

**INFLUENCE OF SOURCES OF SEXUAL INFORMATION
AND PERSONAL CHARACTERISTICS ON SECONDARY
SCHOOL STUDENTS' SEXUAL BEHAVIOUR IN THIKA
WEST SUB-COUNTY, KENYA**

CHRISTINE MUTHONI KAHIGI

**A PhD Thesis submitted as a Requirement for the Award of
Degree of Doctor of Philosophy in Sociology of Education**

UNIVERSITY OF NAIROBI

2015

ACKNOWLEDGEMENT.

First, I wish to express my gratitude to my two supervisors, Professor Lucy Kibera for her encouragement and prompt feedback on my work within the shortest time possible. I am also thankful to Dr. Lewis Ngesu, for his valuable suggestions and advice that helped to shape my work.

Second, I thank the respondents who participated in this study by filling questionnaires and participating in interviews. Special thanks go to all the head teachers who permitted me to undertake the study in their institutions as well as their participation as key informants in this study.

Third, I thank Mutua Mutinda for his dedication as my research assistant throughout to collection phase of the study. I also thank my son Johnson who accompanied me during my trips to collect data as he made me feel secure and relaxed. Further, I appreciate Information and Communication Technology skills of my first born son Simon that were utilized when searching and composing information from the internet.

Fourth, special thanks go to and my husband Peter Njuguna for offering me unlimited services in his printing company, Harlifax Printers, from graphic designing, type setting, printing and binding whenever I requested. I also thank him for the days he sat with me late at night to give me moral support as I struggled to complete the thesis.

Fifth, I also thank University of Nairobi administration for granting me the opportunity to study in this great institution, through its enabling staff development policies especially on fee waiver for members of staff. The same gratitude is extended to members of my department of Educational Foundations for their support in many ways for all the time I was studying.

Sixth, I thank my daughters Penny Jones, Mary Mayne and my Sister Hellen Oldcorn. They made me work very hard for they kept on reminding me that they are willing and ready to come to Kenya for my graduation.

Seventh, special thanks go to Professor Jimmy Macharia of United States International University (USIU) for assisting me at the stage of data analysis and report writing. He demonstrated his gift of tolerance as he patiently guided me through this vital stage of research. Finally, I thank God for helping me realize my dream as he must have been the force behind all those who assisted me.

DEDICATION

This study is dedicated to my immediate and extended family members. Special dedication is to my late father Johnson Muturi Chege and my mother Mary Wangui Muturi. My father believed that I was destined to become a doctor, and repeated his prophesy to his peers and friends on many times. My mother kept on reminding me of my late father's prophesy and this encouraged me to keep up with my studies. This work is also dedicated to my husband Mr.Kahigi Muigai Njuguna for providing a peaceful environment that enabled me to study without disruption. The work is also dedicated to my daughters Penny Jones and Mary Mayne who walked with me and gave me moral support at every stage of the study and my sons Simon and Johnson for providing me with technical support in data collection and data analysis.

ABSTRACT.

The purpose of this research was to investigate reliable sources of sexual information for secondary school students that influence their sexual behaviour. This research was carried out in Kenya, specifically Thika West sub-County. It was conducted among sampled secondary school students, their head teachers and teacher counsellors. The specific objectives of the study were to: establish how sexual information obtained through the school curriculum influences secondary school students' sexual behaviour; establish how sexual information received through the family setting influences secondary school students' sexual behaviour; investigate how sexual information received through religious institutions influences secondary school students' sexual behaviour; establish how sexual information obtained through the peer group influences secondary school students' sexual behaviour; investigate how sexual information accessed through the media influences secondary school students' sexual behaviour; and how students' personal characteristics influence their sexual behaviour. The study was carried out using survey research design and was guided by six hypotheses. Research tools used comprised questionnaires for student respondents and interview schedules for head teachers and teacher counsellors. The data collected was processed using Statistical Package for Social Sciences (SPSS IBM statistics 21). The statistics were tabulated and subjected to regression analysis using ANOVA and coefficient models. Pertinent findings have indicated that: an overwhelming proportion of secondary school students are sexually active. This may have contributed in a rise in cases of premarital pregnancies and subsequent abortions, student drop out from schools, Human Immune Virus/Acquired Immune Deficiency Syndrome and Sexually Transmitted infections. The results established that mass media as a source of sexual information is the most influential, followed by peer group and school curriculum respectively. However all respondents reported that the information received through the school curriculum is too little and economical especially on emotional aspects of sexuality. Sexual information from the family members though considered as reliable is too little to be of any significance on students' sexual behaviour. Information received through religious institutions is almost non-existent and has the lowest level of significance on students' sexual behaviour. Finally, students' personal characteristics of age and gender were revealed as influencing students' choice of being sexually active. Study results reveal that the preferred agents of transmitting sexuality information were; school curriculum, media, family, peer counsellors, and teacher counsellors respectively. Others mentioned included religion, mentors, and specialized personnel. In a nutshell, there is no any reliable source of sexual information that students can rely on. All student respondents indicated their support for comprehensive sexuality information to enable them avoid pitfalls from lack of knowledge. All key informants who included head teachers and teacher counsellors supported that information about the use of contraceptives should be made available to students.

TABLE OF CONTENTS

Declaration.....	ii
Acknowledgements.....	iii
Dedication.....	iv
Abstract.....	v
Table of Contents.....	viii
List of Tables.....	xiii
List of Figures.....	xv
List of Appendices.....	xv
Acronyms and Abbreviations.....	xvi
CHAPTER ONE: INTRODUCTION	
1.1 Background to the study.....	1
1.2 Statement of the Problem.....	9
1.3 Purpose of the Study.....	10
1.4 Research Objectives.....	10
1.5 Research Hypotheses.....	11
1.6 Significance of the Study.....	12
1.7 Limitations of the Study.....	12
1.8 Delimitation of the Study.....	13
1.9 Assumptions of the Study.....	13
1.10 Organization of the Study.....	13
1.11 Definition of Operational terms.....	14
CHAPTER TWO: REVIEW OF RELATED LITERATURE	
2.1 Introduction.....	17
2.2 Sexual Information and School Curriculum.....	17
2.3 Influence of Sexual Information from Family on Students' sexual Behaviour.....	23
2.4 Influence of Sexual Information from Religious Institutions on Students' sexual Behaviour.....	26
2.5 Influence of Sexual Information from the peer group on Students' sexual Behaviour.....	30
2.6 Influence of Sexual Information from Mass Media on Students' Sexual Behaviour.....	32
2.7 Influence of Students' individual Personal characteristics on sexual Behaviour.....	35
2.8. Summary of Influence of Sexual Information.....	39
2.9 Theoretical Framework.....	39
2.10 Conceptual Framework.....	42
CHAPTER THREE: RESEARCH METHODOLOGY	
3.1 Introduction.....	43
3.2 Study Design.....	43
3.3 Target Population.....	44
3.4 Sample size & Sampling Procedure.....	44
3.5 Research Instruments.....	45
3.6 Pilot Study.....	45
3.7 Data Collection Procedure.....	46
3.8 Data Analysis Techniques.....	47
3.9 Ethical Issues.....	47

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION.

4.1 Introduction.....	48
4.2 Instrument Return Rate	48
4.3 Demographic Information of Respondents.....	50
4.4 Marital Status of Student Respondents' Parents.....	51
4.5. Fathers' Level of Education.....	52
4.6. Students' Religious Affiliation.....	55
4.7. Religious Affiliation of Students' Parents.....	56
4.8. Sexual Activities in schools.....	57
4.9. Relationship between School Category and Students' Sexual Activities	58
4.10. Relationship between School Type and Sexual Activity	60
4.11. Sexual Relations between Students and Married People.....	61
4.12. Students' Engagement in Unprotected Sex.....	62
4.13. Students and Oral Sex	63
4.14. Students and Homosexuality	64
4.15. Students and Lesbianism	65
4.16. Students and Group Sex.....	66
4.17. Students and Prostitution	67
4.18. Teachers' Opinion on Sexual Activities among Students.....	68
4.19. Students' Reasons for Engaging in Sexual Activities.....	68
4.20. Students and Abstaining from Sex	70
4.21. Students Sources of Sexual Information	72
4.22. Testing of Hypotheses.....	74
4.23. Testing of Hypothesis 1: Relationship between School Curriculum and Students' Sexual Behaviour.....	75
4.24. Testing of Hypothesis 2: Relationship between Family Sources and Students' Sexual Behaviour	82
4.25. Testing of Hypothesis 3: Relationship between Religious Institutions and Students' Sexual Behaviour	88
4.26. Testing of Hypothesis 4: Relationship between Peer Group and Students' Sexual Behaviour	95
4.27 Testing of Hypothesis 5: Relationship between media and students' sexual behaviour	101
4.28 Testing of Hypothesis 6: Relationship between students Personal Characteristics and students' sexual behaviour.....	106
4.29. Multiple regression analysis.....	112
4.30. Students' Views on Introduction of Sex Education in Schools.....	115
4.31. Preferred Agents in Transmission of Sexual-related Information.....	117
4.32. Students' views on Advantages of Abstaining from Sexual Activities	118

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS.

5.1. Introduction.....	121
5.2 Summary of the study.....	121
5.3 Major Findings of the Study	123
5.4 Findings based on Objective 1	125
5.5 Findings based on Objective 2	126

5.6 Findings based on Objective 3:	127
5.7 Findings based on Objective 4	128
5.8 Findings based on Objective 5:	129
5.9 Findings based on Objective 6:	129
5.10 Relative Importance of Study Variables	130
5.11 Study Conclusion	131
5.12. Recommendations from the Study.....	135

REFERENCES.....	137
------------------------	------------

APPENDICES

Appendix 1: Students questionnaire.....	152
Appendix 2: Teacher counsellors interview schedule.....	158
Appendix 3: Head teachers interview schedule.....	160
Appendix 4: List of schools sampled.....	162
Appendix 5: Ethnic distribution of Student Respondents.....	163
Appendix 6: Research Permit.....	164

LIST OF TABLES

Table 4.1: Instrument Return Rate by School Category.....	49
Table 4.2: Gender of Respondents.....	50
Table 4.3: Age of Student Respondents.....	51
Table 4.4: Marital Status of Student Respondents' Parents.....	52
Table 4.5: Father's Level of Education and School Category cross Tabulation.....	53
Table 4.6: Religion of Student Respondents.....	55
Table 4.7: Religious Affiliation of Students' Parents.....	56
Table 4.8: Students' Opinion on 'no' sex Between Secondary School Students.....	58
Table 4.9: School 'Category' and Students' Opinion of 'no' sex Between Students.....	59
Table 4.10: School 'Type' and Students' Opinion on 'no' Sex Between Students.....	60
Table 4.11: Students' Opinion on 'no' Sex Between Secondary School Students and 'Married' people.....	61
Table 4.12: Students Opinion on 'not' Engaging in Unprotected Sex.....	62
Table 4.13: Students' Opinion on 'not' Engaging in Oral Sex.....	63
Table 4.14: Students' Opinion on 'no' Homosexuality in Secondary Schools.....	64
Table 4.15: Students' Opinion on 'no' Lesbianism in Schools.....	65
Table 4.16: Students' Opinion on 'no' Group Sex among Students.....	66
Table 4.17: Students' Opinion on 'no' Prostitution among Students.....	67
Table 4.18: Students Reasons for Engaging in Sexual Activities.....	69
Table 4.19: Students' Reasons for Abstaining from Sex.....	70
Table 4.20: Students' Sexual Encounter.....	71
Table 4.21: Students' Rating of Sources of Sexual-Related Information.....	72
Table 4.22: Students' Additional Sources of Sexual-related Information.....	73
Table 4.23: Analysis of School Curriculum as a Source of Sexual Information.....	75
Table 4.24: Regression analysis of School Curriculum as a Source of Sexual Information-ANOVA.....	76
Table 4.25: Students' Opinion on School Curriculum as Offering Sexual information-Coefficients.....	76
Table 4.26: Students' rating of school curriculum as offering Sexual Information.....	77
Table 4.27: Head teachers' Opinion on Curriculum as a Source of Sexual information.....	78
Table 4.28: Teacher Counsellors' Opinion on School Curriculum as a Source of Sexual information.....	79
Table 4.29: Analysis of Family Members as a Source of Sexual Information-Model Summary.....	82
Table 4.30: Regression analysis of Influence of Sexual Information from the Family on Students' Sexual behaviour- ANOVA.....	83
Table 4.31: Regression Analysis of Influence of Sexual Information from the Family setup-Coefficients.....	83
Table 4.32: Students' Opinion of Family as a Source of Sexual Information.....	84

Table 4.33: Head Teachers’ Opinion of Family members as a Source of Sexual Information for Students’.....	85
Table 4.34: Teacher Counsellors’ Opinion of Family members as a Source of Sexual Information	86
Table 4.35: Analysis of Influence of Sexual Information received through Religion on Students Sexual Behaviour-Model Summary.....	89
Table 4.36: Regression Analysis of Sexual Information offered Through Religious Institution on Students’ Sexual Behaviour-ANOVA.....	89
Table 4.37: Regression Analysis of Sexual Information offered Through Religious Institution on Students’ Sexual Behaviour-Coefficients.....	90
Table 4.38: Students’ Opinion on Religious Institutions as Offering Sexual Information to Secondary School Students.....	91
Table 4.39: Head teachers’ Opinion of Religious Institutions as Offering Sexual- related Information.....	91
Table 4.40: Teacher Counsellors’ Opinion on Religious Institutions as Offering Sexual Information.....	92
Table 4.41: Analysis of Influence of Sexuality Information from the Peer group on Students’ Sexual Behaviour-Model Summary.....	95
Table 4.42: Regression Analysis of Information received through the Peer group on Students’ Sexual Behaviour ANOVA.....	96
Table 4.43: Regression Analysis of Information received through the Peer group on Students’ Sexual Behaviour-Coefficients.....	96
Table 4.44: Students’ rating of Peer group as a Source of Sexual Information for Secondary School Students.....	98
Table 4.45: Head Teachers’ Opinion Peer group as a Source of Sexual Information for Secondary School Students.....	98
Table 4.46: Teacher Counsellors’ Opinion of Peer group as a Source of Sexual Information for Students.....	99
Table 4.47: Analysis of Influence of Sexual Information Received through Mass Media on Students’ Sexual Behaviour-Model Summary.....	101
Table 4.48: Regression Analysis of Influence of Sexual Information from the Media of Students’ Sexual Behaviour-ANOVA.....	102
Table 4.49: Regression Analysis of Influence of Sexual Information from the Media of Students’ Sexual Behaviour- Coefficient....	102
Table 4.50: Students ’ rating of Media as a Source of Sexual Information.....	103
Table 4.51: Head Teachers’ Opinion on Media as a Source of Sexual Information for Students.....	104
Table 4.52: Teacher Counsellors’ Response on Mass Media as a Source of Sexual Information for Students.....	104
Table 4.53: Analysis of Sexual Activity and Student’s Gender-Model Summary.....	107
Table 4.54: Regression analysis of Students’ Sexual Activity by	

Gender-ANOVA.....	107
Table 4.55: Regression Analysis of Influence of Sexual Information from the Media of Students' Sexual Behaviour-Coefficient.....	108
Table 4.56: Students' Sexual- Encounter by Gender.....	109
Table 4.57: Analysis of Sexual Activity and Student's Age-Model Summary.....	110
Table 4.58: Regression analysis of Sexual Activity and Students' Age-ANOVA.....	111
Table 4.59: Regression Analysis of Influence of Sexual Information from the Media of Students' Sexual Behaviour-Coefficients...	111
Table 4.60: Multiple Regression Analysis of relative level of influence Of independent variables on students' Sexual Behaviour-Coefficients.....	112
Table 4.61: Multiple Regression Analysis of relative level of Influence of Perversion on Sexual Behaviour-Coefficients.....	113
Table 4.62: Multiple Regression Analysis of relative level of Influence of Perversion on Sexual Behaviour-Coefficient.....	114
Table 4.63: Head teachers Views on Content of Sex education.....	116
Table 4.64: Teacher Counsellors' Views on Content of sex education.....	116
Table 4.65: Students Preferred Agents of Sexual Information.....	117
Table 4.66: Students' Opinion on Advantages of Abstaining from Sexual Activities.....	119

LIST OF FIGURES

Figure 1: Conceptual framework.....	41
--	----

LIST OF ACRONYMS AND ABBREVIATIONS

ACAP	American Committee of the American Academy
CBS	Central Bureau of Statistics
CDC	Centre for Disease Control
CRC	Convention on Rights of the Child
CSW	Commission on Status of Women
CSA	Centre for Study of Adolescent
DRH	Directorate of Reproductive Health
FGM	Female Genital Mutilation
FLE	Family Life Education
FPAK	Family Planning Association of Kenya
ICPD	International Conference on Population and Development
IPPF	International Planned Parenthood Federation
IPPRS	International Programs and Populations Reference Bureau
KHDS	Kenya Health Demographic Survey
KIE	Kenya Institute of Education
KLEIN	Kenya Legal and Ethical Issues Network
LSE	Life Skills Education
MOE	Ministry of Education
MOEST	Ministry of Education Science and Technology
MOH	Ministry of Health
MOPND	Ministry of Planning and National Development
NACC	National Aids Control Council
NCAPD	National Coordinating Agency for Population and Development
NCPD	National Council for Population and Development

NCPTP	National Campaign to Prevent Teen Pregnancy
NHDS	Nigerian Health Demographic Survey
PIP	Population Information Program
PRJ	Population Reproductive Journal
RHS	Reproductive Health Services
SIECUS	Sex Information and Education Committee of United States
UN	United Nations
UNAIDS	United Nations Aid for Development
UNDESD	United Nations Decade on Education for Sustainable Development
UNESCO	United Nations Education, Scientific and Cultural Organization
UNGASSH	United Nations General Assembly Special Session on HIV
UNICEF	United Nations International Children’s Fund
UNSEGH	United Nations Special Envoy for Global Health
UNSGSVAC	United Nations Secretary General Study on Violence Against Children
USAID	United States Aid for International Development
WDR	World Development Report
WHO	World Health Organization
WPHRP	World Program for Human Right Education
WPF	World Population Fund
WYR	World Youth Report

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Knowledge may be interpreted as familiarity with something, which can include information, facts, descriptions and skills acquired through experience, formal education or non-formal education. It can also refer to the theoretical or practical understanding of a subject. According to Blake (2002) sexual knowledge, the subject of this study refers to understanding what sex is, the role sex has in human life, whether one can identify the sex acts that are considered moral or immoral, and how that understanding influences sexual behavior.

