RELATIONSHIP BETWEEN LEVELS OF EXPOSURE TO MASS MEDIA AND STUDENTS’ DEVIANT BEHAVIORS IN SELECTED SECONDARY SCHOOLS, NAKURU COUNTY KENYA

BY

KIMANI JAMES MWAURA

E83/10734/08

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AUGUST, 2014
DECLARATION

I declare that this thesis is my original work and has not been presented in any other university/ institution for consideration. This research thesis has been complimented by referenced sources duly acknowledged. Where text, data (including spoken words), graphics, pictures or tables have been borrowed from other sources, including internet, this are specifically accredited and references sited in accordance in line with anti-plagiarism regulations.

Signature__________________________ Date__________________________

Kimani James Mwaura
E83/10734/2008

APPROVAL

This thesis has been submitted for review with our approval as University supervisors.

Signature ________________________ Date __________________________

Dr. Sammy Tumuti
Department of Educational Psychology
Kenyatta University

Signature__________________________ Date__________________________

Dr. Philomena Ndambuki
Department of Educational Psychology
Kenyatta University
DEDICATION

To my God the giver of life, my loving wife Njeri and our children. Also to my sisters and brothers, loving mother Wanjiku and my late dad Kimani.
ACKNOWLEDGEMENT

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# Abbreviation and Acronyms

<table>
<thead>
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<th>Abbreviation</th>
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</tr>
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<tr>
<td>AMREF</td>
<td>African Medical Research Foundation</td>
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<td>ANPPCAN</td>
<td>African Network for Prevention and Protection against Child Abuse and Neglect</td>
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<tr>
<td>CBS</td>
<td>Central Bureau of Statistics</td>
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<td>CSA</td>
<td>Centre for the Study of Adolescence</td>
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<td>FIDA</td>
<td>International Federation of Women Lawyers</td>
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<td>KNCHR</td>
<td>Kenya National Commission for Human Rights</td>
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<td>NACADA</td>
<td>National Campaign Against Drug Abuse</td>
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<td>NCCK</td>
<td>National Council of Churches of Kenya</td>
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<td>NCPD</td>
<td>National Council of Population and Demography</td>
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<td>NCST</td>
<td>National Council for Science and Technology</td>
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<td>RH</td>
<td>Reproductive Health Services</td>
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<td>UN</td>
<td>United Nation</td>
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<td>UNICEF</td>
<td>United Nations Children’s Education Fund</td>
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<td>UNESCO</td>
<td>United Nations Educational Scientific and Cultural Organization</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DECLARATION</td>
<td>ii</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>iv</td>
</tr>
<tr>
<td>ABBREVIATION AND ACRONYMS</td>
<td>v</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>x</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xi</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>xii</td>
</tr>
<tr>
<td>CHAPTER ONE: INTRODUCTION AND CONTEXTUALIZATION OF THE STUDY...1</td>
<td></td>
</tr>
<tr>
<td>1.1 Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Background to the study</td>
<td>1</td>
</tr>
<tr>
<td>1.3 Statement of the problem</td>
<td>9</td>
</tr>
<tr>
<td>1.3.1 Purpose of the study</td>
<td>10</td>
</tr>
<tr>
<td>1.3.2 Objectives of the study</td>
<td>10</td>
</tr>
<tr>
<td>1.3.3 Research hypotheses</td>
<td>11</td>
</tr>
<tr>
<td>1.4 Significance of the study</td>
<td>11</td>
</tr>
<tr>
<td>1.5 Delimitation and limitation of the study</td>
<td>13</td>
</tr>
<tr>
<td>1.6 Assumptions of the study</td>
<td>13</td>
</tr>
</tbody>
</table>
1.7 Theoretic and conceptual framework ................................................................. 14
1.7.1 Theoretical framework .................................................................................. 14
1.7.2 Conceptual framework .................................................................................. 16
1.8 Operational definition of terms ........................................................................ 18

CHAPTER TWO: REVIEW OF RELATED LITERATURE ......................................... 19
2.1 Introduction ........................................................................................................ 19
2.2 Relationship between levels of exposure to mass media and students’ drug abuse... 19
2.3 Relationship between levels of exposure to mass media and students’ aggression.. 28
2.4 Relationship between levels of exposure to mass media and students’ risky sexual
behaviour .................................................................................................................. 32
2.5 Exposure to mass media and students’ expression of physical violence............ 53
2.6 Summary of literature review ............................................................................. 61

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY .......................... 63
3.1 Introduction ........................................................................................................ 63
3.2 Research design and locale .............................................................................. 63
3.2.1 Study variables ............................................................................................ 63
3.3 Location of the Study ........................................................................................ 64
3.4 Target population .............................................................................................. 65
3.5 Sampling techniques and sample size determination ......................................... 65
3.5.1 Sampling techniques .................................................................................... 65
5.2 Summary..................................................................................................................92

5.2.1 Relationship between levels of exposure to mass media and students’
   drug abuse..................................................................................................................92

5.2.2 Relationship between levels of exposure to mass media and students’
   aggression..................................................................................................................93

5.2.3 Relationship between levels of exposure to mass media and students’ level of
   sexual violence..........................................................................................................94

5.2.4 Relationship between levels of exposure to mass media and students’ levels of
   physical violence.......................................................................................................96

5.3 Conclusion.................................................................................................................98

5.4 Recommendations....................................................................................................99

5.5 Further research.......................................................................................................101

References...................................................................................................................102

Appendices ..................................................................................................................115

Appendix I: Questionnaire for students......................................................................115

Appendix II: Letter of introduction..............................................................................134

Appendix III: Approval of research proposal...............................................................135

Appendix IV: Research authorization..........................................................................136

Appendix V: Chi Square Distribution Table................................................................137
Table 4.1: Percentage distribution of students age by gender and class............................75
Table 4.2: Percentage distribution of students’ gender by age and class............................76
Table 4.3: Cross tabulation results on mass media versus drug abuse............................78
Table 4.4: Chi-square tests results: mass media versus drug abuse............................79
Table 4.5: Cross tabulation results on mass media versus interpersonal conflicts........82
Table 4.6: Chi-square tests results: mass media versus interpersonal conflicts........83
Table 4.7: Cross tabulation results on mass media versus students’ risky sexual behavior............................86
Table 4.8: Chi-square tests results: mass media versus students’ risky sexual behavior............................87
Table 4.9: Cross tabulation results on mass media versus students’ physical violence............................89
Table 4.10: Chi-square tests results: mass media versus students’ physical violence........90
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Conceptual framework</td>
<td>16</td>
</tr>
<tr>
<td>4.1</td>
<td>Bar chart on levels of exposure to mass media against students’ drug abuse</td>
<td>80</td>
</tr>
<tr>
<td>4.2</td>
<td>Bar plot on levels of exposure to mass media against students’ interpersonal conflict</td>
<td>84</td>
</tr>
<tr>
<td>4.3</td>
<td>Bar plot on levels of exposure to mass media against students’ risky sexual behaviors</td>
<td>88</td>
</tr>
<tr>
<td>4.4</td>
<td>Bar plot on levels of exposure to mass media against students’ physical violence</td>
<td>91</td>
</tr>
</tbody>
</table>
ABSTRACT

The influence of the media on the psychosocial development of children and the youth is profound. Kenya has witnessed tremendous and rapid expansion of the mass media, whose large proportion of features is Western oriented. Most of this information focuses on violence, drugs, relationships and sexuality. The available literature shows that most young people are heavy consumers of both electronic and print media. This study was therefore designed to establish the relationship between levels of exposure to mass media and students’ deviant behaviors in selected secondary schools within Nakuru County Kenya. Specifically, the study sought to establish the relationship between levels of exposure to mass media and students’: drug abuse, aggression, sexual violence and physical violence. The study was guided by the Social Learning Theory pioneered by Albert Bandura with its principle of “modeling” and operant conditioning theory by B.F Skinner. The study employed survey research design. In view of this, questionnaires were used to collect both qualitative and quantitative data. The independent variable in the study was levels of exposure to mass media. The dependent variables were students’ Drug abuse, aggression, Sexual violence and physical violence. The study was carried out in the 3 Sub-counties of Nakuru town, Molo and Nakuru North, within Nakuru County, Kenya. The sample size for this study was 482 sampled from a total student population of 12,300 from the 3 selected Sub-counties. The study areas were purposively sampled while stratified random sampling and simple random sampling were used to sample schools and students respectively. The study used 8 public secondary schools distributed as follows, 3 were Sub-county day and mixed, one provincial day and mixed, 2 provincial boarding and mixed, 1 national boys boarding and 1 national girls boarding. All form one, two and three students in the specified categories formed the accessible population of 482 students. The study used questionnaire to collect data. The instruments were pretested in 3 schools, randomly selected from the 3 Sub-counties. Each school had 20 students selected randomly. Quantitative data was analyzed using Statistical Package for Social Sciences (SPSS) version 20 for Windows. Specifically, Chi square and Pearson correlation statistics were used to test the significance of the stated null hypotheses, set at α=0.05. Qualitative data applied thematic analysis while descriptive statistics such as percentages, frequencies and means were used to summarize data. The key findings indicated that levels of exposure to mass media influences students to drug abuse (P=0.007 that is <0.05). Test done proved that levels of exposure to mass media are related to students’ Drug abuse, aggression, sexual violence and physical violence. The statistical test results showed that time spent watching TV or video has an influence on students’ physical violence levels (P=0.029 which is <0.05). Moreover, the statistical test results showed that time spent watching TV or video has an influence on students’ levels of risky sexual behavior(P=0.004 which is <0.05). It was recommended that government, teachers and parents undertake measure to control adverse effects of media consumption by students. Further research should also be done to enhance parental role in sex education of the youth.
CHAPTER ONE
INTRODUCTION AND CONTEXTUALIZATION OF THE STUDY

1.1 Introduction

This chapter presents background of the study, statement of the problem, purpose of the study, objectives of the study, significance of the study, delimitations and limitations of the study, assumptions of the study, theoretical framework, conceptual framework and operational definition of terms.

1.2 Background to the Study

Communication refers to conveying or transfer of information from one person to another (Lemish, 1997). Communication begins at birth and ends at death and is common to all human beings. Mass media refers to any printed or electronic media designed to carry messages to large audiences. Mass media comprises those channels of communications, which are used in receiving heterogeneous audiences simultaneously. Examples of electronic media include radio, television, cinema, interactive multimedia, communication through internet, e-mail, mobile phones among others. Print media include: Newspapers, magazines, billboards, exhibition display, poster leaflets among others. People use mass media for reasons such as: gathering information for the purposes of acquiring knowledge, for personal identification so as to gain insight into oneself, to change the attitudes and behavior of the targeted customers, for integration and social interaction with other people and for entertainment (Cantor, 1999).

Earlier researches indicated that majority of electronic media consumers were and still are young people, especially TV broadcast and cable channels, videos, radio and cinema and more recently
the internet, email and the mobile phones. Factors that may determine the type of media used by an adolescent include: gender, age, race/ethnicity, social class, and religion, place of residence (rural or urban, among other factors (Cantor & Omdahl, 1999)

Other factors that influence the young person’s social welfare include: Maltreatments in the family, domestic violence, physical and sexual abuse, genetic factors, social cultural factors, emotional deprivation, reinforcement of violence and aggression, cognitive problems, psychiatric disorders, group influences, racial/ethnic conflicts, poverty, failure of the school structure among others. Different types of mass media could be used either to create awareness, increase knowledge or to change the attitudes and behavior of the targeted customers. Indeed it is through mass media that people choose one brand of a commodity over another, what music gets played on radio or news. In fact, mass media represents one of the most important and unrecognized influences on a child’s and adolescent’s health and behavior (Taylor, 2006 ). For example, mass media to an extent can encourage children and adolescents to be constructive, imaginative and cooperative. Mass media can also help to foster vocabulary development in children and adolescents (Taylor, 2006).

In the U.S.A, Several highly publicized murders in schools have alarmed the public and politicians. An average of 20-25 violent acts are shown in children’s television programmes each hour (Rubin, 1993). Significant association was found between the amount of time spent watching television during adolescence, with its exposure to violence, and the likelihood of subsequent antisocial behavior, such as threatening, aggression, assault or physical fights resulting in injury, and robbery (Huesmann and Taylor, 2006). Young men often name the mass media as their major source of reproductive health information.
However, increased and continued exposure of adolescents to harmful information on media can have negative consequences on their behavior, learning achievements and interpersonal relationships (Melson, & Magnani, 2000). This is because mass media does provide models for emulation that sometimes influence adolescents beliefs, values and expectations. The interpretations of the information obtained from the media may sometimes be used as reference by adolescents when making decision about values, lifestyles, learning and relationships (Rubin, 1993). The impact of violent media on children and adolescents has been the subject of debate since the advent of mass media, and involved complex interplay of policies, politics, research, commercial interest and public advocacy. The U.S. Congress and federal agencies, prodded by professional organizations and child advocacy group, have for example claimed that violence in the entertainment media negatively affects children and have called for more self regulation and social responsibility by the media industries (Rubin, 1993).

While the overall U.S.A rate of individual homicide has been fairly consistent over the past decades, the rates of homicidal behavior in school-age children have risen sharply. Gun related homicide among 15-to-19-year-olds has tripled since 1980. Several highly publicized murders in schools have alarmed the public and politicians. An average of 20-25 violent acts are shown in children’s television programs each hour (Rubin, 1993). Significant association was found between the amount of time spent watching television during adolescence, with its exposure to violence, and the likelihood of subsequent antisocial likelihood of subsequent antisocial behavior, such as threatening, aggression, assault or physical fights resulting in injury, and robbery (Lemish, 1997). Exposure to media violence is positively related to subsequent aggressive behaviors, aggressive ideas, arousal and anger, and a negative effect on helping behavior (Bushman & Cantor, 2003).
Children age 8 to 18 years spend more time (44.5 hours per week or 6 ½ hours daily) in front of computer, television, game screens than any other activity in their lives except sleeping (Kaiser Family Foundation, 2005). Media violence affects children’s behavior, states the American Medical Association, American Academy of Pediatrics, American Psychological Association, American Academy of Family Physicians and American Academy of Child and Adolescent Psychiatry (Bushman & Cantor, 2003). Children are affected at any age but young children are most vulnerable to effects of media violence (Bushman & Cantor, 2003). Young children are more easily impressionable, have a harder time distinguishing between fantasy and reality; cannot easily discern motives for violence, learn by observing and imitating. Violence (homicide, suicide and trauma) is the leading cause of death for children, adolescents and young adults. It is more prevalent than disease, cancer or congenital disorders (Bushman & Anderson, 2001).

Six prominent medical groups (American Academy of Pediatrics; American Academy of Child & Adolescent Psychiatry), American Psychological Association, American Medical Association, American Academy of Family Physicians and the American Psychiatric Association) warn that media violence causes: increase in anti-social and aggressive behavior; children to be less sensitive to violence and those who suffer from it; make children view the world as violent and mean, becoming more fearful of being a victim of violence; make children desire to see more violence in entertainment and real life and encourage children to view violence as an acceptable way to settle conflicts (UNICEF, 1998).

Among urban, unmarried males aged 15-19 in Senegal, 61% named media as a major source of sexual information, 22% named school, and 11% cited health personnel. Young men surveyed in
Bangladesh said they preferred to receive sex education via media sources, with 76% mentioning radio and 73% mentioning television as preferred sources of information (Kubaison, 2011). In Uganda, a study done by the Busoga Diocese’s Family Life Education program found that both young and adult men, found information on their sexuality from the mass media, (Kamara, 2009). A study on Influence of mass media on adolescents’ expression of sexuality and sexual behaviour in Nairobi Province, Kenya by M'imaita, (2011) showed that magazines are the most popular media that provide sexual information (42.6%). It is further revealed that though magazines are popular, more girls (63.2%) than boys (36.8%) had received sexual information from the television.

According to the latest Kenya Demographic and Health Survey (KDHS), 8 out of 10 young people have had sex before the age of 20, with a median age at first sexual intercourse of 17 years (CBS, 2004). 4 in 10 women and 5 in 10 men aged 15-19 years have had sex (UNICEF, 1998). 15% of girls and 31% of boys aged 15-19 had sex for the first time before age 15 (UNICEF, 2000). Involvement in sexual affairs by majority of adolescents is likely to have been influenced by mass media, which is read and viewed by most of them. (UNICEF, 2000). After the Kenya’s disputed presidential elections of 2007 for example, there followed terrible ethnic tribal clashes that resulted in loss of human lives, destruction of property, displacement of families, rape cases, left families traumatized and encouraged hate campaigns among other vices. In all these, mobile phones and internet, television and newspapers became the tools for propagating the violence (UNICEF, 2000).

According to the 2003 Kenya Demographic and Health Survey (KDHS), 30% of adolescents aged 15-19 years reported to have either experienced physical or sexual violence. A survey
conducted by the Centre for Adolescent Health and Development (CSA) and UNICEF in 2003 revealed that 20% of youth (10 years -24 years) have been sexually abused (Mburu, 2004). Cases of child battering, spouse battering as well as sexual aggression such as incest and rape have been very common in most parts of the country, Nakuru County included. Indeed, information on these occurrences are made public through mass media whose consumers include children and adolescents of school going age (Mburu, 2004). Aggression has been witnessed in schools and more so in secondary schools where bullying of Form One students have been very common. Cases of homosexuality, lesbianism, drug trafficking, frequent school strikes have not been uncommon (Ayieko, 2004). In extreme cases, bullying of other students as well as sexual molestations have led to deaths of the victims. Inter school and intra school fighting have also been reported in our learning institutions. There have also been reports of sexual molestation of female teachers by their male students (Mburu, 2004). In most of these incidences, students are likely to have emulated what they have viewed on television, listened to on radio, read on print media or have been influenced by information from the internet.

The involvement of young people in crime has been on the increase over the past few years (NACADA, 2009). While young people are mainly associated with petty crimes, there is increasing anecdotal evidence of involvement in violent crimes including the use of firearms (Otieno, 2004). There has been significant increase in violent behavior among secondary school students over the past few years (Mburu, 2004). In the month of July 2004 alone, 11 secondary schools containing approximately 3,000 students were closed down due to strikes and violence. Students burnt down school buildings, resulting in the death of one pupil (UNICEF, 2000).
A survey conducted by the Centre for Adolescent Health and Development and UNICEF in 2003 revealed that 58% of the youth had been involved in general theft and 30% did so due to idleness (Erulkar, 1998). A survey on the experiences and lifestyles of adolescents in Central province showed that 12% of boys and 10% of girls had stolen from a shop or kiosk (Erulkar, 1998). All these have been reported in the mass media and consequently, this may be having some relationship in the subsequent cases of adolescents’ misbehavior. Otieno (2004) observes that adolescents’ actions are largely influenced by what they watch, read and participate in.

Cases of abductions, kidnapping, murder, rape, incest among other vices are highlighted by mass media almost on daily basis. Social and religious motivated aggressions have been reported and documented. In the churches, fighting over leadership positions and claims of corruption have been many in virtually all denominations, with details being availed by the media (Erulkar, 1998).

