given to career guidance, remediation, crisis interventions, bereavement counselling, and other psychological therapies with less done in preventing students' problem behaviors in secondary schools. This is shown by what happens when there is a major crisis in the schools for example the St. Kizito mixed secondary school incidence (3rd July 1991) in which several girls were not only raped by the boys but also died. Other severe cases include Bombolulu girls' secondary (2000) and Kyanguli boy's secondary (2001) where over 30 girls and 67 boys perished in dormitory fire tragedies respectively (Githongo, 1999). Forty-one students from various schools were arrested for involving themselves in deviant sexual behaviors, alcohol and drug abuse inside a Kirinyaga bound public service Bus (NTV and Daily Nation 5th August 2015). Over 500 students aged between 12 and 18 years caught in an underground hall at a Brothel in Eldoret town drunk, abusing all sorts of drugs and involved in promiscuous sexual activities as was evidenced by condoms strewn on the floor (Citizen TV 7th October 2015). In Kisumu eight students (3 boys and 5 girls) locked themselves in a house for almost a month when teachers were on strike (Daily Nation 9th October 2015).

In June to August 2016 the Kenya witnessed an upsurge of violence in schools leading to burning of dormitories and destruction of property. The worst incident was in Itierio Boys secondary school where students razed down seven dormitories. Meru County also witnessed destruction of school property by irate students believed to be under the influence of intoxication and drug abuse. The cases in Meru School, Katheri Boys,

Gikumene Girls, Ontulili boys, Mikinduri Girls and many others could be some of the consequences of ignoring preventive counselling in school and at home. Igembe South sub-county has not been left behind by this wave of violence and destruction of property in secondary schools. Students in Kieiya Day and Kirimene Day secondary school caused unrest, demonstrated to the Sub-county education offices and prevented the principals from carrying out their normal responsibilities by banishing them and threatening their lives. In Igembe and Burieruri Boys secondary schools there were several attempts to burn the dormitories by deviant students. Njia boys and St Rita girl's unrest and consequent suspension of students from school are other cases of the consequences of students' problem behaviors (CQASO Report on unrest in schools Meru county 2015-2016).

Drugs and substances abuse, violence and gross misbehaviors, adolescence sex and teenage pregnancies, chronic absenteeism, increased school dropout and juvenile crimes among others are the major problem behaviors evident in schools in the Sub-County (DQASO report Igembe South, 2015-2016). Such unbecoming behaviors negatively affect learning and raises concern over guidance and counselling approaches used in the schools and clearly indicating the need for preventive counselling.

The unabated occurrence of these problem behaviors vividly shows that conventional Guidance and Counselling approaches currently applied in schools are ineffective. These conventional approaches have greatly focused on post-crisis interventions (crisis counselling) and remediation ignoring the pre-crisis (Preventive counselling) that is concerned with identifying, addressing and preventing the students' problem behavior (Wambui, 2005; Samatwa, 2007: UNESCO, 2012). It is for this reason that the researcher sought to establish the effectiveness of preventive counselling in addressing the problem behaviors of secondary school students in Igembe South Sub-County.

1.2 Statement of the Problem

The occurrence of students' problem behaviors raises much concern in secondary schools. Despite the use of conventional counselling, less has been achieved in addressing and preventing the continued upsurge of students' problem behaviors in secondary schools. The major problem behaviors in Igembe south as in other places

include drugs and substances abuse, teenage sex and pregnancies, chronic absenteeism, dropout, truancy, violence, school arson, suicide and gross Misbehavior. The consequences are time and resources wastage, damage to property, individual or societal harm. To fill the gap, this study therefore, sought to establish the effectiveness of Primary, Secondary and Tertiary preventive counselling approaches in addressing and preventing the problem behaviors of secondary school students at various levels of development.

1.3 Purpose of Study

The purpose of the study was to establish the effectiveness of preventive counselling in addressing students' problem behaviors in secondary schools of Igembe South Sub-County.

1.4 Objectives of the Study

The study was guided by the following objectives:

i. To determine the effectiveness of primary preventive counselling in addressing problem behaviors of students in secondary school of Igembe South Sub-County, Kenya.

ii. To establish the effectiveness of secondary preventive counselling in addressing problem behaviors of students in secondary school of Igembe South Sub-County, Kenya.

iii. To determine the effectiveness of tertiary preventive counselling in addressing problem behaviors of students in secondary school of Igembe South Sub-County, Kenya.

1.5 Research Questions:

The study was guided by the following questions:

i. What is the effectiveness of Primary Preventive Counselling in addressing problem behaviors of secondary school students in Igembe South Sub-County?

ii. Is Secondary Preventive Counselling effective in addressing problem behaviors of secondary school students in Igembe South Sub-County?

iii.   Is of Tertiary Preventive Counselling effective in addressing the problem behaviors of secondary school students in Igembe South Sub-County?

1.6 Significance of Study

The study intended to establish the effectiveness of preventive counselling in addressing the behavioral problems of public secondary school students in Igembe South Sub County. The findings may help students to develop positive and acceptable behaviors, cope and adjust to secondary school life. The teachers, teacher counsellors and school administration would get more insight to enable them prevent students' behavioral problems and reinforce sustained positive behavior change and rehabilitation. The government education policy makers could use the findings to develop measures that enhance implementation of preventive counselling interventions that will effectively addresses students' problem behaviors in secondary schools. The findings would form part of relevant data to scholars for future researches on importance of preventive counselling approaches in addressing students' problem behaviors in secondary schools.

1.7 Scope of the Study

The Study was conducted in public secondary schools in Igembe South Sub-county Meru County. It involved form three students, teacher counsellors and deputy principals of the fifteen schools that were sampled for the study.

1.8 Limitations of the Study

The following were the limitations of the study:
  i.   Since the respondent had filled the questionnaires themselves, the researcher was not able to ascertain the spontaneity of the answers given.
  ii.   The research findings could not be generalised since it covered one sub-county hence such a study can be done in other sub-counties in Kenya.

1.9 Assumptions of Study

The study was based on the following assumptions:

i.   The researcher got honest, reliable and accurate information from the respondents to assist him in drawing justified conclusions.

ii.   All the respondents were aware of the problem behaviors in the schools hence easy to give their responses.

iii. Preventive counselling services were offered in all secondary schools in Igembe South Sub-County.

1.10 Operational Definition of Terms

The following are the operational definitions of different terms used in this study:

Consequences: The painful outcome of an event especially in relation to an individual. In this study it means painful undesirable outcomes and results that logically follow from actions of students' problem behaviors.

Addressing: Refers to the activity of managing or exerting control over something. In this study it refers to the act of influencing skilfully and efficiently in order to reduce or lessen the intensity and effects of the students' problem behaviors in secondary schools.

Conventional Counselling: It's a special form of helping relationship where a trained professional uses appropriate methods to help the clients cope with the challenges in accordance to mutually agreeable rules. In this study it refers to counselling methods that do not apply preventive approaches to control students' problems behaviors of students in secondary schools.

Discipline: A system of rules or principles of conduct involved in guiding and training the students to make reasonable and responsible decisions. In this study it means the method of practice in secondary school where students follow set rules or code of behavior using reward to reinforce appropriate behaviors and punishment to correct their errant or unacceptable behaviors.

Effectiveness: It means producing desired results or intended effects. In this study it refers to the potency of the preventive counselling approaches in creating conducive environment in the secondary schools that enables proper teaching and learning which leads to achievement of the desired results in students' behaviors.

Preventive Counselling: It is the process of identifying, handling, reducing and treating behavior or conduct problems. In this study it

means addressing the secondary school student's problem behaviors that are not acceptable by the societal standards, values and ethics and are detrimental to the individual or society's wellbeing at primary, secondary and tertiary levels.

Primary Prevention: In this study it refers to the preventive counselling approach that targets individual students with no signs of problem behaviors, helps understand the dangers of the common behavior problems with the aim of preventing them from engaging in and develop the maladjusted behaviors in school.

Problem Behaviors: Refers any outrageous behavior that is undesirable and unacceptable by the conventional society norms, ethics and values becoming a source of concern to the community. In this study it means the expression of physical, social, and moral behavioral problems such as violence, aggression and arson, drugs and substances abuse, teenage sex and pregnancies, truancy, absenteeism and dishonesty in students that affects their normal way of life in school or at home.

Secondary Prevention: In this study, it refers to preventive counselling interventions that deals with students who show initial signs of problem behaviors, identify and prevent them from leading to major detrimental and damaging problem behaviors.

Secondary School: In the study it refers to the institution in which students of varying ages receive academic, technical and vocational courses and prepared for joining institutions of higher learning.

Student: Refers to a learner enrolled in an education institution of higher learning. In this study it means a person who attends a secondary school for purposes of being taught,

learning and studying something to acquire the desired knowledge, good discipline and acceptable behavior.

Tertiary Prevention: In this study it means the remediation interventions applied in counselling in order to help the victims of problem behaviors by addressing or stopping the consequences at the same time preventing relapse of the behavioral problems and help them develop positive and acceptable behaviors and cope in life.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter has put into perspective the historical development of preventive counselling World over, in Africa and in Kenya. The reviewed literature explain the concepts, perspective and role of preventive counselling approaches in identifying addressing and preventing the problem behaviors of secondary school students. It also identifies the common types of problem behaviors, their antecedents and expounds the impacts of preventive counselling on students' problem behavior in secondary schools in Igembe South Sub-County.

2.2 General Perspective of Preventive Counselling

Conventional guidance and counselling is a broad phenomenon in psychology that uses various approaches and interventions. The literature reviewed in this study gives special attention to Preventive Counselling in a Global perspective as well as in Africa, East African region and in Kenya. Due to changes in the living standards, the environment, technological advancement, human communication and interactions, there has been emerging challenges that human population faces. These include physical ailments (diseases); psychological disturbances (mental health issues); problem behaviors or conduct disorders; human distress, security and other risk issues (Conyne, 1987; Satcher, 1996; Schmolling, Youkeles and Burger, 1997).

Prevention is a phenomenon that has been the practice of humanity from the beginning. God, after creation had given the first man precautionary measures to keep him from sinning (Holly Bible: Genesis 1 to 3). In ancient and present times, people used prayers and rituals to invoke the spiritual or supernatural realms that protect them from or prevent unexplainable disasters, calamities or catastrophes (Youkeles and Burger, 1997). People use all means to ensure that they prevent problems or danger befalling them. They get vaccination against diseases, receive prenatal care, go for medical check-ups, exercises, manage stress and eat nutritious foods to keep their bodies healthy. They build and secure homes and houses all meant to prevent certain problems and dangers (Cowen, 1973; Spaulding and Balch, 1983; Conyne, 1987; Hage and Romano, 2001).

In the 20th century, there has been changes that led to the development of the mental health hygiene movement, vocational guidance movements, discoveries of major scientific approaches such a vaccines and medicine, prevention of drug and alcohol abuse, social violence and problem behaviors that were aimed at reducing the physical, psychosocial and emotional distress through prevention (Conyne, 1997; Martin and Thomas, 2000). Although much has been done through guidance and counselling to alleviate human dysfunction and sufferings, less attention has been paid to preventive measures. The approaches used mainly tended towards individual remediation, crisis interventions, and psychological dysfunction giving less attention to systematic preventive approach. Much support has been skewed towards approaches that target the individual rather than the society, disease and distress rather than health and wellbeing of the individual or society hence steering counselling psychology towards crisis intervention with less emphasis on preventive counselling approach (Roche and Sadoski, 1996; Holder and Black, 1999).

The late 20th century witnessed more involvement of preventive approach under the work of George, Albee, Emory Cowen and Gerald Caplan with his classic volume on Principles of Prevention Psychiatry in 1984. In USA, the congress under J.F Kennedy introduced the community mental health act of 1963, which brought the concept of prevention services to the community (Spaulding and Balch, 1983). In 1965, community mental health conference held in Swampscott established community psychology to promote prevention and practice in the community mental health (Elias, 1987). The first issue of Journal of Primary Prevention was published in 1980 while the Centre for Substances Abuse Prevention was established in 1992.

Recent developments on preventive approach are indicated by the use of modern technology to address the issue and disseminate it to the community through the Peer-Reviewed Electronic Journal–Prevention and Treatment by APA and the AAAPP First Online Conference in June 2000. However, much can be done on the preventive approach through research and practice as noted by Hyman, (1999). This shows that preventive approach has registered much improvement in certain areas especially through publication. In 1984, Good Year and Shaw edited a special issue on prevention in education and community settings (Personal and Guidance Journal-Now

the Journal of Counselling Development). In 1987, Barker, Shaw and Conyne produced books on Primary Prevention that is improving Counselling through Primary Prevention and Primary Preventive Counselling: Empowering People and Systems respectively. They explained the history, conceptual models and application of Primary Prevention Counselling Psychology. Brown and Whirter, (2000) produced a handbook of counselling psychology that covered prevention developmental interventions in youth workplaces and in health. According to Conyne, (1999) much research has been done on groups for preventive approaches with children, adolescents and adults. Conyne emphasized on increased research, training and practice of preventive approach in groups into the 21st Century. As noted by Stone and Archer (1990), the universities and colleges had expanded their programs in preventive counselling and outreaches. The institutions offered topics on stress prevention, (Romano, 1983); drug and substances abuse prevention, (MCilman and Fleming, 1990); Wellness, (Hanger and Destefano, 1990); HIV prevention (Sanderson, 1999) and Shyness prevention, (Maintin and Thomas, 2000).

2.3 The Concept of Preventive Counselling

Literally, prevention means to stop something from happening such as preventing diseases, stress, depression, teenage pregnancy or problem behaviors (Hage and Romano, 2000). The prevention interventions are mainly conceptualized as: stopping the problem behaviors from ever occurring; delaying the onset of problem behaviors for those at risk; reducing the impact of problem behaviors; strengthening knowledge, attitudes and behaviors that promote emotional, social, moral and physical wellbeing. It means empowering individuals, societal and government policies that promote physical, social, moral and emotional wellness of the individuals or larger society (Hage and Romano, 2000). It's more desirable to prevent the problem behavior than to try and treat or cure it once it has occurred.