The level of knowledge about sex among students is demonstrated in many ways such as knowledge of names and functions of sexual organs; body changes that bring about menstruation and wet dreams; sexual desire; the sexual act and associated outcomes such as pregnancy, Sexually Transmitted Infections (STIs) and Human Immune Deficiency Syndrome (HIV/AIDS); means to avoid negative outcomes of sexual activities; and ways of promoting responsible sexual behavior. The aim of sex education should be to humanize sexuality as it relates to the sum total of one's feelings and behavior, not only as sexual beings, but also as male and female (Shahid, 2005).

The onset of puberty begins with an increase in hormone levels, notably estrogen for girls and progesterone for boys. As the reproductive organs develop, the mind of adolescents also gets awakened and many become pre-occupied with sex (Story, et al, 2013). Consequently, many have been

compelled to explore and 'taste' sex at all cost, and thereby become sexually active without conscious decision and consideration of its effects.

Globally, the onset of sexual activity among the youth between 12-24 years old is on the rise Kangara (2004), indicating that benefits of abstinence from sexual activity are not held in the same respective light as they were generations ago. This implies that there is a need to address the needs of the learner according to the times they are living. Hence sexual information should be availed with the aim of providing quality sexual knowledge that helps to create an enabling context that allows young people to practice positive sexual behavior.

The family is the first school that a child learns about all issues pertaining to life in society, sexuality being one of the most important. As primary instructors, the family should take advantage of their daily contact opportunities to give the right information, inculcate importance of self control and moral values, emphasizing natural and supernatural virtues in the course of their instructions (Janice, 2010). Traditionally, sex education was undertaken as part of the initiation process that began much earlier in the extended family and social structures of particular ethnic group.

Commitment to meeting the young people's needs for sexual knowledge or Youth Reproductive Health has always been a priority globally as sexual pressure on today's youth is different from that faced by previous generations. The young people in modern times are faced with contradictions in religion, culture, moral values and modernity on sexual matters. The contradicting environment for instance, for the Kenyan youth today is aggravated by the fact

that society is undergoing rapid socio-cultural and economic transition (Ministry of Health /Directorate of Reproductive Health, 2005).

International conferences and agreements such as the 1989 Convention on the Rights of the Child, the 1994 International Conference on Population and Development, the United Nations World Program of Action for Youth to the Year 2000 and Beyond, and the 2001 United Nations General Assembly Special Session on HIV/AIDS, affirmed the needs of young people for information, counseling, and high quality sexual and reproductive health services. Against the background of these international agreements, to which Kenya is a signatory, the Government of Kenya has taken a number of steps to support dissemination of sexual information to school going youth.

Among many attempts, towards provision of sexual knowledge to Kenyan youth include; Sessional Paper no.1 of 1977 Ministry of Planning & National Development, on national population policy, that proposed teaching of Family Life Education (FLE) through Guidance and Counseling Programs; recommendation by Ministry of Education Science and Technology in 1984 for development of programs addressing sexuality concerns among the youth such as use of drama through television; publication of a book on sex education using the boy scouts' book on Family Life Education in 1994; and endorsement of units of FLE integration into various curricula and development of a HIV/AIDS syllabus in 2002 for STD I-IV and for Teacher Training Colleges. Kenyatta University and University of Nairobi also introduced a compulsory unit on HIV/AIDS for all undergraduate, postgraduate and certificate level students.

All these efforts culminated with publication of yet another official syllabus on Life Skills Education for both primary and secondary schools in 2008 by Kenya Institute of Education. Life Skills Education aims at equipping the teachers and learners with adaptive abilities to positive behavior that would enable them to effectively deal with the demands and challenges of everyday life (World Youth Report, 2003). According to World Health Organization (1997), every school should enable adolescents at all levels to learn health and life skills which should be comprehensive, integrated life skills education that enable young people to make healthy choices and adopt healthy behavior throughout their lives.

In spite of all the efforts so far reviewed, development and implementation of sex education programs has met with diverse challenges that have to some great extent jeopardized their effectiveness. For instance, Oduor (2006) observes that, sex, sexuality, sexual health and sexual rights are controversial topics in any setting in Africa and they are mostly whispered in order to forestall controversy and suspicion. Some argue that sex education incites stimulation of instincts which are detrimental to society while others argue that human instincts such as those associated with food, fear, greed and coitus need not be taught (Population Information Program, 2002).

In sub-Saharan Africa, resistance come from religious and traditional leaders bent on upholding traditions and beliefs, including the expectation that young people abstain from sexual activity until marriage (Kahn, 2008). They often mobilize parents and some teachers as allies while political leaders are reluctant to risk a religious backlash by openly supporting provision of sex education formerly in schools.

In addition, Kenyan society does not allow open dialogue on sexuality between adolescents and adults, but they expect them to behave well. Some parents use scare tactics to prevent their children from engaging in sexual activity. Others expect school teachers to help in that area while teachers, being subject to the same conservative social beliefs and lack of training are unable to provide complete and unbiased sex education (Mbugua, 2007). Other school officials may have no personal objection but resist introduction of sex education because they fear overcrowding the existing curriculum.

The controversy on sex education may have contributed to development of a Life Skills Education syllabus by the Ministry of Education in 2008 but with scarce information on sexuality. Life Skills Education content in Kenya Institute of Education syllabus is infused in a variety of subjects in the national curriculum. The program falls under Guidance and Counseling departments that were introduced in all primary and secondary schools as the major school based handler of pupils' personal problems. Although the department is expected to provide intervention on sexuality matters in schools among many other social issues, guidance and counseling lessons are not allocated time in the school timetable or taught as a stand alone subject (Chemutai, 2011).

Other challenges relating to provision of sexuality information are determining sexual values suitable for students from over 42 different ethnic communities that constitute the Republic of Kenya. This means that there may exist over 42 different cultures and therefore as many different values of sexuality. For example, premarital sex among the Samburu of Northern Kenya is acceptable among young girls and 'morans'(young warriors who are not allowed to marry

until they are 30 years of age), but among the Kikuyus in Central Kenya it is regarded as immoral (Kenyatta, 1938).

Additionally there is the challenge caused by infiltration of uncensored sexual information from other sources such as the electronic media, print media and the internet. Children and adults have been shown to believe the media as a central source of information on sex and sexuality (Malamuth and Impett, 2001). It appears like few programs, from daily news, talk shows, reality-based programs to family-centered programs are immune to stories of sexual nature. Content analyses performed on print media to determine the type of messages delivered have shown that adolescents are being exposed to both implicit and explicit sexual content (Ward & Wyatt, 1994).

The outcome of all sexual information obtained by secondary school students in Kenya from various sources is quite disheartening. Past studies indicated that Kenyan adolescents had very low knowledge and information concerning sexual matters (Kalinga, 2010; Lema, 1990; Garbara 1985; Gachuhi, 1974; 1973 ;), or the kind of information they choose to rely on is incorrect and completely misleading.

Consequences of silence on sex education among adolescents, are being uninformed, misinformed or under informed leaving them powerless and confused about their feelings and sexual activity. Misleading sexual information becomes detrimental to the students sexual practices such as, 'myths that a girl cannot get pregnant the first time she has sex; a boy's penis blocks if he does not have sex occasionally; a girl needs the protein from male sperms to make hips grow, and many more' (Nganda, (2008).

In particular, pregnancy, abortions, school dropout, exposure to STIs and HIV/AIDS may be pointers to adolescent sexual activity which a number of scholars have saliently identified. Anyangu (2009) asserts that, as adults withhold information, children look for it in the media which is not always a good source and replicate what they observe. For instance, the Daily Nation newspaper (2nd May, 2011) explained how starry eyed university students in Kenya record themselves in lewd acts and post them in the internet with the intentions to rival the 'role models' they have observed as "hot chic" or "hot dude" in steamy music videos or movies.

The review of literature suggests that sexual information obtained from most sources such as media is not age appropriate and is associated with the drop in the age of onset of sexual activity among the youth. Research findings reveal that girls as young as 12 years old are sexually active and that 40% of those sexually active confessed to having as many as six different partners in a span of six months (Kenya Demographic Health Survey (KDHS) 2014; and Centre for the Study of Adolescent (CSA) 2009). This indicates a drop in age as results from KDHS (2008-09), had shown that youth became sexually active between 15-19 years of age.

The increased sexual activity among young people has led to unsafe premarital sex which in turn has led to increased HIV/AIDS infection. 'Teenage sex shock for parents', was a front page item in Daily Nation newspaper, 14th, October, 2009 referring to the report by Centre for Study of Adolescents (2009), revealing that 70 percent of Kenyan school students are sexually active before the age of 19 years, and that HIV infection rate is 12 percent in the same age bracket.

Nearly every 3 girls out of 10 in Kenya are having babies and disrupting their school according to a report by United Nation's special envoy for global education, (Mr Gordon Brown, Daily Nation, 13th October, 2012; Oduor 2006) .When announcing the results of Kenya Certificate of Secondary Education (KCSE) for the year 2010, the former minister for education Professor Ongeru expressed concern that the number of students sitting their exams in the maternity wards had risen that year to 169 (Daily Nation, 1st March,2011).

A rise in premarital pregnancy also raises the number of abortions among the same age group (Daily Nation, 27th October 2012). In Kenya, where abortion is legal only to save a woman's life, complications from unsafe procedures can account for up to 20,000 hospitalizations in the public health-care system alone from incidences of unsafe abortion and associated mortality (WHO, 2007). It's estimated that every year 300,000 Kenyan girls and women procure abortions, according to International Planned Parenthood Federation (IPPF, 2010). Since abortion is illegal in Kenya, many of the abortions take place in back-street clinics, with the result that between 40 per cent of maternal deaths in Kenya occur among teenage mothers.

In relation to the consequences of irresponsible sexual behaviour, Thika district has been one of the leading towns in Kenya in HIV/AIDS infection rate even among student population according to National Aids Control Council (2002). Thika District is located in Central Province approximately 40 kilometres from the capital city Nairobi. It is primarily rural yet includes some urban and peri-urban areas. The percentage of Thika residents living below the poverty line is 34.9 percent (Kenya Central Bureau of Statistics, 2005). Many

residents are employed either in nearby Nairobi or in Thika by one of a variety of local industries, including coffee, pineapples, and flowers. In 1994, Thika had the highest HIV prevalence at 39% (Kenya Ministry of Health-NASCOP, 2004). Although HIV prevalence has declined, Thika has the highest HIV prevalence in Central Kenya (Kenya Ministry of Health, 2005). In 2003, UNICEF estimated 38,402 orphans resided in former Thika District and projected this number to increase to 40,781 by 2008 (UNICEF, 2006b). Thika West has high rates of student dropout in schools due to pregnancy and child mortality is high in comparison to other sub counties in Kiambu County according to KDHS (2013).

1.2 Statement of the Problem

On the basis of information presented so far, it is now evident that the world of modern adolescent is extremely complex at the stage of secondary level of education from exposure to ever changing modern ideas and set of social expectations over sexuality. They are coming into contact with all types of sexual interactions on a day to day basis and are forced to deal with information from their homes, neighborhoods, churches, schools, peers and the media. Parents and mainstream religious institutions insist on embracing conservative traditional practices whose support structures have since collapsed. On the other hand, the school as a social institution continues to struggle to strike a balance by offering what is acceptable to other stakeholders and those who guide students in matters of sexual information.

However, background information shows that students' secondary education continue to be interrupted by negative consequences of irresponsible sexual interactions. The study therefore aimed at finding out which sources of sexual

information influences secondary school students' sexual behavior. The variables that were investigated included the school curriculum, the family, the religious institutions, the peer group, the media and personal characteristics as independent variables, while dependant variables were sexual behavior in terms of students' involvement in premarital sex, abstention, oral sex, homosexuality and lesbianism, group sex and prostitution.

1.3 The Purpose of the Study

The purpose of this study was to find out which source of sexual information influences secondary school students' sexual behavior in Thika West sub-county, in Kiambu County, Kenya.

1.4 Research Objectives

In carrying out this study, six specific objectives were formulated and they sought;

- i. to determine how sexual information obtained through secondary school curriculum influences secondary school students' sexual behavior,
- ii. to establish how sexual information received through the family setting influences secondary school students' sexual behavior,
- iii. to determine how sexual information received through religious institutions influences secondary school students' sexual behavior,
- iv. to establish how sexual information obtained through the peer group influences secondary school students' sexual behavior,
- v. to determine how sexual information accessed through the mass media influences secondary school students' sexual behavior,

vi. to establish how students' personal characteristics influence their sexual behavior.

1.5 Research Hypotheses

The study formulated six null hypotheses as follows;

H₁: Sexual information received through secondary school curriculum will not significantly influence secondary school students' sexual behavior.

H₂: Sexual information received through the family setting will not significantly influence secondary school students' sexual behavior.

H₃: Sexual information received through religious institutions will not significantly influence secondary school students' sexual behavior

H₄: Sexual information received through the peer group will not significantly influence secondary school students' sexual behavior.

H₅: Sexuality information received through the media will not significantly influence secondary school students' sexual behavior.

H₆: Personal characteristics of secondary school students will not significantly influence their sexual behavior

1.6 Significance of the Study

The results of this study are expected to become a source of information on the level of sexual knowledge among secondary students in Kenya. The findings may be used for advocacy by the stakeholders for development of comprehensive sex education programs aiming at counteracting the negative consequences of irresponsible sexual behavior among students. The results will therefore be of benefit to institutions such as Ministry of Education, Teachers Service Commission, Kenya Centre for Curriculum Development, and Non-governmental Organizations when dealing with sexuality issues

among the youth in Kenya. The study is likely to reveal the shortcomings in the present curriculum in this area, and therefore, the findings are expected to show the need for curriculum review on sex education programs. The results are also expected to create interest for more research in the field.

1.7 Limitations to the Study

Given that most Africans regard the whole area of sex and sexuality as taboo, some members, in particular student male respondents were unwilling to give their views. The other challenge was from the National and County schools whose programs are so rigid that getting students to save some time to fill questionnaires was quite a task and therefore data collection exercise took a longer time than anticipated.

1.8 Delimitation of the Study

The field research was carried out in, Thika West Sub-County, Kiambu County, Kenya and therefore the research findings may not necessarily apply in the other areas outside Thika. The study was confined to 12 secondary schools in one Sub County of former larger Thika in Central Province as it existed before 2012. At the time of the study, the district had been subdivided into six different Sub County under Kiambu County with 33 secondary schools (District Education Office records, 2013).

1.9 Assumptions of the Study.

This study assumed that student respondents would look at the study as an opportunity for them to communicate their unmet need in relation to sexuality education. The same assumption applied in the case of teachers who are by nature of their work, witnesses to cases of students suffering from negative consequences of irresponsible sexual behavior. Therefore, majority of the

respondents would be sincere and therefore help in achieving the objectives of this study.