Economic motivated aggressions have been highlighted in the mass media in the form of demonstrations and strikes by employees over pay hikes, leading to violent confrontations between them and the police, which have resulted into serious injuries and sometimes even death (UNICEF, 2000). Inter-ethnic aggression over water points, land, pasture and livestock, have all been reported and highlighted by media. More still, religious intolerance have given rise to cases of suicide bombers and terrorist attacks (NCAPD, 2010). With all these happening in their full watch and knowledge, children and adolescent are more often than not likely to take up to these behaviors via imitation. However when strict measures are taken by Government, parents, teacher and other stakeholders to control and limit what media program children watch, read and use, then the negative impacts of violent media will be minimized.
Ayieko (2004) notes that cases of violent behaviors resulting in destruction of properties, deaths, rape of female students by their male counterparts and disruption of the learning process have been on the increase in the recent years. Cases of drug abuse among students, school drop outs of female students due to unplanned pregnancies, cases of abortion, among other anti-social behavior have been on the increase in our schools (Njau, 1994). More recently, cheating during the National Examinations resulting to the cancellation of results for many students and schools have been blamed on the use of mobile phones, particularly by secondary school students. Furthermore, students have taken to the western way of dressing with parents and teachers blaming the government for banning corporal punishment in schools, while teachers and government have blamed parents for poor parenting (Kiragu, 2010).

Sexual activity is high among adolescents and youth in Kenya and begins early (UNICEF, 1998). The breakdown in traditional family systems, urbanization and influence of the mass media are just some of the factors contributing to increased adolescent sexual activity. This high level of sexual activity is associated with risks such as HIV/AIDS, pregnancy, unsafe abortion, economic hardship and school dropout. Studies have shown that adolescents are sexually active by ages 13-19 years. Curiosity, peer influence, expectations of gifts and money and coercion are reasons for early sexual activity among adolescents (Kembo, 2012).

Cases of drug abuse, violent behaviors, sexual violence, unplanned for pregnancies and abortions have been on the rise among Secondary school students within Nakuru County, Kenya. Peer pressure and poor parenting have been blamed for the increase in these vices (Kiragu, 2010). Locally accessed and available literature seem not to have focused on how exposure to mass
media may influence Adolescents’ interpersonal relationships, indulgence in deviant behaviors and use of reproductive health information. This study therefore sought to fill these gaps.

1.3 Statement of the Problem

The world has witnessed rapid expansion of the media industry, which has been brought about by technological advancements. Changes in media industry may have resulted in the many social changes being realized globally, Kenya included. It is widely believed that media may probably be contributing considerably, either negatively or positively to the adolescent’s behavior. All mass media read, watched or listened to is usually recorded in the mind and revisited from time to time (Green, 1997). Lately, both print and electronic media are accessible to students within Nakuru County as evidenced by the many cinema halls, video businesses, and increased use of internet services within Nakuru town and its environs (Kiragu, 2010). Moreover, the disintegration of extended families and disregard for traditional cultural values due to among other factors, migration to towns in search of formal employment has affected child’s rearing adversely (Mullin & Linz, 1995). The end result has been heavy reliance on the mass media such as books, magazines, social media, television, radio, etc, to get the much needed information on sexuality and modeling. Consequently, many youths have tended to indulge in deviant behaviours.

Recent research done by NACADA (2012) indicates that drug abuse among secondary school students have been on the rise in the recent past. Cases of physical violent behaviors among students leading to destruction of school properties, injuries and sometimes death have also been reported. In addition cases of school drop outs due to unplanned for pregnancies have been on the rise especially in schools within Nakuru county Kenya (Kiragu, 2010). Conflicts between
students and parents/teachers have also been common. Incidences of female students procuring abortions, thereby endangering their lives have also been reported. Most local researcher have tended to generally associate students’ deviant behaviors to poor parenting and peer pressure (Kabaison, 2011). In the west, research findings indicate that there exists an association between adolescents’ deviant behaviors such as violence and exposure to mass media (Taylor, 2006). But this may not necessarily be true in Kenya which is located in a developing world setup, and whose communication technology may not be as advanced like in the west. Moreover, most of the respondents used as research sample in the west were children in the lower grades/classes, who had not attained adolescence stage of life. This study therefore sought to fill these gaps by establishing weather there exist a relationship between levels of exposure to mass media and secondary school students’ expression of deviant behaviors.

1.3.1 Purpose of the Study

The purpose of this study was to establish the relationship between levels of exposure to mass media and students’ deviant behaviors in selected secondary schools in Nakuru County, Kenya.

1.3.2 Objectives of the Study

1. To determine whether levels of exposure to mass media is related to students’ drug abuse

2. To establish whether levels of exposure to mass media is related to students’ interpersonal conflicts.

3. To examine the extent to which levels of exposure to mass media is related to students’ levels of risky sexual behaviours.
4. To investigate the extent to which levels of exposure to violent mass media is related to students’ levels of physical violence

1.3.3 Research Hypotheses

The study will be guided by the following hypotheses:

Ha₁. There is a significant relationship between levels of exposure to mass media and students’ drug abuse

Ha₂. There is a significant relationship between levels of exposure to mass media and student’s interpersonal conflicts.

Ha₃. There is a significant relationship between levels of exposure to mass media and students’ level of risky sexual behaviors.

Ha₄. There is a significant relationship between levels of exposure to violent mass media and students’ level of physical violence

1.4 Significance of the Study

The findings from this study may hopefully be used by the government, Ministry of Education, parents and teachers to make changes and alterations in their respective areas of jurisdictions, with an aim of reducing the negative effects of media use by the adolescents. The government for example through the relevant Ministry of Information, Communication and Technology may put in place measures aimed at regulating the media industry so that it does not expose adolescents to harmful information. Sale of pornographic materials may also be banned by the
government and tougher rules put in place, to guard against negative influence of mass media use.

Parents may be enlightened on how to regulate on the amount of time spent by their children on media, the types of media they should discourage their children from using and the kind of information they should discourage their children from accessing.

The findings of the study will also be of significance especially:

i. To the government in formulating policies and laws that may regulate media industry so as to prevent misleading information reaching the youth. The government through institutions such as NACADA may pass laws to curb drug abuse among adolescents by outlawing misleading advertisements on drugs especially alcohol and cigarette.

ii. To students and adolescents in general to enable them make informed choices on media use especially on matters of relationships, reproductive health issues, drug use and violence.

iii. To counselors and teachers in efforts to help students who may already be expressing behavioral problems due to mass media influence.

iv. To researchers, who may find this study a base in exploring other areas on this subject not covered by the current study

It is therefore hoped that this study will provide valuable information leading to positive mass media influence on students and adolescents in general.
1.5 Delimitation and Limitation of the Study

This study was only carried out in Nakuru Town, Molo and Nakuru North Sub-counties of Nakuru County, Kenya. It was also restricted to eight selected public secondary schools. The study could not cover other secondary schools and regions due to:

i) The selection of study area being purposive required choice of specific areas.

ii) Limited local literature/publications in the area of study.

iii) Possibility of some respondents concealing some information concerning their sexual behaviors major choices and relationships.

To ensure that the above limitations did not affect the credibility of the research findings, the following measures were taken:

i. The study findings were only to apply in the area purposively selected for the study due to the sampling method used, which was non-probability in nature.

ii. The respondents were assured of confidential treatment of the information they provided and this hopefully enabled them to provide information that was personal in nature.

iii. The researcher also made use of wide range of information sourcing including the use of newspaper, magazine and internet to solicit information on the subject under investigation.

1.6 Assumptions of the Study

The study assumed that:

i) The respondents had access to some form of exposure to mass media.
ii) The deviant behaviors expressed by students were as a result of being exposed to mass media.

iii) The respondents accessed mass media freely with no restriction.

iv) The sample of respondents selected would be willing to readily give correct information as stipulated in the questionnaire.

1.7 Theoretical and Conceptual Framework

1.7.1 Theoretical Framework

This study was guided by social learning theory pioneered by psychologists Albert Bandura (1969), and operant conditioning theory by B. F Skinner. These theories assisted the researcher in understanding how levels of exposure to mass media were related to the students’ behaviors. Specifically, the researcher sought to investigate how exposure to mass media impacted to students’ drug abuse, interpersonal relationships, and use of reproductive health information as well as expression of aggressive behaviors.

(a) Social Learning Theory

This theory focuses on the principle of observational learning called “modeling” The models included physical, involving real people, symbolic, involving verbal, audio or visual representations or combination of these. Modeling is recognized as one of the most powerful means of transmitting values, attitudes and patterns of thought and behavior. According to modeling theory, television violence has negative effects on children, particularly when perpetrators are attractive characters and are not punished, and when there is little pain and suffering by the victims. In this study, the theory is applied to demonstrate how students who are constantly exposed to mass media are likely to copy the behaviors of those they perceive as
“good models”, this is regardless of whether the media was watched, read or listened to. For example those who watch programs that portray physical or sexual violence are likely to imitate the same behavior. In addition, what students watch, read or listen to, is likely to influence their choice of friends, their relationships with significant others and use of reproductive health information and services.

(b) Operant conditioning theory

This study applied the theory of B.F Skinner (1938) who brought up the idea of operant conditioning. According to skinner, rewarding a learning process results in perpetuating or maintaining a behavior while punishing a behavior extinguishes it. Skinner and other learning theorists, asserted that individual conditional adjustments to the environment was a result of lifelong learning process which entailed discovering relationships between actions and their immediate effects on the environment. To behaviorists, much of an individual’s behavior is dependent upon its immediate consequences. Moreover, reinforcers exert a powerful influence on one’s behavior. Reinforcers have both negative and positive aspects. In positive reinforcements, a behavior is conditional and gains strength because it is followed by a positive reinforce. Negative reinforcement results to escapist or avoidance behaviors. Escape conditioning occurs when an operant response consistently terminates an aversive stimulus. For example one getting to an addiction of smoking due to nicotine, or due to positive media advertisement of cigarettes. In this study this theory is used to illustrate how persistent exposure to mass media is related to students’ involvement in deviant behaviors, as well as their use of reproductive health information.
1.7.2 Conceptual Framework

Relationship between levels of exposure to mass media and students’ drug abuse, interpersonal conflicts, risky sexual behaviors and physical violence.

![Diagram of Conceptual Framework]

Independent Variable
- Levels of exposure to Mass media
  - Print media
  - Electronic media

Dependent Variables
- Drug Abuse
  - Alcohol
  - Cigarettes
- Interpersonal conflicts
  - Peers
  - Class mates
  - Parents
- Risky sexual behaviors
  - Multiple sexual partners
  - Unprotected sex
  - Abortions
- Physical Violence

Figure 1.1 Conceptual Framework for the study

The conceptual framework provides the researchers’ assumptions about the possible relations between the various variables and how they influence each other. In this study, the
dependent variable is levels of exposure to mass media. The mass media are diversified media technologies that are intended to reach a large audience by mass communication. The technology through which this communication takes place varies. According to Paik (1994) levels of exposure to mass media poses different implication to the users with greater impact being noted on the young generation. This study addresses the implication of mass media in line with drug abuse, interpersonal conflicts, risky sexual behaviours and physical violence among teenagers in college. These variables forms the independent variables of the study.
1.8 Operational Definition of Terms

The following are the meanings of important terms as used in this study:

**Deviant Behaviors:** this referred to students’ abuse of drugs, expression of physical violence, improper sexual behaviors, and wrong use of reproductive health information following persistent exposure to mass media.

**Drug Abuse:** In this study, this refers to use of alcohol and cigarettes by secondary school students following persistent exposure to mass media.

**Interpersonal Conflicts:** In this study, this referred to disagreements between students and parents, peers and teachers following exposure to mass media.

**Levels of Exposure to mass media:** This refers to the number of hours the students spend watching, listening or reading mass media per week.

**Physical Violence:** In this study it refers to students’ expression of violent behaviors while in school following persistent exposure to mass media.

**Risky Sexual Behavior:** In this study, refers to behaviors that may lead students to indulge into activities that may affect them adversely such as abortions, having multiple sexual partners and unprotected sex.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter focuses on related literature on studies done earlier related to the current study. The related literature is drawn from Kenya, Africa and other countries of the world. The literature reviewed were those examining how exposure to mass media was related to adolescents’ behavior. Specifically, it focuses on the influence of levels of exposure to mass media: on students’ drug abuse, aggression, sexual violence and physical violence.

2.2 Relationship between Levels of Exposure to Mass Media and Students’ Drug Abuse

During the 1970s and 1980s, rock music lyrics became more explicit in their references to sex and drugs (Fedler & Tanzi, 1982). The AAP’s revised policy statement in 1996 stated that although there were no studies documenting a cause-and-effect relationship between sexually explicit or violent lyrics and adverse behavioral effects, several studies have in fact looked at whether music preference is associated with adolescent turmoil and even suicidality. Weidinger and Demi (1991) provided the first look at the preference for heavy metal music in disturbed or drug-abusing adolescents in a small sample of 60 adolescents hospitalized on a psychiatric unit. This was followed by Arnett (1992), who surveyed 248 students in 10th and 12th grade in a southern metropolitan area about their musical preferences and reckless behaviors. The reckless behaviors included driving while intoxicated, driving at speeds of greater than 80 mph, drug use, sexual promiscuity, shoplifting, and vandalism (Mwiti, 1994). The results demonstrated a clear association between heavy metal and hard rock as a musical preference and reckless behavior. The author cautioned that the results not be interpreted as causative, but instead that the heavy
metal and hard rock music appeals to adolescents who have high levels of sensation-seeking behavior (Mwiti, 1994)

Martin, Clarke and Pearce (1993) surveyed 247 high school students in two Australian government high schools about their musical preferences and aspects of their psychological health and lifestyle. The results showed a marked gender bias, with 74% of the girls preferring pop music compared with 71% of the boys preferring hard rock/heavy metal music. They also reported significant associations between a preference for hard rock/heavy metal music and suicidal thoughts, acts of deliberate self-harm, “depression,” “delinquency,” drug taking, and family dysfunction. They suggested that there is a group of young people with preexisting personal family psychopathology who may choose hard rock/heavy metal music because its themes resonate with their own feelings of frustration, rage, and despair. Many of these adolescents report that listening to hard rock/heavy metal music actually makes them feel happier. The article did, however, identify 11% of the sample who claimed that listening made them feel sadder and postulated that it is perhaps this group that is at most risk for suicidal behavior.

In a larger study by Stack, Gundlach and Reeves (1994), the relationship between the subculture of heavy metal magazine subscriptions and adolescent suicide was examined in all 50 United States. The authors concluded that the greater the extent of heavy metal subculture, the higher the suicide rate. They further asserted that this music, which is marked by themes of despair, alienation, and chaos, “nurthes suicidal tendencies already present in the subculture”.

Using a smaller clinical sample of 88 psychiatric patients, Took and Weiss (1994) further questioned the relationship between musical preference and adolescent turmoil. This study was
the first to include rap music as a preference category. Although the initial results indicated that those who preferred heavy metal and rap had worse school grades, more school behavior problems, increased sexual activity, and increased drug and alcohol use and arrests, when controlled for gender, only below-average current and elementary school grades and a history of counseling in elementary school for school problems remained significant.

Lemish (1997) examined the potential causal effect of music television on violent behavior. He collected data on 222 patients in six wards of a forensic hospital between the ages of 18 and 67 years, mean age 28.65 ± 9.45 (SD) years. The study was prompted by his observation that at least one and often both of the two television sets on each ward were often tuned to the Music Television (MTV) network. Noting the high levels of sexual and violent themes present, and seeing signs of clinical deterioration after prolonged viewing, they designed a study that looked at the number of assaultive incidents before and after MTV removal on the wards. The results showed a statistically significant reduction in incidents per week from 44 to 27 after removal of MTV that was further supported by time-series analysis.

Durant et al (1997b) examined the content of tobacco and alcohol use behaviors on television. The results showed that a high percentage (26%) of MTV videos portrayed tobacco use. The percentage of alcohol use on MTV was still the highest at 27%, but differences with the other networks were not statistically significant. Of note, given the influence of modeling and imitation in young people, videos that portrayed alcohol and tobacco use depicted the lead performer as most often the one observed to be smoking or drinking. Sexuality was also portrayed in a higher percentage of videos with drinking. BET contained the highest percentage of videos with sexuality or eroticism.
Subsequent studies of older ages considered the influence of various advertising and marketing techniques and later susceptibility to smoking. Evans, Farkas, Gilpin, Berry and Pierce (1995) examined data on 3,536 adolescents who had never smoked to determine their susceptibility to smoking; they surveyed two indices: (1) a 5-point index of an individual’s receptivity to advertising as evidenced by recognition of advertising messages, having a favorite advertisement, naming a brand he or she might buy, owning a tobacco-related promotional item, and willingness to use a tobacco-related promotional item; and (2) an index classifying the individual’s reported exposure to family and peer smoking. The relationship of receptivity to advertising and susceptibility to smoking was stronger than the relationship of family or peer smoking and susceptibility, indicating that advertising is a more powerful influence than exposure to peer or family smoking. Four recent research articles, with large sample sizes and different geographical locales, have looked more specifically at the relationship between tobacco promotional items and smoking susceptibility: Sargent et al (1997), survey of 1,265 rural New Hampshire and Vermont youths aged 10–19 years; Pierce (1998), survey of 1,752 California adolescents aged 12–17 years.

Each study has documented a strong association between an awareness of and involvement with tobacco promotions and subsequent susceptibility to tobacco use. Pierce’s study was the only longitudinal examination of the link between advertising, exposure to promotional tobacco items, and later smoking. Spanning a 3-year period from 1993 to 1996, the study found that adolescents who had a favorite cigarette advertisement in 1993, compared with those who did not, were twice as likely either to have started smoking by 1996 or to be willing to start, and those who owned or were willing to own a promotional item were three times as likely to have started smoking by 1996 or to be willing to start.
Studies from the 1980s showed significant correlation between exposure to alcohol advertising and drinking beliefs and behaviors (Atkin & Block, 1981). In the 1990s two major studies examined the effects of alcohol advertising on children and adolescents. Grube and Wallack (1994) looked specifically at the relationship between television beer advertising and drinking knowledge, beliefs, and the intention to later drink. The sample queried was a random group of 468 fifth and sixth graders, using self-administered questionnaires and structured interviews. They measured television viewing, awareness of beer advertising, knowledge of beer brands and slogans, alcohol beliefs (both positive and negative), intention to drink as an adult, perceived parental and peer approval of drinking, perceived parental and peer drinking, and demographic and background variables. Children with more knowledge of beer brands and slogans held more favorable beliefs about drinking and more frequently intended to drink as adults. The positive values associated with drinking included romance, sociability, and relaxation.