According to Caplan, (1964) prevention has been broadly categorised as Primary, Secondary and Tertiary Prevention that is applicable to the individuals, group or population at different levels of problem behavior development. Caplan, (1964) puts that Primary Prevention focuses on preventing a problem from occurring; Secondary Prevention targets early detection and remediation of a problem, preventing it from

continuing and getting worse while Tertiary Prevention aims at preventing a problem that cannot be re-mediated from causing other problems (Caplan, 1964). The interventions are designed to reduce the incidences, prevalence and impact of the problem behaviors to promote health, social, moral and physical well-being of the individual or society (Cowen, 1996). According to Felner and Silverman (2000), primary prevention is real preventive intervention. Baker and Shaw, (1987) holds the view that secondary and tertiary prevention are not prevention but just remediation while Cowen, (1983) says tertiary prevention is treatment. Most psychologists advocate for a combined intervention that involves primary, secondary and tertiary prevention since the problem behaviors that require remediation (secondary prevention) or rehabilitation (tertiary prevention) has a primary intervention in them. Primary prevention approach also seems to have some remediation and rehabilitative interventions depending on the problem behavior or disorder in question (Schwartz and Waldo, 2003; Schwartz, Griffin and Russell, 2006).

Much prevention intervention focussed on enhancing human functioning and reducing psychological distress (Catalano, Berglund, Ryan and Hawkins, 2002). It promotes health and wellbeing of the individuals, community and the nation; reduces the cost of mental health care and controls occurrence of problem behaviors (Satcher, 2000; Tolan and Dodge 2005; W .H .O, 2008). According to Bull, (2011) infusing and applying the modern technological development helps to further the benefits and effectiveness of preventive counselling interventions on problem behaviors.

Effectiveness of the preventive interventions could be achieved more by applying it early from childhood through adulthood. This will promote quality of life, human functioning and reduce development of problem behaviors (Gruenberg and Klein, 2009). Applying preventive interventions as a developmental approach focussing children and adolescents will results to more positive outcomes. Children and adolescents are so vulnerable and constitute a greater percentage of those who experiences mental, emotional and behavioral disorders. This is because children and adolescents are more prone and at a higher risk of problem behaviors like drugs and substances abuse, violence, teenage sex and pregnancies, sexually transmitted infections and other forms of deviancy (Weisberg, Walberg, O'Brien and Kuster, 2003).

According to Conyne, (2004) early preventive interventions should focus on reducing the risks and causes of problem behaviors or psychological dysfunctions. Therefore, early focussed interventions may control symptoms, reduce seriousness of the consequences and promote positive behavior development in individuals and society wellness (Durlak, Weisberg and Pachan, 2010)

The interventions could be more beneficial if they focused on not only the problem behaviors but also on the knowledge competencies (Berglund, 2002). Preventive interventions become more effective by recognizing and promoting factors that enhances human health, resilience and reduce factors that increase risks of problem behaviors. They should seek to reduce socioeconomic disparities, negative peer influence, family conflicts and dysfunctions, school failures and individual inadequacies. The interventions should promote socioeconomic skills, ethical decision making, interpersonal competencies, successful school programs, job placement and proper nutrition in order to strengthen preventive interventions (National Research Centre and Medical Institute, 2009; Singh, Hay and Watson, 2011).

The interventions should also put into perspective the societal, community and school's cultural aspects to ensure that the interventions take into account the local societal cultural norms and ethical issues (Jason and Glenwick, 2012). Application of the preventive intervention should recognize the cultural diversities of region, race, ethnicity, social class, gender identity, sexual orientations and education ability (Kumpfer, smith and Bellamy, 2002). According to Tricket, (2011) the aspects of community life should direct the preventive interventions and not mare culture. To have more positive outcomes, the prevention interventions should address social disparities by minimizing discrimination, oppression, nepotism and reduce the problem behaviors that come with them. Children and adolescents living in poverty ridden and disadvantaged areas are more prone to common problem behaviors like conduct disorders, academic failures, drug and substances abuse, child abuse, teenage sex and pregnancies (Ludwig, 2011; Goodnight, 2012). The interventions would be more beneficial when fairness and impartiality are addressed in the school or society served by it. This creates a healthy interaction and a better environment for positive behavior development in the individuals (Lawson, Noblett and Rodwell, 2009; Prilleltes 2012).

Discrimination and unfair treatment based on socioeconomic class and background, race, ethnicity, gender, sexual orientation and academic achievements may impede the success of preventive interventions (APA, 2012; Singh and Mckleroy, 2011).

For preventive interventions to succeed all the stakeholders must be involved at planning, program development and implementation levels. The interventions should target the family, school and the society in order to address the institutional barriers of gender, orientation and poverty to reduce the risks and strengthen protective factors (Orpinas and Horne, 2004; Smith, 2006). They should focus on developing norms that promote healthy behaviors and reducing the problem behaviors of individuals (Orpinas and Horne, 2004; Smith, 2006). Putting in place interventions that serves diverse students' needs enhances their emotional, social, physical and academic development preventing the risks of involvement in problem behavior (Newman and Horne, 2003; Greenberg *et al*., 2004). Kiselica, (2004) stresses importance of bringing the government policy makers on board in the school-based prevention interventions for more positive outcomes. The combined Caplan (1964) and Gordon (1987) models of interventions can easily be applicable in the school set up as primary, secondary or tertiary prevention depending on the level or the extent of the problem behavior in the individual students. Waldo and Schwartz, (2008) prefers application of the three interventions together to address all the categories of students rather than focussing on discrete intervention in order to have maximum benefits.

2.4 Primary Prevention and Problem Behaviors

Primary prevention is an intentional intervention that targets the population or group with healthy individuals currently not affected for purposes of helping them continue functioning in healthy ways free from problem behaviors (Conyne, 1991). The intervention is aimed at protecting the individual by stopping or avoiding occurrence of the problem prior to the symptoms of the problem. It constitutes various activities, practices and programs that are mainly not individual specific and geared towards altering and addressing the opportunities, risks and expectations concerning the individual. It's based on collectively teaching individuals the competencies they need to successfully cope with challenges and demands in life (Conyne, 1991; Romano and Hage, 2000). Primary prevention is aimed at addressing the problem behaviors in the

individuals, population or society over a certain period by addressing their antecedents before they result to behavior problems. It seeks to reduce the risks of occurrence of the problem behaviors in the population by assisting the individuals to lead healthy rather than unhealthy lives (Caplan, 1964).

The Primary or Universal Prevention intervention can contemporarily be applied in preventing common students' problem behaviors by setting out the requirement for the acceptable behavior. Universal Prevention is used to address all students during assembly days. This is by putting in place a participatory school-wide plan that involves the students clearly stating and defining the behavioral expectation in or outside the school. It requires all the students to meet the behavioral expectations impartially and reinforcing when the set out behavioral expectations are met by the students. The intervention should focus on immediate and consistent response to the inappropriate behaviors shown by the students ensuring follow-up and data collection for appropriate decision making (Schwartz and Waldo, 2003). This is the most crucial level in which much behavior expectations can be achieved. This is by putting in place appropriate interventions in a school wide program that involves all staff, students, parents, community and the environment (Sharon *et al.*, 2002).

In order to control and prevent these adverse problem behaviors, there is need to understand their antecedent causes and origin. Most of the physical problem behaviors are caused by both external and internal factors. These factors relate to the family background, classroom and school environment, interrelationship with peers and teachers, communication breakdown, culture and societal norms and ethics, the genetic, physiological and morphological changes in an individual (Rizzo and Kim, 2005; Price and Anderson, 2007; Yee, Fox and Balinese, 2009). Most of the problem behaviors expressed by the students have their origins at homes, hence students from families deranged with poverty, domestic violence, conflicts, separation or divorce and autocratic parenting may depict such behaviors at school (Show, 2000; Solomon, 2005). The physical problem behaviors need to be prevented or reduced early enough before they negatively impact on the students' way of life, conduct and behavior.

At this level of primary interventions, the focus should be all the students in classroom or non-classroom activities. It targets to improve the school environment, student communications, interpersonal relationships, order and discipline in the school. It will also reduce the referrals on behavioral problems, save time that would have been wasted in instructions, counselling and handling the problem behavior cases (Watson and Griffin, 2009). Externalizing behaviors that can be controlled at this level are expressed in emotions, feelings, and aggression (Njoroge, 2005; Muchiri, 2008). Teaching and inculcating good moral such as honesty, trustworthy, obedience, uprightness, faithfulness and sincerity associated with the acceptable school rules, ethics, norms and values can promote acceptable behaviors at the same time discouraging the antisocial behaviors in students (Greenberg, 2002; Trevino, 2006). Students can easily learn the morally acceptable acts, good moral decision-making skills, good moral behaviors and judgement (Bernardi et al., 2004; Muchiri, 2008). The school as a community with different individuals can promote acceptable social behaviors. Social interactions and practices (socialization) such as giving gifts, helping others, sharing notes and group working impacts students' intensions, emotions and actions. It also influences their thoughts and attitudes towards others enhancing good social behaviors (Kochanska and Aksan, 2006; Poulou, 2005; Adler, 2002).

2.5 Secondary Prevention and Problem Behaviors

This is an early intervention targeting mainly the individuals or population who are not necessarily in problem behaviors but are at risk, showing early signs or stages of the problem behaviors. Secondary or Selective Prevention is applied to the smaller groups of students in classes. This level of intervention seeks to stop or reduce the risks and their negative consequences. It strongly emphasizes on the support required to meet the expected behaviors by encouraging the individual to cease the maladaptive behaviors through counselling treatment (Conyne, 1994; Romano and Hage, 2001).

Secondary Prevention takes the form of remedial intervention since it mainly aims at reducing and alleviating the risks that may lead to the problem behaviors (Schwartz and Waldo, 2003). It involves identifying the students' needs at the individual level that will contribute towards helping in modifying the behaviors to meet the expectations. This can be done through developing and applying an appropriate plan

comprising of skills training, problem solving and practicing. It should at the same time acknowledge the progress in behavior change and getting feedback on behavioral expectations (Safe and Caring Schools Policy, Department of Education, 2006).

The most common physical or violent problem behaviors signs expressed by students in school include fighting, beating, bullying, kicking, slapping, biting, pinching, scratching, hair pulling, spitting, inappropriate sexual contact or touching aimed at others. Those aimed at objects includes Knocking, hitting furniture, slamming of doors or windows, tearing and damage of books and other instructional materials (Wachira, 2002; Ziro, 2002; Njoroge, 2005). These are clear indicators of severe violence likely to occur and if not addressed early they could explode into disastrous eventualities in school (Wachira, 2002; Ziro, 2002; Njoroge, 2005). Other symptoms include dry lips, watery eyes, sudden change in appetite, blurred or impaired vision, dossing in class, unnecessary blaring and yelling and other disruptive activities in class and school. These are indicators of involvement in drugs and substances abuse, illegal sexual activities, crimes, strained parent relationship and dysfunctional family that could be affecting the student (Mutisya, 2003, Oriya, 2005; Muchiri, 2008).

The signs and symptoms of moral behaviors that can be identified at this level of intervention could include change in the normal acceptable mode of dressing into the explicit dressing. Others include sudden change into exaggerated body makeup, attraction, use and possession of sexually explicit materials and lustful closeness and association with members of opposite sex. Students may also show no respect, become disobedient to authorities, unexplained absenteeism, being dishonest and untrustworthy in class and school (Muchiri, 2008; Nwamuo and Ekwe, 1998 and Mambula, 1999). Students may show sudden changes in social behaviors like not willing to talk or share things with friends, avoiding the teachers, increased shyness and guilty expressions. Disappearance of students' items in class, dormitories and the school also indicate development and occurrence of social problem behaviors that needs early attention.

Most students who are adolescents are greatly attracted to explicit media content like fictional programs, reality shows, rap music, violence, racial prejudice and sexual

promiscuity which inculcates in them deviated morality. The exposure to such explicit electronic, print and social media content not only leads to time wastage but also instils a culture of violence, aggression, rebellious, sexual deviancy and other antisocial behavior in the adolescents of school going age. Both parents and teachers need to be there for the students, guiding, training and directing them by being their role models and offering constant support and advice. This is even supported by the Bible in Proverbs 22:6 that says "train a child the way he should go, and when he is old he will not depart from it" and Proverbs 14:34 which postulates that righteousness exalts a nation but sin is a reproach to any people.

2.6 Tertiary Prevention and Problem Behaviors

Tertiary prevention is an intervention that aims to stop the problem behaviors and ameliorate their painful, harmful consequences and negative effects through counselling, treatment and rehabilitation. The intervention aims at reducing further onset of difficulties and involves preventing the problem behaviors that cannot be re-mediated from causing other problems (Caplan, 1964; Conyne, 2004). It also strives to prevent any risk of problem behaviors relapse after healing and mainly helps the victims to cope with the consequences (Schwartz and Waldo, 2003).

The students who are mainly involved in and show severe signs of the common problem behaviors in secondary schools may be helped through the tertiary preventive approach. Much violence and aggression that results to damage, harm, injuries, pain to self and to others, towards property or objects in the environment are outcomes and consequences of severe externalizing problem behaviors (Njoroge, 2005; Muchiri, 2008). These not only results to destruction of property as witnessed in the occurrences of students setting the dormitories ablaze, but leads to unnecessary wastage of vital study, time. This negatively affects teaching and learning and energy wasted unnecessarily in punishments, suspension and expulsion. They also result to psychological stress, physical strain and unnecessary costs to the students, parents, guardians and the community at large (Mutisya, 2003, Oriya, 2005; Muchiri, 2008).

The increased cases of teenage and adolescence pregnancies, marriages and sexually transmitted infections as well as HIV AIDS are some of the consequences of the school

and societal moral decadency. The decline and deterioration in societal morals leads to development and involvements to problem behaviors like promiscuous teenage sex and pregnancy, homosexuality and lesbianism, explicit dressing, adolescence courting and relationships, sexual abuse among others (Danielson, 1998; Campbell-Bishop 2003; Tigay, 2004). These not only causes pain and suffering to the young girls but also deaths and life damage as they procure abortions with the help of quark doctors in dark alleys. They cause severe psychological torture to the students and parents who also in addition incur unnecessary expenses trying to save life and redeem their children.

It is therefore evident that if the problem behaviors are not addressed earlier before they explode to severe destructive behaviors, the costs of repairing, rebuilding and redeeming damaged property and lives will be too high for the individual student, family and society at large. A good number of youths of school going age are candidates and clients in psychiatry and rehabilitation centres around the Country due the effects of drug and alcohol abuse as well as sexual and social media addictions. The cost of developing, constructing and maintaining rehabilitation and juvenile correctional centres is too high a burden to both the National and County governments (MoEST Report Kenya, 2015; Ministry of Health Report Kenya, 2014; WHO, 2012).

Therefore, it is imperative to all concerned stakeholders, government policy makers, law enforcers, schools, churches, society, families and the youth to take upon themselves the challenges and consequences of problem behaviors. All the stakeholders should consolidate their efforts and funding into planning, developing and implementing programs that addresses the problem behaviors early and efficiently. This should involve long term intervention that mainly targets individuals who require specialized attention and includes skill development, functional behavior analysis, a behavior management plan, behavior change programming and relapse prevention. All this addresses the severe problem behaviors and require the support of the family, education officials and psychotherapists who help in the students' functional behavior analysis.