1.10. Organization of the Study.

This Study is organized in five chapters. Chapter One of the study consists of the background to the problem, statement of the problem, purpose of the study, research objectives, research hypothesis, significance of the study, limitations of the study, delimitations of the study and assumptions of the study. Chapter Two comprises of the literature review, which is divided into the following subheadings; the secondary school curriculum and sexuality information, life skills curriculum and sexuality information, the family setting as a source of sexuality information, religion on sexuality information, the peer group as a source of sexuality information, mass media and sexuality information and student personal characteristics and sexuality information. Chapter Three covers the research methodology, which is divided into the following sections; study design, target population, sample size and sampling procedure, research instruments, pilot study, data collection procedure, data analysis techniques and ethical issues. Chapter Four consists of data analysis, presentation and interpretation. Chapter Five consists of summary, conclusion and recommendations arranged as follows; summary of the study, major findings of the study according to hypothesis, relative importance of study variables, study conclusion and recommendations from the study.

1.11 Definition of Operational terms

Adolescent: This refers to any young person between 10 to 20 years of age, experiencing progressive physical and psychological changes that lead to sexual maturity

Curriculum: This refers to the systematic education program that students in Kenya go through aimed at transmitting skills, knowledge and values that enable them to fit in the society. In this study it will also mean transmission of sexual knowledge, skills and values to enable the lead a healthy sexual life.

Education: This refers to the process of transmitting information to equip the learners with knowledge, skills and value systems to fit in the society.

Family: In this study it refers to a group of people related by marriage, blood or kinship.

Influence: This will refer to factors that determine a student's choice of action in relation to sexual behavior.

Media: refers to mass electronic and print sources of information, such as internet, books, newspapers, magazines etc.

Life Skills: Refers to learned ability to apply informed choices of positive behavior that enables individuals to deal effectively with challenges of everyday life. In this study it refers to ability to deal with sexuality issues to avoid negative consequences

Peer Group: This refers to a number of people relating as friends bound by a common social tie such as age, social class or geographical location. In this study it refers to adolescent ties.

Religious Institutions: This refers to various formal denominational organizations such as Catholics, protestants, Pentecostals and Muslims etc. who share faith in a supreme being and provides spiritual guidance to its members

Sex: It refers to the biological and anatomical differences distinguishing females from males. It has been used with reference to the act of sexual intercourse in this study.

Sex education: It refers to the process of transmitting information on sex and sexual relationships.

Sexual behavior: This refers to consistent way of reacting to stimuli to reproductive senses, demonstrated through activities such as, engaging in premarital sexual intercourse, prostitution, sexual orgies homosexuality/lesbianism, or even abstention etc.

Sexual Knowledge: This refers to understanding what sex is, role of sex in human life, sexual organs, their functions, and moral values attached to them, positive and negative outcomes of their use and misuse.

Sexuality: It refers to the sum total of a human state in relation to attitudes, beliefs and values about identity, relationships, and sexual intimacy. It is the broad social perspectives of sex, such as sexual mores, and feelings.

Sexuality information: It refers to that which pertains to reproductive health aimed at equipping an individual with knowledge to handle relationships in sex.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter deals with literature related to studies on sources of information on sexuality and how that information influences sexual behavior among the youth and in particular secondary school students. The literature reviewed is presented in six thematic subtopics, based on the variables of this study. These are the school, the family, religious institution, the media and the peer groups, as sources that interact as agents of socialization with every growing human child in all social aspects including sexuality. The literature on personal characteristics and their influence on sexual behavior have also been reviewed. Further, the Ecological Systems Theory by Urie Bronfenbrenner (1979) was also reviewed and consequently used in interpretation of findings.

2.2 An Overview of the Influence of secondary School Curriculum Sexual Information on Secondary School Student's Sexual Behavior.

Education Committee of the United States (2000) defines education on sexuality as a lifelong process of building a strong foundation for sexual health through acquiring information and forming attitudes, beliefs and values about identity, relationships, and intimacy. In this study, sexual-related information refers to information that pertains to reproductive health. Sexual-related information can be passed through formal or informal sex education programs through various social agents. Thus, sex education refers to the deliberate process of transmitting information on sex and sexual relationships while sexuality is the broad social perspectives of sex, such as sexual mores, and feelings. The knowledge so acquired should enhance the quality of

relationships of an individual and their ability to make informed decisions over their sexual behavior.

Any sex education curriculum should aim to reduce the risks of potentially negative outcomes from sexual behavior, and contribute to young people's positive experience of their sexuality. School based sex education can be an important and effective way of enhancing young people's knowledge, attitudes and behavior. According to Forrest (2005), effective school programs should include a number of elements such as: a focus on reducing specific risky behavior; a basis of theories which explain what influences people's sexual choices and behavior; providing accurate information about the risks associated with sexual activity; about contraception and birth control, and about methods of avoiding or deferring intercourse; dealing with peer and other social pressures on young people; and providing opportunities to practice communication, negotiation and assertion skills.

Forrest (2005) further asserts that effective school programs also use a variety of approaches to teaching and learning that involve and engage young people and help to personalize or relate to that information; use approaches to teaching and learning which are appropriate to young people's age, experience and cultural background; is provided by people who believe in what they are saying and have access to support in the form of training or consultation with other sex educators. Similarly, Oduor (2006) recommends the use of social learning theories as a foundation for program development focusing on recognition of social influences, changing individual values, changing group norms and building social skills.

Formal sex education programs with these elements can increase students' levels of knowledge about sex and sexuality. This would put back the average age at which they have their first sexual intercourse, as well as decrease the risks when they do have sex (Forrest, 2005). Review of related literature on sex education curriculum indicates that Kenya lacks a definite sex education policy. Instead it has ad hoc programs that keep changing depending on the controversy each program raises (Kiragu, 2006; Zabin,1989; Njau 1974).

As stated earlier, the Ministry of Education proposed the teaching of Family Life Education in schools through Guidance and Counseling Programs (MOEST, 1984) and other forum like the media. However, a soap opera, 'usiniharakishe' (meaning 'don't make me rush') introduced in the national television was banned after a few episodes following protests from church leaders and some parents. The former president of Kenya, Daniel Arap Moi, instead endorsed, traditional sex education by tribal elders even though traditional education structures were no longer compatible with adolescents who are with teachers for nine out of twelve months in a year. A sex education book published using the boy scouts' book on Family Life Education in 1994 was rejected on grounds of being too explicit. The book discussed topical issues in sex education such as human anatomy, sex, pregnancy and abortion. Resistance and criticism from religious groups and parents led the former president Moi again to order that the book should be withdrawn from all book-shops (Wanyonyi, 2014).

Sex education programs are referred in different terms in different countries such as, Reproductive Health Education in United States of America; Family Life Education in Poland; Long Live Love in Netherlands; Healthy Respect in

Scotland; Nature Science in Slovak and Sex Education in France (Centre for Disease Control, 2007). In Kenya, as noted earlier, opposition to Family Life Education led to development of Life Skills syllabus and integration of reproductive health education in school subjects such as Biology.

Sex education is taught in two main forms in countries with formal programs. These have comprehensive sex education (also known as abstinence plus) and abstinence-only education which emphasizes abstinence from sex prior to marriage and rejects use of contraceptives (Family Planning Perspectives, 2000). However, Ohon (2002) and Zabin (1998) assert that other powerful influences such as prolonged stay in school that delays early marriage, early psychological maturation, early dating and immature ego development have made abstinence impractical for majority of young people. This therefore indicates there is a need for providing information to the adolescents in order to assist them to make informed choices over their sexual behavior under the given circumstances.

Even with the above understanding, providing an effective sex education curriculum can be a daunting task. This is because it means tackling potentially sensitive issues and involving a variety of stakeholders such as parents, schools, community groups and health service providers. A protest march engineered by the Catholic Church opposing provision of Family Life Education in 1985, for instance, led government to withdraw the program and this climaxed with the burning of condoms and sex education books (Kamaara, 2005).

Currently in Kenyan schools, sex education is integrated in subjects like Christian Religious Education and Biology. The department of guidance and

counseling established in all schools is left with the task of assisting each learner to understand him/herself sexually and to be well adjusted to the society. A life skills curriculum was also introduced to complement the integrated syllabi and is only allocated forty minutes lesson per week (Chemutai,2011).

Life Skills Education (LSE) is one of the strategic means by which the goals of learning can be achieved (Chemutai, 2011). It is defined in a general way as a mix of knowledge, behavior, attitude and values, and designates the possession of some skills and know-how to do something of reach and aim (WHO, 1996). In this study, Life Skills refer to the ability to adapt positive behavior that enables individuals to deal effectively with challenges of everyday life, including sexuality challenges.

Life Skills based education is now recognized as a methodology to address sexuality issues. Most recent forums continue to lay emphasis on LSE, such as World Youth Report (2007), World Program for Human Rights Education (2004), UN Decade on Education for Sustainable Development (2005), UN Secretary General's Study on Violence against Children (2006), 51st Commission on the Status of Women (2007), and the World Development Report (2007). The emphasis of this approach is on personal social skills, attitudes and knowledge helpful in making positive decisions and lifestyle choices.

Expected learning outcomes in the Life Skills approach are to create opportunities for youth to acquire skills, such as critical thinking, that enable them to avoid manipulation by outside influences (MOEST, 2008; Bandura, 1997; Kirby, 1991). The LSE curriculum in Kenyan schools is designed to

address issues on self-awareness and self-esteem, coping with emotions and stress, interpersonal relationships, empathy, effective communication, assertiveness, peaceful conflict resolution negotiation, decision making skills, peer pressure and peer resistance (MOEST, 2008). However, the adolescent requires understanding how their bodies work for them to be able to negotiate or assert themselves when they relate with members of the opposite sex.

Life Skills Education is provided through Guidance and Counseling programs in schools in Kenya. The subject of sexuality is rarely tackled as emphasis is laid on career choices (Githaiga, Gathanwa & Thinguri, 2014; Chemutai, 2011; USAID, 2010; Oduor,2006; Ohon, 2002). In study on teachers' attitude towards Life Skills Education, Githaiga, et al (2014), findings showed majority of respondents, (57%) were of the opinion that the intended objectives of Life Skills Education were not being met.

A rapid assessment of the effectiveness of Life Skills Program in Kenyan schools by Kenya Legal and Ethical Issues Network (2011) showed gaps in the implementation of the existing curriculum as including; inadequate number of trained teachers on sexual and reproductive health; religious conservatism; lack of capacity in institutions –lack of training materials; cultural orientations such as early marriages and female genital mutilation as young girls are introduced to sex ; lack of skills to handle HIV/AIDS; and abstinence based approach to sexuality education. It is in view of the controversy surrounding formal sex education in schools that the study attempted to establish whether the school curriculum is an adequate source of sex education for secondary school adolescents in Thika West Sub-County and how the information received influences their sexual behavior.

2.3 Influence of Sexual Information from the Family on Students' Sexual Behavior.

The family is the first school that a child learns about life issues and sexuality while the school complements what a child learns from home. The home seems to be the natural setting for instructing children about sex. It is at home that young people can easily have a one-to-one discussion with parents focusing on specific issues, questions and concerns (Kalinga, 2010). Parents and guardians are expected to give the right information, inculcate the importance of self-control and moral values, emphasizing natural and super natural virtues in the course of their instructions. This is the reason why sexual behavior of the child as he/she enters adolescent is perceived as a reflection of what they learn or fail to learn from their families (Oduor, 2006).

Sex education at home tends to take place over a long time and involves lots of short term interactions between parents and children (Forrest, 2005). The benefits of on-going in-depth discussions between parents and adolescent regarding sexuality are apparent. For example, adolescents become more aware of the steps they must take to prevent Sexually Transmitted Infections and pregnancy. In addition, the adolescents' well being may be enhanced if they feel more comfortable with their own sexuality. The family may also benefit from open communication, adjusting more successfully to the adolescent's developing sexuality. In Netherlands, for example, families regard sexuality education as an important responsibility and this has contributed to greater cultural openness and improvement in sexual health among the youth in that country (IPPF, 1995).

In traditional societies, sex education was undertaken as part of the initiation process that began much earlier in the extended family and social structures of particular ethnic groups. Although parents opposed to teaching of sex education in schools support traditional methods of teaching, the situation has changed due to breakup of traditional social structures, and encroachment of other players like the media, new religious beliefs and formal education. According to Kiragu (2007) and Muhunzu (2010) different people in this modern age, including the youth have different perceptions of sexual relationships while means of communication on the same have changed. In fact, Zabin and Kiragu (1998:215) speculate that in sub Saharan Africa, schooling may actually encourage sexual onset, especially because it tends to remove young people from the supervision of traditional caregivers.

Studies continue to show that parents do not provide concrete information to their children in the matter of sexual morality and sexual intercourse. An inherent feature of the foregoing studies by Karanja (2004), Ohon (2002), Ramsey, (1980), Youniss (1985) Njau (1992), Kiragu (1995) is that parents avoid talking about sex with their children. If they do discuss sex, the messages they give to their children are negative ones which interfere with sexual satisfaction (Darling & Hicks, 1982). Parents are not only reluctant to communicate verbally with adolescents about sex, but they may also send non-verbal messages that may discourage open communication.

A study among 15-19 year olds indicated that parents' discussion with their children is mostly in school work and careers (Kiragu,1995), while Millen and Rolls (1977) noted that, even where parents spend ample time with their children, their interaction is mostly on fulfillment of chores to develop sense

of responsibility rather than discussing sex with an adolescent. Snergroff (2000) asserts that failure to teach sex education by parents is 'sex' education in itself. According to Montmay (1982) lack of sexual-related information becomes a fertile ground for fantasy, an eventuality which the peers hardly hesitate to exploit. Parents are supposed to encourage young people to recognize when they want to say no and develop skills to do so, as well as encourage the timely recognition and acceptance of the choice of being sexually active and the use of contraceptives.

Because parents continue to influence adolescent behavior greatly, parental communication should be strengthened to help adolescents become more responsible in their sexual behavior. There is evidence that a community based pregnancy prevention program, with parental input and conducted by both schools and churches had significantly reduced the rate of adolescent pregnancy in a non-Hispanic population in South Carolina (Orr, 1982; Vincent et al, 1987). An evaluation of Parent Education Intervention through a Saving Sex For Later Program (O'Donnell, Stueve, Agronik, Duran, Jeanbaptiste, 2005) shows that parents can influence the choices their adolescents make in communities where rates of early sex initiation and negative consequences of sexual activity are high. This is found in cases where parents participated in the sexuality education program.

2.4 Influence of Sexual Information from Religious Institutions on Students' Sexual Behavior.

The opponents of sex education in the school favor sex education by parents and religious leaders. The argument is that religious leaders are better placed to provide sexual- related information to adolescents due to their social

background and moral status in the society (Kalinga, 2005). But the effectiveness of the religious institutions as providers of sexual-related information that influences responsible sexual behavior is as varied as the other sources.

Studies show that a big percentage of adolescents who are affiliated to a religious faith are less likely to become as promiscuous as those without any religious affiliation. For example, a study of adolescents aged 11-25 years showed that respondents who were not sexually active scored significantly higher than those who were sexually active on the importance of religion in their lives (Holder, 2000). They also reported more connections with friends whom they considered to be religious or spiritual than those reported by the respondents who were sexually active.

Another study of adolescents aged 12-17 years by National Campaign to Prevent Teen Pregnancy, (2001) found that 26 percent of adolescents who said they attended religious services a few times a year still identified moral values and religious beliefs as the factor that most affected their decisions about whether to have sex. . For in spite of the conservative nature of denominations over sex education, it is also worth noting that some studies show that adolescents not associated with a church begin to have sex earlier than others (Jurs, 1984).

Literature review also shows that there is less sexuality information from the institution for those adolescents who may not be looking for it from other sources. The religious faith of a family influences the communication of information on sexuality based on the religious doctrines of the family's denomination. A study by Jurs (1984) showed that religious affiliation is

among key set of factors to which inadequate performance in schools transmitting sex-oriented information to young people may be ascribed. Denominational schools tend to have a conservative and rigid environment while non-sectarian schools tend to be liberal and flexible.

Parents are also constrained by their denominational doctrines in transmission of sexual-related information to their offspring. As an example, Alfonso & Lopez (1995) for Catholic Christians asserts that, it is imperative to give suitable and timely instruction to young people. While Christian affiliation does not necessarily translate into practice of Christianity or upholding Christian values, it however entails that a large proportion of Kenya's population, to some extent, are inclined to the doctrine of Christianity. According to Thornton (1989), the Kenyan people are very religious, and moral arguments from their church leaders and religious organizations are extremely influential.