Concern from parents, professionals, and the populace at large about the impact of the media on children and adolescents has grown steadily over recent years. Dietz and Strasburger’s review (1991) summarized the research of the previous 20 years, which demonstrated the multiple effects of television on child and adolescent cognition and behavior. Looking at topics ranging from cognitive development, to obesity, to aggressive behavior and violence, drug use, suicide, sexual activity, and the promotion of stereotyping, this article highlighted earlier findings and provided the basis for much of the recent research (Alliet 2000). From this point, particularly in the area of television and movies, the research became heavily oriented toward content analysis and viewing patterns, with the widely accepted premise that children gain knowledge, learn behaviors, and have their value systems significantly shaped by exposure to media. In 1996 the American Medical Association’s brochure “Physician Guide to Media Violence” (Walsh,
Goldman & Brown, 1996) further highlighted the direct correlation between media exposure and violent behavior and called on physicians to incorporate a media history into the routine assessment of patients as part of an effort to stem the growing epidemic of violence in America. More recently, Strasburger and Donnerstein (1999) updated the media topic by providing an overview article, “Children, Adolescents, and the Media: Issues and Solutions.” With more than 150 references, this article detailed research, popular press articles, governmental publications, and survey data. The article summarizes the research findings and examines the roles of parents, health professionals, the media, and government in providing solutions.

In Kenya NACADA, which has been spear-heading the government’s crusade against drug abuse, has been very active in targeting the creative advertising industry that fronts for leading beer and cigarette manufacturers. Former NACADA boss Joseph Kaguthi says that he is not against alcohol or anyone but maintains that he will fight arbitrary efforts by alcohol and tobacco firms to “destroy Kenyan youth through unfairly exposing them to the products”. People who smoke are portrayed as being either great sportsmen or socially successful, wealthy or important people. Social pressure from media and friends is a universal risk factor for substance abuse among adolescents in developed and developing countries (Gikonyo, 2005). This is especially common in urban areas where there is widespread exposure to advertising on radio, television and billboards. Young people in urban areas are more exposed to images and messages promoting tobacco and alcohol than their counter parts in rural areas (Imbosa, 2002) concur with this argument asserting that external pressures especially the media have an influence in substance abuse among the youth. According to him, the amount of time young people spend watching television has a negative influence on their behaviour. Okech (1997) argues that the mass media lays a big role in influencing children. They receive information from movies,
television, video cassette, billboards and magazines. Even though these media do not usually promote drug use explicitly, they can reinforce a child’s impression that the use is normal (NACADA 2011).

A study conducted by Kiragu (2010), to investigate the extent to which selected factors contribute to alcohol and cigarette use among male students in public day secondary schools: a case study of Nakuru Municipality. A total student population of 2279 and a sample size of 327 was used. The research design used was ex post facto and independent variables were studied retrospectively. Multistage cluster, Probability Proportionate to Size and purposive sampling methods were used to select the participating schools and respondents. Data was analyzed by use of frequencies, percentages, cross-tabulation, Chi-square and logistic regression. SPSS computer program was used in data analysis. The study established that peer-group influence had the greatest contribution to high school and cigarette use, followed by family factors. The selected factors accounted for 44% of high alcohol and cigarettes use collectively. The findings were such that exposure to pro-alcohol and cigarettes mass media content was significantly related to levels of alcohol and cigarettes use ($\chi^2=13.63$, df=2, p<0.05). The findings indicated that 52.9% low drug users reported low mass media exposure as compared to 9.3% who reported high mass media exposure. For high alcohol and cigarettes users, 58.2% had mass media exposure. This is compared to 4.2% high alcohol and cigarettes users who had low mass media exposure. The results indicated that 15.7% of the respondents had seen or heard pro-alcohol and cigarettes advertisement on the internet.

A study to establish the factors that influence drug and substance abuse among the youth was conducted in Mbeere district, Kenya. This study sought to establish the factors influencing the use of drugs and drug abuse among the youth in Mbeere district. It focused on how literacy
levels influence drug and substance abuse; whether gender influences substance and drug abuse; the influence of type of employment on drug and substance abuse; evaluation of the role of availability of drugs and substance in drug and substance abuse and lastly whether peer pressure is a contributing factor to drug and substance abuse among the youth in Mbeere district (Murimi, 2012).

A descriptive survey research design was used. Three out of 27 Locations in Mbeere district were purposively sampled for the purposes of the study. Depending on accessibility 40 youths were selected in each location for the study; giving a total of 120 youth. A questionnaire was used to collect information from both the youth and the organizations dealing with youth issues. Data was analyzed using descriptive statistics. The study findings showed that drug and substance abuse among the youth are influenced by literacy level, gender, type of employment, availability of drugs and substances of abuse and peer pressure. Key recommendations made are; effects of drug and substance abuse be part of the syllabus from primary school, media be used to emphasize on the effects of drug abuse, the Government to create employment for the youth and train youth on time management and entrepreneurship, reinforcement of various laws that regulate production and consumption of drugs and substance of abuse and sensitize parents on good role modelling.

Another study was also done to establish the Influence of Excess Pocket Money on Drug Abuse among Secondary Schools in Laikipia, Nakuru and Kericho Counties, Kenya. The objective of the study was to determine the relationship between amount of pocket money given to students and drug abuse among students in urban and rural secondary schools in Laikipia, Nakuru and Kericho Counties. The study used descriptive survey and ex- post facto research design. The target population was all the secondary school students in the region. Purposive sampling was
used to select the 66 administrators and school counsellors. Simple random sampling was used to select the 320 students within Form II and III classes. Stratified random sampling was used to select the schools. Pretesting of the instruments was done in the Kiambu County in three schools where the Cronbach correlation coefficient was 0.72, which was higher than the minimum, required in social science research. The Statistical Package for Social Sciences (SPSS) version 17 was used in the data analysis. Descriptive analysis (percentages) and Chi-square was used to test the relationship between pocket money and drug abuse. An alpha level of .05 was used for the statistical test. The study indicated that the drug problem was higher in rural schools than in urban schools and that the amount of pocket money given to students has a statistically significant relationship with drug abuse. This study thus recommends that the amount of pocket money given to students should not be excessive and that there should be a heightened focus on educating and enlightening students on proper use of pocket money (King’ori W. et al 2014).

A study by Kembo (2012), on the factors associated with drug use among standard eight primary school pupils in Mathare division, Nairobi province, indicated that gender has a significant influence in the pupils’ drug use. It was found out that where both parents use of drugs, the father’s use of drugs had a significant influence on the pupils drug use. Friends and siblings' use of drugs were also significant influences in pupils drug use as was the pupil’s high knowledge of drug terminology. On the other hand, socio-economic status, family environment, availability of drugs and having knowledge on drug were found not to be statistically significant in influencing pupil’s drug use. A study conducted to investigate the factors that influence drug abuse among boys in high school within Nakuru North Sub-county, revealed that drug abuse among boys in high school is influenced by factors such as peer pressure, curiosity, influence from family members, and celebrities, lack of knowledge about the dangers of drug abuse, easy availability of
drugs, low cost of drugs, excessive pocket money, the wish to increase intelligence and lack of
good role models in teachers and parents. Girl students were however not included in the study.
The role of mass media was also not the focus of the study; the current study therefore aims at
filling these gaps.

2.3 Relationship between Levels of Exposure to Mass Media and Students’ Interpersonal
Conflicts

Presently, almost every individual has access to the media which can give him/her information
regarding the acts of violence that have impacted the society. The constant exposure to the
stories of violence, might increase aggression, which will lead to violence and crimes eventually
(Sonu,2011).

Moreover, commercialization has led the media to sensationalize stories, and these exaggerated
stories highly influence the minds of the masses. This influence might inspire the people to
imitate the protagonist in such stories irrespective of his/her acts (violent or non-violent) in the
sensationalized story. In addition to this, the exposure to violent video games has been found to
increase the aggression in some individuals (children and youth). When an asinine
psychologically disturbed individual posts a violent video on any popular website, there is a
strong possibility that at least one of the viewers will be inspired by such a video, and will be
tempted to imitate the act in the video, and this will lead to a crime! As media grows, the
exposure to such violent stories has also increased, and it is believed, that such an exposure has
inspired a number of people to act violently and commit crimes Todd, Deborah M. (2013, Feb. 1)
studied patterns of interpersonal conflict and resolution in families as depicted in prime-time
network television shows. Major findings were that: conflict-resolving acts occurred almost
twice as often as conflict-escalating acts; intact families were least likely to engage in conflict
escalation and blended families were most likely to engage in conflicts; brothers were most likely to escalate conflict and mothers were most likely to engage in conflict-resolving behaviors. The strategies shown for resolving conflict were diverse, and parents and children across family types tended to display respect and concern for one another (AMREF, 1997).

A second study by Stout, Hilary (2010, April 30) examined the depiction of conflict, jealousy, envy, and rivalry in family interactions in prime-time network programs. The data showed that more than 30% of the conflict situations involved parents and children, 19% involved spouses, and 13% involved siblings. Integrative strategies, considered to be the most healthy were used most by mothers and sons, and more destructive strategies were used by siblings and spouses (Mbugua et al, 2004). The authors concluded that although family conflict and jealousy are frequently portrayed on prime-time television, the portrayals are not predominantly antisocial.

Content analyses of movies in Stout, Hilary (2010, April 30) study revealed the disturbing fact that one of eight Hollywood films depicts a rape. Although there are studies on college age subjects exposed to erotica and violent erotica showing them to be less sympathetic to actual rape victims, for obvious reasons there are no such studies on children. However, it is clear from content analysis of television and movies that children are routinely being exposed to such violence on regular basis from early ages. Available and accessed local literature has not focused on the influence of mass media on adolescent’ aggression; this study seeks to fill this gap by focusing on how levels of exposure to mass media may influence students’ relationships with parents and teachers, with whom they interact frequently (Kang, Cecilia. 2012, June 26).

Social media has become the biggest platform for communication throughout the world and forever changing interpersonal communication and relationships. The effect social media usage
has on interpersonal relationships is changing the way the world population communicates and forms face-to-face relationships, while decreasing human social and behavioral skills. If the trend of social media and online interactivity and communication continues to rapidly grow and increase in the future, the more time the population will spend interacting on social media, which means the more face-to-face human contact skills, as well as interpersonal relationships, diminish. The studies examined study two important questions emerging—the first one regarding why a significant chunk of the world’s population chooses to use social media every single day in such high volumes, while interpersonal relationships slowly take a back seat, and the second question ultimately asking how such time-consuming virtual relationships effect social media users’ concrete interpersonal relationships with individuals they cross paths with in reality, giving insight as to what this means for interpersonal communication in the future (Giffords, E. 2009).

With its new advancements in electronic technology progressing every day, its rising popularity in society, and its constant, continued use within that society, social media has become the biggest platform for communication throughout the world. Whether businesses use it for promotion, advertising, and marketing, charities and groups for raising awareness and fundraising, or families, friends and individuals simply seeking information, wanting to build and maintain relationships with those around them, near and far, the purpose of social media allows for one specific task to be executed efficiently and effectively in the easiest possible way—spreading a message (Giffords, E. 2009).

Spreading this new form of message, regardless of intent, opens the gateway for universal communication 24 hours a day, 365 days a year from any geographical location, changing the communication process indefinitely. With the world swallowing up this new means of
communication, and with social media usage progressively continuing to skyrocket, this new form of technology opens up a new channel of tightly woven interconnectivity and interactivity with individuals for the first time, forever changing the way the world population interacts, communicates, spreads its messages, and ultimately forms relationships. And with these positive advancements in communication and building relationships through social media, social media also incorporates negative advancements in communication and building relationships, alluding to online communication trends transitioning into interpersonal communication trends, exterminating the need to communicate face-to-face and crippling the way in which the population communicates interpersonally (Ling, R. 2010).

Since the concept of social media usage is fairly new, social media usage takes its most dominating presence with “digital natives,” a term used for the generation growing up having and using computers. The New York Times online article “Antisocial Networking?” reports on a 2010 study conducted by the Pew Research Center, finding that 54 percent of American teenagers—defined in the study as ages 12 through 17—communicate with friends through text and social media, while only 33 percent say they talk to their friends face-to-face on a daily basis (Stout, 2010). The same article also says that these study findings came a few months after the Kaiser Family Foundation reported that Americans between the ages 8 and 18 spend on average 7 1/2 hours a day using some sort of electronic device (Stout, 2010).

With such a high percentage of this generation using social media as frequently as 7 hours a day, social media represents a huge following of the world’s population in its virtual world. And although reasons for such frequent usage vary by individual, “Antisocial Networking?” states that the study found that, to some children, technology is merely a facilitator for an active social life (Stout, 2010). But having an active social life online does not necessarily mean having an
active social life in face-to-face reality, and it’s this trend of children being more interactive in online relationships and steering away from interpersonal relationships that concerns psychologists.

2.4 Relationship between Levels of Exposure to Mass Media and Students’ Risky Sexual Behaviors.

The media has long been tagged as one of the things that influence people the most. It is because when we talk of media it covers the radio, television, and print. There is also electronic media, which includes the use of computers and other latest gadgets. With all these technology available readily available to everybody, it cannot be denied that whatever people see and hear will have an effect on them. The influence of media on young people is another point of discussion.

The youth represents majority of the population. Teenagers and young adults are part of this group. They represent the significant percentage of people who are self conscious of their image; hence they are the target audience of producers and advertisers. The influence can be good or bad, depending on how the individuals respond to the shows, movies, commercials, and other media products. In terms of body image, the media bombards the young girls’ minds with images of skinny models. This makes them feel that if they are a few pounds heavier than these images on the magazine then they are unacceptable to the society. As time passes, it has been observed that the girls who are becoming weight conscious gets younger and younger—for instance, about 80% of nine-year-olds are on diets and that the number of eating disorder cases has been rising. Through the media, boys are getting obsessed with their body because they always see well-built men in magazines and television shows. Staying fit has never been an issue but there is an
alarming increase in the number of people who adhere to obsessive weight training and use anabolic steroids and dietary supplements that promise these boys buggers muscles and more stamina for lifting. With regard to sex, three out of four teenagers say that the television shows and movies make it seem normal for children their age to engage in sexual relations. The young teens regard the entertainment media as the number one source of information about sexuality and sexual health. Being open about sex and how they talk to their girlfriends or boyfriends about it is largely because of what they see and hear. (M’IImaita, 2011)

The mainstream mass media (television, magazines, movies, music, and the Internet) provide increasingly frequent portrayals of sexuality. We still know relatively little about how this content is used and how it affects sexual beliefs and behaviours. The few available studies suggest that the media do have an impact because the media keep sexual behaviour on public and personal agendas, media portrayals reinforce a relatively consistent set of sexual and relationship norms, and the media rarely depict sexually responsible models. More longitudinal research, especially with early adolescents is needed to learn more about how media content is attended to, interpreted, and incorporated into developing sexual lives (Ward, Gorvine, & Cytron, 2002). The mass media are an increasingly accessible way for people to learn about and see sexual behaviour.

The media may be especially important for young people as they are developing their own sexual beliefs and patterns of behaviour and as parents and schools remain reluctant to discuss sexual topics. In the United States, young people spend 6 to 7 hours each day on average with some form of media. A national survey in 1999 found that one third of young children (2 to 7 years old) and two thirds of older children and adolescents (8 to 18 years old) have a television in their
own bedroom. Many of those televisions also are hooked up to cable and a Videocassette Recorder (VCR) (Brown, and Newcomer, 2010). Sexual talk and displays are increasingly frequent and explicit in this mediated world. One content analysis found that sexual content that ranged from flirting to sexual intercourse had increased from slightly more than half of television programs in 1997-1998 to more than two-thirds of the programs in the 1999-2000 season. Depiction of intercourse (suggestive or explicit) occurred in one of every 10 programs. One fifth to one half of music videos, depending on the music genre (e.g., country, rock, rap) portray sexuality or eroticism (Brown JD and Newcomer SF, 2010).

Two thirds of Hollywood movies made each year are R-rated; most young people have seen these movies long before they are the required 16 years old (Stout, Hilary 2010, April 30). Although teen girls' and women's magazines, such as Seventeen and Glamour have increased their coverage of sexual health issues over the past decade, the majority of advertising and editorial content in these magazines remains focused on what girls and women should do to get and keep their man (Kang, Cecilia. 2012, June 26). Gay, lesbian, bisexual, and transgender youth rarely find themselves represented in the mainstream media. Although a few of the youth-targeted programs such as "Dawson's Creek" and "Will and Grace" have included gay characters, what some have called compulsory heterosexuality prevails (Brown JD and Newcomer SF, 2010). The Internet has increased dramatically the availability of sexually explicit content. Computer and Internet use is diffusing more rapidly than any previous technology; as of the end of 1999, more than half (56%) of all adults in the United States were online.

The word sex is the most popular search term used on the Internet today (Stout, Hilary 2010, April 30). The Internet may have both positive and negative effects on sexual health. According
to one national survey of young people (10-17 years old) who regularly used the internet, one out of four said he or she had encountered unwanted pornography in the past year, and one out of five had been exposed to unwanted sexual solicitations or approaches (Stout, Hilary 2010, April 30). At the same time, a number of sites, such as the American Social Health Association's iwannaknow.org, promote healthy sexual behavior and provide young people with advice on communication in relationships as well as methods for protecting against sexually transmitted diseases. Despite increasing public concern about the potential health risks of early, unprotected sexual activity, most of the mass media rarely depict three C's of responsible sexual behaviour: Commitment, Contraceptives, and consideration of Consequences. Although more than half of the couples who engage in sexual intercourse on television are in an established relationship, 1 in 10 are couples who have met only recently; one quarter do not maintain a relationship after having sex (Rubin, 1993). Only about 1 in 10 of the programs on television that include sexual content mentions the possible consequences or the need to use contraceptives or protection against STDs. Unintended pregnancies rarely are shown as the outcome of unprotected sex, and STDs other than HIV/AIDS are almost never discussed (Rubin, 1993). Abortion is a taboo topic, too controversial for commercial television and magazines (Hocklong and Linda 2003).

An in-home longitudinal survey of 1017 black and white adolescents from 14 middle schools in central North Carolina was conducted to assess over time whether exposure to sexual content in 4 mass media (television, movies, music, and magazines) used by early adolescents predicts sexual behavior in middle adolescence. Each teen was interviewed at baseline when he or she was 12 to 14 years old and again 2 years later using a computer-assisted self interview (audio computer-assisted self-interview) to ensure confidentiality. A new measure of each teen’s sexual media diet (SMD) was constructed by weighting the frequency of use of 4 media by the
frequency of sexual content in each television show, movie, music album, and magazine the teen used regularly (Häggström-Nordin, E. 2005).

The results obtained were such that White adolescents in the top quintile of sexual media diet when 12 to 14 years old were 2.2 times more likely to have had sexual intercourse when 14 to 16 years old than those who were in the lowest SMD quintile, even after a number of other relevant factors, including baseline sexual behaviour, were introduced. The relationship was not statistically significant for black adolescents after controlling for other factors that were more predictive, including parental disapproval of teen sex and perceived permissive peer sexual norms.