2.7 Theoretical Framework

In this section, a brief discussion of the problem is based on theoretical concepts that explained the causes, control and prevention of the behavior problems in students. There are several theories on behavior development and causes but in this study, only few that are related to problem behaviors are considered. The theories applied in this section are, Person-Centred Theory by Carl Rogers, (1959-1984) and The Problem Behavior Theory by Jessor and Jessor (1991).

2.7.1 Person Centred Theory

The Person-Centred Theory is one of the contemporary theories and was brought forth by Carl Rogers in 1959. The theory is based on three key concepts of a helping relationship, empathy (entering in another's feelings), congruence (quality of agreeing, being open and honest with oneself and to others) and the unconditional positive regard for the others (considering the others as important). The concepts of this theory relate well with the aspect of problem behaviors control and prevention interventions that involve the individual personality, their perceived environment, interactions between the individual and the caregivers, parents, teachers, counsellors and behavior systems (Conyne, 2004).

The person-centred theory provided useful and practical approach to prevention of the causes of common problem behaviors in students in relation to relationships, emotional development and ethical behaviors (Gatongi, 2007). Unlike other theories the person-centred theory clearly addresses vital conditions in behavior development and change. The concept of openness, honesty, agreeing, feeling for others and the unconditional positive regard, the person-centred theory relates to the principles of primary, secondary and tertiary prevention (Conyne, 2004; Muchiri, 2008). It's an approach to the causes of problem behaviors and what could be their remedies. The theory put emphasis on the role played by the individual through his or her self-perception, opinions and prevailing conditions (Bernard, 1984). This goes in line with the dogmas of primary prevention that target the behaviors of individuals in the broader community. Involvement and development of problem behaviors depends on one's self-perception and understanding that helps in preventing occurrence of problem behaviors.

The aspect of unconditional positive regard is important in that the individuals feel secure, loved and accepted thus encouraged towards positive behavior change. This is vital to secondary preventive interventions that targets individuals who are at risk of problem behavior development. Upholding this concept removes the bias, discrimination and negativity based on gender, ethnicity, socioeconomic status, personal qualities and sexual orientation that could have made the individual feel insecure and difficult to change (Leislar, 1984; Tudor, 2004).

The phenomenon of tertiary prevention is supported in the Person-Centred Theory through its concept of empathy. Individual who are in and are undergoing the pains and suffering of problem behavior consequences needs much more than unconditional positive regard. They desperately require someone's understanding, one who really feels with them. At this point they need more than just love but close attention and care that can only be possible when we are able to empathize with them. This helps them to come to terms with the realities of what they are experiencing due the effects and consequences of the problem behaviors. It also brings in the support necessary to help them not only to cope but also stop them regressing into their maladjusted behaviors and prevent relapse of the problem behaviors (Nelson, 2000).

2.7.2 Problem Behavior Theory

The Problem Behavior theory was formulated in the late 1960s by Richard Jessor who together with his colleagues has reformulated, revised and expanded the theory through 1977, 1987, 1991 and 1998 in order to capture more issues related to problem and conventional behaviors of adolescents or the youth (Jessor and Jessor, 1977; Donovan, 1991). The Problem Behavior theory is a broad systematic, multivariate, social-psychological conceptual framework that predicts and explains the problem behaviors in adolescents the category in which most students are (Steinberg, and Morris, 2010). Of interest to this study is the expansion and restructuring of the Problem behavior Theory to include the problem behaviors of secondary school and college students as well as the protective and risk factors that influences and determines the degree of behavior being conventional (healthy) or problematic (unhealthy) behaviors.

The theory is premised on the fact that all behavior emerges out of the structure and interactions of psychosocial systems of behavior, personality system and the perceived environment system. They operate within the concepts of protective factors and risk factors that mainly influence the students' behaviors. The theory explains how the interactions between the behavioral system (conventional acceptable and risky behavior); the personality system (self-perception, values and attitudes); the perceived environmental system (adolescent perception, the family, peer group and the school) and how they result to involvement in risky problem behaviors or the protective healthy behaviors (Jessor and Jessor, 1998; Muchiri, 2008). From the concepts in the theory it becomes easier to understand emergence of problem behaviors and take early control to prevent them.

According to the theory, the protective factors such as parental support and approval, positive peers and adult models, proper regulations and engagement in school provides the controls to extenuate problem behaviors. They directly provide models for positive behavior, participate in conventionally structured activities, personal or social values, and a supportive environment while at the same time countering the effects of risky problem behaviors. Conversely, the risk factors such as interaction with negative peer and adult models for problem behaviors and exposure to circumstances that provides risky models, creates opportunities for engaging in risky problem behaviors, increases personal vulnerability and promotes the problem behaviors (Jessor and Jessor, 1998). Encouraging good and positive role modelling could be a vital aspect to prevention of problem behaviors as reflected in the theory since the students who are mainly youth learn more from what they interact with than what they are taught.

The theory reveals that most adolescent students who have some difficulties in certain areas of life (family, friends, school and society) are more vulnerable to risky problem behaviors (Hawkins, Lisher, Catalano and Howard, 1992; Petraitis, Fay and Miller, 1995). Students with negative school experiences (low academic achievements, low motivation and truancy) are more likely to engage in problem behaviors such as smoking, alcohol and drug abuse and risky sexual behavior than those with positive school experiences (Bryant, Schulenburg, Johnson and O'Malley, 2000; Brant and Zimmerman, 2002). They also noted that the adolescence stage in which most students

are is the time where most risky behaviors begin and intensifies. It is at this stage that patterns of academic difficulties and other problem behaviors are likely to be witnessed. This clearly indicates that low academic performance and other school misbehaviors are more predictive of problem behaviors such as alcohol and substances abuse, truancy and other delinquent behaviors (Bryant *et al.,* 2000).

The problem behaviors in school are related to the problem behaviors in other contexts. When students are not psychologically and behaviorally engaged in class and in the field, they are likely to be involved in disruptive behaviors like absenteeism, make noise and fail to do assignments. These may graduate to severe problem behaviors like drugs and substances abuse, sexual deviation and other delinquent behaviors (Steinberg and Brophy, 1996). The co-occurrence of problem behaviors is another vital aspect towards developing appropriate prevention interventions to common problem behaviors in secondary school going adolescents. The theory espouses that problem behaviors like psychological distress and the tendency to misbehave co-occur in adolescence and at this age they tend to engage in risky behaviors due to the psychological disturbances taking toll over their behavior (Hawkins *et al*., 1992; Newcomb *et al*., 2002).

Studies carried in Italy, Netherlands, China and America on adolescents at various levels proved that involvement in one particular problem behavior leads to involvement in another problem behavior hence a syndrome of problem behaviors (Kandel and Andrews, 1988; Silvia Ciarirano, 2004). This was found to apply mainly in alcohol, tobacco, drugs and other substances abuse that make the adolescent students vulnerable to violent behaviors, risky sexual behaviors, premarital pregnancies, low academic achievements and increased school dropouts (Mensch and Kandel, 1998). When related behaviors co-occur (use of soft drugs and hard drugs) there is a higher likelihood of inclination towards specific problem behavior like substances abuse hence easier prediction of possible prevention interventions. This is not the case when dissimilar behaviors co-occur (drug abuse and unprotected sex) which makes it difficult to anticipate their control or preventive approaches (Jessor and Jessor, 1985). According to this theory, prevention of problem behaviors could be best achieved through understanding of how problem behavior could result to more severe problem behaviors.

By early correction the minor problem behaviors becomes a good remedy in preventing the more severe maladjusted behaviors that could result.

In their researches on the personality System in relation to Problem Behavior Theory, Voelkl and Frome, (2000) and Bryant and Zimmerman, (2002) determined that students with high level of achievement motivation, positive attitude and self-image, high interest in school, self-esteem and self-perception are less likely to be involved in problem behaviors in school. The combination of positive attitudes, self-image, high motivation and achievements prevents involvement in problem behaviors (Bryant and Zimmerman, 2002). Students whose parents and peers offers necessary support, interest, and monitor their school and daily activities, are less likely to engage in risky problem behaviors (Kerr and Staffin, 2000; Pilgrim et al., 2003). The perception of peers' involvement on problem behaviors has more impact on the student's behavior than the perception of the parents or family. Students who perceive that their peer friends are engaging in alcohol, drugs abuse, teenage sex and delinquent behavior, have high chances of getting involved in such problem behaviors (Sternberg, 1996; Bryant and Zimmerman 2003).

In the perceived environment system, the family socioeconomic status is a factor that determines the students' background and the proneness to problem behaviors. As Sarah *et al*., (2010) found out, children from affluent families are at risk of engaging in risky externalizing and internalizing problem behavior like substances abuse, depression, delinquent and risky sexual behaviors as much as those from low income families (Brandley and Corwyn, 2002). This has been supported by the studies conducted in USA and China on the students from affluent background. They have more risk, vulnerable, engage in and experience the consequences associated to problem behaviors despite the financial stability, safe and protected life in wealthy schools they attend and enjoy (Latendresse, 2005; McMahon and Luthar, 2006). These finding supports the concept of preventive interventions by putting into perspective the influence of external factors to problem behaviors as explained in this study.

2.8 Conceptual Framework

The Theoretical framework is conceptualized as shown in Figure 1 that gives the relationship between the study variables as depicted by the theories discussed.

Preventive counselling	Government policies	Control of problem behaviors:
. Primary prevention	. Family background	. Social behaviors
. Secondary prevention	. Personality	. Physical behaviors
. Tertiary prevention	. School environment	. Moral behaviors

Independent variables   **Intervening Variables**   **Dependent variables**
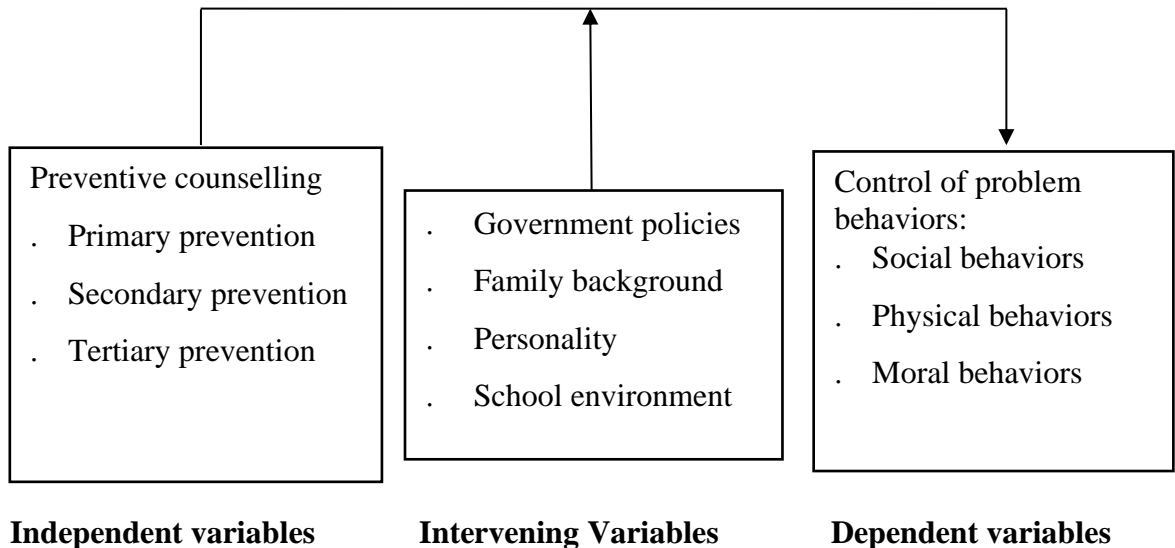
Figure 1: The relationship between the Preventive Counselling Approaches and the Problem Behaviors

Figure 1 shows the independent variable as preventive counselling with the approaches as primary, secondary and tertiary preventive counselling. It shows the relationship between these approaches and the dependent variable which are the problem behaviors. It also shows the intervening variables like government policies and family background that may influence the outcome of the study.

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CHAPTER THREE
METHODOLOGY

3.1 Introduction

The chapter contains the specific procedures and strategies that the researcher used to collect, analyse and process the data to address the research problem. It mainly described the research design and instruments used; location of study; populations and sample size as well as the sampling techniques. The chapter also shows how the reliability of the instruments and validity of data collected were ascertained.

3.2 Research Design

The study used descriptive survey research design. According to Gay, (2009) it is a process of collecting data in order to answer research questions concerning current status or subject in the study. The design uses quantitative methods or measurements mainly through use of questionnaire and interview schedules as well as direct interviews by the researcher (Babbie, 1990). The design is appropriate because according to Mugenda and Mugenda, (1999) the survey is designed to gather information from the respondents concerning the current phenomena and whenever possible to draw valid general conclusions. The survey aimed at gathering information on the opinion, attitude, feeling of the Principals, Deputy Principals, Teacher Counsellors, and students on the effectiveness of preventive counselling on students' behavior and academic performance in the selected secondary schools in Igembe South Sub-County.

3.3 Location of the Study

The study was carried in public secondary schools in Igembe South Sub-County. The researcher had much interest in the area due to occurrence various forms of common problem behaviors such as early marriages, school dropout, premarital sex and teenage pregnancies, drugs and substances abuse, violence and indiscipline in schools of which could have been prevented.

3.4 Population of the Study

The target population was 8,101 individuals comprising of 8,017 students, 42 teacher counsellors and 42 deputy principals in secondary schools in Igembe south sub-county as shown in Table 1.

Table 1
Distribution of Target Population by School Category

School Category	No.sof Schools	Deputy principals	Teacher Counsellors	Students	Total Population
Boys	3	3	3	1,986	1,992
Girls	3	3	3	1,820	1,826
Mixed	36	36	36	4,211	4,283
Total	42	42	42	8,017	8,101

Source: District Quality Assurance and Standards Office Igembe South 2015.

The accessible population was 1,974 individuals with 1,890 form three students, 42 teacher counsellors and 42 deputy principals as shown in Table 2.

Table 2
Distribution of Accessible Population by School Category

School Category	No.sof Schools	Deputy principals	Teacher Counsellors	Form three Students	Total Population
Boys	3	3	3	453	459
Girls	3	3	3	435	441
Mixed	36	36	36	1,002	1,074
Total	42	42	42	1,890	1,974

Source: Sub-County Quality Assurance and Standards Office Igembe South 2015.