Religious groups have strongly opposed school-based sex education in the United States, Mexico, Kenya (Pick de Weiss, 1991). Almost 90% of Kenyans are Christians with religious beliefs that do not condone sex outside of marriage. A good number of those do not condone use of condoms and other forms of contraception (Kangara, 2007). A study of first-year college students by Zaleski, (2000) found that sexually active adolescents with high levels of religious identification were less likely to use condom than those with less religious involvement

Indeed, it is opposition from the church that led to the abandonment of FLE programs and resulted with the adoption of Life Skills Education by KIE in 2008. While addressing a meeting in Nairobi in 2009, the director of public

health, Shahnaz Sharif, claimed that opposition from parents, religious groups and some civil society bodies for provision of school based comprehensive sex information, had led to censored sex education programs. For instance, sex education, referred as education for love (Catholic Church), is to be done individually through dialogue, must not be explicit, morality must be emphasized, contraception or safe sex should not be taught, or pervasive sexual practices such as homosexuality (Alfonso, 1995)

This policing of sex education by the church in Kenya was demonstrated when the Roman Catholic church confronted educationists when they protested the inclusion of three novels, *A man of the People* (Chinua Achebe), *Kiu* (S.A.Mohammed), and *Kimeingia Mchanga* (S.A.Mohammed) as set books for study in literature in Kenyan Secondary School. Some parents and clerics alike considered the books too sexually explicit to a point of being pornographic. The protests culminated with a protest under the banner, 'Help Kick Pornography out of the Classroom' in Kiambu and Nairobi, Kenya.

Majority of religious denominations in Kenya advocate for abstinence only sex education although abstinence messages have been shown to be ineffective in curtailing the rates of teenage pregnancy and HIV/AIDS (Mbugua, 2007). Attempts to develop an acceptable curriculum culminated with endorsement of units of FLE and its integration into various curricula. The integrated units continue to be taught in subjects like Christian Religious Education as Christian ethics in the fourth year of secondary school education.

Parents have a duty to fight against damaging forms of sex education to ensure that their children are educated according to Christian principles that are consonant with their personal development. Even though family endorses the

religious beliefs and practices of their society, some beliefs are an adoption of the community's cultural practices than they are instructions from their Holy books (Isam, 1974). For example, Islam recognizes the power of sexual needs and the subject is discussed in the Quran but Muslims avoid discussing sex, not because the Quran prohibits it but because of cultural training. The Christian Bible discusses sex openly in many of its books, but the religious leaders put restrictions on the discussion of the same.

According to some critics of the religious organizations' activism against sexual-related information, this practice can be viewed as religious conservatism and perpetuation of a theology that is removed from reality, and tantamount to taking Kenya back to dark ages (Daily Nation, 2003). A new controversy surrounding some of the church leaders on sexual morality have raised concern on their appropriateness as providers of sexual-related information. Many parents are finding it difficult to trust the religious leaders with their adolescent children and would rather leave them with spiritual matters only (Kalinga.2005). The controversy arises from a rise in cases of sexual immorality involving religious leaders who take advantage of the members when they are approached for counseling. All things considered, it is on the basis of the above literature review that this study assessed if the religious institutions, have been delivering what they have fought for, for so long, that is the mandate to provide the right sexual information, and how that information influences students' sexual behavior.

2.5 Influence of Sexual Information from the Peer Group on Students' Sexual Behavior.

A review of literature on Peer group contribution as a source of information that influences secondary students' sexual behavior shows it is a major force. This is partly because peers form equalitarian relationships that center around age-specific interests which make association with peers considerably more attractive than the hierarchical task oriented relationship that adolescents have with other adults (Millen and Roll 1977). Peers are less threatening than adults as a source of information about a topic that is widely treated in many cultures as having elements of shame and guilt associated with it (Swan et al, 2003).

Studies in several settings show that peers remain the main source of sexuality information for adolescents. In a study among college students in Hanoi, Ho Chi Minh City, Vietnam, over 90% of adolescents reported that they are most comfortable discussing sexual and reproductive health matters with peers of their own sex, while very few reported discussion with their parents (Vu Quy Nhan, 1996). Similarly, from case studies in 13 provinces of Indonesia, peers outrank parents as the main source of information on sexual matters for both males and females (Wirakartakusumah, 1997). In the study, 74percent males and 65 percent females indicated that they obtain their information on sexual matters from their peers, compared to 13 percent of males and 23 percent of females who reported parents as their source. In Kenya in a study among secondary school students in Homa Bay, Kenya, 35 percent of female students and 51 percent of male students reported frequent discussions in sexual matters with their peers (Nyamongo, 1995).

Peers have been cited as the primary source of information that friends act upon. (Millen and Rolls, 1997; Kaiser Family Foundation, 2002; Karanja, 2004;Oduor, 2006; Muhunzu, 2010;). The majority of the youth polled by

Centre for the Study of Adolescent (2008) in 145 schools in Nyanza, Mombasa, Nairobi and Central provinces indicated they would rather inquire about sexual matters from friends. This may be because the peer attitude is liberal and communication with peers regarding sexual intercourse and contraceptive use is open and non-judgmental

Generally, adolescents report greater sexual activity when they believe that their friends are sexually active, whether it is true or not. For example, in a study of adolescents in USA, Kaiser Family Foundation (1998) reported that when asked why they had sex for the first time, 13 percent of respondents aged 13-18 years cited peer pressure from their friends. Peer pressure was also established as the reason that led to engagement in sexual activity in a studies on premarital sex among secondary school students in Kenya (Oduor, 2006; Amuyunzu, 2010; Njau, 1998). Indeed for many young people in college it is twice as hard to remain faithful to ones' moral commitment when it comes to sex according to Makhoha (1991).

Kiragu and Zabin, (1993) study showed that adolescents who associate with sexually experienced friends are themselves much more likely to become sexually active. Bearman and Bruckner (1999) also reported that American adolescents whose friendship network included mostly low-risk friends were half as likely to experience first intercourse as were adolescents whose close friend network was composed of mostly high risk-friends. This strong influence of the peer group can be positively harnessed through guided peer counseling to achieve desired sexual behavior among secondary school students in Kenya.

Advancement in information technology, such as mobile phones, face book, whatsapp and twitter has resulted with creation of a social network that enables the peers to exchange information of all sorts. ‘Is your child texting or sexting’ (Nation, 8th Sept, 2010) refers to the widespread use of the Short Message Services (SMS) among the young people in Kenya to exchange sex messages. Parents were being called upon to pay more attention to their adolescent children’s use of the mobile phones as it had become a major platform for transmitting sexuality messages.

2.6 Influence of Sexual Information from the Mass Media on Students’ Sexual Behavior.

The mass media—television, music, magazines, movies and the Internet are important sources of sexual information. A review of literature on the media as a source of information shows that the development of information technology has increased the number of hours that people are engaged in one form of media or another. According to Roberts (2000), young people today spend 6–7 hours each day, on average with some form of media. This may be through mobile phones where they are either calling, chatting on face book or whatsapp, surfing the internet, listening to music or watching a movie. In the house, they could be watching Television, playing a video game or listening to music on radio where they learn a lot of things.

A study by Kalinga, (2010) showed that 72% of youth said their source of sexual knowledge is media and peers with the rest (28%) reporting parents, school, and church. Oduor (2006) in a study of 13-19 year olds found that 22% learnt about sex from books, 20% from films, 9% from school and 9% from family. Rukaria et al (1992) on contraceptive use among University students

found that 73% of the students had knowledge of contraceptives when in secondary school with their main source as books, magazines, films and TVs and that parents had not played any role.

Students use the media partly because there is a lot of information available for free and with little or no constraint in accessing it. The other reason why they turn to the media is because parents are reluctant to give them the information and are vague when asked questions or accuse the youth about their intentions when they show interest on the issue (Chemutai, 2011; Muhunzi, 2010; Karanja, 2004). The media is said to be better at depicting the passion and positive possibilities of sex than its problems and consequences, Were (2007).

Snegroff (1995) asserts that advertisements are filled with presentations of sex as glamorous, exciting and risk-free, with no consequences. Sexually Transmitted Infections, other than HIV/AIDS are almost never discussed, and unintended pregnancies are rarely shown as the outcomes of unprotected sex. Abortion as a topic seems too controversial for commercial television and magazines and is rarely discussed. The information they receive through the media is that sex is cool and stress free in their own observation.

Research shows that greater exposure to sexual content in media is associated with more permissive attitudes toward sexual activity, higher estimates of the sexual experience and activity of peers, and more and earlier sexual behavior among adolescents. Reigh, (2006), Wilson & Liedtke (1984) found that more men than women are likely to engage in a sexual activity after watching an arousal film, while women were inspired by romantic movies and can rival men in the frequency of sexual activity. This implies that one is more likely to

get male students watching a pornography than female students, and likely to get more female students watching romantic movies than male students.

Although sexual content in the media can affect any age group, adolescents may be particularly vulnerable. This may be partly because they are exposed to sexual content during a developmental period, and the cognitive skills that allow them to critically analyze messages from the media and to make decisions based on possible future outcomes are not fully developed (Kahn, 1998). According to the Social Learning Theory (Bandura, 1997), individuals are more likely to adopt a modeled behavior if the model is similar to the observer and has admired status and the behavior has functional value. Sex is presented as a pass time for the popular and affluent, a lifestyle a lot of youth dream about.

Music is also known to affect the listener and influence behavior. Shahid, (2006) asserts that medical research shows that music affects sexual mood by activating melatonin, the hormone from pineal gland in the brain which is turned on by darkness and flashing lights. It is the same gland which has been thought to trigger puberty and affects the reproductive cycle and sex mood. This would mean that the more time adolescents spend listening to music, the more they emotions are aroused towards sexual desire especially when they are out interacting.

It is worth noting that radio and television have been very instrumental in opening doors to the discussions of some topics which were previously taboo. In some countries like Uganda and Botswana, dramatization on radio and Television were used as a strategy to create HIV/AIDS awareness and encourage behavior change when infections in those countries had reached

alarming levels (Candace, 2015). Malamuth, et al (2001) point out information on sexuality through the radio does communicate about problems that may be associated with irresponsible sexual behavior better. In view of this review on the media as a source of sexual-related information, the study undertook to establish how sexuality information accessed through the media influences secondary students' sexual behavior.

2.7. Influence of Individual Personal Characteristics on Students' Sexual Behavior

Personal characteristics in this study refer to gender, age, ethnic background and social economic status of respondents. Review of literature point out that sexual behavior may be influenced by a combination of some personal characteristics and the independent variables in this study, namely school, family, religion, media and peer group. Gender is consistently related to intentions to engage in sexual activity, perceptions of peers' sexual activity and peer pressure (Nahom, et al,2001). United States National survey data suggested that while proportion of boys and girls engaged in sexual activity were the similar, age of initiation for males was earlier than for females. Males also anticipated more partner pressure for sex than females. In addition, males were more likely to intend to have sex before finishing high school or getting married than were females. Females have been found to be more likely than males to perceive a larger proportion of their peers were engaged in having sex and to perceive less peer pressure for sex and more support for waiting than males.

Another study examined individual characteristics and peer influences related to adolescents' sexual behavior, taking gender and sexual experience into account (Browning, et al, 2000). As part of a larger, longitudinal study investigating youth health awareness, 8th, 9th, and 10th graders reported their intentions to engage in sexual activity and use condoms in the next year, the amount of pressure they felt to engage in sexual activity, and their perceptions about the number of their peers engaging in sexual activity. Findings suggest difference by gender in intentions to engage in sexual behavior and use condoms, feelings of pressure to have sex, and perceptions about the number of friends engaging in sexual intercourse and sexual experience status.

Another view from traditional sex-role stereotypes suggest that men and women engage in sex for different reasons (Carrol, Volk & Hyde, 1995). Previous studies have supported the notion that women are more motivated by emotional expression in having sex, and men are more concerned with physical gratification. In a survey of sexual behavior, heterosexual and homosexual by Fisher (2003), respondents were asked to rate the importance of a variety of reasons for having sex and not having sex. The results showed that men and women differed in the importance attached to emotional and physical motives, with gender differences appearing in both heterosexuals and homosexuals.

Other studies show that males' responses to visual images of sexual images are different from those of females. A research by Dewitte. (2014), shows that males appear to need explicit visual stimulation, like blue movies or pornographic films to engage in sex, while women use soap operas' romantic

scenes to conjure up their fantasies an indication that females are aroused by relationship context. This study intended to find out if gender characteristics influences sexual behavior among male and female students.

Sexual behavior in relation to age has a level of correlation as well. Some studies have found a cause-and-effect relationship between viewing sexual content in the media and earlier age at first sexual intercourse. On average, viewing a lot of sexual content at a young age lowers the age at first intercourse by one year (Dawson, 2014). Adolescents are not cognitively equipped to interpret media images they watch as they may not be having normal personality development. This would therefore mean that students are likely to engage in sexual activities in the formative years of secondary education but would reduce the frequency as they mature.

Sexual Strategies Theory by Dawson and McIntosh, (2006) supposes that certain characteristics--namely, physical attractiveness in women and dominance and the ability to provide material resources in men are highly desirable to potential mates because they are evolutionarily advantageous. However, socially based characteristics (e.g., positive personality traits, common interests) are also desirable in potential mates. It was predicted that people who are weaker on evolutionarily advantageous traits (i.e., less attractive women, less wealthy men) would emphasize alternative, socially desirable traits to compensate for these perceived deficiencies (Archer, 1996). One hundred fifty-one Internet personal advertisements were analyzed for attractiveness, income, mention of physical attributes, and mention of other positive personal characteristics. Results were generally consistent with predictions. In males, both wealth and attractiveness were related to decreased

emphasis on other positive personal characteristics, while in women, emphasis on physical attributes (but not objectively rated physical attractiveness) was negatively related to emphasis on other positive personal characteristics.

Younger people are perceived as possessing a host of socially desirable attributes, some of which are the same traits attributed to attractive people. This brings into focus the role of the social- economic status as a factor that may have some influence on sexual behavior among students. Possibly among the children from the high social economic status, more male students are able to find mates than students from low socio-economic status. Like wise, attractive females from low socio-economic status may find it advantageous to get involved with wealthy males for financial gains. It is as a result of such observations that this study collected data on personal characteristics to be able to establish how they influence sexual behavior among students.

2.8. Summary of Influence of Sexual Information from Varied Sources on Students' Sexual Behavior.

In summary, literature reviewed in this chapter indicates that the school, family, religion, mass media and the peer groups provide sexuality information to secondary school students wherever they may be. It is evident too that the school programs on sex education face challenges from conservative parents influenced by their culture and their religious background. Consequently, sex education curriculum and the life skills syllabus have limited sexuality information due to many challenges during its development, namely interference from the religious bodies and parents. Literature on mass media as a source of sexuality information on the other hand reveals that mass media having undergone great advancement in

information technology has made access to all information cheap and easy for the students regardless of age appropriateness. Review of literature on the peer group as a source is shown as a very powerful support group as it offers freedom in discussion without any inhibitions found in other sources. This study therefore, was able to establish the level of influence of each of the five sources of sexuality information on secondary school students' sexual behavior in Thika West Sub County.

2.9 Theoretical Framework

This study was guided by ecological systems theory of Urie Bronfenbrenner also known as “human ecological theory” (and sometimes the bio- ecological systems theory) in interpretation of key concepts. In his book *The Ecology of Human Development: Experiments by Nature and Design* (1979), Bronfenbrenner's theory views human development in terms of an “ecological system,” that can be divided into five subsystems, or layers of environment. These are the microsystem, Mesosystem, Exosystem, Macrosystem, and Chronosystem. The quality of interactions in the first layer, the micro system, determines the child's ability to respond to interactions with other layers such as, Mesosystem, Exosystem, Macrosystem, and Chronosystem.

Ecological Systems Theory was wedded to Systems Thinking perspectives in the 1970s. Systems Thinking is the process of understanding how things, regarded as systems, influence one another within a whole. In nature, Systems Thinking examples include ecosystems in which various elements such as air, water, movement, plants, and animals work together to survive or perish. In organizations, systems consist of people, structures, and processes that work together to make an organization "healthy" or "unhealthy".