The inferences made from the findings were that exposure to sexual content in music, movies, television, and magazines accelerates white adolescents’ sexual activity and increases their risk of engaging in early sexual intercourse. Black teens appear more influenced by perceptions of their parents’ expectations and their friends’ sexual behaviour than by what they see and hear in the media. Although we might hope that parents and schools would be galvanized to action by such trends, studies show that parents rarely talk in a timely and comprehensive way with their children about sex, and schools are increasingly limited in what they can say, mandated by federal money to promote only abstinence until marriage and to discuss the failure rates of contraception. (Hocklong and Linda. (2003). In such a context of reticence by conventional sexual socialization agents, the mass media (e.g., television, movies, music, and magazines) may be powerful sex educators, because they provide frequent and compelling portraits of sex as fun and risk free. The media may serve as a kind of sexual super peer for teens, providing models of attractive older adolescents engaging in risky behaviour that may not be condoned in the teen
Adolescents consistently cite the mass media as important sources of sexual information. Recent surveys show that white adolescents in the United States spend on average 5 to 6 hours a day with some form of mass media and black youth spend even more. The sexual content in much of the media these teens attend to is frequent, glamorized, and consequence free. In 2002, 83% of the television shows watched frequently by adolescents included sexual content, but only 1 in 8 of those shows included any depiction of sexual risks and/or responsibilities. Despite long-standing concerns about the impact of increasingly explicit sexual content in mainstream youth media and recent graphic examples, such as Janet Jackson’s “wardrobe malfunction” at the 2004 Super Bowl game, relatively little research has looked at whether exposure to sex in the media has a long-term impact on teens’ sexual behaviour. The few studies that have been conducted focused almost exclusively on television or some kinds of television programming, such as music videos, rather than other kinds of media, although television viewing accounts for only 40% of early adolescents’ (11–14 years old) media time (Rubin 1993).

In this longitudinal study, we investigated the effects of the sexual content in 4 kinds of media adolescents use frequently, television, music, movies, and magazines, on black and white adolescents’ sexual behavior. The few studies of the effects of television on adolescents’ sexual beliefs have found that prime-time programs and music videos focusing on sex outside marriage promote more permissive attitudes about premarital sex (Giffords, E. 2009).

Two cross-sectional surveys have linked frequent exposure to sexual television content and transition to sexual intercourse. However, because time order was not clear in these studies, it is plausible to conclude that adolescents who were having sex were also those most interested in
sexual content in the media rather than exposure to sexual media accelerated the adolescents’ initiation of sexual activity.

A widely known field experiment reported by Rubin (1993), involved children in three rural Canadian communities before and after the introduction of television in towns receiving the government-owned channel (CBC), U.S. networks, or a combination. Children were studied in first and second grades and re-evaluated two years later. The research findings indicated that children, who viewed violent episodes frequently, expressed aggressive sexual and physical behaviors and attitudes (Rubin, 1993).

The extensive research literature was reviewed in 1972 by the Surgeon General's Advisory Commission, in 1982 by the National Institute of Mental Health, and in 1993 by the American Psychological Association's Commission on Violence and Youth. Their reports and those of more recent investigations are consistent across time, methods, child populations, and funding sources.

The key findings showed that: There is a causal link between the viewing of televised violence and the subsequent aggressive behaviors and attitudes in children who are frequent viewers of violent episodes, ranging from preschool to late adolescence. These children are more likely to model their behavior after aggressors in the programs than those who watch infrequently, particularly when the aggressors are depicted as attractive and get away without punishment, and when there is no apparent pain and suffering on the part of the victims. Children who have few positive role models in their lives are more vulnerable than those who do.
Aggressive behavior and attitudes are learned at young ages and can result in lifelong violence unless there are interventions. Violent behavior is a preventable problem. There is a wide availability of broad-based programs. Reduction in media violence and access to media violence are a component of these programs. Frequent viewing of television violence leads to the belief that such violence is an accurate portrayal of real life, resulting in an exaggerated fear of violence from others. Fear stemming from watching scary media may be immediate and short-term but can also be enduring. Prolonged viewing of filmed and televised violence can lead to emotional desensitization toward actual violence. Because young viewers tend to identify with the perpetrator and violent episodes seldom depict pain and suffering, there is a blunting of viewers' empathy for the victims and a reduced willingness and readiness to help.

Considering the finite amount of time in a child's day, frequent exposure to mass media content affects children's behaviors, attitudes, and perceptions while depriving them of opportunities for viewing equivalent amounts of pro-social behaviors as viable solutions to interpersonal problems. The amount of sexual material, including sexually violent material, has increased over the past decade. The Kaiser Foundation report indicated “family hour” of television (8 to 9 P.M.) currently contains more than eight sexual incidents per hour, a 4-fold increase from 1976. In the most recent Kaiser Foundation study (Kunkel et al, 1999), described as the most extensive study ever conducted of sexual conduct on television, more than 1,300 shows across 10 channels were analyzed. The results showed that while more than 50% of shows—and 66% of prime-time shows—contain sexual content, only 9% contain any reference to the possible risks or responsibilities of sexual activity or any reference to contraception, protection, or safer sex. A closer examination of media content by genre showed that it was talk shows that most often addressed sexual risk or responsibility, but even here this occurred only 23% of the time. The
report goes on to present survey data revealing that 76% of teenagers indicate that one reason young people have sex is because television shows and movies make it seem more normal for teenagers. Sexual and reproductive health is part of physical and emotional well-being of all human beings. Adolescents globally have unique sexual and reproductive health needs and accompanying vulnerabilities. Many adolescents face sexual health risks of early sexual debut, sexually transmitted infections including HIV/AIDS, unplanned pregnancies and illegal abortions. These challenges threaten their health and survival. The 1994 International Conference on Population and Development stressed that adolescent sexual and reproductive health needs are basic human rights (Hocklong and Linda, 2003). It emphasised the need to offer sexual health services and information to adolescents and to address reproductive health challenges across the lifespan. For adolescents to effectively transit into adulthood, they need to be provided with factual, affordable, accessible, confidential, non-judgemental and friendly sexual health information and services. Despite this recognition, adolescent preventive reproductive health services (PRHS) and programmes remain largely inadequate in sub-Saharan Africa. In Kenya, efforts to provide reproductive health care services to adolescents have faced numerous challenges. These challenges include lack of mandatory health insurance, inadequate health facilities, and shortage of health care providers (Wairimu, 2006). The lack of decentralized health care delivery system in Kenya causes disparities in service provision, favouring urban as opposed to rural areas.

The largest-ever generation of young people is now approaching adulthood–there are 1.6 billion young adults between the ages of 10 and 24 throughout the world. There is a growing understanding of the need to help these young people take control of their reproductive health,
and that male — as well as female — participation in sexual and reproductive health services is a necessity (Green, 1997).

A study was conducted on the influence of mass media on youths sexual behaviours. It aimed at establishing the influence of mass media on expression of sexual behaviour among high school adolescents in Nairobi Province. It sought to: identify the different types of mass media that provide adolescent with sexual information; factors that determine accessibility of materials and, determine the relationship between access to mass media and adolescents' expressed sexual behaviour. A sample of 418 adolescents in selected high schools participated in this study. Self-administered questionnaires were used to collect the required information. Focus group discussions and interviews for teachers and parents were organized to solicit qualitative information. Descriptive data analysis was done by use of the Statistical Package of Social Sciences (SPSS). Chi-square test of independence was used to establish the relationship between access to mass media and the expressed sexual behaviour of adolescents. The findings are presented by use of frequency tables, pie charts and graphs. Most of the respondents were boys (57%), with majority aged between 16 and 17 years. The study shows that magazines are the most popular media that provide sexual information (42.6%). It is further revealed that though magazines are popular, more girls (63.2%) than boys (36.8%) had received sexual information from the television. Information accessed through the media by adolescents included; pornographic picture and text (87.6%), dressing and fashion (63.4%), sex styles (54.2%) and contraceptive use (25.6%). More pocket allowance on the part of the adolescents seemed to increase the frequency of material access. The respondents whose parents received monthly payment accessed the materials more frequently (55.5%) than those whose parents were not on monthly payments. Approximately 46.2% of the respondents who accessed materials more
frequently were day scholars compared to 17.2% of the boarders. This study found that half of the respondents (50.7%) had experienced sexual intercourse. Among the adolescents who claimed to have sexual intercourse, 63% did not use condom during their first sexual intercourse. Despite the risk associated with multiple sexual partners, it was found that 54% of the respondents had had more than one sexual partner in the last one year. The results revealed that the majority (55.6%) of the adolescents were influenced into sexual debut by pornographic materials ($c^2 = 5.726$, df = 1, p = 0.017**). A relationship was found to exist between watching pornographic movies and sex demand from a sexual partner afterwards ($c^2=5.365$, df=1, p = 0.018**). A further relationship was also found to exist between the frequency of material access and non-condom use during adolescents' first sexual intercourse ($c^2=168.976$, df=1, p =0.000***). The frequency of material access was found to determine the number of sexual partners among the school going adolescents.

A study on Influence of mass media on adolescents' expression of sexuality and sexual behavior in Nairobi Province, Kenya by M'imaita in 2011 showed that magazines are the most popular media that provide sexual information (42.6%). It is further revealed that though magazines are popular, more girls (63.2%) than boys (36.8%) had received sexual information from the television. Information accessed through the media by adolescents included; pornographic picture and text (87.6%), dressing and fashion (63.4%), sex styles (54.2%) and contraceptive use (25.6%).

Reproductive health programs for young men primarily encourage responsible sexual behavior. Programs can also be instrumental in supporting other positive behaviors and attitudes, such as staying in school, seeing females as equals in relationships, and supporting female partners’ reproductive health needs and decisions. Although there are few research findings to date
specifically on young men’s sexual and reproductive information needs, program efforts to reach young men are underway around the world (Green, 1997).

The media are full of sexual information, and in some of the different kinds of media the portrayals have grown increasingly frequent and explicit (Häggström-Nordin, E 2005). The most recent study of sexual content on television, for example, found that two thirds of all shows included sexual content (all shows except news, sports, and children’s programming shown between 7 a.m. and 11 p.m. on 10 networks in 2001–2002 were coded). In the top 20 shows among teen viewers, 8 in 10 episodes included some sexual content, including 1 in 10 that depicted or implied sexual intercourse; only 15% of the shows with sexual content included any reference to safer sex issues, such as waiting to have sex, contraceptives, or the consequences of having sex (Ndani 1995). Even though teens younger than 16 years technically are not supposed to see R-rated movies in theatres without being accompanied by an adult, adolescents are frequent viewers of R-rated films in movie theatres as well as at home via cable channels and videotapes. And, the popular music adolescents listen to most frequently is primarily about love, sex, and relationships. One-half to three-fourths of girls aged 12 to 15 years read magazines such as “Seventeen,” “Teen,” and “YM.” The primary theme of these magazines is how girls can make themselves attractive enough to catch and keep a boy. Although teen girl magazines have steadily increased content about sexual health topics such as contraception, pregnancy, and STDs, a much higher proportion of content focuses on sexual attractiveness and strategy (UNESCO, 2000).

Very few studies have examined the relationship between exposure to sexual content in the media and adolescents’ attitudes and beliefs about sex, but the few that have suggest that teens do learn about sex from the media they attend to. One experimental study, for example, found
that adolescents who were exposed to music videos containing more sexual references were more likely to approve of premarital sex than adolescents exposed to randomly selected music videos. In other experimental studies, college students exposed to sexual scenes from prime-time television shows were more likely than those who had not to endorse the typical television view of sexuality: that men are sex driven and have trouble being faithful, that dating is a game or recreational sport, and that women are sexual objects whose value is based on their physical appearance (UNESCO, 1991). Even fewer studies have investigated the relationship between developmental level and reaction to sexual media content. Two studies, using chronological age as a censure of developmental status, found differences in interpretation of sexual messages, with younger adolescents being embarrassed and confused by what they were exposed to than older adolescents. In one of the only studies to assess pubertal status and use of sexual media, Brown et al. (1996) found in their ethnographic study of 20 white middleclass girls that the girls who had not yet menstruated were less likely than those who had begun menstruating to choose sexual media content (Häggström-Nordin, E. 2005).

The girls who were more biologically developed were more likely to seek out sexual images and information in the media, and were more likely to interpret media content as sexual and appropriate. The more sexually mature girls, for example, when asked to keep track of what they’d seen in the media about love, sex, and relationships, chose images of partially nude models and discussed television shows in which love and sex were depicted (Erulkar and Annabel S., 2004). In contrast, the less physically developed girls were most likely to say sexual images in the media were not appropriate for girls their age, referred to it as “gross” and “disgusting,” and said they tried not to see it. The above study did not however focus on how
boys were affected by exposure to mass media. The current study therefore sought to fill this gap.

From a report published on the Standard Newspaper, Kenya, in December 2009, teens have become more exposed to sexual material in mass media, which has encouraged their escapades. "They receive sexual orientation through the media and not through sex education programmes in schools which they resent," said Dr Koech. Sexually charged material has become available in urban centres thanks to duplicate videos and the Internet. Teens can access the Internet through unsupervised cyber cafes or their mobile phones. The teenagers schooling in rural areas are less likely to access these material due to lack of sufficient mass media infrastructure.

Young men generally report having their first sexual experience earlier than their female counterparts. Surveys in ten Latin American countries found that young men had initiated sexual activities on average one to two years earlier than young women had. Young men typically know little about their own or their partners’ sexuality, communicate about sex very little in their relationships, and tend to believe numerous sexual myths. An African regional conference reported that most teenage men are not well informed about sexuality, safe sex, condoms and other contraceptives, and that young men are far less likely than young women to be targeted by health communications and services (John Hopkins Center for Communication Programs, 1997).

Young men’s attitudes towards sex, females, and relationships in general often cause negative health and social consequences. Because many cultures associate multiple sexual partners with manhood, young men may feel pressured to engage in sexual behaviors that put them, and their partners, at risk. Cultural norms, peer pressure, and lack of self-confidence may discourage young men from obtaining reproductive health information and counseling. For instance, many
young men attempt self-treatment of STIs and consult non-medical sources, such as pharmacy staff and friends, for advice (Kurz, 1995). This study did not however investigate how mass media affected the youths’ use of reproductive health information and services. The current study did address this concern.

Ideally, programs for young men should educate about reproductive health while fostering the well-being of participants and being empathetic to male values, motivation and feelings. The programs should include decision making and life planning skills that combine sexual health with a broad range of general health services. For instance, opportunities for social and economic advancement may be coupled with knowledge or skills in reproductive health. Programs should also uphold the need for equity and respect in male/female relationships as long as they refrain from blaming men while exploring the impact of male privilege (Green, 1997).

Most importantly, reproductive health program content should be based on the needs young men identify. For instance, young men may be less concerned than young women with the fertility-related issues traditionally addressed by family life education programs. During sexuality workshops held by the Indonesian Planned Parenthood Association’s Lentera project, male high school students’ concerns included masturbation (how often is normal; consequences of); body image (penis size, pubic hair); losing their virginity; STIs; and sexual orientation. Preliminary findings from several training workshops conducted by the Margaret Sanger Center International in Namibia show that young men strongly: believe in sexual myths; have very little information and want to know everything they can about sexual and reproductive health and how to satisfy women sexually; and are willing to support women’s right to family planning and reproductive health care (Green, 1997).
Program planners should differentiate young men by age groupings of one to two years, as they experience rapid developmental and emotional changes in adolescence. A study in Kenya, for example, found that pre-teen males wanted to know about wet dreams and why they occur, while older males sought information about relationships between the sexes and how to avoid STIs. The current study therefore aimed at establishing how exposure to mass media affected youths’ sexual behaviors. Program planners should take into account research and field experience that shows where young men congregate, their perceived needs, and the most appealing channels for them to get information on responsible sex and sexuality. Some of the program approaches found successful with young men are:

A multipurpose youth center that offers recreation can be a good place to host workshops and discussions on sexuality if a facilitator is sincere and non-threatening. In Grenada, the Family Planning Association sponsors "Under-20’s Clubs" where male and female adolescents gather after school to socialize and do homework. The clubs also offer counseling, health education classes, physical examinations, and contraceptives. The Africa Region Boy Scout Association introduced a family life education program in eight countries, featuring activities leading to a merit badge, training seminars, a handbook, and regional workshops (Alexis, 1998).

In Kenya, the Mathare Youth Sports Association is a notable example of how sport can be used as an entry point to raise sexual and reproductive health issues and promote healthy lifestyles. To create awareness about AIDS, risky sexual behavior, and other reproductive health issues, a 10 to 15 minute talk is given to both players and supporters before each game. Some young people can also be reached in juvenile detention centers. The Teen Parenting Skills Project in the United
States provides a variety of life skills education courses to young fathers who are incarcerated, including partner communication, child development, family financial planning, and job skills.

Outreach sites such as discos, pool halls, video arcades, the marketplace and local fairs are all places to reach young men with reproductive health information, condoms and services. In Uganda, the Busoga Diocese’s Family Life Education program found that both young and adult men tend to congregate and have fewer daily responsibilities than women, and are therefore an easy-to-access audience if outreach is conducted in the places where they "hang out". In Indonesia, a project uses street outreach to reach young men in bars and on street corners. While most youth were initially negative about condoms and few wanted to take them from street outreach workers, within six months a shift in attitude was noted as positive feedback from young men’s partners made using condoms "cool."

Peer programs train young men to reach their peers with information and referral for services. As peer influences are an important determinant of early sexual initiation, peer educators can often provide support that counters negative peer pressure. For instance, peer education can provide young men with opportunities to examine the myths that have shaped their own attitudes about themselves and about women. Young men generally respond well to peer educators and welcome the opportunity to talk about their feelings and their roles as men they find them credible, approachable and helpful (Haider, 1997).

In Mexico, peer educators of MEXFAM’s Gente Joven project report that as a result of project activities, more young men are seeking information about contraception. In Namibia, the Strengthening Male Involvement in Reproductive Health project trains cadres of peer educators to conduct ongoing educational sessions for other young men within the defense and police
forces, soccer clubs, and the Evangelical Lutheran church. In Ghana, the Red Cross and the Scout Association have organized a peer education program that provides training in negotiating safer sex and refusal and assertiveness skills (Plata, 1998).

Men in general do not feel comfortable seeking services from family planning clinics, and young people in particular often feel embarrassed. Reproductive health clinics have tried, with mixed success, to attract young men by adding a separate entrance and waiting area for males, creating special hours, hiring more male clinic staff and outreach workers, offering free condom supplies, and training staff to treat male clients more respectfully and sensitively (UNESCO, 2000).

In New York, focus groups with young men prompted establishing "male-only" nights at a family clinic, which are so popular that on most nights more young men show up at the clinic than can actually be attended to. PROFAMILIA in Colombia offers men their own all-male clinic located in a different building from the regular clinics, and also has found the number of male clients increasing at its regular clinics when staff are trained to be sensitive to men’s unique needs. Young men under the age of 19 are served by PROFAMILIA’s youth clinics in Colombia and the Dominican Republic (Taylor, 2006).