3.5 Sampling Procedures and Sample Size

The researcher used stratified sampling to put the public secondary schools into three categories as Boys, Girls and Mixed schools. The only three Boys and three Girl's secondary school in Igembe South Sub-County were purposively selected to participate in the study while 9 mixed day secondary schools were selected through Simple Random Sampling. Simple random sampling is appropriate since it allows generalizability of the results to the target population (Mugenda and Mugenda, 1999). A sample of 15 Teacher Counsellors and 15 Deputy Principals were purposively selected from the fifteen schools sampled for the study. A sample of 317 Form three students were selected through simple random sampling from fifteen public secondary

schools selected to participate in the study. A sample size of 347 respondents participated in the study as shown in Table 3.

Table 3
Distribution of Respondents' Sample by School Category

School Category	Boys boarding	Girls boarding	Mixed day	Sample size	Sampling methods
No of schools	3	3	9	15	Simple random
Deputy principals	3	3	9	15	Purposive
Teacher consellors	3	3	9	15	Purposive
Form three students	50	37	230	317	Simple random

Source: Sub-County Quality Assurance and Standards Office Igembe South 2015.

3.6 Instrumentation

The questionnaires were used in data collection and consisted of group of questions deliberately designed and structured to get information from the respondent at specific levels. According to Borg and Gall (1983), the questionnaires were less costly, takes less time, are easy to apply and good for quantitative research and hence suitable and appropriate for this study. The questionnaires were useful in gathering information that is not observable and sought information on the individual background, attitude, feelings, experiences and accomplishments hence they were more relevant in this study (Borg and Gall, 1983). The questionnaires are category specific with questions or items more relevant to the category of individuals. The study had three sets of questionnaires specific for the Students, Teacher Counsellors, and Deputy Principals. All the questionnaires consisted of open and closed-ended questions distributed in four parts. Part A: Covering background information; Part B: Effectiveness of Primary Preventive Counselling; Part C: Effectiveness of Secondary Preventive Counselling and Part D: Effectiveness of Tertiary Preventive Counselling. The researcher personally guided the respondents and administered the questionnaires in the schools selected to participate in the study.

3.6.1 Validity of the instruments

It is the ability of the data to reflect the attributes of interest or the extent to which a test measure what it was intended to measure (Borg and Gall, 1989). Face validity is the measure of the extent to which the questions could be misunderstood or misinterpreted

by the respondents. Content validity refers to the extent to which the instrument covers the research topic, objectives and questions. Construct validity measures the extent to which the data collected through the instruments would accurately and meaningfully reflect the theoretical concept. The researcher sought the expert opinion and advice of the supervisors, other research experts, searched relevant literature and the questionnaires were developed according to the study objectives in order to ascertain the content and construct validities of the instrument.

3.6.2 Reliability of the instruments

This is the degree to which a research measurement instrument produces consistent results after several repeated trials or tests (Orodho, 2004). It refers to the dependability, consistency, predictability and stability of data (Suen and Aryl, 1989). The pilot study was done in sampled schools in Igembe North Sub-County with conditions similar to Igembe South Sub-County in order to ascertain the clarity, correctness and the level of the questionnaire items. The researcher used the data collected during piloting to ascertain reliability of the instrument by use of Cronbach's alpha coefficient to determine internal consistency of the questionnaire items. This method is appropriate since it is administered only once (Cohen and Swerdlik, 2005) and is capable of assessing multiple responses (Cozby, 2003). In this study, a reliability coefficient of 0.903, 0.875 and 0.794 were obtained for the students, teacher counsellors and deputy principals respectively and an average of 0.857 obtained was taken as appropriate. According to Wierman and Jurs, (2005) testing of the research data collection instruments helps to determine their reliability and identify their weaknesses and ambiguities that can be rectified. After piloting, the items found to be defective, inadequate or vague were rectified, simplified and made clear for easier respondents understanding.

3.7 Data Collection Procedures

The researcher got approval from Chuka University Ethics and integrity Committee and got letter of introduction from Chuka University. Using the letter, the researcher sought permission from the National Commission for Science, Technology and Innovations (NACOSTI) to conduct the research in the selected secondary schools. The researcher notified the Principals before commencement of the research and personally visited

each of the selected schools and administered the questionnaires. The school authorities were requested to assist by ensuring availability of all respondents. The researcher first introduced himself before explaining the questionnaire to the respondents and allowed them ample time to complete questionnaires by giving their appropriate responses after they were then collected on completion to ensure high returns and confidentiality.

3.8 Ethical Considerations

To ensure that the study met the required ethical standards, the researcher sought appropriate permission from the relevant authorities such as Chuka University Ethics and integrity review Committee who verified the instruments. The administrators of schools concerned were notified in good time before the study commenced and assured of compliance with the school rules and programs. They were also assured that the information gathered from the school will not be released to or used for any other purpose other than research only. All the respondents identified were given time and explained the information contained in the research instruments so as to make informed decisions and they were assured of utmost confidentiality and anonymity of the information they give in their responses. The researcher sought to create a good rapport with the respondents and no influence, or any form of coercion was used before and during the administration of the questionnaires, the respondents' voluntary involvement and participation were upheld.

3.9 Data Analysis

Data analysis means the interpretation of the raw data collected into meaningful information (Kombo and Tromp, 2006). The data collected was checked to ascertain its completeness before categorizing and coding it for easier analysis mainly using quantitative analysis methods. After organizing, collating and verifying all the data collected, the information was coded and analysed with aid of the computer Statistical Package for Social Sciences (SPSS) version 20.0. In quantitative analysis of the data the researcher used descriptive statistical methods such as frequencies and percentages in tabulated form. The average percentages were derived for all the responses in each approach giving the general conclusions. Qualitative analysis involved the respondents' opinions and views that were thematically analysed based on the objectives and their responses in the questionnaires.

Table 4
Summary of Data Analysis

Research Questions	Independent variables	Dependent variables	Statistical methods used
i. What is the ffectiveness of Primary preventive counselling in addressing the problem behaviuors of secondary school students in Igembe south sub-county?	Primary Preventive counselling	Problem Behaviors	Frequencies Percentages Means
iii. Is tertiary preventive counselling effective in addressing problem behaviors of students in secondary schools of Igembe south sub-county?	Tertiary Preventive counselling	Problem Behaviors	Frequencies Percentages Means
ii. Is secondary preventive counselling effective in addressing the problem behaviors of students in secondary schools of Igembe south sub-county ?	Secondary Preventive counselling	Problem Behaviors	Frequencies Percentages Means

CHAPTER FOUR
RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the findings of the research on the effectiveness of preventive counselling in addressing the problem behaviors of secondary school students in Igembe South Sub-County. The data was collected using the questionnaires and analysed through SPSS version 20.0 computer programs. Presentation of the analysed data was done using descriptive statistics such as frequency tables and percentages. The research findings, results and discussions were based on the research objectives.

4.2 Demographic Characteristics of the Respondents:

The researcher obtained the respondents demographic characteristics such as age, gender, education and length of stay in the school for the teacher counsellors and deputy principals. The researcher sought to corroborate the characteristic to the effectiveness of preventive counselling on students' problem behaviors.

4.2.1 The Respondents Rate of Responses

A sample of 347 respondents that constituted 317 form three students, 15 Teacher counsellors and 15 Deputy Principals were involved. The percentages of the respondents against the total sample are shown in Table 5.

Table 5
Response rate by Respondents

Respondents	Target Sample	Respondents Percentage(%)	Actual Responses	Response rate percentage (%)
Form three students	317	91.36	310	97.79
Teacher counsellors	15	4.32	15	100.00
Deputy Principals	15	4.32	13	86.67
Total	347	100.00	338	97.41

The data in Table 5 shows the number of respondents who filed the questionnaires. The students represented by 91.36% while the teacher counsellors by 4.32% and the deputy principals were by 4.32%. The study did not achieve 100% response rate because seven students and the two deputy principals who were out of schools did not fill in the questionnaires and due to time constraints, the researcher did not do any follow-up.

However, average response rate was 97.41% and was beyond the acceptable threshold in quantitative research.

4.3 Respondents Background Information

The data analysis is based on the respondents' feedback on the respective questions asked in the questionnaires. The student respondents were required to give information on the personal attributes such gender, age and type of school. The teacher counsellors and deputy principals were required to give information on the personal attributes such gender, age, level of education, appointment and length of stay in the schools.

4.3.1 Student Information by gender

The students were required to indicate their gender in the questionnaires and the responses are shown in Table 6.

Table 6
Students by Gender

	Responses	
Respondents	Frequencies (f)	Percentages (%)
Boys	123	38.80
Girls	187	58.99
Total	310	97.79
Missing	7	2.21

According to Table 6, there were 187 girls and 123 boys in the sample selected for this study indicating that there could be more girls than boys in the secondary schools. The low number of boys in secondary schools in Igembe South might have been caused by problem behaviors such as dropping out, absenteeism, truancy and effects of drugs abuse or involvement in miraa business common in the area. The findings agree with the studies done in Igembe south by Mutuma and Muthaa (2013); Karimi (2013); Agance (2010) and the Meru North Strategic plan 2005-2010 mainly on school dropouts due to pupils and students' involvement in miraa. These findings concur with the reports by UWEZO, (2011); UNICEF, (2014); UNESCO, (2014) and ESQAC, (2016) on the gender parity in secondary schools in Kenya. The findings call for the need to address the problem through preventive counselling in order to control the causes of low numbers of the boys in secondary schools.

4.3.2 Student Information by Age

The researcher required the students to show their age that may have had some bearing on the guidance and counselling. Age could also influence the development of problem behaviors in students hence the interest on their age as shown in Table 7.

Table 7
Students by Age

Respondents age (yrs.)	Responses			
	Boys (f)	Girls (f)	Total (f)	(%)
12-14	00	02	02	0.63
15-17	16	30	46	14.51
18-20	97	142	239	75.40
21-23	10	12	22	6.94
24 and above	00	01	01	0.31
Total	123	187	310	97.79

Table 7 shows the data on students' age with 48 of the students aged below 17 years, 239 aged between 18 to 20 years and 23 of them were above 21 years. The study revealed that there were 30 girls and boys 16 aged below 18 years while there were 97 boys and 142 girls aged 18-20 years while 13 girls and 10 boys were above 20 years. The study revealed that girls who were above 20 years of age might have dropped out of school at some point due to pregnancy or traditional influences. It can be deduced from the findings that girls either attended school at an older age due to negative culture on girl education or they were delayed through forced repetition in their primary level. It also revealed that most of the secondary school students are in their teenage years at which they are so vulnerable and can easily be influenced into problem behaviors. Preventive counselling becomes necessary at this stage in order to enlighten and caution them on the consequences of problem behaviors and how to desist from involvement in unacceptable behaviors and avoid the negative influences in and outside school.

4.3.3 Teacher Counsellors and Deputy Principals' by Gender

The teacher counsellors and deputy principals were required to state their gender an attribute that has some influence on their role and suitability in guidance and counselling and handling students' problem behaviors in secondary schools. Their responses are shown in Table 8.

Table 8
Teacher Counsellors and Deputy Principals by Gender

Respondents Gender	Teacher counsellors		Deputy principals	
	Friquency (f)	Percentage (%)	Friquency (f)	Percentage (%)
Male	04	26.67	10	66.67
Female	11	73.33	03	20.00
Total	15	100.00	13	86.67
Missing	0		2	13.33

The findings in Table 8 shows that there were 11(73.33%) female teacher counsellors and 4(26.67%) male teacher counsellors. The higher number of female teacher counsellors could be due to counselling being taken as a less tasking responsibility better for females. But according to Chepkonga (2009), it could be due to the belief that female teachers are more patient and understanding to the students' problem behaviors in a motherly manner hence suitable as counsellors. In their studies, Bhui and Morgan (2011); Latham (2011); Noah (2009) found that there are female psychotherapists than their counterpart males hence supporting the findings in this study.

The findings in Table 8 also revealed that there were 10(66.67%) male deputy principals and 3(20.0%) female counter parts. Having more males than female deputy principals might have been due to the gender bias in appointing teachers to administrative responsibilities or the notion that deputyship is a too demanding responsibility that the female teachers do not like being appointed into it as Njamura, (2012); Murage, (2011) and Eckman, (2002) had pointed out in their studies.

4.3.4 Teacher Counsellors and Deputy Principals' Age

The researcher was interested in their age which could give some insight on their experience in counselling and handling students' problem behaviors. It was also used to give an indication of their length of stay in the schools as teacher counsellors and deputy principals. Table 9 shows the percentages of the teacher counsellors and deputy principals in relation to their ages.

Table 9
Teacher Counsellors and Deputy Principals by Age

	Teacher counsellors		Deputy principals	
Responses	Frequency	Percentage	Frequency	Percentage
Age(years)	(f)	(%)	(f)	(%)
25-28	03	20.00	02	13.33
29-32	06	40.00	04	26.67
33-36	04	26.67	03	20.00
37 and above	02	13.33	04	26.67
Total	15	100.00	13	86.67

The findings in Table 9 shows that 13 of teacher counsellors were aged between 29 and 36 with only 2 above 37 years. There were7 deputy principals aged between 29-32 years while 4 were above 37 years. The fact that teacher counsellors in most secondary schools were under 32 years of age could mean that they had less experience. The age indicates maturity of not only the body but also one's knowledge and experience and the more mature teacher counsellors and deputy principals could be, the better in counselling and handling common students' problem behaviors.

4.3.5 Teacher Counsellors by academic level, training and qualification.

Adequate guidance and counselling knowledge, proper academic and professional qualifications make the teacher counsellors more effective in counselling secondary school students. This information is presented in Table 10.

Table 10
Academic Level and Training Status of Teacher Counsellors

	Respondents					
Responses	Academic		Trained teacher Counsellor		Untrained teacher counsellors	
level	(f)	(%)	(f)	(%)	(f)	(%)
Diploma	04	26.67	01	06.67	03	20.00
Undergraduete	02	13.33	00	00.00	02	13.33
Degree	08	53.33	02	13.33	08	53.33
Masters	01	06.67	01	06.67	00	00.00
Total	15	100.00	04	26.67	11	73.33

According to the findings in Table 10, the teachers in charge of guidance counselling were 13.33% undergraduate, 53.33% graduates, 26.67% diploma, 6.67% masters' degree. The findings also revealed that only 4 representing 26.67% of the teachers in charge of guidance and counselling were trained teacher counsellors while 11

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representing 73.33% of them were not trained teacher counsellors. It also revealed that there were 13.33% undergraduate teachers not professionally qualified doing part time teaching job but were given the responsibility as guidance and counselling teachers.