Systems thinking are not one thing but a set of habits or practices within a framework that is based on the belief that the component parts of a system can best be understood in the context of relationships with each other and with other systems, rather than in isolation. Systems-thinking focuses on cyclical rather than linear cause and effect (Meyer, 1995)

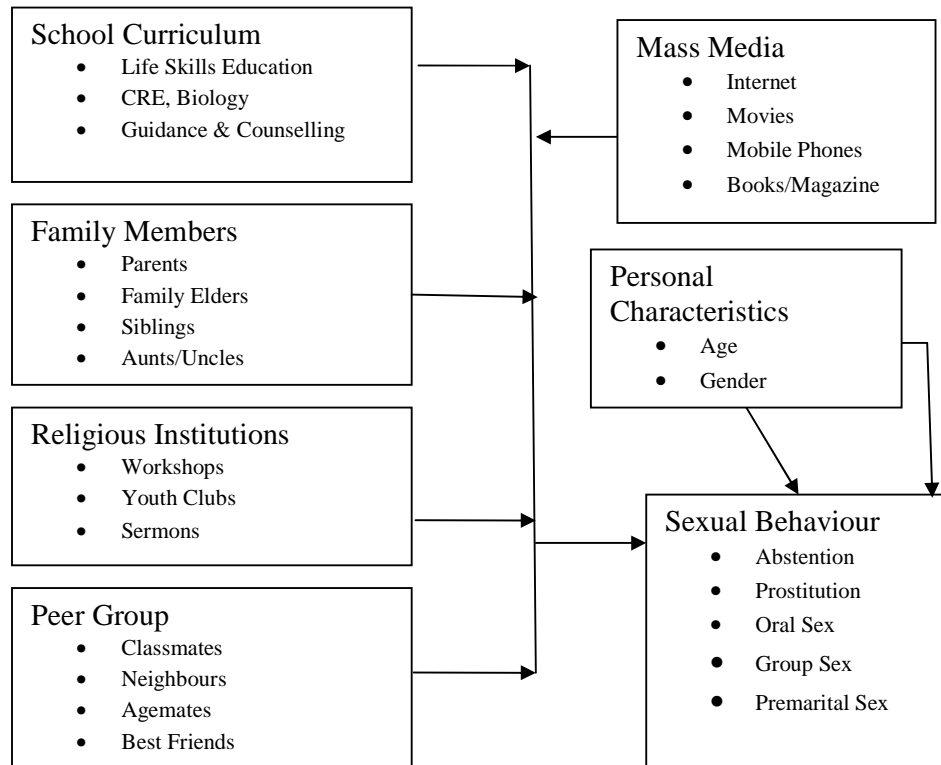
Urie Bronfenbrenner's Ecological Systems Model has been used in this study to represent the influence of the five sources of sexual related information on secondary school students' sexual behavior. They are, school curriculum, family setting, religious institutions, peer group and the media as independent variables and the outcome of adaptation manifested in sexual behavior (dependant variables)

The model shows five levels of interaction and adaptation in a child's life namely; microsystem level which includes family, religion, school and peers; mesosystem level, where a person's individual microsystems interconnect and influence upon one another; exosystem level which defines the larger social system in which the child interacts without physically being in these places; macrosystem level encompassing the cultural environment in which child lives such as the economy, cultural values, and political systems; and the chronosystem encompassing the dimension of time as it relates to a child's environment, such as the timing of a parent's death, or physiological changes that occur with the growing up of a child. The theory was therefore found to be relevant to this study as variables under study can be equated to different layers of the ecological strata where interactions result in certain behavior.

2.10. Relationship between Sources of Information and Sexual Behavior.

The Concept illustrated on Figure 1 illustrates how sources of sexual-related information (independent variables) interacts other (moderating factors) with the resultant outcome (dependant variables) as sexual behavior.

Figure 1: Conceptual Framework



Information on Figure 1 illustrates the relationship between Sources of Sexual-related information and Sexual Behavior. The diagram demonstrates how a source of sexual-related information is influenced by mediating personal characteristics such as gender or age. The figure also shows that students' personal characteristics can affect students' sexual behavior irrespective of any given source of knowledge.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter contains research methodology used in this study. This comprises of study design, target population, sample and sampling procedure, research instruments, pilot study, data collection procedure and data analysis techniques.

3.2 Study Design.

The study used survey method of research. A survey research design is a technique in which detailed information concerning a social phenomenon is gathered by posing questions to respondents. A survey research is generally used as a method in studies which have individuals as units of analysis of a phenomenon. The outcome of such investigations makes it possible to find explanations of the phenomenon in question. A survey is particularly useful in measuring people's attitudes and orientations in a large population. The research used both quantitative and qualitative data. Descriptive survey was used to measure, classify, analyze, compare and interpret data. Regression analysis was used to test the hypotheses formulated for the study. The hypotheses were tested using 5 percent (0.05) level of significance. The locale of the study was Thika Sub-county, Kiambu County, Kenya.

3.3 Target population

The study targeted form four students, their head teachers and teacher counselors from secondary schools in Thika West Sub County. The students were useful participants as consumers of sexuality information from the varied

sources. The teachers on the other hand, apart from being agents of transmission, interact with students for the better part in a year. Therefore, they are better placed in giving their opinion on students' sexual behavior. The study concentrated on Thika West Sub-County, the area with the two targeted national schools, in addition to other categories of secondary schools, that is, County, District and private schools.

3.4 Sample Size and Sampling Procedure

All together, the Sub County had a total of 33 schools (District Education Office records, 2013), out of which a total 12 schools were sampled. Only 40 form four students were sampled from the 12 sample school bringing a total of 480 student respondents. The 12 Head teachers and 12 teacher Counselors of the sample schools participated in the study.

The study used purposive sampling of schools according to categories to select sample schools. This procedure was necessary because the study targeted respondents from all categories of schools, that is, National, County, Sub County and private schools. Probability sampling technique was then used to select 12 secondary schools from lists of different categories of secondary schools. As for the two 2 national schools in the sub county, census method was used. The 12 sample schools of different types and categories were as follows; 2 national schools, (1girls boarding and 1 boys boarding); 2 County schools, (1 boys' boarding and 1 girls' boarding); 2 District boarding (1 boys and 1 girls); 2 district day (1 boys and 1 girls); 1 District mixed day; 1 private boys boarding; 1 private girls boarding; and 1 private mixed day. Form Four students were selected through systematic sampling from a class list of each

participating school. Students from schools with many streams were selected by dividing 40 by the number of streams to get equal number of students from each stream. Stratified sampling was carried out in mixed schools so as to obtain a representative sample of both genders.

3.5 Research Instruments

The study used questionnaires for students and interview schedule for teacher counselors and head teachers. The questionnaire was designed using both closed and open-ended questions. One advantage of using a questionnaire is that it saves time and can be administered to a big population. The interview schedule was used in the second phase of data collection with the teacher counselor and the head teacher. Interview schedule was used to obtain qualitative data necessary to enrich the study findings from quantitative data. Tape recorders were used during the interviews where participant accepted for purposes of further content analysis. However, some head teachers declined the request to be tape recorded.

3.6 Pilot Study

A pilot study was conducted in another school in Thika West Sub County in order to test research instruments or establish level of reliability. The purpose of pre-testing the research instruments was to verify whether the questionnaires were clear and understood by the respondents, and identified problems respondents were likely to encounter in completing the questionnaire. To enhance validity, the pilot study would assist in establishing whether the questionnaires were going to provide data needed for the study. Any problems that were noted were rectified before proceeding to sample respondents to collect data. The procedure used in pre-testing was identical to

those used during actual study or data collection. Therefore the pilot study revealed whether the anticipated analytical technique was appropriate as proof of reliability

3.7 Data collection Procedure

The researcher was able to obtain a permit to collect data from National Council of Science and Technology. The researcher then contacted the District Commissioner in charge of Thika West for clearance to collect data in the District. The researcher further contacted the District Education Officer for clearance to collect data from schools in the District. The researcher then visited each of the sampled schools for familiarization and made appointments with the head teachers of the sampled schools. The researcher with the help of trained research assistants administered questionnaires to students. In certain occasions, teacher counselors of sample schools assisted in administering questionnaires. While conducting the interviews, to avoid bias and capture valid data, the researcher obtained qualitative responses of Key Informant Interviews (KII), by writing of feedback manually and tape recording for further content analysis.

3.8 Data Analysis Techniques

The study used descriptive statistics such as frequency distributions and percentages as well as inferential statistics. Data was then appropriately coded, entered and analyzed using the Statistical Package for Social Sciences software (SPSS). Hypotheses were tested at 0.5% level of significance using regression analysis in order to establish the relative importance of different sources of sexual related information on students' sexual behavior.

The study also employed interactive data analysis for information gathered through interviews. After each interactive activity the researcher listened, transcribed and checked for any unanswered questions. The researcher then strove to answer these questions in subsequent activities, so that consequent Key Informant Interviews were informed by previous ones. Reading through the transcripts helped the investigator pick out emerging themes.

3.9 Ethical Issues.

Confidentiality was observed at all stages of the research through self administration of questionnaires. The information gathered was kept in safe custody and only used for the purpose of this study only. Further, students were asked not to write their names on the questionnaire or the name of their school. In addition, given that the students had not reached the age of maturity, permission from their parents was sought through the head teachers of the school. Key Informants were asked to read informed consent form explaining the ethical stand, where the researcher signed on their behalf after verbally agreeing to the terms.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the research findings on basis of bio data, research objectives and corresponding research hypothesis. Data was collected by means of both self administration of questionnaires and face to face interviews. Questionnaires were administered to randomly selected students from public and private secondary schools. Interviews were held with head teachers and teacher counsellors from the schools where students participated as respondents. Statistical analysis of the data is presented and interpreted to show the relationship between the variables studied and their influence on sexual behaviour among secondary school students in Thika West Sub-County. Descriptive statistics were used to analyze data. In addition, hypotheses were tested using regression analysis at 0.05 or 5% level of significance.

4.2. Instrument Return Rate.

Analysis of rate of return of questionnaires and availability of Key Informant Interviews was carried out according to the category of sample schools. The breakdown is presented in Table 4.1.

Table 4.1: Instrument Return Rate by School Category

Respondents' School category	Students		Head teachers		Teacher Counsellors	
	Frequency	%	Frequency	%	Frequency	%

National	70	21.7	2	16.7	2	18.2
County	118	36.7	2	16.7	2	18.2
District	132	41.0	5	41.6	4	36.4
Private	2	0.6%	3	25	3	27.2
Total	322	100	12	100	11	100

The information captured in Table 4.1 shows that a total of 322 out of 480 sampled students participated in the study. This is a 67% return rate that is acceptable by research standards. Therefore analysis of data was based on (n=322). Respondents from National schools comprised 21.7%, County schools, 36,6%, District schools 41.0%, and 0.6% failed to indicate their type of schools (private) in the questionnaire resulting to the category of ‘others’. The Table also reveals that a total of 12 head teachers and 11 teacher counsellors participated in the study. Other participants included National school head teachers at 16.7%, County schools 16.7%, Sub County schools 41% and private schools 25%. National school teacher counsellors constituted a sample of 18.2%, county schools 18.2%, District schools 36.4% and private schools 27.2%. The study then analyzed students’ personal characteristics

4.3. Demographic Information of Respondents.

The demographic information of respondents was also captured in the study. The first was the gender of the respondents which was tabulated and presented in Table 4.2.

Table 4.2: Gender of Respondents

Gender	Students		Head teachers		Teacher counselors	
	Frequency	%	Frequency	%	Frequency	%
Male	123	38.2	7	58.3	3	27.3
Female	199	61.8	5	41.7	8	72.7
Total	322	100	12	100	11	100

The analysis in Table 4.2 indicates that student gender distribution was 61.6% female and 38.2% males. As for the gender of Key informants, head teachers constituted 58.3% males while their female counter parts formed 41.7%. Teacher counselors were 83.3% females and 16.7% male. These results reflects an aspect of gender trait where studies show that majority of men are not forthcoming in expressing themselves while the reverse is the case with majority of women (Nahom, et al, 2001). This may be the case considering that although questionnaires were given to both gender equally, the return rate among the boys was very low. The statistics are also against the educational trends in the country today, where the higher one looks on the educational radar, the .number of female students go down.

The second set of demographic information was aimed at establishing the age of respondents. Results of the analysis are tabulated in Table 4.3

Table 4.3: Age of Student Respondents

Age of respondents	Frequency	Percentage
15	13	4.0
16	25	7.8
17	125	38.8
18	100	31.1

Over 18	59	18.3
Total	322	100

The data in Table 4.3 reveal that majority of student respondents were aged 17 years with 38.8%, 18 years 31.1%, over 18 years 18.3%, 16 years 7.8% and 15 years 4% respectively. The age bracket of student respondents confirms that participants were actually within the age bracket when they are supposed to be in Form four level of education in Kenyan secondary schools.

4.4. Marital Status of Student Respondents' Parents

The study sought to establish the marital status of the parents of student respondents. The information would make it possible to analyze whether the status has any impact on the children's sexual behaviour. It would clear the contention on constant reference of cases of discipline in secondary schools as spear headed by single parents' children. A similar perception was noted among the school administrators. An overwhelming majority of head teachers (90%) laid a lot of blame on single mothers' as a major source of negative influence to their children's sexual behaviour. The marital status of the parents is illustrated in the Table 4.4

Table 4.4: Marital status of student respondents' parents

Parent status	Frequency	Percentage
Single	56	17.4
Married	237	73.6
Separated	16	5.0
Divorced	11	3.4
Others	2	0.6
Total	322	100

The results in Table 4.4 shows that, 73.6% are married, 17.4% are single, 5% are separated, 3.4% divorced and 0.6 did not provide information on the status. This distribution indicates that although single parents continued to be singled out as major influence on students' negative sexual behaviour, the numbers are not as large. However, considering the level of sharing of information demonstrated by responses, and the fact that the peer group is a source of sexual related information, the study viewed the small group of individuals as capable of passing information to others.

4.5. Fathers' Level of Education.

The study sought to find out the level of education of the parents of student respondents. The aim was to find out if the level of education of the parent has influence on category of the school a child joins for secondary education. Results are shown in Table 4.5.

Table 4.5: Father's level of education and school category cross tabulation

Fathers' Level of Education	School Category				Total-%
	National-%	County-%	District-%	Others-%	
No Formal Education	0.6	0.9	1.6	0	3.1
Primary Education	1.2	4.0	5.6	0	10.9
Secondary Education	1.9	9.3	12.7	0	23.9
Diploma Education	3.4	4.7	9.0	0	17.1
University Education	14.6	17.7	12.1	0.6	45.0
Total	21.7	36.7	41.0	0.6	100

The analysis in Table 4.5 shows that the father's level of education seems to influence the category of school that their children attend. As illustrated parents with university education have highest number of their children in National and County schools, 14.6% and 17.7% respectively, and 12.1% in District schools and 0.6% in Private schools. Those with diploma education

have 3.4% and 4.7% respectively and 9% in District schools. Those with secondary education have 1.9% and 9.3% in National and County respectively and 12.1% in District schools. Those with primary education, have 1.2% and 4.0% respectively and 5.6% in District schools. Parents with no formal education have the least numbers of students in all categories, with 0.6% and 0.9% in National and County schools respectively and 1.6% in District schools. The pattern is not very different when it comes to level of education of the mothers. These findings agree with others where studies indicate that the level of education of parents has a correlation with the parents' aspiration of his/her children's education (Ohon, 2002). The higher the level of education of a parent, the more likely it may translate to a better job, and better social economic status. Therefore their children go to better schools in terms of teaching facilities for education. Another aspect of demographic information sought was to get a view of students' religious background, individually and that of their parents.

4.6. Students' Religious Affiliation

The study also gathered information on students' religion with a view of finding out whether their religious affiliation may have any influence on their sexual behavior. It would also serve as an indicator whether any denominations provide sexual related information to its adolescent members. The information is presented in Table 4.6

Table 4.6: Religion of Student Respondents

Students religion	Frequency	Percentage
Protestant	129	40.1
Catholic	112	34.8
Pentecostal	54	16.8
Islam	20	6.2
SDA	3	0.9
Atheist	2	0.6
Freemason	1	0.3
Independent	1	0.3
Total	322	100

The results in Table 4.6 shows that majority of student respondents are followers of a particular religion, with 40.1% Protestants, 34.8% Catholics, 16.8% Pentecostals, 6.2% Muslims, 0.9%SDA and 0.3% Independent and 0.3% Free masons. Only 0.6% of the total sample indicated they are pagans or atheists. These findings are similar to another by Kangara (2004) in a study of youth, Church and Sexuality in Kenya, in a study on whether youth in Kenya are given lessons on sexuality. The findings indicated that over 90% of youth in Kenya identified with a religious denomination. This shows that it would be possible to instruct a large number of the youth on sexual matters if the church leadership undertook the task.

4.7 Religious Affiliation of Students' Parents

The study also tried to establish the religious affiliation of the parents with the aim of establishing whether it has influence on the student's choice of denomination. The distribution of religious affiliation of parents is presented in Table 4.7

Table 4.7: Religious Affiliation of Students' Parents.

Religion of parent	Frequency	Percentage
Protestant	130	40.4
Catholic	115	35.7
Pentecostal	55	17.1
Islam	17	5.3
SDA	3	0.9
Independent	1	0.3
Pagan	1	0.3
Total	322	100

The data in Table 4.7 point out that among the parents of the respondents, 40.4% are Protestants, 35.7 Catholics, 17.1% Pentecostals, 5.3% Muslims, 0.9% SDA, while Independent and Pagans had 0.3% each.