Young men often name the mass media as their major source of reproductive health information. Among urban, unmarried males aged 15-19 in Senegal, 61% named media as a major source of sexual information, 22% named school, and 11% cited health personnel. Young men surveyed in Bangladesh said they preferred to receive sex education via media sources, with 76% mentioning radio and 73% mentioning television as preferred sources of information.
Hotlines and radio/TV call-in shows can also be very useful because of the anonymity they accord for young men to ask questions without being judged. The Talking about Reproductive and Sexual Health Issues (TARSHI) telephone helpline based in New Delhi receives the majority of its calls from young men. On subsequent calls, male clients report delaying penetrative sex, masturbating instead of visiting a commercial sex worker, and adopting other less risky sexual practices. UNICEF is developing a series of interactive videos for youth that model real-life situations; the young men in the situations "Snooker Game" and "At the Brothel" were recruited from a billiard hall in Phnom Penh. Leaders of Mexico’s Gente Joven program have made a special effort to counter the "machismo" image of men as sexual predators and to encourage young men to behave responsibly in their sexual relationships through a series of films, materials and peer educators.

There is abundant media attention focused on all matters related to pregnancy and abortion among youth, much of it contradictory. A conservative Christian perspective permeates even the mainstream press (Folke 2000). Nationally, Kenya boasts 17 Christian media outlets, including a major daily newspaper (Karanja, 2004). Newspapers and popular magazines regularly feature stories chronicling the downward spiral of youth into moral depravity, often triggered by innocent curiosity or moral laxity (Ligaga 2005). These stories reflect not only the influence of colonial religions but also the social proscriptions and stigmatizing terms for sexual activity among young people that are plentiful in many Kenyan languages (Nzioka 2004). These sexual allegories are contrasted starkly by young people’s broad exposure to US broadcast media, particularly situation comedies, talk shows and soap operas portraying unfettered and inconsequential sexuality and liberal sexual mores (Folke, 2000; Cogan, 1992).
Young people are taught as part of the official school curriculum that sexual intercourse and induced abortion leads to a wide range of chronic health and social problems. Two excerpts from the official Kenya Certification Secondary Education Social Education & Ethics Exam Review Book reveal the sensationalist tenor of the discourse on abortion in the public education system (Otiende, 2001): Young people who procure abortion often end up leading depressed, frustrated, unwholesome and lonely lives which usher them into a further abyss of depravity and drug addiction. A girl will always know and live with the reality that she willfully smothered and killed her unborn child. It is fairly haunting and dauntingly prickly to one’s conscience. Hallucinations, dementia and ultimate madness are the likely consequences for the victims.

In Masolo and Ongonga (2001), young people are instructed that all mutually respectful human relationships and other aspects of good citizenship are predicated upon an anti-abortion stance.

It is very difficult to consider ourselves ready to respect all living human persons we associate with unless we have first accorded them that respect during their earlier periods of growth and development by allowing them to grow, develop and come into this world. Masolo and Ongonga (2001) advise that students can attribute their very existence and personal worth to an apparent escape from abortion. Imagine that something destroyed the fertilized egg from which you were developed two months after conception. Do you think you would be here today? Don’t you think that you are alive and valuable to us today because that egg was not interfered with?

The misinformation on abortion is embedded in a broader academic approach some have found to be deficient in promoting reproductive health (Kamara, 1999). Wanyeki (2010) evaluated one school-based reproductive health intervention in Western Kenya and found that a school-based intervention significantly reduced students’ support for safer sex practices and increased girls’
confusion about the timing of their fertile period. The influence of conservative religious institutions within the Kenya Education Institute, the technical agency responsible for public school curricula, is pervasive (Wanyeki, 2010).

Despite an official academic curriculum that rigorously condemns abortion (and its antecedents: premarital sex and pregnancy), unwanted pregnancy and abortion are prevalent among school going youths in Kenya. In 2003, young women below 20 years of age accounted for 16% of the 22,000 abortion-related complications treated annually in Kenya’s public hospitals. Although 42.1% of young people aged 15–19 reported having experienced sexual debut in the most recent national demographic and health survey, only 11.0% of young women reported using modern contraception (National Coordinating Agency on Population and Development (NCAPD, 2010).

Pregnancy is the second leading cause of secondary school attrition for Kenyan girls (NCAPD, 2010). While prior quantitative studies of in-school Kenyan girls found only 9% who report that they would manage a hypothetical unintended pregnancy through abortion, incidence studies suggest the proportion is much larger (Okumu & Chege, 1994). Secondary school students are more likely to pursue abortion as a strategy than their out-of-school age peers (Okumu & Chege, 1994). The World Health Organization has reported that African adolescents are also more likely to delay abortion decisions and to seek unsafe providers than adult women. Legal, economic, and societal pressures can make parenthood very difficult and socially disastrous for young people in Kenya (Nzioka 2004). The World Bank experts assert that high unsafe abortion rates may be partially attributable to the continued extra-official expulsion of pregnant students from Kenyan schools (Odaga & Heneveld 1995).

The Internet is increasingly used to study youth sexuality, but its use in Africa remains rare
(Turner, 1998; Mustanski, 2001; Binik 2001). Students were presented with a comic book narrative about the sexual encounter and subsequent unintended pregnancy of two secondary school students. The respondents were told that ‘Rukia’s’ pregnancy had been discovered at six weeks. Four panels showed four conflicting statements of advice or attitude from ‘friends’, ‘pastor’, ‘auntie’ and ‘teacher’. Respondents were invited to give honest answers and told that all responses were confidential and acceptable. We posed structured open-ended hypothetical questions in response to the cartoon vignette, a common method for eliciting ruminations on sensitive topics (WHO, 1993; Webb, 2000). Students were told to imagine that Jack and Rukia were their good friends. Three questions were posed: (a) what would you advise them to do? (b) why do you think that is what they should do? (c) if you or your partner had an unintended pregnancy, what would you choose to do about the pregnancy? Young people were subsequently asked to describe the outcome of actual cases of unintended pregnancy among their peers.

2.5 Exposure to Mass Media and Students’ Levels of Physical Violence

The amount of violence on television is on the rise. The average child sees 12,000 violent acts on television annually, including many depictions of murder and rape. More than 1000 studies confirm that exposure to heavy doses of television violence increases aggressive behaviour, particularly in boys. Other studies link television or newspaper publicity of suicides to an increased suicide risk.

The following groups of children may be more vulnerable to violence on television: children from minority and immigrant groups, emotionally disturbed children, children with learning disabilities, children who are abused by their parents and children in families in distress.
Physicians who see a child with a history of aggressive behaviour should inquire about the child’s exposure to violence portrayed on television (Sonu, 2011).

In terms of violence, one study shows that children are learning aggressive attitudes and behaviors because of watching shows and movies that depict such behavior. They develop a fear of being victimized by violence. What most of the programs they see and hear send the false notion that in every conflict there has to be a winner and a loser, thus making them believe that violence is a successful means of resolving conflicts. Media violence can lead to aggressive behavior in children and this is supported by a research that states that when a child hits the age of 18, he must have seen about 200,000 acts of violence on television alone. Young children become desensitized to the real world violence. They cannot easily tell the difference between real life and fantasy that the violent images they see on television and in the movies may seem real to them. Parents can reduce the negative influence of media on young people by limiting and monitoring the programs the children watch. They should also teach the children the value of inner beauty, the value of self worth, and alternatives to violence.

The negatives in society are highlighted with the purpose of awakening people about them. For example, the negative effects of addiction are portrayed through advertisements. Newspapers, television and the Internet are used to convey social messages. But unfortunately sometimes, the message is misconstrued (Manali Oak, 2012). The 'awakening' does not reach everyone or it reaches the masses in the wrong way. So there is a section positively influenced by the media while there are others who take the wrong message from it. Media influences them negatively. What is shown with intent to 'spread a message' ends up becoming a bombardment of the bad,
the ugly. The bad is overinflated and the good goes unnoticed. Depiction of the bad has a negative impact on kids not mature enough to interpret what they are being shown. It's not just media to be blamed in this case. Parents and teachers have a big role to play in selecting what the young should see and what they should not. To some extent, media is responsible for generating negative feelings among those exposed to it. An early exposure to bold or violent films, books publishing adult content and news portraying ugly social practices has a deep impact on young minds. If children are bombarded with fight sequences, stunt work, sex and rape scenes, suicides and murders through books or movies, they are bound to leave a scar on these impressionable minds. And not just children, the unpleasant can impact even an adult's mind. Adults may have the maturity to distinguish between the good and the bad, but bombarding only the bad can affect anyone at least at the subconscious level. (Manali Oak, 2012).

Watching violence is a popular form of entertainment. A crowd of onlookers enjoys a street fight just as the Romans enjoyed the gladiators. Wrestling is a popular spectator sport not only in the United States, but in many countries in the Middle East. People enjoy combat between animals, e.g, cock fights in Indonesia, bull fights in Spain, and dog fights in rural areas of this country. Violence is frequently depicted in folklore, fairy tales, and other literature. Local news shows provide extensive coverage of violent crimes in order to increase their ratings. Technological advances have dramatically increased the availability of violent entertainment. The introduction of television was critical, particularly in making violent entertainment more available to children.

More recently, cable systems, videocassette recorders, and video games have increased exposure. Hand-held cameras and video monitors now permit filming of actual crimes in progress. Economic competition for viewers, particularly young viewers, has placed a premium on media
depictions of violence. Not long after the introduction of television in American households, there occurred a dramatic increase in violent crime (Huesmann LR, Taylor LD. 2003). Some scholars and commentators see a causal connection. The most common argument is that children imitate the violence they see on television. The process of imitation is emphasized by social learning theory—a well-established approach in social psychology (Bandura 1983).

Themes of misogyny can be seen in much gangster rap (GR) music. This music elevates degradations of women such as rape, torment, and violence. In a study conducted by Armstrong in 2001, he found after examining 490 GR songs, that 22 percent contained violent and misogynist lyrics. Wester, Crown, Quatman, and Heesacker state that, "The increasing popularity of GR, coupled with documentation of society's increased sexism, domestic violence, sexual assault and other forms of degradation of women suggest that perhaps GR is partly to blame for an increase in anti-female attitudes and behaviors. It is difficult to tell whether GR directly causes misogynous attitudes or if it serves to increase preexisting anti-female cultural values. The difference between rap music and other types of music is that the lyrics are generally the main focus of attention. Rappers seem to commit themselves to worst impulses by telling their stories in the first-person.

In a study conducted by Barongan and Hall (1995) they had male college students listen to rap music with misogynous or neutral song lyrics. After listening to the different music, they viewed three different vignettes. These vignettes were sexual-violent, neutral, or assaultive. Then the students were asked to choose one of the three vignettes to show a female. Those who had listened to the misogynous music were significantly more likely to show the female the assaultive vignette.
Influence of media to violence may seem like cliché but the truth of the matter is - children learn through observation. The esteem that is accorded to personalities who are violent, aggressive and destructive appeals to the adolescents because they would want to be held in high esteem by their peers. This mismatch of violence and heroism misinforms the teenagers who then imitate their heroes (NCCK 1992). The case is made worse because these negative actions as portrayed in the media go unpunished. There is now solid evidence to suggest a relationship between aggressive behavior and exposure to violent television and movies. Researchers have found that children are more physically and verbally aggressive immediately after watching violent television and movies. It is also clear that aggressive children and teens watch more violent television than their less aggressive peers (Obor & Wamahiu, 1997). With the premise of such findings then it will not be wrong to theorize that the Kenyan students were re-playing what they had viewed in the media earlier in the year as the post election violence unfolded.

Two major meta-analytic reviews were published in the 1990s. Wood (1991) examined 28 research reports on children and adolescents exposed to media violence and subsequently observed in unconstrained social interactions. The authors concluded that exposure to media violence increases aggressive interactions with strangers, classmates, and friends. In a larger review of 217 studies conducted between 1957 and 1990, Paik and Comstock (1994) looked at the effects of television violence on anti-social behavior among age range of 3 to 70 years with 85% of the sample aged 6 to 21 years. The study revealed a significant correlation between television violence and aggressive behavior, regardless of age. The greatest effect size was demonstrated for preschool children, even though the aggression they exhibited was, by the nature of their age and size, the least problematic (Gerda, 1985).
The authors, in a prescient way, cautioned as to the nature of the aggression being dismissed and wondered about the long-term consequences of such large effects on subsequent behavior. The effect on males was only slightly higher than the effect on females, and the effect size for erotica and violent erotica combined was greater than that for violence only programs. This later outcome is viewed as supportive of the “sexual callousness” model described by Zillman and Weaver (1999) and Mullin and Linz (1995), which proposed that erotica with or without violence that depicts women as promiscuous may encourage the subsequent development of callous attitudes or behavior toward women among males so exposed.

In an effort to understand the content of American television, the National Television Violence Study (Federman, 1998) rigorously examined more than 10,000 hours of programming across a variety of channels, cable and non-cable, at all hours of the day in three consecutive years from 1994–1997. There was surprising consistency of the data from year to year, with an alarming amount of violence present. It was estimated that young people view 10,000 acts of violence per year, with 61% of shows containing violence of some kind. The type of violence and the context was also consistent, with 26% of violent interactions involving the use of weapons, 38% of violent acts being committed by “attractive perpetrators,” more than 50% of violent incidents showing no apparent pain associated with the violence, and almost 75% of violent acts involving no evident remorse, criticism, or penalty for the violence. To the contrary, humor accompanied the violence in 41% of the incidents.

The three volumes of the National Television Violence Study concluded the following:

1. Television violence contributes to antisocial effects on viewers.
2. Three primary effects arise from viewing televised violence:
a. Learning of aggressive behaviors and attitudes
b. Desensitization to violence
c. Fear of being victimized by violence

3. Not all violence poses the same degree of risk of these harmful effects.

With the content established as consistent over each of the three years, the last volume attempted to identify how each of nine specific contextual features heightens the probability that a given depiction of violence will generate one of the three primary types of effects. The predicted impact of contextual factors based on social science research rated attractive perpetrator, presence of weapons, and humor as associated with learning aggression; graphic violence and realistic violence associated with generating fear; and humor and graphic violence associated with predicting desensitization. Two current articles have looked at trauma symptoms and television watching. Joshi and Kaschak (1998), in a study using a self-report questionnaire administered to 702 high school students, noted that 75% reported exposure to violence in the media at moderate to high levels, with 10% reporting that they sought counseling for the negative sequel. Symptoms reported included bad dreams and nightmares, anxious feelings, being afraid of being alone, withdrawing from friends, and missing school.

Singer (1995) examined viewing preferences, symptoms of psychological trauma, and violent behaviors among children who watch television. The data from their survey of 2,245 students, grades 3 through 8, showed that children who watched more than six hours of television per day reported more trauma symptoms and more violent behaviors. In addition, children who showed a preference for viewing “action and fighting shows” reported higher levels of violent behaviors. High-Risk Behaviors, television viewing has also been shown to be associated with less
dramatic, but still very concerning, risky behaviors by adolescents. Klein (1993) examined data derived from in-home surveys of 2,760 randomly selected 14- to 16-year-old adolescents in 10 urban areas. Participation in eight potentially risky behaviors (sexual intercourse, drinking, smoking cigarettes, smoking marijuana, cheating, stealing, cutting class, and driving a car without permission) increased among adolescents who listened to radio and watched music videos and movies on television more frequently, regardless of race, gender, or parental education level.

Klein (1993) findings are consistent with content-based research on how alcohol is portrayed in television programming. Research from the 1980s demonstrated that alcoholic beverages are commonly portrayed either neutrally or positively (Breed & De Foe, 1981). Klein (1993) reported separately that a viewer can observe more than a dozen drinking episodes in one average evening of television.

Huesmann and Taylor (2006), assert that media violence poses a threat to public health in as much as it leads to an increase in real-world violence and aggression. Research shows that fictional television and film violence contribute to both a short-term and a long-term increase in aggression and violence in young viewers. Television news violence also contributes to increased violence, principally in the form of imitative suicides and acts of aggression. Video games are clearly capable of producing an increase in aggression and violence in the short term, although no long-term longitudinal studies capable of demonstrating long-term effects have been conducted. The relationship between media violence and real-world violence and aggression is moderated by the nature of the media content and characteristics of and social influences on the individual exposed to that content.
Kinyua (2011), conducted a study to investigate the causes of indiscipline and violence by in Kenyan public secondary schools. The study targeted students, teacher counsellors and head teachers. The study sample comprised of 50 students, 5 teacher-counsellors and 5 head teachers from five secondary schools in Central Division of Embu Sub-county. The schools were selected using stratified random sampling. For analysis purposes, the statistical package for social science was used to analyse and process the data. Descriptive were used to analyse the data, included frequencies and percentages. The results of the data analysis were presented in frequency tables and bar charts.

The study established that drugs and substance abuse among secondary school students in Central Division of Embu Sub-county is on the increase. Among the student who took part in the study, 40% admitted that they were abusing various drugs, which is higher than the global proportion of 13.5% of the youth aged 15-24 who have tried drugs at least once as reported by UNODC (2000) This indicates that the efforts that the schools have been putting in place to fight drug and substance abuse have not been working, effectively. Consequently, drug and substance abuse has lead to increase in cases of indiscipline, as reflected through strikes, theft truancy, sneaking out of school, disobedience to teachers, don't care attitude among student and general indiscipline. On the overall, this has led to poor academic performance in the schools. In view of the above findings the current study therefore sought to establish the possible link between violence in secondary schools and students’ exposure to mass media.

2.6 Summary of Literature Review

Influence of mass media cannot be underestimated. Literature review in this chapter has shown that adolescents are heavy consumers of mass media resulting to devastating effects on their
behaviors. Available local literature for example showed that, adolescents engage in deviant behaviors due to poor parenting and peer influence (Kariuki, 2011).

Little or partial attention have been given to the influence of mass media on the behavior and lives of young people in Africa as well as Kenya. With most of the researches in this area having been done in western countries. In addition the current technological growth in telecommunication industry and especially the increased use of social media by young people makes the current study absolutely essential. Previous researches done locally and in the Western countries concentrated on the role of parenting and peer pressure in drug abuse, aggression and indulgence in violent acts by adolescents. This study therefore aimed at filling the gaps left by the previous researchers which included the following: the relationship between persistent exposure to mass media and students deviant behaviors such as drug abuse, with specific emphasis on gender differences in exposure levels. It also aimed at establishing relationship between levels of exposure to mass media and students’ aggression, sexual violence and physical violence.
CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter comprises the research design, variables, location of the study, target population, sample size and sampling technique, research instruments, pilot study, data collection techniques, data analysis as well as logistical and ethical considerations.

3.2 Research Design

This study adopted survey research design which assisted the researcher in investigating and understanding the relationship between exposure to mass media and students’ expression of deviant behaviors which included: drug abuse, interpersonal relationship, sexual behaviors, physical violence and use of reproductive health information within Nakuru County. This design was appropriate due to its suitability in collecting peoples’ opinions, attitudes, habits or other social issues that form part of the objectives of the current study (Orodho, 2005).

3.2.1 Study Variables

The independent variable in this study was exposure to mass media, both print and electronic. Information from print media may be obtained from books, newspapers, magazines among other sources.

The dependent variables included: students’ drug abuse, aggression, sexual violence and physical violence. Questionnaires were used to solicit information on how dependent variables were influenced by levels of exposure to mass media. These variables were measured by the
frequencies of occurrence and the amount time spent in hours on mass media, among students in the selected public secondary schools. Ordinal and nominal levels of measurements were also used.