Training of teacher counsellors should be through organised guidance and counselling seminars, workshops and symposia to equips them with relevant counselling skills and techniques to understand the youths' world to be able to handle students' problems behaviors effectively (Geldard and Geldard, 2003; Makewa, 2008; Odhiambo, 2015). Okoth (2003) opined that a trained teacher counsellor will be able to understand the students' social environment, psychological and physical needs and be able to efficiently offer the necessary help. Lack of adequate training on counselling is a great impediment to quality preventive counselling services in secondary schools (Kahigi, 2003). According to Kipnusu, (2002); Mutie and Ndambuki, (2003) there was need for posting trained teacher counsellors to all secondary schools with specified duties and lesser workload for re-engineered and effective guidance and counselling. But the counsellors and psychologists Act 2014 that was signed into law on 30th July same year proposes that there should be schools or institutions counsellors with clearly stipulated duties as school counsellors and not posted as teachers.

4.4 Responses on effectiveness of Primary Preventive Counselling

The first objective sought to establish the effectiveness of primary preventive counselling in addressing problem behaviors of secondary school students. The questionnaires had seven itemized statements specifically designed to obtain required information on the effectiveness of primary preventive counselling. A five-point Likert scale rated between 1 and 5 with 5=Very Effective; 4=Effective; 3=Unsure; 2=Less Effective and 1=Ineffective was used. The findings were presented in form of frequencies and percentages with 1.0-19.9% meaning it is ineffective, 20.0-39.9% less effective, 40.0-59.9 average, 60.0-79.9 effective and 80.0-100% very effective for the statements related to primary preventive counselling in addressing the students' problem behaviors.

Findings of students' responses on the effectiveness of primary preventive counselling in addressing the students' problem behaviors are presented in Table 11.

Table 11

Students' Responses on the Effectiveness of Primary Preventive Counselling in Addressing Students Problem Behaviors

| | Respondents ratings | | | | | | | | | |
| | VE | | E | | U | | LE | | I | |
Responses	f	%	f	%	f	%	f	%	f	%
In enlightening students on dangers of drug abuse	116	37.4	173	55.8	9	2.9	4	1.3	8	2.6
Promoting good behaviors in students	235	75.8	62	20.0	6	1.9	3	0.9	4	1.3
Uplifting students' self-esteem in school	203	65.5	73	23.5	18	5.8	9	2.9	7	2.3
Teaching students' importance of dialogue in presenting their needs in school	170	54.8	101	32.6	17	5.5	12	3.9	10	3.2
Improving interaction among students and teachers	229	73.9	51	16.5	8	2.6	13	4.2	9	2.9
In educating students on the risks of teenage sex and STIs	212	68.4	79	25.5	5	1.6	8	2.6	6	1.9
In cautioning students on the use of sexually explicit materials and clothes	126	40.7	145	46.8	12	3.9	13	4.2	14	4.5
Average mean	184.4	59.5	97.7	31.5	10.7	3.4	8.9	2.9	8.3	2.7

The findings in Table 11, the students agreed that primary preventive counselling was very effective by 91.0% and only 09.0% showing that the approach was ineffective. The approach was effective in enlightened students on dangers of drug abuse with 93.2%, risks on STIs by 93.9%, motivated them towards good and acceptable behaviors with 95.8% and uplifting their self-esteem by 89.0%. Griffin, (1994); Chepkonga, (2009) and Muinde, (2015) in their studies in their studies found that counselling was effectiveness in inculcating appropriate behaviors in students.

Findings of the teacher counsellors' responses on the effectiveness of primary preventive counselling in addressing problem behaviors in secondary school students are presented in Table 12.

Table 12
Teacher Counsellors' Responses on the Effectiveness of Primary Preventive counselling in Addressing Problem Behaviors in Secondary School Students

| | Respondents ratings | | | | | | | | | |
| | VE | | E | | U | | LE | | I | |
Responses	f	%	f	%	f	%	f	%	f	%
In enlightening students on dangers of drug abuse	6	40.0	5	33.3	1	06.7	2	13.3	1	06.7
In promoting good behaviors in students	8	53.4	6	40.0	0	00.0	1	06.7	0	00.0
In uplifting students' self-esteem in school	7	46.7	4	26.7	2	13.3	1	06.7	1	06.7
In teaching students' importance of dialogue in presenting their needs in school	7	46.7	5	33.3	1	06.7	1	06.7	1	06.7
In improving interaction among students and teachers	5	33.3	5	33.3	2	13.3	2	13.3	1	06.7
In educating students on the risks of teenage sex and STIs	6	40.0	7	46.7	0	00.0	1	06.7	1	06.7
In cautioning students on the use of sexually explicit materials and clothes	4	26.7	5	33.3	2	13.3	2	13.3	2	13.3
Average Mean	6.1	41.0	5.2	35.2	1.1	07.6	1.4	09.5	1.0	06.7

The findings from teacher counsellors in Table 12 showed that the primary preventive counselling was effective with a rating of 76.2% and only 23.8% indicating it was less effective. They indicated that the approach was effective in promoting good behavior in students by 93.4% and in educating students on dangers of STIs by 86.7%. It was effective also in enlightening students on dangers of drug abuse by 73.3%; in uplifting students' self-esteem by 73.4% and in improving interactions between students and teachers with 66.6%. Studies by Kenani (2011); Kyriacou (2001) and Goldstein (1995) support the findings on improved interaction among students and teachers and its positive impact on students' behaviors. Living in harmony with other students and

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teachers makes the students feel cared for, raises their self-esteem and attachment to their school.

The researcher sought information from deputy principals on effectiveness of primary preventive counselling and the findings are as shown Table 13.

Table 13
Deputy Principals' Responses on the Effectiveness of Primary Preventive Counselling in Addressing Students Problem Behaviors

| | Respondents ratings | | | | | | | | | |
| | VE | | E | | U | | LE | | I | |
Responses	f	%	f	%	f	%	f	%	f	%
In enlightening students on dangers of drug abuse	5	38.5	4	30.8	2	15.4	1	7.7	1	7.7
In promoting good behaviors in students	8	61.5	1	07.7	1	07.7	2	15.4	1	07.7
In uplifting students' self-esteem in school	6	46.2	4	30.8	1	07.7	1	07.7	1	07.7
In teaching students' importance of dialogue in presenting their needs in school	4	30.8	5	38.5	2	15.4	0	0.0	2	15.4
In improving interaction among students and teachers	4	30.8	6	46.2	1	07.7	1	07.7	1	07.7
In educating students on the risks of teenage sex and STIs	3	23.1	5	38.5	2	15.4	1	07.7	2	15.4
In cautioning students on the use of sexually explicit materials and clothes	3	23.1	6	46.2	1	07.7	2	15.4	1	07.7
Average mean	4.7	36.4	4.4	34.1	1.4	11.0	1.1	8.5	1.3	10.0

In the findings in Table 13 the deputy principals indicated that primary preventive counselling was effective with an average rating of 70.5% and 29.5% had said it was less effective. In their opinion, the approach was effective in teaching students the importance of interaction among them and teachers at a rating of 77.0% and of dialogue in presenting their issues by 69.3%. The approach was effective also in educating and cautioning the students on risks and consequences of problem behaviors such as drug abuse at 69.3%; exposure to explicit sexual materials and dressing at 69.3%; teenage

sex, pregnancies and STIs at 61.6%. The students moral behaviors are greatly influenced either negatively o positively by the exposure to social media, internet, radio and television. They encounter personalities and information they associate with and copy the styles they observe as Mahega, (2014) explained in her study done in Tanzania. In her study done in Kitui secondary school, Muinde R., (2015) revealed that uncensored internet and social media use exposes the students to inaccurate information and inappropriate role models that greatly influences their moral behaviors.

The students had the view that primary preventive counselling was very effective in addressing most of their problem behaviors with the average ranking of 91.0% while the teacher counsellors and deputy principals concurred that primary preventive counselling was effective with the rating of 76.2% and 70.5% respectively. When 29.5% of the deputy principals indicated the approach was less effective 09.0% of the students and 23.8% of the teacher counsellors showed that the approach was ineffective in addressing most of the common problem behaviors in secondary school students. But while the students and teacher counsellors said that primary preventive counselling was effective in teaching students the importance of dialogue and educating them on the risks of teenage sex and STIs, to the deputy principals the approach was just average in addressing the issues. The finding are supported by the studies by Ndwiga (2007), Kenani (2011) and Karega (2012) in which they found out that guidance and counselling helps students to acquire the right values and attitudes that will make them attain a sense of self-identity and self-esteem that can guide their behavior and form their character.

4.5 Responses on Secondary Preventive Counselling
The second objective sought to get information on the effectiveness of secondary preventive counselling in addressing the problem behaviors of secondary school students. The questionnaires had seven itemized statements specifically designed to obtain required information on the effectiveness of secondary preventive counselling. A five-point Likert scale rated between 1 and 5 with 5=Very Effective; 4=Effective; 3=Unsure; 2=Less Effective and 1=Ineffective was used. The findings were presented in form of frequencies and percentages with 1.0-19.9% meaning it is ineffective, 20.0-

39.9% less effective, 40.0-59.9 average, 60.0-79.9 effective and 80.0-100% very effective.

The findings on the students' responses to the statements related to effectiveness secondary preventive counselling in addressing secondary school students' problem behaviors are presented in Table 14.

Table 14
Students' Responses on the Effectiveness of Secondary Preventive Counselling in Addressing Problem Behaviors

| Responses | Respondents ratings | | | | | | | | | |
| | VE | | E | | U | | LE | | I | |
	f	%	f	%	f	%	f	%	f	%
In helping students cope with school life	56	18.1	241	77.7	5	01.6	6	01.9	2	00.6
In promoting responsible behaviors in students	263	84.8	20	06.5	8	02.6	12	03.9	7	02.3
In creating positive interaction among students and teachers	177	58.8	116	37.4	10	03.2	4	01.3	3	01.0
In upholding honesty, trustworthiness and obedience of students in school	234	75.5	53	17.1	3	01.0	14	04.6	8	02.6
In reducing thefts and violence in school	118	38.1	115	37.1	10	03.2	55	17.7	12	03.9
In reprimanding those using explicit sexual material and dressings	97	31.3	61	19.7	15	04.8	37	11.9	100	32.2
In reducing cases of teen pregnancies and STIs in school	240	83.9	33	10.6	8	02.6	20	06.5	9	02.9
Average mean	169.2	54.6	91.2	29.4	8.4	02.7	21.1	06.8	20.1	06.5

The information in Table 14 revealed that the students viewed secondary preventive counselling as very effective with an average of 84.0% while 16.0 % indicating that it was ineffective. The students agreed that the approach was very effective in helping them cope with school life at 95.8%; promoting responsible behaviors by 91.3%; reducing cases of teenage pregnancy and STIs by 94.5%; enhancing good social virtues such as honesty, obedience, trustworthiness by 92.6% and improved interaction between students and teachers by 96.2%. The findings also revealed that the approach was effective in reducing physical problem behaviors such as violence, bullying and thefts in school by 75.2%. However, the students had the perception that the approach

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was average in handling moral behaviors like use of explicit sexual materials and clothing in school with lowest rating of 51%. This might have been due to influence of factors such as lack of proper parental guidance and counselling, parents shying from discussing sexuality and exposure to explicit media content according Kahigi, (2003), Barbara, (2005) and Muinde, (2015).

The findings from the teacher counsellors' responses in relation to effectiveness of secondary preventive counselling are shown in Table 15.

Table 15
Teacher Counsellors' Responses on the Effectiveness of Secondary Preventive Counselling in Addressing Students Problem Behaviors

| | Respondents ratings | | | | | | | | | |
| | VE | | E | | U | | LE | | I | |
Responses	f	%	f	%	f	%	f	%	f	%
In helping students cope with school life	5	33.3	6	40.0	1	6.7	1	06.7	2	13.3
In promoting responsible behaviors in students	6	40.0	6	40.0	1	6.7	1	06.7	1	06.7
In creating positive interaction among students and teachers	4	26.7	6	40.0	1	6.7	2	13.3	2	13.3
In upholding honesty, trustworthiness and obedience of students in school	6	40.0	4	26.7	2	13.3	1	06.7	2	06.7
In reducing thefts and violence in school	3	20.0	5	33.3	0	0.0	2	13.3	5	33.3
In reprimanding those using explicit sexual material and dressings	4	26.7	6	46.7	0	0.0	2	13.3	2	13.3
In reducing cases of teenage pregnancies and STIs in school	5	33.3	6	40.0	1	6.7	1	06.7	2	13.3
Average mean	4.7	31.3	5.7	38.2	0.9	5.7	1.4	09.5	2.3	15.3

The major finding in Table 15 was that the teacher counsellors had the opinion that secondary preventive counselling was effective with an average mean of 69.5% with 30.5% indicating that it was less effective. They also agreed that the approach was effective in helping students in cope with school life, upholding good virtues like honesty, trustworthiness, obedience and good behaviors with ratings of 66.7% and 80.0% respectively. They also acknowledged that the intervention was effective in reduced STIs and teenage pregnancies by 73.4% and in reprimanding those with unacceptable moral behaviors rated by 73.3%.

The researcher also had the findings from deputy principals related to effectiveness secondary preventive counselling and their findings were as shown in Table 16.

Table 16
Deputy Principals' Responses on the Effectiveness of Secondary Preventive Counselling Addressing Secondary School Students' Problem Behaviors.

| | Respondents ratings | | | | | | | | | |
| | VE | | E | | U | | LE | | I | |
Responses	f	%	f	%	f	%	f	%	f	%
In helping students cope with school life	5	38.5	2	15.4	0	0.0	3	23.1	3	23.1
In promoting responsible behaviors in students	4	30.8	6	46.2	1	7.7	0	00.0	2	15.4
In creating positive interaction among students and teachers	4	30.8	3	23.1	2	15.4	3	23.1	1	07.7
In upholding honesty, trustworthiness and obedience of students in school	3	23.1	6	46.2	1	7.7	2	15.4	1	07.7
In reducing thefts and violence in school	5	38.5	4	30.8	1	7.7	2	15.4	1	07.7
In reprimanding those using explicit sexual material and dressings	4	30.8	6	46.2	0	0.0	1	07.7	2	15.4
In reducing cases of teen pregnancies and STIs in school	4	30.8	5	38.5	1	7.7	1	07.7	2	15.4
Average mean	4.1	31.5	4.6	35.4	0.9	6.9	1.7	13.1	1.7	13.1

In the findings in Table 16, the deputy principals had shown that secondary preventive counselling was effective at a rating of 66.9% with 33.1% saying the approach was average. In promoting and inculcating responsible behaviors in students, the deputy principals rated the approach at 77.0% and reducing thefts and violence by 69.3%. The findings also revealed that the approach was effective in correcting immoral behavior like teenage sex, pregnancies and STIs and use of explicit sexual materials by 69.3% and 77.0% respectively but was less effective in helping students to cope with school life as shown by the lowest rating of 53.9%. The deputy principals charged with the responsibility of handling discipline in the schools confirmed that the approach had reduced cases of violence and thefts in secondary schools in concurrence with what Muchiri, (2012) indicated that violent behaviors were reduced in secondary schools. But the studies by Ndetei (2008); Oriya (2005); Mutisya (2003) and Wachira (2002) had contrary findings showing that violent behaviors were frequent in secondary schools supporting the opinions of 30.0% of deputy principals who indicated that the approach was ineffective in hence the cases of violence and theft in secondary schools.