The distribution on religion for both students and their parents indicate that majority of students remain in the denominations of parents after they join secondary school. The 40 students from each of the 12 secondary schools (in total 480 students) distributions of the population for dominant churches seem to tally with the history and the patterns of establishment of the Christian denominations in the geographical region in which this study was carried out. The churches with majority members are Protestant churches composed of Anglican Church of Kenya (ACK), Presbyterian Church of East Africa (PCEA) and Africa Inland Church (AIC), and the Catholic Church. They are founded from the efforts of the first missionary societies from European

Countries who opened their first missionary churches in that region in the late nineteenth century (KIE, 1989). The Pentecostals are products of later revival movements mostly from United States of America and a few are offshoot from the mainstream churches. Islam has the least number and students are found in National Schools.

4.8. Sexual activities in schools

Before testing of hypothesis on sources of information that may have influence on secondary school students' sexual behavior, the study also sought to ascertain the kind of sexual behavior that is manifested by secondary schools students. By use of a likert scale students were provided with statements to rate their opinion, on students' engagement in sexual activities such as between themselves, sex between students and married people, engagement in unprotected sex, oral sex, homosexuality, lesbianism, group sex and prostitution. The students' opinion ratings on engagement in sex between secondary school students are presented in Table 4.8

Table 4.8: Students' Opinion on 'no' sex between Secondary School

Students

Student's rating	Frequency	Percentage
Strongly agree	39	12.1
Agree	16	5.0
Disagree	94	29.2
Strongly disagree	173	53.7
Total	322	100

The information in Table 4.8 shows that majority of students disagree that students do not engage in sex among themselves, with 53% strongly

disagreeing, 29% disagree, and only 5% agree and 12.1% strongly agree. In essence this means that 82.9% of the students are of the opinion that secondary school students engage in sex among themselves. This concurs with the opinion of the teachers where 100% reported cases of sexual activity. All teacher counsellors reported cases of “coupling” as rampant in mixed schools, in respect to intimate coupling observed during secondary school events. This behaviour often ends with suspension of the student ‘couple’ from the school.

4.9. Relationship between School Category and students’ Sexual activity.

In order to find out more on whether sexual activity is related to certain schools, data was further analyzed through cross tabulation of opinion ratings of students on their involvement in ‘sex between students’ and ‘category of school’. Results are shown in Table 4.9.

Table 4.9: School Category and Students’ Opinion of ‘no’ sex between Students

School Category	Strongly agree	Agree	Disagree	Strongly Disagree
National	7.1	2.9	28.6	61.4
County	9.3	3.4	29.7	57.6
District	17.4	7.6	28.8	46.2
Private	0.0	0.0	50.0	50.0
Total	12.1	5.0	29.2	53.7

Results in Table 4.9 indicate that students from all categories of secondary schools engage in sexual activities among themselves. From national schools, 61% strongly disagreed with the statement that there is no sex taking place between students, 28.6% disagreed, while 2.9% agreed and 7.1% strongly agreed. In County schools, 57% strongly disagreed with the statement, 29.7% disagreed, 3.3% agreed, and 9.3% strongly disagreed. For those in district schools, 46.2% strongly disagreed, 28.8% disagreed, 7.6% agreed and 17.4%

strongly agreed. Out of those who are in private schools category, 50% strongly disagreed, 50% disagreed and none agreed or strongly agreed with the statement. The result confirm the findings of other studies that show that students are sexually active even as stakeholders continue debate on whether to include sexuality sex education in the school curriculum. The study looked at the relationship between opinion of students on sexual activity and the type of school they attend.

4.10. Relationship between School Type and Sexual activity.

Further analysis of the data was carried out to establish whether the opinion ratings may be associated with the ‘type of school’ a student attends. Cross tabulation of type of school with opinion rates of ‘sex between students’ was done. The results are shown in Table 4.10.

Table 4.10: School type and students’ opinion on ‘no’ sex between students.

School Type	Strongly Agree- %	Agree-%	Disagree- %	Strongly Disagree- %	Total- %
Mixed Day	10.3	8.6	31.0	50.0	100
Mixed Boarding	13.3	6.7	26.7	53.3	100
Boys Day	15.6	4.4	24.4	55.6	100
Boys’ Boarding	7.4	11.1	18.5	63.0	100
Girls’ Day	4.3	5.7	37.1	42.0	100
Girls’ Boarding	11.8	1.6	30.7	55.9	100

Data in Table 4.10 reflects a close pattern of students’ opinion from different categories and school type on account of ‘no’ sex between students. Results show that a total of 50%% from mixed day strongly disagreed, 31% disagreed,

while only 8.6% agreed and 10.3% strongly agreed with the statement. In mixed day secondary schools, 53%, strongly disagreed, 26.7% disagreed, while 6.7% agreed and 13.4% strongly agreed. From boys' day secondary schools, 55.6% strongly disagreed, 24.4% disagreed, while 4.4% agreed and 15.6% strongly agreed. From boys boarding 63% strongly disagreed, 18.5% disagreed, and only 11.1% agreed and 7.4% strongly agreed. Girls' day, 42.9% strongly disagreed, 37.1% disagreed, while 5.7% agreed and 14.3% strongly agreed. From girls boarding, 55.9% strongly disagreed, 30.7% disagreed while 1.6% agreed and 12.1% strongly agreed. In all schools, 100% of head teachers and teacher counselors conceded that secondary school students engage in sexual activities. The results indicate that the opinions of students about sexual activity among students are almost similar across the board. The implication is that students sexual activity is more informed on teenage than the type of schools they attend.

4.11. Sexual relations between Students and Married People.

On establishing sexual behavior with other people, students' opinion on 'no' sex between secondary school students and married people was sought and responses from the respondents are as tabulated in Table 4.11

Table 4.11: Students' Opinion on 'no' sex between Students and Married People.

Student's responses scale	Frequency	Percent
Strongly Agree	30	9.3
Agree	52	16.1
Disagree	147	45.7
Strongly Disagree	93	28.9
Total	322	100.0

The analysis in Table 4.11 shows that secondary school students engage in sex with married people as 28.9% strongly disagreed with the statement, 45.7%

disagreed, while only 16.1% agreed and 9.3% strongly disagreed. The results are supported by the responses in the open ended questions in the questionnaire that had sought to find out why those who engage in sex do so. A significant number of students cited money and gifts as some of the reasons. Similar findings were registered in a study by Centre for the Study of Adolescents (2009) where a number of students said the same. In that study, young adolescents between ages 12-17 years indicated they had sex especially with older people in exchange for money and air time.

4.12. Students' Engagement in Unprotected Sex

To find out if students use protection 'if' and 'when' they engage in sexual practices, opinion rating of a statement that secondary school students do 'not' engage in unprotected sex was also sought. The responses are presented in Table 4.12.

Table 4.12: Students Opinion on 'not' Engaging in Unprotected Sex

Student responses scale	Frequency	Percent
Strongly Agree	30	9.3
Agree	44	13.7
Disagree	113	35.1
Strongly Disagree	135	41.9
Total	322	100.0

The findings in Table 4.12 show that majority of students are of the opinion that students engage in unprotected sex as 41.9% strongly disagreed with the statement, 35.1% disagreed, while 13.7% agreed and 9.3% strongly agreed. Since a total of 77% disagree and 23% agreed, the responses in the study indicate that students in secondary schools engage in sex without using protection. This concurs with other studies by Centre for Studies in Adolescent Health (2009) which had shown that adolescents do not just engage in sex but

they do so without using protection. This leaves students vulnerable to HIV/AIDS infections and unwanted pregnancy. To navigate more on manifestations of sexual behavior, the study also looked at their behavior in relation to oral sex.

4.13. Students and Oral Sex

Ratings by students with regard to students engagement in oral sex was sought through a statement that students do ‘not’ engage in oral sex. The responses are as presented in Table 4.13.

Table 4.13: Students’ Opinion on ‘not’ Engaging in Oral Sex

Students’ responses scale	Frequency	Percent
Strongly Agree	31	9.6
Agree	34	10.6
Disagree	117	36.3
Strongly Disagree	140	43.5
Total	322	100.0

The results in Table 4.13 points out that majority of students are of the opinion that secondary school students engage in oral sex. Some 43.5% strongly disagreed with the statement, 36.3% disagreed while 10.6% agreed and 9.6% strongly agreed’. This shows that secondary students know about oral sex. This is supported by open ended responses to a question where students were asked to name other sources of sexual related information they use. Majority of students indicated that they learn various styles of sex through the internet such as ‘pussy lick’ and ‘dog style’. While not all of those who mentioned it may have participated in it, so many may have learnt about it from their peers.

4.14. Students and Homosexuality

The other opinion sought was on rating of a statement that students do ‘not’ engage in homosexuality. The results are presented in Table 4.14.

Table 4.14: Students' Opinion on 'no' Homosexuality in Secondary Schools

Student responses scale	Frequency	Percent
Strongly Agree	43	13.4
Agree	45	14.0
Disagree	131	40.7
Strongly Disagree	103	32.0
Total	322	100.0

The findings in Table 4.14 show that homosexuality is rife in secondary schools. This is because 32% strongly disagreed that it is not there, 40.7% disagreed, while 14% agreed and 13.4% strongly agreed. This gives a total of 72.7% suggested there is homosexuality in secondary school against 27.3% who said it is not there. The responses concur with findings from head teachers where 50% of those from boys' secondary schools conceded existence of homosexuality, while 50% said it used to be there but not during their time, or it was hard to tell of its existence due to secrecy around it. However, 80% of teacher counselors confirmed it exists and 20% said it is rare.

4.15. Students and Lesbianism

A similar opinion was sought over involvement lesbianism by use of a statement that students do 'not' engage in lesbianism. The responses are captured in Table 4.15

Table 4.15: Students' Opinion on 'no' Lesbianism in Secondary Schools

Students scale responses	Frequency	Percent
Strongly Agree	27	8.4
Agree	38	11.8
Disagree	101	31.4
Strongly Disagree	156	48.4
Total	322	100.0

The data in Table 4.15 indicate that majority of students are of the opinion that secondary school students engage in is lesbianism while in schools. This is because 48.4% strongly disagreed with the statement that there is no sexual practice of lesbianism, 31.4% disagreed, while 11.8 agreed and 8.4% strongly agreed. This gives a total of 79.8% indicating its existence and 20.2% saying it does not exist. This is in concurrence with information provided through key informant interviews where head teachers and teacher counselors reported that lesbianism is rife among girls' boarding secondary school. In an attempt to curb the practice some schools had come up with strict rules banning practices like girls holding hands, kissing, sleeping together or writing notes to one another. A question over the same to the head teacher has 57.1% and 42.9% stating they have never dealt with such a case. When the question was addressed to teacher counselors, 66% accepted lesbianism exists in their schools while 34% said they were not sure.

4.16. Students and Group Sex

The other opinion sought was on group sex, where the statement was that secondary school students do 'not' engage in group sex. The responses are presented in Table 4.16

Table 4.16: Students' Opinion on 'no' Group Sex among Students

Students responses scale	Frequency	Percent
Strongly Agree	43	13.4
Agree	78	24.2
Disagree	119	37.0
Strongly Disagree	82	25.5
Total	322	100.0

Information in Table 4.16 show that a large number of students are of the opinion that students engage in group sex. Just like other sexual activities,

25.5% strongly disagreed, 37% disagreed, while 24% agreed and 13.4 strongly agreed.

4.17. Students and Prostitution

Lastly opinion ratings were sought on prostitution through a statement that secondary school students do ‘not’ engage in prostitution. The results are shown in Table 4.17

Table 4.17: Students’ Opinion on ‘no’ Prostitution

Students responses scale	Frequency	Percent
Strongly Agree	42	13.0
Agree	65	20.2
Disagree	113	35.1
Strongly Disagree	102	31.7
Total	322	100.0

The data in Table 4.17 shows that 13.0% strongly disagreed, 20.2% agreed while 35.1% disagreed and 37.7% strongly disagreed. With a total of 66.8 generally agreeing and 33.2 disagreeing, the study is of the view that secondary school students engage in prostitution. The findings seem to agree with latest reports from the media implying that the innocent looking uniformed school girls by day changed into prostitutes by night to be able to feed for themselves and pay their school fees (The Nairobi, February, 2015). Other reports mentioned cases of University female students being among a group of commercial sex workers nabbed during law enforcement operation in Nairobi streets.

4.18. Teachers' Opinion on Sexual Activities among Students

Key informants were also asked about sexual acts of prostitution among students where, 72.7% of head teachers admitted some secondary school students engage in prostitution, with 22.3% saying no. Among teacher counselors, 67.2% conceded it exists while 32.8% denied. Where prostitution by students was reported, it is said to be among both boys and girls, where boys serve male homosexuals particularly in Thika town and elderly female clients. Girls serve older men for money to buy expensive items in order to look like their heroes or favorite celebrities. These results agreed with other studies (Amuyunzu, 2005) that revealed that young girls engage in sex with multiple partners for money.

Several examples were narrated where head teachers came to know about it after the students got involved in a fracas with their male homosexual clients that drew the attention of law enforcers. Others learnt from parents who realized months later that their sons had been cohabiting with older girlfriends while studying as day scholars.

4.19. Students' Reasons for Engaging in Sexual Activities

Students were also supposed to respond to an open ended question about their opinion as to why some secondary school students (other than themselves) engage in sexual activities. Their responses were coded analyzed and shown in Table 4.18

Table 4.18: Students' Reasons for Engaging in Sexual Activities

Influence to becoming Sexually active	Number of students	Percentages
1. Peer pressure	187	52.8
2. Media	43	12.2%
3. Pleasure	40	11.3%
4. Curiosity	34	9.6%
5. Money	13	3.7%
6. Lack of Knowledge	12	3.4%
7. Poor Communication	11	3.1%
8. Being immoral	8	2.2%
9. Drugs	4	1.1%
10. Practice for Marriage	2	0.6%
Total	N=354	100%

Results in Table 4.18 shows that there were 353 responses to that question as some students gave more than one reason. Out of those, 50.4% attributed it to incitement by peers with some citing stories about sexual escapades shared by students in the dormitories after holidays, 12.2% media through exposure to pornography, movies and radio talk shows, watching porn materials and being coerced by a friend, 11.3% to enjoy or get satisfaction, 9.6% said it is out of curiosity, to taste the unknown 8.5%, 3.7% for money, 3.4% out of ignorance, 2.3% being immoral and 0.6% practice for marriage. What comes out is that most of the reasons mentioned fall under mass media and follows the peer group in popularity.

4.20. Students and Abstention from sex

Students were asked to give reasons that made them to abstain from sexual activities. They gave reasons summarized in Table 4.19

Table 4.19; Students' Reasons for Abstaining from Sex.

Reasons For Abstaining	Frequency	Percentage
1. Self respect	66	19.3
2. Fear of Pregnancy	53	15.4
3. Fear of STI	49	14.3
4. Religious conviction	35	10.2
5. Fear of HIV/AIDS	33	9.6
6. Waiting for right time	30	8.7
7. Fear of outcome	17	4.9
8. Lack of opportunity	15	4.3
9. Good parental upbringing	13	3.8
10. Guidance & Counselling	11	3.3
11. Focused on studies	10	2.9
12. They are outdated	6	1.8
13. Fear of breaking virginity	3	0.9
14. Avoid judgement from society	1	0.3
15. Fear of being discovered she is circumcised	1	0.3
Total	342	100

According to the information in Table 4.19, reasons given for abstaining are selfrespect, 19.3%, fear of getting pregnant, 15.4%, fear of contracting sexually transmitted infection, 14.3%, religious conviction, 10.2%, getting infected with HIV/AIDS, 9.6%, waiting for the right time, 8.7%, fear of outcome, 4.9%, lack of opportunity 4.3, 3.8%, guidance and counseling, 3.2%, focus on studies. 2.9%. There was also a group of 1.8% who felt that those who abstain are backward, ignorant and outdated. There was another 0.9% who fears the pain of breaking virginity, 0.3% who fear judgment by society and 0.3% said they are ashamed for having been circumcised. Among those who cited lack of opportunity said they fear parents or their benefactors. The findings are a reflection of the students groping in the unknown to as reasons given do not in anyway reflect that it is as a result of heeding the good advice from the parents or the church.