3.3 Location of the Study

The study was carried out in three neighboring Sub-counties of Molo, Nakuru Town and Nakuru North, all of Nakuru County, Kenya. Nakuru Town was purposively chosen because it covers town centre that provides easy access to printed materials (books, newspapers and magazines) and visual/audio (electronic media such as cinemas, videos, movies, internet, and television). The second Sub-county, Molo was also purposively chosen because of its remote nature (furthest Sub-county from the town centre). It was assumed to offer limited access to mass media showing boxing, shooting enemies, fighting, abusing, quarrelling e.t.c. Pornographic materials, videos, cinemas and internet among others, were less likely accessible to the students in this sub-county.

The third Sub-county, Nakuru North acted as a representation of outskirts of town centre. These three Sub-counties were further preferred due to availability of many secondary schools. In addition the selected areas have many public secondary schools which are a mixture of day/boarding, girls only schools and boys’ only schools, as well as mixed day and boarding schools. All these were essential for comparison purposes. The limited time available to complete the research also justified the choice of the three neighboring Sub-counties. Furthermore, there has been increased cases of student indiscipline, school dropouts, unwanted pregnancies, drug abuse among other vices in local secondary schools within Nakuru County and more specifically Nakuru Town Sub-county and its environs, particularly in the recent past (Kiragu, 2010). The location selected was also adversely affected by the 2007 post election
violence, in which the youth actively participated either directly or indirectly. Mass media is on record of taking a big blame in fuelling this violence.

3.4 Target Population

The selected sample for this study was 482 students, sampled from a population of 12,300 students, obtained from the 3 purposively selected Sub-counties of Molo, Nakuru town and Nakuru North Sub-county. This sample included form one, two and three public secondary school students, enrolled in 8 selected public secondary schools, using stratified random sampling. The students in the chosen forms were mainly in their adolescence, and were therefore likely to be influenced by mass media. However, form four students being an examination class were excluded from the study. (Provincial Director of Education Office, 2009).

3.5 Sampling Techniques and Sample Size Determination

3.5.1 Sampling Techniques

The study adopted both probability and non probability sample techniques. Non probability method that was used to select the three Sub-counties in Nakuru County was purposive because these Sub-counties had schools with records of various violent behaviors among students. Purposive sampling can be very useful for situations where one needs to reach a targeted sample quickly and where sampling for proportionality is not the primary concern (Orotho, 2005). In this case purposive sampling helped to get subjects that possessed specific characteristics required in this study.
The probability sampling methods used were stratified sampling and simple random sampling in the selection of respondents and schools. This helped to ensure that all the subjects had equal chances of being selected in the sample.

The researcher purposively sampled three out of six Sub-counties in the Nakuru County, Kenya, from which 8 public secondary schools out of the 32 public secondary schools, were selected through stratified sampling into public girls’ only secondary schools (day and boarding), boys only secondary schools (day and boarding) and mixed day secondary schools (boys and girls). Two boarding national schools for both girls and boys were also included in this study. The three Sub-county day public secondary schools (mixed), three boarding provincial schools (mixed) and 2 national schools for both boys and girls were purposively selected. This gave a total of eight schools in the sample to represent the population and allow for adequate comparison.

In this study, a sample size of eight public secondary schools were purposively obtained from the Sub-county. The sample size was determined by the formula recommended by Nassiuma (2000).

\[
\begin{align*}
n &= \frac{NC^2}{C^2 + (N-1)e^2} = \frac{32 \times (0.2)^2}{(0.2)^2 + (32-1) (0.05)^2} = 8
\end{align*}
\]

Where ‘n’ is the required sample size of the schools, ‘N’ is the total number of public schools in the selected Sub-counties, ‘C’ is the coefficient of variation and ‘e’ is the margin error (Nassiuma, 2000). For this study, N = 32 schools, C = 20% and e = 0.05. Then the schools were selected by use of stratified random sampling from the three purposively selected Sub-counties, in a proportionate manner based on one or more of the following criterias: the schools should be located within the 3 Sub-counties proportionally; the schools that had records of drug use,
(cigarettes and alcohol e.t.c.), high rate of school drop outs for girls due to unwanted pregnancies, reported cases of physical and sexual violence, cases of strikes and gross students misconducts before the study according to the information gained from school counselors and administration as well as educational officials at the Sub-county and county levels.

3.5.2 Sample Size

The sample size of 482 students in Forms 1; 2 and 3 were obtained using a table for determining sample size as recommended by Kathuri and Pals (1993). In each class, a table of random numbers was used to get 20 suitable respondents except for boys’ only and girls’ only schools where 21 Form 1 students were selected in each of the two schools. Students were picked randomly and instructed to point a location in the table of random numbers which was located as the starting point, then proceeded downward across until the number required of 482 respondents was achieved. This sample size was therefore assumed to be a representative of the total population of 12,300 students.

The use of a sample for generalization, within the study area, made it easier and more economical without jeopardizing the end results. The researcher used probability sampling to ensure that population of the study was homogenous. The general strategy was to identify important sources of variation in the population and then select a sample that reflects this variation (Singleton, 1988).
Table 3.1:

**Sampling Frame**

<table>
<thead>
<tr>
<th>School type and Location</th>
<th>Form 1 Boys</th>
<th>Form 1 Girls</th>
<th>Form 2 Boys</th>
<th>Form 2 Girls</th>
<th>Form 3 Boys</th>
<th>Form 3 Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nakuru Town</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A- County Day Mixed School</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td>B- National Boys Boarding</td>
<td>21</td>
<td>-</td>
<td>20</td>
<td>-</td>
<td>20</td>
<td>-</td>
<td>61</td>
</tr>
<tr>
<td>C- Sub-county Day Mixed</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td><strong>Molo Sub-county</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D- County Mixed Boarding</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td>E- County Mixed Boarding</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td><strong>Nakuru North Sub-county</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F- National Girls Boarding</td>
<td>-</td>
<td>21</td>
<td>-</td>
<td>20</td>
<td>-</td>
<td>20</td>
<td>61</td>
</tr>
<tr>
<td>G- Sub-county Day Mixed</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td>H- County Boarding Mixed</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>81</td>
<td>81</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>482</td>
</tr>
</tbody>
</table>

To collect the required information from the respondents, the researcher made use of self administered questionnaires which were constructed as follows:

**3.6 Construction of Research Instrument**

The research instrument consisted of self administered questionnaire (See Appendix A), which was constructed by the researcher. The questionnaire for the students comprised of questions on students’ personal information, exposure to mass media versus: drug abuse, students’
interpersonal relationships, students’ physical and sexual violence as well as students’ use of reproductive health information.

When constructing the questionnaire, the researcher ensured that there were items addressing each research objective. Care was also taken to ensure that validity and reliability of the items were ensured and enhanced. Each student was expected to respond to the relevant items in all sections of the questionnaire contained in the appendix A.

3.7 Pilot Study

The researcher subjected the questionnaire to piloting before commencement of the actual study. The piloting was undertaken in secondary schools which were not among those to be included in the actual study. The pilot study was conducted among 60 respondents from three schools (20 respondents from each school) selected randomly from the three Sub-counties under study. The main aim of piloting was to test the questionnaire and in the process enhance its validity and reliability. The pilot study also aimed at pin pointing some problems that the researcher could have overlooked. It was also instrumental in determining whether the time given for answering the questions was adequate. Items that students found to be ambiguous or unable to answer were improved. The qualitative and quantitative data collected through piloting were analyzed to test their validity. Analysis of quantitative data was done using Statistical Package for Social Sciences (SPSS). Descriptive statistics such as means, frequencies helped in summarizing the data. Cross tabulation of some variables, Pearson correlation and chi square statistics were also used to test the significance of the stated hypotheses (Gatumu, 2008). In summary, the pilot study helped to enhance the validity and reliability of the study instruments.
3.7.1 Validity of the Research Instrument.

The study sought to establish the content validity of the questionnaire for students on the relationship between exposure to mass media and students deviant behaviors in the selected areas and schools. The student questionnaire items, were on levels of exposure to mass media versus selected deviant behaviors such as drug abuse, physical violence and aggression. To ensure content validity of the instrument, the researcher made use of the face validity approach where he sought the expertise of the lecturers in the department of educational psychology so as to enhance the instrument’s validity (Gatumu, 2008). Peer review was also used to enhance validity. The suggestions were incorporated and went along way in enhancing the validity of the instruments.

The researcher also used simple and stratified random techniques to select respondents, which also helped to ensure representativeness and thus enhancing validity of the study. In constructing the instruments the researcher ensured that the items used to collect data measured the concept under investigation, and responded to each of the four objectives of the study. In addition, the researcher also pilot tested the instruments in schools not used in the actual study so as to further increase the validity of research instruments. Vague questions were done away with or rephrased to make them clearer.

3.7.2 Reliability of the Research Instrument

The student questionnaire was tested for reliability by using Cronbach coefficient alpha to determine the internal consistency of the items. This is method of estimating reliability of test scores, by the use of a single administration of a test. Consequently, it provides good measures of reliability because holding other factors constant, the more similar the test content and conditions
of administration are, the greater the internal consistency reliability (Mugenda & Mugenda, 1999). In this study, the items were considered reliable if they yielded a reliability coefficient of 0.70 and above. This figure is usually considered respectable and desirable for consistency levels (Chepchieng’, 2004). In this study the reliability of students’ questionnaire was 0.88 for all the dependent variables. This was close to one and therefore considered a reliable measure (Orotho, 2004, Gatumu, 2008). This meant that the questions on exposure to mass media versus students’ Drug abuse, Interpersonal relationships, sexual behaviors, physical violent behaviors and use of reproductive health information were reliable.

3.8 Data Collection Techniques

The data collection procedures commenced when the researcher obtained a research permit from the National Council for Science and Technology (See Appendix D). Upon being granted permission, the investigator visited the selected schools and established rapport and made appointments with the principals of the respective schools, school counselors and teachers who were to facilitate the exercise.

The researcher then sought consent and made the students understand that the study was purely meant for research purposes and that it would help in addressing their needs whenever possible. The respondents were also given assurance that the information they provided would be treated with utmost confidentiality. The researcher spelled out the instructions that included: accuracy and keenness as essential attributes. On completion, the respondents handed in their questionnaires to a central location, for the purposes of collection by the research assistants. The researcher then collected the filled in questionnaires for further processing. The self administered questionnaires were used to collect both qualitative and quantitative information. The research
assistant assisted in the distribution of research instruments to the selected schools with the assistance of school teachers and counselors.

3.9 Logistical and Ethical Considerations

The researcher first obtained a research permit from the National Council for Science and Technology (NCST). The respondents were assured of the confidential treatment of the information they provided. In addition the researcher explained to the respondents that the data collected was only to be used for study purposes and that the research findings would hopefully be used to enhance social, moral, psychological and intellectual developments of the adolescents.
CHAPTER FOUR

FINDINGS, INTERPRETATIONS AND DISCUSSIONS

4.1 Introduction

This chapter presents findings of the study that sought to understand the relationship between levels of exposure to mass media and students’ expression of selected deviant behaviors, in selected sub-counties of Nakuru County, Kenya. The findings are presented in line with the objectives of the study as stipulated in chapter one through use of frequency tables, bar charts and pie charts. The program that was used to analyze the data was Statistical Programme for Social Sciences (SPSS Version 20).

4.2 Data Analysis

The qualitative and quantitative data obtained from the respondents was analyzed with the help of the computer using SPSS version 20 for windows. The results are presented in this section using both descriptive and inferential statistics. Specifically chis square and Pearson Correlation statistics were used to test the significance of the stated null hypotheses. Cross tabulation of selected variables was also found useful (Gatumu, 2008). The significance level was set at $\alpha=0.05$. Descriptive statistics used to analyze qualitative data included: frequencies, percentages, means, graphs etc.

The null hypotheses of the study tested included the following:-

$H_0_1$. There is no significant relationship between levels of exposure to mass media and students’ drug abuse.
Ho$_2$. There is no significant relationship between levels of exposure to mass media and students’ interpersonal conflicts

Ho$_3$. There is no significant relationship between levels of exposure to mass media and students’ level of risky sexual behaviors

Ho$_4$. There is no significant relationship between levels of exposure to violent mass media and students’ level of physical violence

Chi square and Pearson correlational statistics were used to test the significance of the stated null hypotheses.

4.3 Results

4.3.1 Socio-Demographic Characteristics of the Respondent

The following section illustrates socio-demographic characteristics of the respondents which include; respondents’ age, form, and gender. Such background information is essential in understanding the respondents of the study. It also assists in analyzing the study findings. Analysis of the respondents was done on the basis of their age composition, gender, and class.

4.3.2 Age of students by class

Among the students most (49.8%) were between 15-16 years followed by 17-18 years at 37.8% while the least were 21 and above years old with a representation of 0.4%. Most (25.1%) of the students between 17-18 years were in form three while those between 15-16 years most were in form one (23%) and form two (21%). On the other hand, those with 21 years and above were in form two (0.4%). Table 4.1 shows the distribution.
Table 4.1:
*Percentage Distribution Of Students Age By Gender And Class*

<table>
<thead>
<tr>
<th>Students Age</th>
<th>Male (%)</th>
<th>Female (%)</th>
<th>Total (%)</th>
<th>Form 1 (%)</th>
<th>Form 2 (%)</th>
<th>Form 3 (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14 years</td>
<td>1.9</td>
<td>5.4</td>
<td>7.3</td>
<td>7.1</td>
<td>0.2</td>
<td>-</td>
<td>7.3</td>
</tr>
<tr>
<td>15-16 years</td>
<td>23.4</td>
<td>26.8</td>
<td>50.2</td>
<td>23.0</td>
<td>21.0</td>
<td>6.2</td>
<td>50.2</td>
</tr>
<tr>
<td>17-18 years</td>
<td>21.2</td>
<td>16.8</td>
<td>38.0</td>
<td>3.1</td>
<td>9.8</td>
<td>25.1</td>
<td>38.0</td>
</tr>
<tr>
<td>19-20 years</td>
<td>3.3</td>
<td>0.8</td>
<td>4.1</td>
<td>0.2</td>
<td>1.7</td>
<td>2.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Above 21 years</td>
<td>0.4</td>
<td>-</td>
<td>0.4</td>
<td>0.0</td>
<td>0.4</td>
<td>-</td>
<td>0.4</td>
</tr>
</tbody>
</table>

The age factor is significant in this study because students in late adolescence are likely to make informed choices on their mass media choices than their counterparts who are younger (Kiragu, 2010).

**4.3.3 Gender distribution of students**

There were more male students (50.2%) than female students (49.8%). When compared by their age, there were more female students (26.8%) than male students (23.4%) between 15-16 years. Most of the male students (17.8%) were in form three while female students (17.6%) were in form one. More female students were therefore concentrated in the younger age bracket than their male counterparts. This suggests that either more female students start schooling earlier than male students or male students drag at lower levels of education than female students. This
can be explained by the fact that girls generally attain both social and psychological maturation faster than boys (Papalia et al, 1999). Table 4.2 shows the findings.

Table 4.2:
Percentage Distribution Of Students’ Gender By Age And Class

<table>
<thead>
<tr>
<th>Gender</th>
<th>Students Age</th>
<th>Students class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13-14 years</td>
<td>15-16 years</td>
</tr>
<tr>
<td>Male</td>
<td>n=35 (%)</td>
<td>n=242 (%)</td>
</tr>
<tr>
<td>Female</td>
<td>n=482 (%)</td>
<td>n=240 (%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>13-14 years</th>
<th>15-16 years</th>
<th>17-18 years</th>
<th>19-20 years</th>
<th>Above 21</th>
<th>Total</th>
<th>Total</th>
<th>Form 1</th>
<th>Form 2</th>
<th>Form 3</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1.9</td>
<td>23.4</td>
<td>21.2</td>
<td>3.3</td>
<td>0.4</td>
<td>50.2</td>
<td>242</td>
<td>15.8</td>
<td>16.6</td>
<td>17.8</td>
<td>50.2</td>
<td>242</td>
</tr>
<tr>
<td>Female</td>
<td>5.4</td>
<td>26.8</td>
<td>16.8</td>
<td>0.8</td>
<td>-</td>
<td>49.8</td>
<td>240</td>
<td>17.6</td>
<td>15.8</td>
<td>49.8</td>
<td>50.2</td>
<td>240</td>
</tr>
</tbody>
</table>

4.4 Levels of Exposure to Mass Media and Students’ Drug Abuse
The first objective of this study was to determine the relationship between levels of exposure to mass media and students’ drug abuse. To achieve this objective the study sought to test the null hypothesis which stated that, “There is no significant relationship between levels of exposure to mass media and students drug use” against the alternative hypothesis, “There is a significant relationship between levels of exposure to mass media and students’ drug abuse.” The respondents were asked to indicate the extent to which levels of exposure to mass media influenced people into abusing drugs. Different tabulations were sought to analyze the relationship between levels of exposure to mass media and students’ drug abuse which included: use of cross-tabulation tables, chi-square test statistics and stacked bar plots. The results of cross-tabulation in table 4.3 shows that majority of the respondents (197) were, on average, exposed to mass media for 7 hours and below. Out of the 197 respondents, 186 do not abuse drugs at all, 6
abuse drugs on rare occasions while 5 abuse drugs more often. Out of 123 respondents who were exposed to mass media for 14 hours, 112 argued that they don’t abuse drugs at all, 5 respondent that they rarely abuse drugs while 6 confirmed to abuse drugs more often. A total of 105 respondents were exposed to mass media for 21 hours out of which 83 did not abuse drugs at all, 8 abused drugs on rare occasions and 14 abused drugs more often. A few respondents (55) were exposed to mass media for 28 hours. 45 of them said they did not abuse drugs at all, 4 said they abused drugs rarely while 6 abused drugs more often. Only 2 respondents were exposed to mass media for more than 28 hours all of whom did not abuse drugs at all. These findings implied that many students were exposed to mass media for less than 21 hours but however, abused drugs more often if it was the case that they were drug abusers. The results further showed that the lesser the number of hours of exposure to mass media the greater the count of students who did not abuse drugs at all. This therefore, leads to a conclusion that there exists a significant relationship between the level of exposure to mass media and students’ drug abuse.
Table 4.3:

Cross Tabulation Results on Mass Media Versus Drug Abuse

MASS MEDIA * DRUG ABUSE Crosstabulation

<table>
<thead>
<tr>
<th>MASS MEDIA</th>
<th>DRUG ABUSE</th>
<th>RARELY</th>
<th>OFTEN</th>
<th>NOT AT ALL</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 HOURS AND BELOW</td>
<td></td>
<td>6</td>
<td>5</td>
<td>186</td>
<td>197</td>
</tr>
<tr>
<td>14 HOURS</td>
<td></td>
<td>5</td>
<td>6</td>
<td>112</td>
<td>123</td>
</tr>
<tr>
<td>21 HOURS</td>
<td></td>
<td>8</td>
<td>14</td>
<td>83</td>
<td>105</td>
</tr>
<tr>
<td>28 HOURS</td>
<td></td>
<td>4</td>
<td>6</td>
<td>45</td>
<td>55</td>
</tr>
<tr>
<td>MORE THAN 28 HOURS</td>
<td></td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23</td>
<td>31</td>
<td>428</td>
<td>482</td>
</tr>
</tbody>
</table>

A chi-square statistical test was carried out to test the null hypothesis stating that, “There is no significant relationship between exposure to mass media and students drug use.” P–Value was taken at 0.05 significance level. The findings of this test indicated a P–Value of 0.007 that is less than 0.05 with degree of freedom at 8 and chi square value of 20.909. The null hypothesis was thus rejected, and the alternative accepted. This implied that, there is a significant relationship between levels of exposure to mass media and students’ drug abuse.
Table 4.4:

Chi-Square Tests Results: Mass Media Versus Drug Abuse

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>20.909a</td>
<td>8</td>
<td>.007</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>20.267</td>
<td>8</td>
<td>.009</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>11.139</td>
<td>1</td>
<td>.001</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>482</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 5 cells (33.3%) have expected count less than 5. The minimum expected count is .10.