In summary of the findings on effectiveness of secondary preventive counselling, it was clearly evident that the students viewed the approach as effective with average rating of 84.0% while only 16% had a contrary opinion. The average rating 69.5% by the teacher counsellors showed that they agreed on the effectiveness of the approach in addressing most of the students' behavioral problems although 30.5% of them had dissenting views. The deputy principals had the opinion that the approach was average in addressing the behavioral problems in secondary school students as reflected by their average ranking of 69.9%. This could be due to influences by other underlying factors on students such as socio-economic background, peer and parental influence, parental guidance, legal individual rights, changes in lifestyles as Kimani, (2014); Muinde, (2015) and Karega, (2012) opined in their earlier studies. The studies also revealed that peers, teachers and parent who are immediate role models to the students positively or negatively influences the students' moral conduct and behaviors.

4.6 Responses on Tertiary Preventive Counselling

The third objective aimed to get the information on effectiveness of tertiary preventive counselling addressing problem behaviors in secondary school students. The

questionnaires had seven itemized statements specifically designed to obtain required information on the effectiveness of tertiary preventive counselling. A five-point Likert scale rated between 1 and 5 with 5=Very Effective; 4=Effective; 3=Unsure; 2=Less Effective and 1=Ineffective was used. The findings were presented in form of frequencies and percentages with 1.0-19.9% meaning it is ineffective, 20.0-39.9% less effective, 40.0-59.9 average, 60.0-79.9 effective and 80.0-100% very effective. The results from the students' responses are shown in Table 17.

Table 17
Students' Responses on the Effectiveness of Tertiary Preventive Counselling in Addressing Students Problem Behaviors.

| | Respondents ratings | | | | | | | | | |
| | VE | | E | | U | | LE | | I | |
Responses	F	%	f	%	f	%	f	%	f	%
In rehabilitating students addicted to drugs	192	61.9	86	27.7	6	1.9	14	4.5	12	3.9
In encouraging drop out go back to school	36	11.6	231	74.5	16	5.2	14	4.5	13	4.2
In reinforcing sustained behavior change in students	221	71.3	64	20.6	8	2.6	10	3.2	11	3.5
In rehabilitating perpetrators and victims of bullying in school	98	31.6	143	46.1	18	5.8	31	10.0	20	6.5
In rehabilitating students with criminal behaviors	191	61.6	100	32.3	3	0.9	10	3.2	6	1.9
In reprimanding those indulged in explicit sexual materials and dressing in school	94	30.3	154	49.7	12	3.9	29	9.4	22	7.1
In helping victims of STIs, AIDS and teenage pregnancy	180	58.1	87	28.1	6	1.9	24	7.7	13	4.2
Average	144.6	46.6	123.6	39.9	9.9	3.2	18.9	6.1	13.9	4.5

The findings on students' responses in Table 17 indicated that tertiary preventive counselling was effective in addressing common behavioral problems with a rating of 86.5% and 13.5% thought that the approach was not effective. The approach according to the students was effective in reinforcing sustained behavior changes by 91.9%; in rehabilitating those who had criminal behaviors at 93.9% and those addicted to drugs and alcohol at 89.6%. The approach was also effective in encouraging dropout back to school at 86.1%; helping victims of teenage pregnancies and STIs by 86.2% and reprimanding those who were involved in the use of explicit sexual material and clothing at 80.0%.

The researcher had the findings of the teacher counsellors' responses to the statements relating to effectiveness of tertiary preventive counselling addressing the students' problem behaviors as shown in Table 18

Table 18
Teacher Counsellors' Responses on the Effectiveness of Tertiary Preventive
Counselling in Addressing Students Problem Behaviors

| | Respondents ratings | | | | | | | | | |
| | VE | | E | | U | | LE | | I | |
Responses	f	%	f	%	f	%	f	%	f	%
In rehabilitating students addicted to drugs	5	33.3	6	40.0	1	06.7	2	13.3	2	13.3
In encouraging drop out go back to school	7	46.7	4	26.7	1	06.7	2	13.3	1	06.7
In reinforcing sustained behavior changes in students	6	40.0	5	33.3	1	06.7	2	13.3	1	06.7
In rehabilitating perpetrators and victims of bullying in school	7	46.7	5	33.3	2	13.3	1	06.7	0	00.0
In rehabilitating those with criminal behaviors	4	26.7	6	40.0	2	13.3	2	13.3	1	06.7
In reprimanding those indulged in explicit sexual materials and dressing in school	6	40.0	5	33.3	0	00.0	2	13.3	1	06.7
In helping victims of STIs, AIDS and teenage pregnancy	5	33.3	4	26.7	2	13.3	2	13.3	2	13.3
Average mean	5.7	38.1	5.0	33.3	1.3	08.6	2.0	13.3	1.1	07.6

The views of the teacher counsellors as shown by the findings in Table 18, indicated that tertiary preventive counselling was effective by an average rating of 71.4% while 28.6% thought the approach was not effective. But 73.3% of them said that the approach was effective reinforcing sustained positive behavior changes; rehabilitating students who had violent behaviors by 66.7% and helped in those involved in drugs and substances abuse by 73.3%. The teacher counsellors also showed that approach was effective in correcting and reprimanded the students who were nabbed by immoral behaviors like addiction to explicit sexual materials by 73.3% and rehabilitating students who were victims of teenage sex and pregnancies by 60.0%; helped in encouraging dropout to resume schooling at 73.4% and rehabilitation of students who had criminal behaviors at the ratings by 66.7%.

The findings from the deputy principals' responses to the statements relating to effectiveness of tertiary preventive counselling with their analysed results based on the Likert scale rating and means as shown in Table 19.

Table 19
Deputy Principals' Responses on the Effectiveness of Tertiary Preventive Counselling in Addressing Secondary School Students Problem Behavior

Responses	f	%	f	%	f	%	f	%	f	%
In rehabilitating students addicted to drugs	5	38.5	4	30.8	0	00.0	2	15.4	2	15.4
In encouraging drop out go back to school	4	30.8	6	46.1	1	07.7	1	07.7	1	07.7
In reinforcing sustained behavior changes in students	5	38.5	3	23.1	2	15.4	2	15.4	3	23.1
In rehabilitating perpetrators and victims of bullying in school	5	38.5	4	30.8	1	07.7	1	07.7	2	15.4
In rehabilitating those with criminal behaviors	6	46.1	3	23.1	2	15.4	1	07.7	1	07.7
In reprimanding those indulged in explicit sexual materials and dressing in school	5	38.5	4	30.8	1	07.7	2	15.4	1	07.7
In helping victims of STIs, AIDS and teenage pregnancy	4	30.8	3	23.1	1	07.7	2	15.4	3	23.3
Average mean	4.9	37.4	4.0	30.8	1.1	8.8	1.4	11.0	1.9	14.3

In the findings in Table 19, 68.2% of the deputy principals opined that tertiary preventive counselling was effective while 31.8% indicated that the approach was not effective. 61.6% of them agreed that tertiary preventive intervention was effective in sustaining positive behavior change and in rehabilitating the students who had indulged in criminal behaviors by 69.2%. The approach was found to be effective in rehabilitating victims of physical problem behaviors such as bullying and fighting at 69.3%; positively encouraged dropout return to school at 76.9% and correcting students indulged immoral behaviors shown by the rating of 69.3% while it was average in helping victims of teenage pregnancies and STIs by 53.9% and rehabilitating students addicted to drugs and alcohol both at 69.3%. The influence by the television which the students are exposed to often at home and in recreation places have promotional advertisements that glorify inappropriate moral behaviors, alcohol and other substances hence enticing and encouraging students towards their use as was viewed in the studies by Mahega, (2014) and Muinde, (2015).

Showing students love; sympathy and acceptance could help them build self-esteem, self-confidence and promoting behavior changes. These findings are supported by the studies done by Muchiri (2012) on nurturance and students' behaviors; Kenani (2011) on aggressive behavior in which they emphasized on role of parents, school administrators, teachers and school environment in development and addressing of the students' problem behaviors. Students who had chronic violent, social and immoral behaviors were referred to professional counselling and rehabilitation centres. This was done in consultation with the parents, legal children offices and the law enforcers as Nasibi (2003); Makhoha (2008); Maseko (2009) and Richards (2011) had explicated in their different studies.

The importance of good role modelling by the parents and staff in the schools is vital to students' behavior changes as supported by the studies done by Chalmers (2002) and Ganakis (2003) in which they stressed on the importance of teachers and other role models in shaping the students' behavior development. The teachers who constantly interact with the students should be wary of how their behavior, exposure to social and electronic media may greatly influence the students' behavior development through

wrong modelling. According to Collins (2004); Corte (2007); Mahega (2014) and Muinde (2015), the parents have a bigger role in guiding and shaping the moral behaviors of their children against the influence by all form of social media.

In summary the respondents had divergent views in some of their responses on effectiveness of tertiary preventive counselling in addressing students' problem behaviors while in other issues they had similar views. It was the students' general view that tertiary preventive counselling had positive impact on their behaviors as reflected by the average rating of 86.5% for all responses indicated in Table 17. The average ranking of 71.4% showed that the teacher counsellors had the general perception that tertiary preventive counselling had a positive impact in correcting, reprimanding and rehabilitating the students who had various problem behaviors while 20.1% had the opinion that the approach was not effective. The deputy principals viewed the approach as effective but with a rating 68.2% lower than that of both the students and the teacher counsellors. The students had the view that tertiary preventive counselling was effective while to teacher counsellors and deputy principals was average in addressing the common physical, social and moral problem behaviors in secondary school students.

The students and the teacher counsellors had the view that approach was effective in rehabilitating students who were victims of various problem behaviors while the deputy principals opined that the approach was average. When the students felt that the approach was effective in helping the victims of STIs and AIDS, the teacher counsellors and deputy principals said that it was average in addressing the behavioral problems. On encouraging the students who had dropping out to go back to school, all the respondents expressed the view that the approach was average probably due to cases not reported since most dropouts may not really want to resume back in the same school they were previously.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study aimed at finding out the effectiveness of preventive counselling on students' problem behaviors in secondary schools in Igembe South Sub-county. This chapter contains the summary and discussions of the key findings and also presents the conclusions, recommendations analysed as well as suggestions for further research.

5.2 Summary of Findings

Primary preventive counselling was viewed by the all the respondents as effective in addressing the common problem behaviors although their ratings varied in the responses. The findings revealed that students had acquired the right values and attitudes that helped them develop a sense of identity and uplifted self-esteem that guided their behavior and formed their character. The students were constantly cautioned on dangers of involving themselves in problem behaviors such as drug abuse, violent and antisocial behavior, teenage sex and exposure to explicit sexual materials and dressing.

Secondary preventive counselling was found be effective in addressing the common students' problem behaviors as indicated by the students, teacher counsellors and deputy principals but by varying percentages. The approach helped the students to developed responsible behaviors and cope well with school life. Students with acute problems behaviors like sexual deviancy, dropout, violence and criminal behaviors were helped to desist from their deviant behaviors and were rewarded for showing appropriate and sustained positive behaviors changes. The approach had also inculcated good virtues in students hence they relate well with others, were honest and trustworthy, had fewer cases of theft and violent activities, reduced teenage sex and pregnancies.

Most of the findings for the students and teacher counsellors' responses and the deputy principals had revealed that tertiary preventive counselling was effective but at different ratings that were highest I students and lowest in the deputy principals. Tertiary preventive counselling helped in correcting, reprimanding and addressing the students'

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problem behaviors in secondary schools. The approach helped in ameliorating the pain and suffering of consequences of the chronic maladjusted behaviors such as drugs and alcohol abuse, dropout, violent behaviors, sexual deviancy, teenage sex, pregnancy and STIs through treatment and rehabilitation. They were encouraged and motivated to develop adjusting and coping mechanisms in order to resume their normal lives in school and at home. The approach also dealt with rewarding sustained behavior changes and worked to prevent behavior problems relapse in those rehabilitated and recovered.

5.3 Conclusion

From the study findings the researcher made the conclusions based on the study objectives that:

Primary preventive counselling was found to be effective in promoting dialogue; enlightened and motivated students towards appropriate behaviors; inculcated good behaviors in them in order to lead well-adjusted lives. It also cautioned student on the dangers and consequences of the common problem behaviors, helped them develop high self-esteem and good social interaction amongst themselves and with their teachers. It has also helped them acquire the right attitudes that will help them acquire a sense of self-identity, values and beliefs that can guide their behavior and form their character.

Secondary preventive counselling was found to be effective in helping students who had indicated developed problem behaviors by encouraging and motivating them to desist from their maladjusted behaviors and rewarding appropriate behavior changes. The approach has helped the students cope with school life, promoted responsible behaviors, taught them good social virtues, reduced violent behaviors and thefts as well as reprimanding and correcting those with errant behaviors. Students' moral behaviors had been improved as indicated by reduction in teenage pregnancies and STIs as shown by the study findings.

Tertiary preventive counselling was found to be effective in ameliorating the pain in those suffering the consequences of the problem behaviors through treatment and rehabilitation. The school dropouts had been encouraged to go back to school; students with addicted to chronic problem behaviors such as severe drugs and alcohol abuse,

violence and involvement in sexual orgies were rehabilitated and retained or readmitted in other schools after recovery. Showing the victims love, sympathy and acceptance helped them build self-esteem and self-confidence promoting positive living and behavior changes. The recovered victims were helped to cope well with school life and were continuously monitored to prevent relapse of the problem behaviors.

5.4 Recommendations

The following recommendations are made from the findings of this study:

i. Proper comprehensive curriculum should be in place to equip the teacher counsellors with adequate professional knowledge in preventive counselling approaches in addressing secondary school students' problem behaviors.

ii. The school administrators, teachers and parents should be enlightened on factors that lead to problem behaviors in students in order execute their different roles effectively in how their influence impacts on the students' behavior development.

iii. The schools should also have the capacity to correct and rehabilitate the students with acute problem behaviors by ensuring they are not only helped to recover but retained in the schools, motivated and encouraged towards leading well-adjusted lives and ensure they are well monitored even outside school to prevent relapse of the problem behaviors.