Further information on students' involvement in sexual activity was gathered when students who were asked to indicate whether they had engaged in sexual activity or not. The results are presented in Table 4.20

Table 4.20: Students' Sexual Encounter

	Frequency	Percent
Yes	103	32.0
No	219	68.0
Total	322	100.0

Data analysis in Table 4.20 shows that 32% of the respondents have had sex while 68% indicated they had not. This is a very significant population of sexually active students in secondary school. The findings suggest that students need sex education while in school as it will enable them to understand the pro and cons of premarital sex. Trials to provide sex education to students has proven that sex education can influence delay of onset of sexual activities among adolescents, and when they decide to have sex, they do take precautions against sexually transmitted infections such as HIV/AIDS and pregnancy (Kirby, 2012)

4.21. Students Sources of Sexual Information.

Before testing the hypotheses, data on the rate of sexuality information available from each of the five selected sources was analyzed. The findings are presented on Table 4.21

Table 4.21: Students' Rating of Sources of Sexuality Information

Source	Frequency	Percentage
Mass Media	274	28.7%
Peer Group	264	27.6%
School Curriculum	177	18.5%
Religious Institutions	123	12.9%
Family Institution	118	12.3%
Total	956 (n=956)	100%

Data in Table 4.21 reveals that Mass Media is the greatest source of sexuality information among secondary school students with 28.7%, followed closely by Peer Group with 27.6%, School curriculum with 18.5%, Religious

Institution, 12.9% and Family members 12.3%. The findings show that mass media as has overtaken the peer group that has been indicated as the most powerful in many studies. The latest study was by Kalinga (2010) in a study of influence of sex education on adolescents' sexual behavior in Thika District Kenya. In that study, friends were the highest source with 42.2%, and Media 23.4%, parents 14.1%, school 7.3%, church 6.8%, relatives 4.6%, and brother/sister 1.6%. Additional information on sources of sexual-related information was solicited from students through an open-ended question. The results are presented in Table 4.22

Table 4.22: Students' Additional Sources of Sexual Information.

Other sources of information	Frequency	Percent
Magazines	35	24.0
Internet	19	12.3
Porn	18	12.0
Friends	14	9.0
Social media	10	6.5
Personal experience	8	5.2
Counseling	7	5.0
Seminars	6	4.0
Camps	4	3.0
Aunties (house girls)	4	3.0
Discussion	3	1.9
Family members	3	1.9
Parties	3	1.9
Phones	3	1.9
Sex with a teacher	3	1.9
Domestic animals	3	1.9
Secular music	3	1.9
Games	2	1.4
General knowledge	2	.1.4
Total	(n=156)155	100.0

Information in Table 4.22 reveals that, media related sources were cited by 56.8% (where 24% magazines, internet 12.4%, 12% porn, social media 6.5%, phones 1.9%), friends 9%, personal experience 5.2%, counseling 5%, seminars 4%, camps 3%, aunties 1.9%, discussions 1.9%, families 1.9%, parties 1.9%, sex with the teacher 1.9%, sex with animals 1.4%, secular music 1.4%, games 1.4%, general knowledge 1.4%, neighborhood 1.4%, morals 0.6%. These findings confirm that those from the structured question, that the media is the most resourceful source of sexual-related information among students. It is logical to conclude that all kinds of students, such as the isolated, neglectees, loners and the popular ones have access to media as a source and may act as independent sources of information besides any other source. It was important to find out then if the level of influence on behavior relates to the most accessible source; therefore the data was subjected to regression analysis for each of the research hypothesis.

4.22 Testing of Hypotheses.

Eco systems theory by Bronfenbrenner has been used in the interpretation of key findings in this study. The theory was found relevant in the attempt to understand how various forces within the systems in terms of sources of information on sexual knowledge influence students' sexual behavior. Testing of hypothesis is important in this study because it subjects the data to scientific analysis thereby giving credence to the findings. The testing of hypothesis assists in establishing the relative importance of each of the sexual-related sources of information on students' sexual behavior.

4.23. Testing of Hypothesis 1

The **first** hypothesis stated that; **Sexual information received through the school curriculum does not significantly influence sexual behavior.** By use

of regression model, the results of the analysis of school curriculum as a source of sexual-related information are presented in Table 4.23.

Table 4.23: School Curriculum as a Source of Sexual Information

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.133 ^a	.018	.014	.66744

a. Predictors: (Constant), School Curriculum

The analysis in Table 4.23 presented in the regression model indicates that sexuality information received through the school curriculum is associated to students' sexual behavior by a constant of 13.3% (R= 0.133) .This is a weak but significant association of school curriculum as influencing sexual behavior. This can be attributed to the fact that it is only limited information that is provided through the school curriculum in comparison to mass media and the peer group.

The findings are further tabulated to demonstrate whether sexuality information received through the school curriculum can predict sexual behavior. The results are illustrated in Table 4.24

Table 4.24. ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2.549	1	2.549	5.723	.017 ^b
Residual	142.553	320	.445		
Total	145.102	321			

a. Dependent Variable: behavior

b. Predictors: (Constant), School Curriculum

The analysis in Table 4.24, ANOVA points out that the model can predict sexual behavior of students using information availed in the curriculum being

the predictor. The level of significance is at 0.017 which is less than 0.05. We can therefore reject the null hypothesis that curriculum as a source of sexual related information cannot influence sexual behavior.

The most important table is the coefficient table showing the actual regression value of association between school curriculum and sexual behavior. The results are presented in Table 4.25.

Table 4.25: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.769	.110		25.237	.000
SchoolCurr	.168	.070	.133	2.392	.017

a. Dependent Variable: behavior

The information in Table 4.25 shows the regression value of school curriculum at 2.769. If we present sexual behavior by the symbol B, and school curriculum as a source of information by the symbol C, then the model equation is given by $B = 2.769 + 0.168 \times C + \text{error}$. This results indicate that the information provided through the school curriculum is likely to have a higher impact on students sexual behavior had it not been that what is offered is too little.

Students' responses on their opinion of school curriculum as a source were sought. The ratings are tabulated in Table 4.26.

4.26: Student ratings on curriculum as a source of sexual information.

	Frequency N=322	Percentage
Strongly Agree	56	17.4
Agree	121	37.7
Disagree	61	19.0
Strongly Disagree	83	25.9
Total	321	100.0
Total	322	

Information in Table 4.26 reveals that majority of students agreed with the view that school curriculum provides them with sexuality information, where 17.4% strongly agreed, 37.75% agreed, 19% disagreed and 29.9% strongly disagreed. The close tie between agree and disagree implies that there is a reasonable amount of information delivered from the source but the problem is that it is not enough or sufficient.

Head teachers from sampled schools were interviewed as key informants. They were asked to give their opinion on whether sexuality information is transmitted through the school curriculum was adequate. The results are illustrated in Table 4.27.

Table 4.27: Head teachers' Opinion on Curriculum as a Source of Sexual Information.

Rate of scale	Frequency	Percentage
1-Very adequate	-	-
2-adequate	5	14.28
3-inadequate	29	82.9
4-very inadequate	1	2.9
Total	(n=35)	100.0

The data on Table 4.27 indicate that majority of head teachers do not think that the school curriculum provides any meaningful sexuality information as only 14.28% are of the view the information transmitted was very adequate, while 82.9% think it was inadequate and 2.9% felt it was very inadequate.

Head teachers indicated that sexual-related information is integrated in subjects like CRE and Biology, and it is complemented by teacher counselors under life skills program. In their opinion, it is not adequate because it is too shallow. According to them, Christian ethics taught in Christian Religious education is too economical on information; in Biology it is too academic as human reproduction, while life skill education is never taken seriously as priority is given to examinable subjects.

Teacher counselors were asked the same question and their opinion matched that of the head teachers as illustrated in Table 4.28.

Table 4.28: Teacher Counsellors’ Opinion on School Curriculum as a Source of Sexual Information

Rate of scale	Frequency	Percentage
1-Very adequate	-	-
2-adequate	1	2.5
3-inadequate	39	97.5
4-very inadequate	-	-
Total	(n=40)	100.0

The analysis in Table 4.28 points out that majority of teacher counselors, 97.5%, was of the opinion that sexual related information transmitted through the school curriculum was inadequate and only 2.5% thought it was adequate. In the discussion during the interview, teacher counselors asserted that they are neither trained nor allocated teaching time in the school time-table. In addition they have normal teaching loads in other subjects just like other teachers.

Teacher counselors also expressed their concern to the fact that they are not supposed to be seen to be offering sex education to students as this would attract anger from some stakeholders who are against it. This is because sex

education is perceived by some of the stake holders to encourage promiscuity among the youth.

Overall the school curriculum in this study is found capable of influencing sexual behavior to some extent, when it is considered that it is not given a lot. It would appear increased awareness in sexuality information through the school curriculum would assist students to make informed choices and possibly lead to decrease of cases of sexual activity. Furthermore, a large number of students indicated their preference of the teachers and teacher counselors as a preferred agent of transmitting sex education to them. In another study by Brockman (2012), 31% of girls and 38% of boys, referred to teachers as the most important source of sex education. Other studies showed that more information on sexuality results to delay in onset of sexual activity as opposed to the views of opponents. A study by Kirby (2011) carried out on the impact of sex education on the sexual behavior of young people is one of many studies. Out of 97 studies, 73 assessed the impact of sex education programs on the timing of initiation of sexual intercourse. Results indicated that in total, 34 per cent of those programs delayed the initiation of sexual intercourse among either the entire sample of the young persons covered by the program or an important subgroup of those covered. The rest of 66 per cent of the 73 had no impact on timing of initiation of sexual intercourse and notably, none of the programs considered hastened the initiation of sexual intercourse.

Among the 73 studies focusing on the timing of the initiation of sexual intercourse, 40 of them referred to the United States. Out of those, 40 per cent of the studies undertaken reported that sex education programs they referred to

delayed the initiation of intercourse. In developing countries, where 24 studies had assessed the impact of sex education programs and initiation of sexual intercourse, 29 per cent reported that the program they focused on had delayed initiation to sexual intercourse among young people. The findings therefore, indicate that if more information was forthcoming through the school curriculum, the students would be more knowledgeable on what to expect as adolescents in terms of their sexuality and how to handle themselves responsibly.

A comparative analysis of life skills education in Kenya as a way of guiding proper sexual behavior revealed that sex and sexuality are discussed in the class room but within narrow parameters. According to the study by USAID (2010), in all schools, sexual desire is described as natural, but students do not report receiving messages about exploring one's body or the importance of asking questions about sex. Students are reported to complain that teachers respond to their questions by telling them they will have to wait till they are older to get answers, or they judge the students as immoral for asking the question.

Another case study by, USAID (2012), about tailoring international guidance for Kenya in making comprehensive sexuality education available at national scale, UNESCO staff generated information that Non-Governmental Organizations and Ministry of Education experience demonstrated that the best way to encourage both fidelity to new educational material and its sustained implementation is to provide it through a mandatory class offered within the school day. It would be logical to argue that the school curriculum

has the potential of increased association on students' sexual behavior if more information was availed to the students.

4.24 Testing of Hypothesis 2

The study tested the **second** hypothesis which stated that; **Sexual information received through the family setting does not significantly influence sexual behavior**

Data on student responses to questions on the family as a source of sexual-related information was analyzed by use of regression model. The results of the analysis are presented in Tables 4.30

Table 4.29: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.041 ^a	.002	-.001	.67282

a. Predictors: (Constant), Family Members

Information in Table 4.29 shows that the model explains only 4.1% (R=0.041) of family as a source of sexual-related information and students sexual behavior .This is a weak association between sexual-related information received through the family setting and sexual behavior among secondary school students.

Further analysis of the actual level of significance of the influence of sexual-related information received through the family on students' sexual behavior, is presented in Table 4.30.

Table 4.30. ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.242	1	.242	.535	.465 ^b
Residual	144.860	320	.453		
Total	145.102	321			

a. Dependent Variable: behavior

b. Predictors: (Constant), Family Members

The findings in Table 4.30, ANOVA indicates that the model cannot predict sexual behavior of students using information availed by family member as a source of sexual related information. The level of significance is 0.465 which is higher than 0.05. So we can accept the null hypothesis that family setting as a source of sexual related information cannot predict sexual behavior.

The level of influence was further analyzed through coefficient model and results presented in Table 4.31.

Table 4.31: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.938	.114		25.827	.000
Family Members	.027	.037	.041	.731	.465

a. Dependent Variable: behavior

Information in Table 4.31 actual regression value of association between family setting as a source of sexuality information is 2.938 which is a very weak association. If we present sexual behavior by letter B, and family members as a source by symbol F, then the model equation is given by $B = 2.938 + 0.027 \times F + \text{Error}$. This reflects a very weak association on the part of the parents as providers of sexual-related information that may influence sexual behavior of their adolescent children. The results of the study therefore implies that, although the students' micro system environment occurs

interactions between parents and their children on a daily basis, these interactions yields very little information on sexual matters. So parents appear to be a very poor source of sexual-related information for their own children.

A break down of statistical data before regression analysis was processed earlier and results illustrated in Table 4.32

Table 4.32: Students’ Opinion on Family Members as a Source of Sexual Information

	Frequency	Percent
Strongly Agree	32	9.9
Agree	86	26.7
Valid Disagree	83	25.8
Strongly Disagree	121	37.6
Total	322	100.0

The data in table 4.32 indicates that only 36.6% agree, while 62.4% disagreed (37.7% strongly disagreed and 25.8% disagreed). The findings indicate that only a limited number of adolescent children get sexual-related information from their family members. The number of those who receive information from the parents may even be smaller as family sources in this study refers not just the parents but also brothers, sisters, aunts, uncles, grandparents and significant other relatives in the African broad spectrum of family. A similar question was put across to head teachers of student respondents. It elicited information from head teachers on their opinions on the influence of sexual-related information from parents on their children’s sexual behavior captured in Table 4.33.

Table 4.33: Head teachers’ Opinion on Family Source of Sexual Information

Rate of scale	Frequency	Percentage
1-Very adequate	-	-
2-Adequate	1	5.6
3-Inadequate	4	22.2
4-Very Inadequate	13	72.2

Total	35	100.0
-------	----	-------

Data in Table 4.33 indicates that majority of head teachers do not think that family setting provides significant sexuality information to secondary school students, with 72.2% saying it was very inadequate, 22.2% said it was inadequate and only 5.6% said it was adequate. In depth discussion of the matter with the head teachers during face to face interviews revealed that, 63.6% of head teachers were of the opinion that families do not provide sexuality information to their children and most of what they learnt was negative, 18.2% said the same elders were students' sugar daddies, and 9.1% rites of passage encouraged manliness than proper sexual behaviour, and another 9.1% said majority of significant family members exploited the children sexually instead of teaching them. An example was used to illustrate the point that, among the Maasai and the Samburu, after initiation, the new warrior could take a mistress from among the unmarried by a simple gesture of offering beads.

A similar question put across the teacher counselors to establish their opinion received almost identical responses as shown in Table 4.34.

Table 4.34: Teacher counsellors' Opinion on the Family as a Source of Sexual Information.

Rate of scale	Frequency	Percentage
1-Very adequate	-	-
2-Adequate	4	15.4
3-Inadequate	17	65.4
4-Very inadequate	5	19.2
Total	26	100.0

Information in Table 4.34 reveals that teacher counselors had a similar opinion to that of head teachers as only 15.4% were of the view that sexuality

information obtained through family sources was adequate, while 65.4% felt it was inadequate while 19.2% felt it was very inadequate. During the face to face interview, teacher counselors revealed that majority of students who approach them for counseling have issues on sexual matters or relationships. Many approach seeking clarification of myths like, if a girl stands up and jumps up and down after sex, she can not get pregnant, or a girl needs to have sex to develop curvy hips because their growth is enhanced by the protein in the male sperms.

This is an indicator that whereas parents maintain that teachers and schools should must be censored on how much sex education they offer to students, the same is not offered at home. Studies indicate that teenage children rarely consult their parents on sexuality issues, probably because the body language from the parents indicates such discussion is not encouraged. Studies reveal that parents are too shy to discuss the topic and would rather have the teachers do it for them (Laydia D, Ann S, Renee W, Richard D, Varzi, J, (2005). Earlier studies by Fox and Inazu (1980), and Smanski (1998), had similar findings indicating that adolescents receive very little instruction from their parents.

An interesting finding by Smanski (1998) was that although the adolescents were dissatisfied with sex information available at home, they would prefer their parents to be the primary source. But unfortunately, even in families where there has been some communication about sex with young children, research has found that this communication drops as the children approach adolescence. What appears like a parents' rejection of child's sexual maturation coincides with the adolescent's desire for independence and

privacy, creating what is perceived as an adolescent crisis. If the family is unable to deal with the crisis and delay in opening means of communication for discussion of certain sexual issues until early adolescence, the timing may be too late, and many adolescents will have turned to peers and other sources for information (Forrest, 2005). These limit the effectiveness of sex education by parents to their adolescent children when they need it most.