Further on this analysis, a bar plot was used to explore the relationship between levels of exposure to mass media and students’ drug abuse. The findings of the plot in figure 4.1 showed a negative linear relationship between the count of the students who did not abuse drugs at all and the number of hours of exposure to the mass media. The number of students who did not abuse drugs at all diminished linearly with increase in the number of hours of exposure to the mass media. A greater count of students who abused drugs more often was observed at 21 hours of exposure category. The number of respondents who said they abused drugs rarely remained low and relatively constant across all categories except for the category of more than 28 hours of exposure which had a count of zero.
Figure 4.1: Bar chart on levels of exposure to mass media against students’ drug abuse

4.5 Levels of Exposure to Mass Media and Students’ Interpersonal Conflicts.
The second objective of this study was to establish the relationship between levels of exposure to mass media and students’ aggression. To achieve this objective the study sought to test the null hypothesis which stated that, “There is no significant relationship between levels of exposure to mass media and student’s interpersonal conflicts” against the alternative hypothesis, “There is a significant relationship between levels of exposure to mass media and student’s interpersonal conflicts.” The students were asked to indicate in the questionnaires the extent to which levels of exposure to mass media influenced their choice of friends. In addition, they were also required to
indicate the extent to which such exposure may have led to disagreements between them and parents, classmates, peer and their other siblings. The study made use of cross-tabulation tables, chi-square statistics and bar plot to analyze relationship between levels of exposure to mass media and students’ aggression.

The results of cross tabulation in table 4.5 shows that majority of the respondents (197) were, on average, exposed to mass media for 7 hours and below. Out of the 197 respondents, 176 did not have inter-personal conflicts while 21 had inter-personal conflicts. Out of 123 respondents who were exposed to mass media for 14 hours, 11 had inter-personal conflicts while 112 did not experience inter-personal conflicts. A total of 105 respondents were exposed to mass media for 21 hours out of which 11 experienced inter-personal conflicts while 94 were not victims of inter-personal conflicts. A few respondents (57) were exposed to mass media for 28 hours. 5 of them said they had experienced inter-personal conflicts, while 52 were not victims of interpersonal conflicts. In aggregate, out of 482 respondents 48 said they experienced inter-personal conflicts while 434 did not despite of their exposure to mass media. These findings implied that the lesser the number of hours of exposure to mass media the more the cases of inter-personal conflicts amongst the students. This therefore, leads to a conclusion that though weak there exists a relationship between the level of exposure to mass media and interpersonal conflicts among students.
Table 4.5:

Cross Tabulation Results on Mass Media Versus Interpersonal Conflicts.

<table>
<thead>
<tr>
<th>MASS MEDIA</th>
<th>INTERPERSONAL CONFLICT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 HOURS AND BELOW</td>
<td>YES: 21</td>
<td>NO: 176</td>
</tr>
<tr>
<td></td>
<td>14 HOURS</td>
<td>YES: 11</td>
</tr>
<tr>
<td></td>
<td>21 HOURS</td>
<td>YES: 11</td>
</tr>
<tr>
<td></td>
<td>28 HOURS</td>
<td>YES: 5</td>
</tr>
<tr>
<td>Total</td>
<td>YES: 48</td>
<td>NO: 434</td>
</tr>
</tbody>
</table>

Further, a chi-square statistical test was done to test the null hypothesis, “There is no significant relationship between levels of exposure to mass media and student’s interpersonal conflicts” against the alternative hypothesis, “There is a significant relationship between levels of exposure to mass media and student’s interpersonal conflicts”. P–Value was taken at 0.05 significance level. The findings of this test as shown in table 4.6 indicated a P–Value of 0.946 that is greater than 0.05 with degree of freedom at 3 and chi square value of 0.370. The p value obtained 0.946, is greater than the thresh hold of 0.05. The study therefore failed to reject the null hypothesis. This leads to the conclusion that there is no significant relationship between levels of exposure to mass media and students’ inter-personal conflicts.
Table 4.6

Chi-Square Tests Results: Mass Media Versus Interpersonal Conflicts

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>.370*</td>
<td>3</td>
<td>.946</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>.376</td>
<td>3</td>
<td>.945</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.101</td>
<td>1</td>
<td>.751</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>482</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.68.

Further analysis was done to investigate the relationship between levels of exposure to mass media and students’ interpersonal conflicts by using a bar plot. The findings of the plot in figure 4.2 showed that a greater number of respondents did not have inter-personal conflicts. However this count reduced linearly with the increase in the number of hours of exposure to mass media. The number of students who experienced interpersonal conflicts remained low and volatile across all the categories of levels of exposure to mass media exhibiting lack of relationship between levels of exposure to mass media and students’ interpersonal conflicts. This results confirms the chi-square output result which showed independence between these two variables.
Figure 4.2 Bar plot on levels of exposure to mass media against students’ interpersonal conflicts.

4.6 Levels of Exposure to Mass Media and Students’ Risky Sexual Behavior

The third objective of this empirical study sought to establish the relationship between levels of exposure to mass media and students’ risky sexual behavior. To achieve this objective the study sought to test the null hypothesis which stated that, “There is no significant relationship between levels of exposure to mass media and students’ risky sexual behavior” against the alternative hypothesis, “There is a significant relationship between levels of exposure to mass media and
students’ risky sexual behavior.” Students were asked to indicate the extent to which exposure to mass media influenced their sexual behavior.

The results of cross tabulation in table 4.7 showed that majority of the respondents (197) were, on average, exposed to mass media for 7 hours and below. Out of the 197 respondents, 145 engaged themselves into risky sexual behaviors while 52 did not. Out of 123 respondents who were exposed to mass media for 14 hours, 72 practiced risky sexual behaviors while 51 did not engage themselves into risky sexual behaviors. A total of 105 respondents were exposed to mass media for 21 hours out of which 59 practiced risky sexual behaviors while 46 were not victims of risky sexual behaviors. A few respondents (57) were exposed to mass media for 28 hours. However a greater number of them (41) engaged themselves into risky sexual behavior as compared to 16 who did not practice risky sexual behaviors. These results showed a relationship between mass media and risky sexual behavior of the students. The results corroborates with the findings of Jamah (2009) which indicated that risky sexual behaviors were at a rise among college students despite AIDS.
Table 4.7

*Cross Tabulation Results on Mass Media Versus Students’ Risky Sexual Behavior.*

<table>
<thead>
<tr>
<th>MASS MEDIA * RISKY SEXUAL BEHAVIOUR Crosstabulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
</tr>
<tr>
<td>RISKY SEXUAL BEHAVIOUR</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>MASS MEDIA 7 HOURS AND BELOW</td>
</tr>
<tr>
<td>14 HOURS</td>
</tr>
<tr>
<td>21 HOURS</td>
</tr>
<tr>
<td>28 HOURS</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

To ascertain the conclusion drawn from cross-tabulation results a chi-square statistical test was done to test the null hypothesis, “There is no significant relationship between levels of exposure to mass media and student’s risky sexual behaviors” against the alternative hypothesis, “There is a significant relationship between levels of exposure to mass media and student’s risky sexual behaviors”. P–Value was set at 0.05 level of significance. The findings of this test as shown in table 4.8 indicated a P–Value of 0.004 that is less than 0.05 with degree of freedom at 3 and chi square value of 13.469. The p value obtained 0.004, does not exceed the threshold of 0.05. The study therefore rejected the null hypothesis sand concluded that there exist a significant relationship between levels of exposure to mass media and students’ indulgence to risky sexual behavior.
Table 4.8

Chi-Square Tests Results: Mass Media Versus Students’ Risky Sexual Behavior.

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>13.469a</td>
<td>3</td>
<td>.004</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>13.502</td>
<td>3</td>
<td>.004</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>2.858</td>
<td>1</td>
<td>.091</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>482</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 19.51.

The study further sought to explore the relationship between levels of exposure to mass media and students’ indulgence to risky sexual behaviors by using a bar plot. The findings of the plot in figure 4.3 showed that a greater number of students indulged themselves into risky sexual behavior varying at each category of levels of exposure to mass media. The count of the students who were not victims of risky sexual behavior remained low at each category of levels of exposure to mass media. This implied that there was a significant positive relationship between sexual behavior and exposure to mass media. These findings were in line with the conclusions of Hall et al., (1982) that exposure to mass media has a positive relation with change in sexual behaviors among teenagers.
4.7 Levels of Exposure to Mass Media and Students’ Levels of Physical Violence

The fourth objective of this study sought to establish the relationship between exposure to mass media and students’ expression of violent behaviors. To achieve this objective the study sought to test the null hypothesis which stated that, “There is no significant relationship between levels of exposure to mass media and students’ level of Physical violence” against the alternative hypothesis, “There is a significant relationship between levels of exposure to mass media and students’ levels of physical violence.” The students were required to indicate the extent to which
exposure to violent mass media influenced their expression of violent behaviors. The results of cross tabulation in table 4.9 showed that majority of the respondents (184) were, on average, exposed to mass media for 7 hours and below. Out of the 184 respondents, 76 indicated to have had physical violence while 108 did not. Out of 117 respondents who were exposed to mass media for 14 hours, 57 said they have had physical violence while 60 did not. A total of 103 respondents were exposed to mass media for 21 hours out of which 59 were victims of physical violence while 44 were not. A few respondents (57) were exposed to mass media for 28 hours. Out of this number (33) said that they had physical violence as compared to 24 who did not.

**Table 4.9:**

*Cross tabulation results on mass media versus students’ physical violence*

<table>
<thead>
<tr>
<th>MASS MEDIA * PHYSICAL VIOLENCE Crosstabulation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td><strong>MASS MEDIA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 HOURS AND BELOW</td>
<td>76</td>
<td>108</td>
</tr>
<tr>
<td>14 HOURS</td>
<td>57</td>
<td>60</td>
</tr>
<tr>
<td>21 HOURS</td>
<td>59</td>
<td>44</td>
</tr>
<tr>
<td>28 HOURS</td>
<td>33</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>225</td>
<td>236</td>
</tr>
</tbody>
</table>
A chi square statistical test was done to test the null hypothesis stating that, “There is no significant relationship between the lengths of time spent viewing violent mass media and students’ level of physical violence. The findings indicated that P = 0.029 that is <0.05 with degree of freedom at 3 and chi square value at 8.990. P-Value was taken at 0.05 significance level. The null hypothesis was thus rejected and the alternative accepted. The test results showed that there was a relationship between time students’ spend viewing TV or video per week and their levels of physical violence. Therefore, the time spent watching television or video has an influence on students’ physical violence levels. This may adversely affect their interactions with their peers, teachers or parents. This confirmed what previous researchers found out, that persistent exposure to mass media was likely to make young people violent (Taylor, 2006). A student who was frequently exposed to violent TV programs, for example was likely to engage in physical confrontations with peers, teachers, or even parents as compared to those who were less exposed

### Table 4.10

**Chi-square tests results: mass media versus students’ physical violence**

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>8.990a</td>
<td>3</td>
<td>.029</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>9.027</td>
<td>3</td>
<td>.029</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>8.429</td>
<td>1</td>
<td>.004</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>461</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 27.82.
The study further sought to explore the relationship between levels of exposure to mass media and students’ levels of physical violence by using a bar plot. The findings of the plot in figure 4.4 showed that the number of students who had physical violence amongst themselves was greater than those who did not have an indication that the exposed the students were to mass media the more violent they were. The count of the students who were not victims of physical violence reduced linearly across the categories of levels of exposure to mass media.

![Bar Chart](image)

**Figure 4.4** Bar plot on levels of exposure to mass media against students’ physical violence
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusions, recommendations and suggestions for further research. Kenya like other parts of the world, has witnessed drastic and rapid expansion of the mass media that largely magnify Western culture. Consequently, learning modeled from the media, such as aggression, drug abuse and sexual violence among students have been affected. This study therefore focused on establishing the relationship between levels of exposure to mass media and students’ deviant behaviors, in Nakuru County, Kenya.

The main purpose of this study was to establish the relationship between levels of exposure to mass media and students’ deviant behaviors in selected secondary schools Nakuru County, Kenya. The study summary was therefore based on the specific objectives as stipulated in chapter one under the following headings:

5.2 Summary

5.2.1 Relationship between Levels of exposure to mass media and students’ drug abuse

The study sought to establish the relationship between exposure to mass media and students’ drug abuse. It was evident that the major contributing factor considered important in influencing drug abuse among students was advertisement on mass media, movies and internet in order of
influence. However, novels and magazines were said to be the least influencing mass media. This indicates that the electronic media viewing influenced students more towards drug abuse than novels and magazines (print media).

5.2.2 Relationship between Levels of exposure to mass media and students’ Interpersonal Conflicts.

In an attempt to establish whether exposure to mass media has an influence to the students’ interpersonal conflicts, students were asked whether they blamed their problems in school to accessibility of mass media they have been exposed to. The findings showed that, most of the students did not blame the problems in school to accessibility of mass media they have been exposed to. However a small number of them did blame their problem to accessibility of mass media they have been exposed to. In this regard, levels of exposure to the mass media does not significantly affect the students, thus they do not put blame to the mass media for the problems they encounter in school (Mbugua et al, 2004).

However, this is not to say that the media has no influence on the students’ interpersonal aggression especially with their parents and teachers. The students cited the major cause of conflict or disagreement between their parents and teachers as being time spent watching television or video and failure to complete homework due to television or video viewing. Thus, it is evident that even though the students’ did not blame their problems in school to accessibility of mass media exposure, there however existed conflicts and disagreements between them and their parents and teachers as a result of the time spent watching television or videos. This in turn led to failure in completing their homework and a basis of conflict with their parents and teachers. It may in turn have affected their interpersonal relationships.
It is also evident that the mass media had an impact on the students’ interpersonal relationships as findings indicated that Facebook and mobile phones were some of the mass media that brought the students together thus helping them to make friends of the opposite sex or even of the same sex. The students were more at risk of exposure to harmful mass media information which might have influenced them to acquire aggressive behaviors. More so, the parents or teachers might not have been aware they were being exposed to such harmful information since they might not have been able to monitor them as a result of their busy working schedules. Hence, time spent watching television or videos in absence of their parents might have influenced them in acquiring deviant behaviors which might as well had affected their interpersonal relationships adversely.

5.2.3 Relationship between Levels of exposure to mass media and students’ level of Risky sexual Behaviors.

The study sought to establish whether students had friends they regarded as sexual partners. The findings showed that, majority of the students did not have a friend whom they regarded as a sexual partner while a few said they had such a friend. Further results indicated that, majority of the students said they did not have any sex partner while a few, said they had between 1-3 sex partner; a smaller number of them had four and above sex partners. In terms of class most of the students in form 1 had no sex partners while most in form 2 said they had one sex partner. Among those who said they had sex partners, they noted that the major source of their sex partner was from Facebook due to its attractive messages. Moreover, those who had a sexual partner had ever gone to a movie or video show and most of the movies they watched were romantic and porn movies. In addition, they also noted that their sexual partner had ever insisted on having sex. It is evident that the most cited activity bringing students together was making
friends of the opposite sex through use of Facebook and mobile phones as indicated in table 4.8. This indicates that making friends from the opposite sex brings students closer but does not necessarily mean they have sex partners among their friends. This fact is confirmed when students said they do not have sex partners as seen above. Nevertheless, making friends of the opposite sex due to peer pressure has been one of the major factors leading to unwanted pregnancies among female youths (Njau, 1994). However the findings of the current study did establish that exposure to sexual programs from mass media made students to indulge in irresponsible sexual behaviors.

The study went further to establish which mass media, students considered as the most favorable source of sexual information. The findings indicated that sexual information from internet were most preferred than information from friends and peers. Other least preferred sources were movies and television viewing in that order. This shows that the mass media does influence students more than their friends on access to sexual information. Earlier researches had indicated peers and friends as most preferred source of sexual information by the youth (Kiragu, 2010). However, a significant number of students felt that these sources do indeed make them desire to have sex. The major reasons given for their desire to have sex were; sexual information obtained from mass media arouses their sexual urge and it is fun or enjoyable.

This shows that the mass media does influence the students’ sexual behavior and may lead them to engaging into sexually deviant behaviors. Further, when asked whether they enjoyed reading or watching pornographic materials, a small number of them said they did while the majority said they did not. Among those who said no their reasons were; pornographic reading or
watching of movies poisons one’s mind and therefore affecting his/her studies while those who said yes noted that it helps in relaxation.

The researcher also sought to determine whether exposure to mass media may result to students’ engaging in sexual violence. The findings from figure 4.3 show that majority of the students’ had never been accused of any sexual offence while a relatively small number of them said they had been accused of a sexual offence. In terms of gender, more female than male students indicated not having been accused of a sexual offence while a few who conceded to have been accused, consisted of more male students than female. The main reason given by the students who had ever been accused of a sexual offence was due to seductive or inappropriate dressing.

5.2.4 Relationship between Levels of exposure to mass media and students’ levels of physical violence

The researcher assessed the effect of exposure to mass media on students, involvement in violent behaviors in school. The findings as in figure 4.4 indicate that majority of the students acknowledged that they had ever experienced a strike in their school while only a few of them said they had not. The major reasons of strikes given by students were; insufficient food in school, harsh school laws, bad company and peer pressure, and less teachers. This indicates that the students are influenced by the mass media in terms of being violent while in school.

When asked about the types of mass media they spend most time on, findings showed mobile phones and television or video viewing as the major types of media used by the students, spending more than 28 hours on them per week. When asked whether the time spent on various mass media has an effect on them, many of them said it had an effect while a few said it had no effect. Among those who said they were affected by the time they spend on various mass media
gave their reasons as, the mass media interfered with academic performance, it made one not to complete his/her work given and some said it affected them positively in keeping them informed and busy.