5.5 Suggestions for Further Research

The following are suggestions for further research:

i. A comparative study can be carried out with students exposed to preventive counselling and those not exposed to it in order to clearly show the effectiveness of preventive counselling on students' problem behaviors.

ii. A comparative research can be conducted on the effectiveness of preventive counselling in addressing the problem behaviors of students' private secondary school.

iii. A national wide study can be carried out in secondary schools to establish whether similar findings could be obtained.

REFERENCES

ADEA, (2003). The Challenge of Learning: Improving Basic Education in Sub Saharan Africa. *Discussion Paper for the ADEA Biennial Meeting*: Grand Baize, Mauritius, 3-6 December, Paris, Association for the Development of Education in Africa.

Adelman, H.S. and Taylor, L. (2000). Moving Prevention from Fridges into the Fabric of School Improvement. *Journal of Educational and Psychological Consultation, 11, 7-36.*

Adepoju, T.L. (2003). Locational Factors and Academic Performances of Secondary School Students in Oyo State, Nigeria. Unpublished Ph.D., Thesis, University of Ibadan.

Adler, N. (2002). Interpretations of Meaning of Care: Creating Caring Relationship in School Classrooms. *Urban education 37 (2) 241-266.*

Ajowi, J.O. and Samatwa E.M.W. (2010). *Role of Guidance and Counselling in Promoting Students Discipline in Secondary School in Kenya.* Case Study, of Kisumu District. Department of Education Management and Foundations, Maseno University Kenya.

Ajzen, I. and Fischbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior.* Englewood Cliffs, NJ: Prentice Hall.

Ajzen, I. (1991). Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes. 50, 179-211*

Albee G.W. (1959). Mental Health Manpower Trends. New Yolk: Basic Books.

Albert Bandura, (1969). Principles of Behavior Modification, Holt, Reich art and Wiston.

Aleude, O. Mc Eicher, A. G. & Kenny, M.C. (2005). Counselling in Nigeria and the United States. Contrasts and Similarities. *International journal for the Advancement of Counselling 27,* 371 – 383

Amadio, M., Troung, N., Ressler D., and Gross, S. (2004). Quality Education for All? World trends in education and gaols between the 1980s and 2000s.*Background Paper for EFA Global*

Arnett J.J. (1996). Sensation Seeking, Aggressiveness and Adolescence Reckless behavior. *Personality and Individual Differences, 20, 693-702.*

Audo, T.O. (2008). *Peer Counselling Experience among Selected Kenyan Secondary Schools*. Paper presented at KAPC Conference Safari Park Hotel 2nd to 4th September 2008.

Ayodele, S.O. (2000). *The Challenges of Secondary Education in Twenty First Century*. Keynote Address at a Curriculum Organization of Nigeria Conference of Fellowship Ceremony Held at Multipurpose Auditorium of University of Jos Jos (4th march).

Barbette, P.M., Norana, K.L and Richard D.F. (2005). Classroom Behavior Management: A dozen common mistakes and what to do instead. *Preventing School Failures, 49 (3), 11-19.*

Battistich, V., Schaps, E., Watson M., Solomon D. and Lewis C. (2003). Effects of child Development Project on Students Drug use and other Problem Behaviors. Journal of Primary Prevention.21, 75-99.

Bergman, R. (2002). Why Be Moral? A Conceptual Model from Developmental Psychology. *Human Development*, 45, 104-124.

Berkowitz, A.D. (2003b). Application of Social Norms Theory in other Health and Social Justice Issues. Chapter 16 in H.W. Parkins (Ed.). *The Social Norm Approach to Preventing School and College Age Substances Abuse: A Handbook for Educators, Counsellors, Clinicians,* San Francisco, Jossey

Berkowitz, M.W. (2000). Character Education as Prevention (pp37-45).

Bigsby, M.J. (2002). Seeing Eye to Eye? Comparing Students and Parents Perceptions of Bullying Behavior. *School Social Work,* 27(1); 37-57.

Borg, W.R and Gall, M.D. (1989). Educational Research and Introduction, 5th Ed. White Plains, NY: Longman.

Brant, A.L. and Zimmerman, M.A. (2002). Examining the Effects of Academic Beliefs and Behaviors on Changes in Substances Use among Urban Adolescents. *Journal of Educational Psychology, 94, 621-637.*

Bryant, A.L., Schulenburg, J., Bachman, J.G., O'Malley P.M. and Johnson L.D. (2002). Understanding the Links between School Misbehavior, Academic Achievement and Cigarette use in Adolescence. *A National Panel Study, of Adolescents. Preventive Science,1, 71-87.*

Caplan, G. (1964). Principles of Preventive Psychiatry, New Yolk: Basic Books

Clap, D.J. and MacDonnell, A.L. (2000). The Relationship of Perceptions of Alcohol Promotion and Peer Drinking Norms to Alcohol Prevention Problem Reported by College Students. Journal of College Students Development, 41 (1) 20-26.

Conyne, R.K. (1987) Primary Prevention Counselling: *Empowering People and Systems:* Muncie*,* IN: Accelerated Development Inc.

Conyne, R. K. (1991). Gains in primary prevention: Implications for the counseling profession. *Journal of Counseling and Development*, *69*, 277-279.

Conyne, R.K. (2004) Preventive Counselling: *Helping People to Become More Empowered in Systems and Settings*, New Yolk: Brunner-Ronladge.

Conyne, R.K., Wilson, F. R, Home, A.M, Dagley, J.C, and Kulic, K.R., (1999, August). *Reviews of Groups for Prevention with Adolescents and Adults*: Symposium conducted at the 107th APA convention, Boston.

Cowen, E.L. (1994). The Enhancement of Psychological Wellness: Challenges and Opportunities. *American Journal of Community Psychology, 22, 149-179.*

Cronbach, L.J., Glesser, G.C., Nanda, H. and Rajaratman, N. (1972). The Dependability of Behavioral Managements: Theory of Generasability for Scores and Profiles.

Dryfoos, J.G. (1990). *Adolescent at Risk: Prevalence and Prevention*: New Yolk: Oxford University Press.

Fields, B.A. (2011). *Productive Pedagogies and Discipline*: The Challenges of aligning teaching and behavior management. University of Southern Queensland.

Gacathi, J. (1975) *National Committee on Educational Policies and Objectives Report* (Republic of Kenya), Nairobi government printer

Glaser, W. (2009). Classroom Management: *Dealing with Discipline Problems, Quality Education Programs*, Inc. San Pedro.

Glaser, W. (2009). *Introduction to Choose Theory*: Teaching Students' Responsible Behavior. Quality Education Programs Inc. San Pedro.

Goodnight, J. A., Lahey, B. B., Van Hulle, C. A., Rodgers, J. L., Rathouz, P. J., Waldman, I. D., & D'Onofrio, B. M. (2012). A quasi-experimental analysis of the influence of neighborhood disadvantage on child and adolescent conduct problems. *Journal of Abnormal Psychology, 121,* 95–108. Doi: 10.1037/a0025078

Gottfredson, G.D. and Gottfredson D.C. (2001). What Schools do to Prevent Problem Behaviors and Promote Safe Environments? *Journal of Educational and Psychological Consultation, 12, 313-344.*

Government of Kenya. Republic of Kenya (2001)." Report of Task Force on Student Discipline and Unrest in Secondary Schools" Nairobi: Jomo Kenyatta Foundation.

Greenberg, M.T., Weisberg, R.P., O'Brien, M.T., Zins, J.E., Fredric's, L., Resnick H *et.al.* (2003). Enhancing School-Based Prevention and Youth Development through Coordinated Social Emotional and Academic Learning. American Psychologist, 58, 466-474.

Hage, S.M., Romano, J., Conyne, R., Kenny, M., Mathews, C., Schwartz, J.P. and Waldo, M. (2007). Guidelines to Prevention, Research Training and Social Advocacy for Psychologists. *The counselling psychologist, 35, 493-536.*

Hansen, W. (1992). School Based Substance Prevention*: A Review of the State of the Art in Curriculum, 1980-1990. Health Education (*Bradford UK), Vol.7 p (403-30).

Harop, Alex. (1983). *Behavior Modification in Classroom*: Hodder and Stoughton: London, Sydney, Auckland, Toronto.

Jessor R. (1987). Problem Behavior Theory, Psychosocial Development and Adolescent Problem Drinking, 82 (4), 331-342.

Jessor, R. (1992). Risk Behavior in Adolescence: A Psychological Framework for Understanding and Action. *Developmental Review. 12, 374-390.*

Jessor, R., & Jessor, S. L. (1977). *Problem behavior and psychosocial development.* San Diego, CA: Academic Free Press.

Jessor, R., Turbin, M.S., Custa, F.M., Dong, Q., Zang, H. and Wang, C. (2003). *Adolescent Problem Behavior in China and United States*: A Cross-National Study, of Psychosocial Problem Behavior in Adolescence, 13(1), 329-360.

Kathuri, J and Pals, A (1993). Introduction to Education Research. Njoro: Egerton Media Centre.

Kochanska, G., & Aksan, N. (2006). Children's conscience and self-regulation. Journal *of Personality, 74*, 1578-1618.

Kombo, D.K. and L.A.T. (2006) Proposal and Thesis Writing. (Pauline's Publications Africa Kenya).

Kothari, C.R, (1990) *Research Methodology, Methods and Techniques* (2nd edition)

Lickona, T., Schaps E. and Lewis C (2003). *CEPs Principles of Effective Character Education.* Washington DC. Character Education Partnership.

Ludwig, J., Sanbonmatsu, L., Gennetian, L., Adam, E., Duncan, G. J., Katz, L. F., McDade, T. W. (2011). Neighborhoods, obesity, and diabetes: A randomized social experiment. *New England Journal of Medicine, 365,* 1509–1519. doi:10.1056/NEJMsa1103216

Machmias, A. (1997). *Qualitative Research and Case Study, Application in Education.* San Francisco: Jossey Bass.

Maslow, H.A. (2003). *Motivation and personality (3rd Ed.).* New Yolk. Harperand Row.

Miltenberger, R.G. (2008). *Behavior Modification Principles and Procedures.* (4th Ed.) Wards worth: Belmond USA.

Mortimore, Peter et al, (1983). Behavior Problems in Schools: an Evaluation of Support centres. Croom helm Ltd. London and Canbena.

Mugenda, O.M and Mugenda, A.G (1999) *Research Methods: Quantitative and Qualitative Approaches* Nairobi Act press

Mutie, E.K and Ndambuki, P (1999) *Guidance and Counselling for Schools and Colleges* Nairobi: Oxford University Press (East Africa).

Nasibi, W.M.W. (2006). *Discipline, Guidance and Counselling in* Schools2nd edition, Nairobi, Nehema publishers

Newcomb, M.D., Abbot, R.O., Catalano, R.F., Hawkins J.D., Bettini-Pearson, S and Hill, K. (2002). Mediation and Deviance Theories of Late High School Failure. Process of Structural Strains, Academic Competence and General `versus Specific Problem Behaviors. *Journal of counselling Psychology 49 (2) 242-248.*

Olwens, D. (1991). Bully/Victim Problem among the School Children: Basic Facts and Effects of School based Intervention Programs. In D.J. Pepper and K.H. Rubin (Eds). *The development and Treatment of Childhood Aggression* (pp. 411-448), Hillsdale, NJ: Lawrence, Erlbaum Associates Inc.

Prevention in Counselling Psychology: Theory, Research, Practice and Training, Volume 2-Issue 1. 2008.

Reyes, L. Eland Barnaby, G.H. (2004). Examining the Decision Process of Students Cheating Behavior. An Empirical Study, *Journal of Business Ethics, 50, 397-414.*

Reynolds, S.J. (2006). Moral Awareness and Ethical Predispositions: Investigating the Role of Individual Differences in Recognition of Moral Issues. *Journal of Applied Psychology, 91, 233-243.*

Romano, J. and Hage S.M. (2000a). Prevention and Counselling Psychology: revitalizing commitments for the 21st century. *The Counselling Psychologist, 9.90-96.*

Samatwa E.M.W (2007). *Management of Students Discipline in Secondary Schools in Bungoma District, Kenya.* Unpublished PhD Thesis in Education Administration, Maseno University Kenya.

Smith, D.C. and Sandhu, D.S. (2004). Towards Positive Prevention on Violence Prevention in Schools; Building Connections: Journal of Counselling and Development, 82, 287-293.

Statistical Package for Social Sciences, (1998). Statistical Package for Social Sciences 20.0 for windows (Computer software). Chicago II, SPSS.

UNESCO, (2002). *Terms of Reference*: The First International Conference on Guidance and Counselling and Youth Development in Africa, 22-26 April 2002, Nairobi; Kenya.

Waweru K. (2011). *Unique Learning that Nurtures Discipline and Talents.* East African Standard, Nairobi: Published on 14th June 2011.

Weeks, F.H, (2000). Behavior Problems in Classroom: A Model for Teachers to Assist Learners with Unmet Emotional Needs. Pretoria university of South Africa. (Unpublished D.Ed. Thesis)

Weisberg, R.P., Kumpfer, K.L. and Seligman M.E.P. (2003). Prevention that Works for Children and Youth: *An Introduction. American Psychologist, 58 (6/7) 425-432*.

Wolfson, S. (2000). Students Estimates of Prevalence of Drug Use: Evidence for a False Consensus Effect: *Psychology of Addictive Behavior*, 14(3), 295-298.

Youth Alive-Kenya (2008). *"Strikes in Schools Rights or Outrage?* Imprint volume 1-Number 2 Youth Alive. Kenya Nairobi.

APPENDICES
APPENDIX I: PERMISSION LETTER

Henry Kiambati M'eng'ang'a,

P.O Box 675-60600,

Maua,

Dear Sir/Madam,

RE: RESEARCH PERMISSION

I am a postgraduate student at Chuka University. I am currently undertaking educational research on the effectiveness of preventive counselling in addressing problem behavior of secondary school students in Igembe South Sub-County. I am supposed to carry out a research project for the award of a M.Ed. degree. I therefore wish to seek your permission to carry out the research in your area.

Thank you in advance.

Yours faithfully,

Kiambati M'eng'ang'a

APPENDIX II: INTRODUCTION LETTER

<div align="right">
Henry Kiambati M'eng'ang'a,

P.O Box 675-60600,

Maua.
</div>

Dear Respondent,

I am a Masters student at Chuka University. I'm carrying out a research on the *effectiveness of preventive counselling in addressing problem behavior of secondary school students in Igembe South Sub-County*. Given the importance of the study in developing positive behavior in students, I consider you to be an important part of the study. I would be very grateful if you could spare your time to provide information relating to the questions that follow. You are only required to give your honest and genuine responses. The information that you give in the Questionnaire will be **confidentially** handled and used for study purposes only. **Do not** write your name in this questionnaire. Your co-operation is highly appreciated.