Moreover, the most frequently used type of mass media by students was television or videos and mobile phones which were used more than four times per week while the least used type of mass media was newspapers followed by magazines only used once per week. In addition, the students had been exposed to television for more than 16 days in the last one month followed by mobile phones while the least exposed to, type of mass media in the last one month were the magazines having been exposed to, for 2 days only.
5.3 Conclusion

The main objective of this study was to establish the relationship between levels of exposure to mass media and students’ deviant behaviors in selected secondary schools within Nakuru county Kenya. From the findings of this study, it can be concluded that levels of exposure to mass media seems to influence students’ deviant behaviors. This is because the findings of the study indicated significant relationship between levels of exposure to mass media and levels of students’ drug abuse, with lengthy exposures showing greater influences. From the study findings also, students’ choice of friends of the opposite sex and of the same sex, seemed to be heavily influenced by exposure to mass media with majority of the students getting friend from social media interactions such as facebook, leading to conflicts between them and their teachers/parents. In addition, disagreement between students and other people such as parents, teachers and peers seemed to be associated to the use of mass media. For example, disagreement between students and teachers over non completion of homework was blamed on the long hours spent viewing television by the students.

Students’ expression of violent physical behaviors and undesirable sexual behaviors also seemed to be associated to the levels of exposure to mass media. This was in agreement with the findings of the early researchers that have led to the general believe that human beings expression of violent behaviors is influenced to a greater extent by what they watch or view(Taylor, 2006). Exposure to mass media also seemed to have influenced students to indulging into risky sexual behaviours resulting to contraction of sexual transmitted diseases and unwanted pregnancies while in schools. Implementations of the recommendation of this study will therefore hopefully guide government, teachers and parents in censoring mass media information so as to prevent harmful information being accessed by the youth. The students and adolescents in general, will
also be assisted to make wise and informed choices regarding mass media use. Researchers may also find recommendations of this study useful, while exploring other areas of this subject which were not covered by the current study

5.4 Recommendations

From the findings of this study, the following recommendations were made in line with the study objectives.

i. The study established that levels of exposure to mass media were significantly related to students’ abuse of drugs. For this reason, it was recommended that parents, teachers and government undertake intervention measures aimed at censoring mass media information that children would misuse. In addition, intervention measures need to be put in place to rehabilitate those adolescents affected by drugs.

ii. The study established that levels of exposure to mass media impacted on students’ interpersonal relationships, thus the relationships of students and those with whom they interacted eg. Parents, teachers, other siblings, classmates was confrontational. It was therefore recommended that students be guided on their media choices by providing them with relevant information so as to enable them avoid media programs that made them aggressive.

iii. The study findings also revealed that students made intimate relationships with same or opposite genders on the basis of mass media influence. Accordingly, it was recommended that guidance and counseling programs be established and emphasized in schools so as to guide students on the choice of friends.
iv. The study findings also revealed that boys and girls were affected differently by different types of mass media, with boys being more affected by electronic media than girls. It was therefore recommended that either gender be counseled and guided on basis on the type of media that affected them.

v. The study also established that the amount of time spent viewing violent mass media impacted negatively on the students’ levels of physical and sexual violence. For this reason, it was recommended that parents should control the frequency, types and the length of time (hours) that their children spend viewing, reading and listening to mass media.

vi. The study also established that levels of exposure to mass media were related to students’ use of reproductive health information and services. As such, it was recommended that measures be put in place to enhance parental role in providing sex education for their children. This would in turn ensure that children don’t over rely on information on mass media concerning the sexuality, some of which were misleading or even misinterpreted by teenagers leading to disastrous consequences such as school drop outs due to unwanted pregnancies among girl students as well as contraction of sexually transmitted diseases.

Even though we have to appreciate technological developments, we should also appreciate that they come at a cost. The parents, guardians and teachers need to offer leadership, guidance and compassion to children as they learn to use and cope with technological developments. The government needs to develop policies targeted at protecting children (censoring media information). Beyond complaining about media practices, researchers and advocates for the welfare of children can work to diminish the negative influence of mass media by providing
better public education about media effects, by developing and promoting more useful content labels and filters, and by exploring effective intervention strategies. We also need to expand media literacy education for children, including helping them place what they see in perspective, and encouraging them to engage in a critical analysis of their own media choices.

5.5 Further research

Considering the findings and the scope of this study, the researcher realized some gaps that could be explored during further research. These included;

a. Relationship between parents’ social economic status and students’ exposure levels to mass media.

b. Avenues to instilling responsibility in children so that they can make critical analysis of their own media choices.

c. The controls that the government need to put in place to regulate access to violent mass media.

d. Study may be done on ways of enhancing parental role in sex education

e. Interventions that will produce a reduction in exposure to harmful mass media.
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*Adolescents' perceptions of sexuality according to prime-time television.*


APPENDICES

APPENDIX 1: QUESTIONNAIRE FOR STUDENTS

Instructions

This questionnaire concerns your opinion on the role of mass media as a means of acquiring information and knowledge. Please respond to all questions accurately and honestly. All the information you will provide will be held in confidence, and will only be used for the purpose of this study. My research study topic is: Relationship between Levels of Exposure to Mass Media and Students’ Deviant Behaviors in Selected Secondary Schools, Nakuru County Kenya.

Read each question carefully and tick in a box next to the answer you consider most appropriate e.g. (√) or by providing direct answers to the items where this is required.

Section 1a: Students’ Personal Details (Demographic Data)

1). How old are you? _______________ Years

2) In which Class are you? Form 1 □ Form 2 □ Form 3 □

3) What is your Gender? □ Male □ Female

4) What is the name of your school? _______________

5) Name of your Sub-county where your school is located?
   a) Nakuru Town □
   b) Molo □
6) The type of school you attend?
   a) Boys’ Day  
   b) Girls’ Day  
   c) Boys’ Boarding  
   d) Girls’ Boarding  
   e) Mixed Day  
   f) Mixed Boarding  

7) Is the school you attend in an Urban, Peri-urban or Rural area?
   a) Urban  
   b) Rural  
   c) Peri-urban  

8) What are your parents’ occupation?
   a) Father  
   b) Mother  

9) What is your mother’s education level?
   Primary  Secondary  University  Others (Specify)  

10) What is your father’s education level?
    Primary  Secondary  University  
    Others (specify)  

11) What is your religion?
    Catholic  Protestant  Muslim  Other (specify)  

Section 1b: Information on mass media violence versus students’ drug abuse

12) Which of the following factors do you consider most important in influencing smoking or drinking among students?

A. Watching movies [ ]  B. Advertisements on mass media [ ]  B. Novels [ ]

C. Internet browsing [ ]  D. Magazines [ ]  E. All the above [ ]

13) The factors listed below are probable causes of why people engage in smoking and drinking habits. Rate them as appropriate, to indicate, the extent to which they contribute to student smoking cigarettes or drinking alcohol.

<table>
<thead>
<tr>
<th>Cause of drug use</th>
<th>Most important</th>
<th>Important</th>
<th>Least important</th>
<th>Not important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Peers/friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mass media advertisement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Movies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Other siblings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14) How often do you smoke cigarettes?

   A. Rarely [ ]     B. Often [ ]     C. Not at all [ ]

15) How often do you drink alcohol?

   A. Rarely [ ]     B. Often [ ]     C. Not at all [ ]

**NB/ indicate as follows:** Rarely - twice a week, Often - between 3-7 days in a week

Not at all means zero times

**Section 2: Information on mass media violence versus students’ interpersonal conflicts**

16) From the items in the table below, indicate what you think brings peers together leading to close relationship among them: Tick (√) as appropriate.
<table>
<thead>
<tr>
<th>Item/activity</th>
<th>Strongly agree (5)</th>
<th>Agree (4)</th>
<th>Not sure (3)</th>
<th>Disagree (2)</th>
<th>Strongly disagree (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have fashionable clothes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Smoke cigarettes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Drink alcohol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Make friends of the opposite sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Facebook</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Pen pals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Mobile phone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Emails</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Watching TV/CD/Movies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17) Do you get punished in school for failing to complete homework? Yes ☐ No ☐
18) If yes, how often? Few times ☐ Often ☐ Very Often ☐

19) If answers to 17 and 18 above are yes, do you blame your problems in school to accessibility of mass media you have been exposed to? Yes ☐ No ☐

20) Have you ever been suspended from school for any indiscipline case?

A. Yes ☐ B. No ☐

21) If yes, state the exact nature of the offence ____________________________

22) Do you support such practices such as homosexuality and lesbianism?

A. Yes [ ] B. No [ ]

23) Give reasons for your choice ____________________________

________________________________________________________________________

24) The following is a list of likely causes of conflicts/disagreements between you and your parents. Tick as appropriate (√) to indicate the level of your disagreement.

Indicate your choice as follows:

(i) Disagree 7 days a week (very often)   (ii) Disagree 3 times a week (often)

(iii) Disagree once a week (sometimes)   (iv) No disagreement (never)
<table>
<thead>
<tr>
<th>Cause of disagreement</th>
<th>Very often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Time spent watching television/video</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Dressing styles copied from mass media</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Being with bad company watching video games</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Failure to complete homework due to TV view/video</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Use of alcohol and other drugs advertised on mass media</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Going out to watch violent movies and games</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Having friends of the opposite sex watching pornographic movies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Inciting others after watching violent programmes on TV, Internet, Mobile e.t.c</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
25) (i) Have you ever been punished or suspended from school over fighting with your classmate/schoolmates?

A. Yes ☐ B. No ☐

(iii) If yes, did you put any blame for the fight to yourself?

A. Yes ☐ B No ☐

Explain your choice for the above ________________________________

26) Do you find yourself having physical confrontation with your other siblings/and or parents?

A. Yes ☐ B No ☐

27) If yes, give causes for the confrontations

1. .......................................................... ......................................................

2. .......................................................... ......................................................

3. .......................................................... ......................................................

4. .......................................................... ......................................................
28) Which ones of the above causes do you attribute to influence of mass media violence you have been exposed to?

…………………………………………………………………………………………

…………………………………………………………………………………………

29) Give reasons for your choice above

1. ……………………………………………………………………………

2. ……………………………………………………………………………

3. ……………………………………………………………………………

4. ……………………………………………………………………………

Section 3: Information on students’ gender versus exposure to mass media

30) The following is a list of mass media and their possible influence to students’ expression of violent behaviors. Tick as appropriate.
<table>
<thead>
<tr>
<th>Mass Media</th>
<th>Influencing</th>
<th>Very Influencing</th>
<th>Most Influencing</th>
<th>Least Influencing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent TV programmes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violent Video programmes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violent Video Games</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violent pictures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On Books/ Magazine and newspapers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inciting SMS on Mobile Phones</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information from Internet/E-mail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 4: Information on length of time spent watching mass media and students’

31) Do you have a friend whom you regard as a sexual partner? A. No [ ] B. Yes [ ]

   (i) If yes have he/she ever taken you to a movie/video show? A. Yes [ ] B. No [ ]

   If yes what kind of movie/video did you watch? __________________________

32) Has she/he ever insisted on having sex with you? A. Yes [ ] B. No [ ]

33) How many sex partners have you had in the last 3 years?

   1 [ ]  2 [ ]  3 [ ]  4 and above [ ] none [ ]

34) Was the source of your sex partner; through mass media e.g Facebook or pen pal in magazines? A. Yes [ ] B. No [ ]

   If yes, state the source ________________________________

36) Have you ever been accused of any sexual offence? A. Yes [ ] B. No [ ]

37) If yes, explain your answer. ...............................................................

............................................................... ............................

38) Do you support practices such as sex before marriage among adolescents?

   A. Yes [ ] B. No [ ]
39) Give reasons for your choice above.

1..........................................................................................................

2..........................................................................................................

3..........................................................................................................

4..........................................................................................................

40) Should secondary school students be allowed to have mobile phones in school?

A. Yes [ ]  B. No [ ]

41) If yes, why?

1.................................................................

2.................................................................

3.................................................................

42) Should high school students be given condoms?

A. Yes [ ]  B. No [ ]

43) Give reasons for your choice above __________________________________________
44) Rate the following sources of sexual information as appropriate by ticking (✓) against your choice to indicate your preference level.

<table>
<thead>
<tr>
<th>Source</th>
<th>Most favourable</th>
<th>Favourable</th>
<th>Least favourable</th>
<th>Not favourable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Friends/peers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Television viewing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Internet pictures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Movies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Mobile phones</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Theatres</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

45) Does sexual information from your favourite mass media source make you to desire to have sex?

A. Yes [  ]  B. No [  ]
46) If yes, give reasons for your choice ________________________________

47) Have you ever watched a pornographic movie?  A. Yes [ ]  B. No [ ]

48) If your answer to question above is yes, what was the source?

A. TV [ ]  B. Cinema [ ]  C. Internet [ ]  D. Video [ ]  E. Mobile phones [ ]

49) Do you enjoy reading or watching pornographic materials?

A. Yes [ ]  B. No [ ]

50) Give reasons for your choice above ________________________________

51) The following is a list of media commonly used to access Sexual information. Tick (√) to indicate how frequently you use them.

<table>
<thead>
<tr>
<th>Media type</th>
<th>Daily</th>
<th>Weekly</th>
<th>Fortnightly</th>
<th>Weekly</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Television/video</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Novel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Magazines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Newspapers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Radio

6. Mobile phones

7. Computers/internet

8. Cinema

9. Books

52) From the list above state your most favourite?

1. .................................................................

2. .................................................................

3. .................................................................

4. .................................................................

53) Have you ever obtained pornographic information from the internet?

A. Yes [ ] B. No [ ]

54) Have you ever suffered a sexually transmitted disease? A. Yes [ ] B. No [ ]

55) If yes, did you seek treatment? A. Yes [ ] B. No [ ]
Section 5: Information on length of time spent watching mass media violence versus students’ levels of physical violence

56) Have you ever experienced a strike in your school?

A. Yes [ ]  B. No [ ]

57) If yes, explain your role in the strike .................................................................

58) List any 4 major causes of riots/strikes in Secondary schools

1. ....................................................................................................................

2. ....................................................................................................................

3. ....................................................................................................................

4. ....................................................................................................................

59) Do you approve or support any of the reasons for the strike listed above?

A. Yes [ ]  B. No [ ]

60) If yes, briefly explain any possible link (if any) between the riot / strike to students’ exposure to mass media violence .................................................................

............................................................................................................................
61) The following is a list of probable length of time per week, spent on various mass media. Tick (√) as appropriate to indicate the amount of time in hours, you spent in any one of them.

<table>
<thead>
<tr>
<th>Type of Media</th>
<th>Time spent per week (in hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7 hrs and below</td>
</tr>
<tr>
<td></td>
<td>14 hrs</td>
</tr>
<tr>
<td></td>
<td>21 hrs</td>
</tr>
<tr>
<td></td>
<td>28 hrs</td>
</tr>
<tr>
<td></td>
<td>More than 28 hrs</td>
</tr>
</tbody>
</table>

1. Newspapers
2. Television viewing/video
3. Mobile phones
4. Computer (internet)
5. Movies
6. Magazines

62) Does the time spent on various mass media affect you in any way?

A. Yes [ ]    B. No [ ]

If yes explain how ____________________________
63) How frequent do you use any one of the following types of media? Tick (✓) as appropriate to indicate the frequency of your choice.

<table>
<thead>
<tr>
<th>Type of media</th>
<th>Number of hours used per week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One hour</td>
</tr>
<tr>
<td>1. Newspapers</td>
<td></td>
</tr>
<tr>
<td>2. Television viewing/video</td>
<td></td>
</tr>
<tr>
<td>3. Mobile phones</td>
<td></td>
</tr>
<tr>
<td>4. Computer (internet)</td>
<td></td>
</tr>
<tr>
<td>5. Movies</td>
<td></td>
</tr>
<tr>
<td>6. Magazines</td>
<td></td>
</tr>
</tbody>
</table>

64) Indicate the total number of hours you have been exposed to either of the following types of mass media for the last one month.
<table>
<thead>
<tr>
<th>Type of Media</th>
<th>2 hours</th>
<th>4 hours</th>
<th>8 hours</th>
<th>16 hours</th>
<th>More than 16 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Television</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Magazines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Mobile phones</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Internet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Movies/Videos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Thank you for your time. God bless you.*
APPENDIX II: LETTER OF INTRODUCTION

James M. Kimani,
P.O. Box 3928-2100
NAKURU

The Principals,
Public Secondary Schools, Nakuru County,
P.O. Box
NAKURU

Dear Sir/ Madam,

RE: LETTER OF INTRODUCTION
My name is James Mwaura Kimani, post graduate student at Kenyatta University. I am currently undertaking a research on the relationship between levels of exposure to mass media and students’ deviant behaviours in selected secondary school, Nakuru County Kenya. You being the head of this institution, I kindly request you to allow me to access some information from the students to enable me complete the study. I assure you that the information I shall obtain from students will be treated with utmost confidentiality-and will be used for academic purposes only.

Thank you very much for your cooperation. Yours faithfully,

James Mwanra Kimani.
Cc
. The County Commissioners
Nakuru Town, Nakuru North and Molo Districts

The District Education Officer Nakuru District

The Principals
Public Secondary Schools
Nakuru Town, Nakuru North and Molo Districts
APPENDIX III: APPROVAL OF RESEARCH PROPOSAL

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: kubps@yahoo.com
dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 57530

Internal Memo

FROM: Dean, Graduate School
TO: Kimani James Mwaura
    C/o Department of Educational Psychology

REF: E83/10734/08

DATE: 8th March, 2011

This is to inform you that the Graduate School Board at its meeting of 28th February, 2011 approved your research proposal for Ph.D degree Subject to,
"revising the title to 21 words, the title is too wordy".

JOHN ODONGI
FOR DEAN, GRADUATE SCHOOL

c.c. Chairman, Department of Educational Psychology
Supervisors:

1. Dr. Samuel Tumuti
   Department of Educational Psychology
   Kenyatta University.

2. Dr. Philomena Ndambuki
   Department of Educational Psychology
   Kenyatta University.

JMO/rwm
APPENDIX IV: RESEARCH AUTHORIZATION

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telegram: "SCIENTECH", Nairobi
Telephone: 254-020-241349, 2213102
254-020-310571, 2213123.
Fax: 254-020-2213215, 318245, 318249
When replying please quote

Our Ref: NCST/RRI/12/1/SS/864/5

James Mwaura Kimani
Kenyatta University
P. O. Box 34844
NAIROBI

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke
Date: 15th October, 2010

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Relationship between media violence and students' drug use, violence interpersonal relationships and use of reproductive health information in selected Districts, Rift-Valley Province, Kenya". I am pleased to inform you that you have been authorized to undertake research in Nakuru Town, Nakuru North and Molo Districts for a period ending 30th October, 2013.

You are advised to report to the District Commissioners and the District Education Officers, Nakuru Town, Nakuru North, Molo Districts before embarking on the research project.

On completion of the research, you are expected to submit two copies of the research report/thesis to our office.

P. N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:

The District Commissioners
Nakuru Town District
Nakuru North District
Molo District

The District Education Officers
APPENDIX V: Chi Square Distribution Table used in Hypothesis Testing

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To be significant the $X^2$ obtained from the data must be equal to or larger than the value shown in the table. (Source: Adapted from Table IV of Fisher, R.A. and Yates, F. (1974): Statistical Tables for Social Science Research, 6th Ed. Longman Group Ltd, London.)