Thank you in advance

Kiambati Henry M'eng'ang'a

APPENDIX III: QUESTIONNAIRES FOR STUDENT

Part A: Background Information

Tick ✓ in the boxes appropriately and make brief comments where required.

1. Gender: Boy ⬜ Girl ⬜

2. Age 12-14 ⬜ 15-17 ⬜ 18-20 ⬜ 21-23 ⬜ above 23years ⬜

3. School Type: Boys boarding ⬜ Girls boarding ⬜

           Mixed boarding ⬜ Day ⬜

5. Have you ever visited the Guidance and counselling offices?

        Yes ⬜ No ⬜

6. If yes, was it? Voluntary ⬜ Referred by class teacher ⬜

        Referred by deputy ⬜ Summoned by the teacher counsellor ⬜

9. Are student involved in making decision of issues that affects them in school?

    Always ⬜ Often ⬜ On crisis ⬜ Sometimes ⬜ Not at all ⬜

Part B: Primary preventive counselling in addressing students' problem behaviors

Answer the question giving your response by ticking ✓ in the appropriate space against each statement with (**VE-Very Effective; E-effective; U-Unsure; LE-Less Effective; I-Ineffective**).

	STATEMENT	VE	E	U	LE	I
11	Has primary preventive counselling in enlightened you on dangers of drug abuses					
12	Has primary preventive counselling helped you in having good behavior in school					
13	Has primary preventive counselling helped in uplifting your self esteemin class and school					
14	Has primary preventive counselling taught you thhe importance of dialogue in presenting your needs in school					
15	Has primary preventive counselling improved yuor interactions among students and teachers					
16	Has primary preventive counselling educated you on risks of teenage sex and STIs					
17	Has primary preventive counselling cautioned you on use of sexually explicit materials and cloths.					

Part C: Secondary preventive counselling on students' problem behaviors.

Answer the question giving your response by ticking ✓in the appropriate space against each statement with (**VE-Very Effective; E-effective; U-Unsure; LE-Less Effective; I-Ineffective**).

	STATEMENT	VE	E	U	LE	I
22	Has Secondary Preventive Counselling helped you cope with school life					
23	Has Secondary Preventive Counselling helped you in promoting responsible behaviors at home and in school					
24	Has Secondary Preventive Counselling helped you in having positive interaction with other students and the teachers in school					
25	Has Secondary Preventive Counselling helped in teaching you to be honest,trustworthy, polite and obedient in school					
26	Has Secondary Preventive Counselling helped in reducing thefts and violence in your school					
27	Has Secondary Preventive Counselling helped in repremanding those who use explicit sexual material and dressing in school					
28	Has Secondary Preventive Counselling helped in reducing cases of teen pregnancies and STIs					

Part D: Tertiary preventive counselling in addressing students' problem behaviors.

Answer the question giving your response by ticking ✓in the appropriate space against each statement with (**VE-Very Effective; E-effective; U-Unsure; LE-Less Effective; I-Ineffective**).

	STATEMENT	VE	E	U	LE	I
35	Has Tertiary Preventive Counselling helped in rehabilitating students addicted to drugs and alcohol.					
36	Has Tertiary Preventive Counselling helped in encouraging dropouts to go back to school.					
37	Has Tertiary Preventive Counselling helped in reinforcing sustained possitive behavior changes in students					
38	Has Tertiary Preventive Counselling helped in rehabilitating perpetrators and victims of bullying at home and in school.					
39	Has Tertiary Preventive Counselling helped in preventing violence and damage of property in schools					
40	Has Tertiary Preventive Counselling helped in rehabilitating the students indulged in explicit sexual dressing and materials in school.					
41	Has Tertiary Preventive Counselling helped students who are victims of STI and AIDS					

THANK YOU FOR COOPERATING and BE BLESSED

APPENDIX IV: QUESTIONNAIRE FOR TEACHER COUNSELLOR

Part A: Background Information

Tick ✓ in the boxes appropriately and make brief comments where required.

1. Type of school: Boys boarding ☐ Girls boarding ☐

                    Mixed boarding ☐ Day ☐

2. Gender: Male ☐ Female ☐

3. Age: 20-23 ☐ 25-28 ☐ 29-32 ☐ 33-36 ☐ 37 and above ☐

4. Highest level of academic qualifications:

Certificate ☐ Diploma ☐ Undergraduate ☐ Degree ☐ Masters ☐

5. For how long have you served in the school?

      Below 2years ☐ 3-6years ☐ 7-10years ☐

      11-14 years ☐ above 15years ☐

6. Are you a trained teacher counsellor? Yes ☐ No ☐

7. How were you appointed the guidance and counselling teacher in the school?

      Specify _____

8. Is there guidance and counselling office in the school? Yes ☐ No ☐

9. Are students involved in making decision of issues that affects them in school?

      Always ☐ Often ☐ On crisis ☐

      Sometimes ☐ Not at all ☐

Part B: Primary preventive counselling in addressing students' problem behaviors

Answer the questions by ticking ✓in the appropriate space against each statement to show the extent of its effectiveness using (**VE-Very Effective; E-effective; U-Unsure; LE-Less Effective; I-Ineffective**)

	STATEMENT	VE	E	U	LE	I
17	Has primary preventive counselling in enlightened students on dangers of drug abuses					
18	Has primary preventive counselling helped students in having good behavior in school					
19	Has primary preventive counselling helped in uplifting students self esteem and confindence in class and school					
20	Has primary preventive counselling helped in teaching students the importance of dialogue in presenting your needs in school					
21	Has primary preventive counselling helped in improving interactions among students and teachers					
22	Has primary preventive counselling educated students on risks of teenage sex and STIs					
23	Has primary preventive counselling cautioned students on use of sexually explicit materials and cloths.					

Part C: Secondary preventive counselling on students' problem behaviors.

Answer the question by ticking ✓in the appropriate space against each statement to show the extent of its effectiveness using (**VE-Very Effective; E-effective; U-Unsure; LE-Less Effective; I-Ineffective**)

	STATEMENT	VE	E	U	LE	I
29	Has Secondary Preventive Counselling helped students cope with school life					
30	Has Secondary Preventive Counselling helped students in promoting responsible behaviors at home and in school					
31	Has Secondary Preventive Counselling helped students in having positive interacting with other students and teachers in school					
32	Has Secondary Preventive Counselling helped in teaching students to be honest,trustworthy, polite and obedient in school					
33	Has Secondary Preventive Counselling helped in reducing thefts and violence in school					
34	Has Secondary Preventive Counselling helped in repremanding those who use explicit sexual material and dressing in school					
35	Has Secondary Preventive Counselling helped in reducing cases of teen pregnancies and STIs					

Part D: Tertiary preventive counselling on students' problem behaviors.

Answer the question by ticking ✓in the appropriate space against each statement to show the extent of its effectiveness using (**VE-Very Effective; E-effective; U-Unsure; LE-Less Effective; I-Ineffective**)

	STATEMENT	VE	E	U	LE	I
42	Has Tertiary Preventive Counselling helped in rehabilitating students addicted to drugs and alcohol.					
43	Has Tertiary Preventive Counselling helped in encouraging dropouts to go back to school.					
44	Has Tertiary Preventive Counselling helped in reinforcing sustained possitive behavior changes in students					
45	Has Tertiary Preventive Counselling helped in rehabilitating perpetrators and victims of bullying at home and in school.					
46	Has Tertiary Preventive Counselling helped in preventing violence and damage of property in schools					
47	Has Tertiary Preventive Counselling helped in rehabilitating the students indulged in explicit sexual dressing and materials in school.					
48	Has Tertiary Preventive Counselling helped students who are victims of STI and AIDS					

THANK YOU FOR COOPERATING! BE BLESSED.

APPENDIX V: QUESTIONNAIRE FOR DEPUTY PRINCIPAL

Part A: Background Information

Tick ✓ in the boxes appropriately and make brief comments where required.

1. Type of school _____

2. Gender: Male ☐   Female ☐

3 Age in years: 20-23 ☐   25-28 ☐   29-32 ☐   33-36 ☐   37 and above ☐

4. Highest level of academic qualifications:

Certificate ☐   Diploma ☐   Undergraduate ☐

Degree ☐   Masters ☐

5. For how long have you served in the school?

Below 2 years ☐   3-6 years ☐   7-10 years ☐

11-14 years ☐   above 15 years ☐

6. Does the school have a trained teacher counsellor?   Yes ☐   No ☐

7. How are the guidance and counselling teacher appointed the in the school?

Specify _____

8. Is there a guidance and counselling office?   Yes ☐   No ☐

Part B: Primary preventive counselling in addressing students' problem behaviors

Answer the question by ticking ✓in the appropriate space against each statement to show the extent of its effectiveness using (**VE-Very Effective; E-effective; U-Unsure; LE-Less Effective; I-Ineffective**)

	STATEMENT	VE	E	U	LE	I
18	Has primary preventive counselling in enlightened students on dangers of drug abuses					
19	Has primary preventive counselling helped students in having good behavior in school					
20	Has primary preventive counselling helped in uplifting students self esteem and confindence in class and school					
21	Has primary preventive counselling helped in teaching students the importance of dialogue in presenting your needs in school					
22	Has primary preventive counselling helped in improving interactions among students and teachers					
23	Has primary preventive counselling educated students on risks of teenage sex and STIs					
24	Has primary preventive counselling cautioned students on use of sexually explicit materials and cloths.					

Part C: Secondary preventive counselling on students' problem behaviors.

Answer the question by ticking ✓in the appropriate space against each statement to show the extent of its effectiveness using (**VE-Very Effective; E-effective; U-Unsure; LE-Less Effective; I-Ineffective**)

	STATEMENT	VE	E	U	LE	I
30	Has Secondary Preventive Counselling helped students cope with school life					
31	Has Secondary Preventive Counselling helped students in promoting responsible behaviors at home and in school					
32	Has Secondary Preventive Counselling helped students in having positive interacting with other students and teachers in school					
33	Has Secondary Preventive Counselling helped in teaching students to be honest, trustworthy, polite and obedient in school					
34	Has Secondary Preventive Counselling helped in reducing thefts and violence in your school					
35	Has Secondary Preventive Counselling helped in correcting students who use explicit sexual material and dressing in school					
36	Has Secondary Preventive Counselling helped in reducing cases of teen pregnancies and STIs					

Part D: Tertiary preventive counselling on students' problem behaviors.

Answer the question by ticking ✓in the appropriate space to show the extent of its effectiveness using (**VE-Very Effective; E-effective; U-Unsure; LE-Less Effective; I-Ineffective**).

	STATEMENT	VE	E	U	LE	I
43	Has Tertiary Preventive Counselling helped in rehabilitating students addicted to drugs and alcohol.					
44	Has Tertiary Preventive Counselling helped in encouraging dropouts to go back to school.					
45	Has Tertiary Preventive Counselling helped in reinforcing sustained possitive behavior changes in students					
46	Has Tertiary Preventive Counselling helped in rehabilitating perpetrators and victims of bullying at home and in school.					
47	Has Tertiary Preventive Counselling helped in preventing violence and damage of property in schools					
48	Has Tertiary Preventive Counselling helped in rehabilitating the students indulged in explicit sexual dressing and materials in school.					
49	Has Tertiary Preventive Counselling helped in handling students who are victims of STI and AIDS					

THANK YOU FOR COOPERATING! BE BLESSED

APPENDIX VI: RESEARCH CLEARANCE AND AUTHORIZATION

CHUKA   **UNIVERSITY**

Telephones: 020 2310512   P.O. Box 109
              020 2310518   Chuka

OFFICE OF THE CHAIRMAN
INSTITUTIONAL ETHICS REVIEW COMMITTEE

Our Ref: CU/IERC/NCST/17/17   15th March, 2017

THE CHIEF EXECUTIVE OFFICER
NATIONAL COMMISION FOR SCIENCE, TECHNOLOGY AND INNOVATION
P.O. BOX 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH CLEARANCE AND AUTHORIZATION FOR HENRY KIAMBATI M'ENG'ANG.A. REG NO EM16/07114/11

The above matter refers:

The Institutional Ethics Review Committee of Chuka University met and reviewed the above MED in Guidance and Counselling Research Proposal titled **Effectiveness of Preventive Counselling in Controlling the Students' Problem Behaviour in Public Secondary Schools in Igembe South Sub County, Kenya"** The Supervisors are **Dr. Beatrice Mwarania Mburugu and Dr. John M. Kamoyo**

The committee recommended that after candidate amends the issues highlighted in the Attached research clearance and authorization check list, the permit be issued.

Attached please find copies of the minutes, research clearance and authorization check list for your perusal. Kindly assist the student get the research permit.
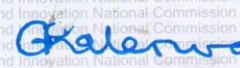
Yours faithfully,

Prof. Adiel Magana
CHAIR
INSTITUTIONAL ETHICS REVIEW COMMITTEE
cc: BPGS

APPENDIX VII: RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
MR. HENRY KIAMBATI MENGANGA
of CHUKA UNIVERSITY, 675-60600
maua,has been permitted to conduct
research in *Meru* County

on the topic: *EFFECTIVENESS OF*
PREVENTIVE COUNSELLING IN
CONTROLLING THE STUDENTS PROBLEM
BEHAVIORS IN IGEMBE SOUTH SUB
COUNTY IN KENYA

for the period ending:
7th July,2018

Permit No : NACOSTI/P/17/19448/17927
Date Of Issue : 7th July,2017
Fee Recieved :Ksh 1000

....
Applicant's
Signature

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

APPENDIX VIII: RESEARCH AUTHORIZATION

NATIONAL COMMISSION FORSCIENCE, TECHNOLOGY ANDINNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax: +254-20-318245,318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

9thFloor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/17/19448/17927**

Date: **7th July, 2017**

Henry Kiambati Menganga
Chuka University
P.O. Box 109-60400
CHUKA.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"Effectiveness of preventive counselling in controlling the students problem behaviors in Igembe South Sub County in Kenya,"* I am pleased to inform you that you have been authorized to undertake research in **Meru County** for the period ending **7th July, 2018.**

You are advised to report to **the County Commissioner and the County Director of Education, Meru County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

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

Copy to:

The County Commissioner
Meru County.

The County Director of Education
Meru County.

APPENDIX IX: SIZE OF RANDOMLY SELECTED SAMPLE

The grid for showing how random samples are selected from a given population of N cases such that sample (S) is within a coefficient of +0.05 and 95% level of confidence.

N	S	N	S	N	S
10	10	220	140	1200	291
15	10	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	241	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377

Extracted from Kathuri and Pals (1993), Introduction to Education Research, Njoro Egerton University Press.