This pattern of parents avoiding any words, acts or gestures of sexual nature in the presence of their children is not new. Even in traditional societies, it was not the actual parent that provided sex instructions to their own children. It began much earlier in the extended family and within the social structures of particular ethnic groups. The rules of shame allowed openness about sexual matters, with grandparents, where a grandmother for instance could become the confidant of her grandchildren on their sexual experiences (Kalinga, 2010). These patterns of sex education have continued to present day society where studies show that parents are a negligible source of information but without the grandparents substitute to do it for them. Part of modern day's problem is that traditional ethnic structures have collapsed due to urbanization and different life career systems that decentralized families. It is fairly difficult to live in common homesteads where grandparents and other significant members of the extended families intermingle and interact with the children as they go through life stages of socialization.

Even for those who still live in the rural settings, the children are away in schools for greater part of the day or the year, leaving them with limited time to bond and interact with the relatives. Furthermore, what children learn from the outside agents of socialization such as media and peer group is seen as

foreign to the homestead relatives. It alienates them from the values and norms of their families thereby creating a generation gap in matters of sexuality and proper sexual behavior. What is worth noting about parents a source of sexual related information in this study is that students rated parents as the fourth preferred agent of communicating sexual-related information after school, media and peer counselors consecutively.

4.25. Testing of Hypothesis 3

In order to assess the level of influence of sexual information received through religious institutions on students sexual behavior, a **third** hypothesis was tested. The hypothesis stated that; **Sexual information received through religious institutions does not significantly influence sexual behavior.** Results of the analysis are presented in Tables 4.35.

Table 4.35: Religious Institutions as a Source of Sexual Information

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.041 ^a	.002	-.001	.67282

a. Predictors: (Constant), Religious Institutions

Information in Table 4.35 indicates that the model explains only 4% (R=0.041) which is a very weak association of religious institutions as influencing sexual behavior.

Further analysis on ANOVA points out the level of significance of sexuality information accessed through religion on students' sexual behavior. Results are presented in Table 4.36

Table 4.36. ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.241	1	.241	.533	.466 ^b
Residual	144.861	320	.453		
Total	145.102	321			

a. Dependent Variable: behavior

b. Predictors: (Constant), Religious Institutions

Data in Table 4.36 ANOVA model shows that information received through religious institutions has a very weak association to sexual behavior of students. The significance is $0.466 > 0.05$. So we can rightly state that religious institutions as a source of sexual related information cannot predict behavior. So we accept the null hypothesis that religious institutions as a source of sexual-related information does not significantly influence students' sexual behavior. Regression analysis of sexuality information obtained through religious institutions and sexual behavior was carried out and results presented in Table 4.37.

Table 4.37: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
	1 (Constant)	2.997	.109		
Religious Institutions	.007	.036	.010	.185	.853

a. Dependent Variable: behavior

Data presented in Table 4.37 point out that actual regression value of association between religious institutions and sexual behavior is 2.997 which is a very weak association. If we present sexual behavior by the letter B, and religious institutions by the letter R, the model equation would be $B = 2.997 + 0.007 \times R + \text{Error}$. Just like the case of parents being a poor source of

influence, the study reveals a low association of religious institutions as a source of sexual-related information.

Before arriving at the above conclusion, data was analyzed and processed in frequency diagrams illustrating the information that was later analyzed. Respondents were asked to rate the frequency of religious institutions providing them with sexual related information. Statistical data of the responses is presented in the Table 4.38

Table 4.38: Students’ Opinion of Religious Institutions’ Offering Sexual Information

	Frequency	Percent
Strongly Agree	41	12.7
Agree	82	25.5
Valid Disagree	86	26.7
Strongly Disagree	113	35.1
Total	322	100.0

Results in Table 4.38 shows that only 38% of students agreed, while 62% disagreed (35.1% strongly disagreed, 26.7% disagreed) that they received sexual information from religious institutions. The findings are similar to another study on sources of sex education for students in Thika by Kola (2010) which rated the church at 6.8% compared to friends at 42%, media at 23.4%, school at 7.3%, parent at 14.1%, brother at 1.6% and relative at 4.6%.

Opinion of head teachers on their view of religious institutions as a source of sexual-related information for secondary school students was sought and Table 4.39 illustrates their responses.

Table 4.39: Head Teachers view on Religious Institutions as a Source of Sexual information

Rate of scale	Frequency	Percentage
1-Very adequate	-	-
2-Adequate	2	9.1
3-Inadequate	7	31.8
4-Very Inadequate	13	59.1
Total	22	100.0

Data in Table 4.39 indicates that majority of head teachers do not view religious institutions as providing sexual information to secondary school students. This is shown by a rate of 59.1% referring to the information as very inadequate, 31.8% as inadequate and only 9.1% thought it was adequate.

Information received through face to face discussion with the head teachers as key informants concur with students rating of religious institutions as a poor provider of sexual related information. Further probing revealed that 54% of the head teachers revealed religious leaders are either too conservative with regard to sexual-related information. Another 36.% rated it as not having much influence because most religious leaders are preaching prosperity gospel and avoid discussing information that may to annoy the members. Another 10% felt youth seminars revolve around for getting students saved without giving them knowledge in matters of sexual-related information.

A similar question was put to teacher counsellors about their views on the influence of religious institutions as a source of sexual-related information on sexual activity. Their responses are captured in Table 4.40.

Table 4.40: Teacher counsellors' view on Religious Institutions as a Source of Sexual information

Rate of scale	Frequency	Percentage
1-Very adequate	-	-
2-Adequate		
3-Inadequate	8	50
4-Very Inadequate	8	50
Total	16	100.0

Information in Table 4.40 reveals that 50% of teacher counsellors thought that sexual information provided by religious institutions was inadequate while 50% thought it was very inadequate. Analysis of in-depth discussion with teacher counsellors on how students receiving information through the church/mosques. In response, 66% indicated that no sexuality information is offered as the subject is considered too sinful to be mentioned in a holy place, and another 34% of the respondents saying there is no way they can be taught as majority of young people do not attend church/mosques.

The findings are in concurrence to other study findings that portray religious institutions as a great hindrance to provision of sex education in schools. Plans to introduce sex education in schools were among the main items discussed during the Cairo Conference in 1994. The agenda was opposed by the Roman Catholic Church who argued that it aimed at giving contraceptives to the youth. The church urged parents not to allow their children to be taught sex education in the schools (Kangara, 2004).

Another study by Wanyonyi, (2014) established that religious institutions have been most vocal in their opposition to introduction of sex education in schools. The argument is that religious institutions are the guardians of citizens' morality. Yet respondents in a study by Kangara (2004) on youth, church and sexuality in Kenya, indicated that issues on sexuality are never discussed in

Church. A survey by Frost (1995) had the following remarks from pastors: 'we do sex; we do not talk about it. If you want me to drive people out of my church, I'll preach about it.'

The Catholic Church policy on contraceptives influences the Catholic faithfuls' attitude towards introduction of sex education in schools in Kenya. This is supported by study findings by Kavivya (2003) on Catholic Church Family planning and its influence on fertility in Kangundo, Machakos. The study revealed Christians are divided over the issue on sex education in schools, where 80.9% of Protestants are in support while only 46.7% of Catholics support. The catholic church is one of the major main stream churches with the largest following in Kenya, so any misgivings on sex education program is bound to affect public support of that program.

USAID (2012) established a strong connection between religion and education in Kenya where most schools receive pastoral instruction from religious bodies. It also established that strong religious element affected policy in government sectors including education, where religious organizations sat on the curriculum oversight board. The MOE found it extremely difficult to incorporate content opposed by major religious groups, such as Christian Evangelicals, Catholics and Muslims. As a fact, one of the recommended class text book recommended for use in the teaching of Christian Religious Education in Secondary schools was developed by the National Catholic Secretariat in conjunction with National Christian Churches of Kenya and Evangelical Churches organization.

Religious conservatism over sex education has been having effects on provision of sexual-related information considering that church constitutes one

of the most powerful agents of socialization. But if the image presented by the religious faithful were to be taken seriously, we would expect to have a society in which sexuality is policed by doctrines of religion, with believers upholding religious doctrines of abstinence and fidelity and faithfulness in marriage. This is not the case, not even among the adults who are supposed to be the role models for the youth to emulate. But without the express support of the religious leaders to provide sex education, sex awareness campaigns will continue to bear little fruit and adolescents and students in particular will continue to suffer consequences of ignorance in sexual matters.

4.26 Testing of Hypothesis 4

In order to establish the extent to which sexual information obtained through the peer group influences students' sexual behavior, a **fourth** hypothesis was tested. This hypothesis stated that; **Sexual information received through peer group does not significantly influence sexual behavior.** The study analyzed the information on the influence of sexual related information from the peer group using regression model. The results of the analysis is presented in Table 4.41

Table 4.41: Peer group as a Source of Sexual-related Information

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.167 ^a	.019	.006	.023

a. Predictors: (Constant), Peer Group

Analysis in Table 4.41 indicates that the model explains only 16.7% (R=0.097) association of peer group as a source influencing sexual behavior. This is a very strong association which indicates that the peer group has a strong influence on the sexual-behavior of students. The data were further

subjected to on ANOVA model of analysis in order to illustrate the level of significance. Results are summarized in Table 4.42

Table 4.42 : ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.355	1	1.355	3.017	.033 ^b
	Residual	143.747	320	.449		
	Total	145.102	321			

- a. Dependent Variable: behavior
- b. Predictors: (Constant), Peer Group

Information in Table 4.42, ANOVA model shows the peer group can predict sexual behavior of students using information availed though it as a predictor. The level of significance is 0.033 which is less than 0.05. We can therefore reject the null hypothesis that peer group as a source of sexual related information cannot predict behavior.

Further analysis by use of coefficient model was computed. The findings are tabulated in Table 4.43

Table 4.43: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.802	.074		42.233	.000
	Peer Group	-.065	.037	-.097	-1.737	.033

- a. Dependent Variable: behavior

Information in Table 4.43 shows that the actual regression value of association between peer group as a source and sexual behavior is 2.802, which is a strong association. If we present sexual behavior by letter B and, and peer group as a source of information by the letter P, then the model equation is given by B

=2.802- 0.065 x P + error. This concurs with other studies that showed peer group as a very strong determinant of the course that adolescents take in terms of lifestyle and life aspirations (Nganda, 2008).

To obtain data for the testing of the hypothesis, students had been asked to rate the view that they receive sexuality information through the peer group. The findings are presented in Table 4.44

Table 4.44: Students’ rating of Peer Group as a Source of Sexual Information

	Frequency	Percent
Strongly Agree	185	57.5
Agree	82	25.5
Valid Disagree	19	5.9
Strongly Disagree	36	11.2
Total	322	100.0

Data in Table 4.44 reveals that 83% agreed and only 17% disagreed that they receive sexual information from the peer group. This implies that the peer group as a source has the potential to influence choice of behavior among the youth. Similar findings are reported in the study by Kalinga (2010) that the peer group was the strongest source of sex education among adolescents.

Opinion of the head teachers over peer group as a source of information was similarly sought for comparison purposes. Their responses are tabulated in Table 4.45

Table 4.45: Head teachers’ view Peer Group as a Source of Sexual Information

Rate or scale	frequency	percentage
Very adequate	11	55
Adequate	8	40
Inadequate	1	5
Very Inadequate	-	-
Total	20	100

Data in Table 4.45 indicates that majority of head teachers felt that the peer group is a major source of sexual information for secondary school students. Some 55% referred to amount of information accessed as very adequate but unreliable, 40% as adequate, with 5% saying it was not adequate”.

In depth discussion with head teachers revealed that 36% were of the opinion that peer group had very strong influence on sexual behavior based on false information about sexual matters. The issue of school mates influence was mentioned by 27.3%, who felt that the culture set by high class groups formed by students (such as ‘click’ and ‘juice’ versus ‘washambe’, and ‘avocado’) determine their sexual behaviour, as the low class students give in to pervertive sexual practices in order to fit (wannabes). Another 18% of head teachers were of the view that students were influenced a lot by what they learnt from the neighbourhood especially girls, while 9.1% said they are influenced by what they learn in parties. Cases of students having and keeping lovers were mentioned by 27.4% of the head teachers

The teacher counselors too were asked to indicate the extent to which their students received information from the peer group. The pertinent results were almost identical to those of the head teachers. These findings are captured in Table 4.46.

Table 4.46: Teacher Counsellors’ Opinion on Peer Group as a Source of Sexual Information

Rate of scale	Frequency	Percentage
1-Very adequate	8	47.1
2-Adequate	8	47.1
3-inadequate	1	17
4-Very inadequate	-	-
Total	17	100.0

Data in Table 4.46 presents a similar view of teacher counsellors to that of head teachers with 47.1% responding as very adequate, 47.1% adequate and 17.8% as inadequate. In depth discussion revealed that most influence comes from class mates through sharing of information at (38%), and learning through shared experiences (29.2%). This sharing of information often led to initiation to lesbianism and homosexuality, learning from other schools at (16.4%) through the traditional pairing of girls and boys schools in the neighbourhood.

This results concurs with other studies that showed that young people often get their information from peers who may not be possessing accurate information on sex and sexuality. As noted by Knauls, Baker and Rich, (1992), peers form equalitarian relationships that centre on age-specific interests which make associating with peers considerably more attractive than the hierarchical task oriented relationships that adolescents have with parents. A study by Kalinga (2010) had 64% students indicate that they rely on their peers for sexual-related information as significant adults do not like to talk about it. An earlier study by Garbara (1985) had similar results showing that most adolescents rely on their peers for information, despite the fact that peers are unreliable sources.

Peer groups among adolescent is a strong force of relevance as they provide support when teenagers are prone to rebelling against presumed oppressive adults. The peer group provides a forum for free discussion of the taboo topic of sex without any inhibitions. Therefore the ignorant believe what is propagated by their peers who pass information that is hard to verify. Another

study by Kalinga (2010) on effects of sex education on adolescents' sexual behavior, indicated the same level of ignorance of sexual matters.

Sharing of information on sexual matters among students makes them misinformed, under-informed or uninformed even though they behave based on what they presume to "know". An earlier study by Mbithi (1998), on sexual knowledge among University students, revealed that sex-information is gathered and disseminated by fellow young people and partisan mass media. This is often a mixture of truth, myth, ignorance, guesswork and jokes. This may mean that formal schools and universities in Africa are often centers of ignorance in matters of sex and sexuality. To emphasize the seriousness of the matter, Mbithi stated that a university student is likely to graduate with knowledge on how to dissect a frog, but nothing about his/her own anatomy. A study by Kalinga (2010) revealed that large proportions of students did not have adequate knowledge on sexuality.

Therefore influence of the peer group on students sexual behavior is a lot and more so when it concerns the matters on sexuality. Latest study by Wanyonyi, (2014) indicated that sexual activity among students is prevalent and this is attributed to peer pressure.

4.27 Testing of Hypothesis 5

In order to assess the influence of mass media on secondary school students sexual behavior, a **fifth** hypothesis was tested. This hypothesis stated that; **Sexual information received through mass media does not significantly influence sexual behavior.** The study analysed data using regression model to find out how information from the media influenced sexual behaviour among secondary school students. The findings are illustrated in Table 4.47

Table 4.47: Mass Media as a Source of Sexual Information

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.176 ^a	.031	.028	.66282

a. Predictors: (Constant), Mass Media

The results in Table 4.47 indicates that the model explains 17.6% (R=0.176) which shows a strong association of mass media as influencing sexual behavior. Same analysis was presented on ANOVA model for actual level of significance. The results are presented in Table 4.48

Table 4.48. ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.515	1	4.515	10.277	.001 ^b
	Residual	140.587	320	.439		
	Total	145.102	321			

a. Dependent Variable: behavior

b. Predictors: (Constant), Mass Media

Analysis in Table 4.48 ANOVA model reveals that mass media can be used to predict sexual behavior of students using information availed by mass media as a source predictor. The level of significance is 0.001 which is lower than 0.05. So we can reject the null hypothesis that mass media as a source of sexual related information cannot predict behavior. We therefore state that mass media is the strongest influence of secondary students' sexual behavior. The study analyzed the data for regression analysis and results presented in Table 4.49.

Table 4.49: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.234	.077		41.881	.000
Mass Media	-.132	.041	-.176	-3.206	.001

a. Dependent Variable: behavior

Data in Table 4.49 reveals that, actual regression value of association between mass media and students’ sexual behavior was 3.234. If we present sexual behavior by the symbol B, and mass media as a source of sexuality information by the symbol M, the model equation is given by

$B=3.234-0.132 \times M + \text{Error}$. This is a very strong association of sexual behavior and mass media, which is higher than peer group in this study.

Prior to subjecting the data to regression analysis, student respondents were asked to rate their view of amount of sexual information they receive from the media on a likert scale. Their responses are summarized in Table 4.50

Table 4.50: Students’ rating of Mass Media as a Source of Sexual Information

	Frequency	Percent
Strongly Agree	185	57.5
Agree	89	27.6
Disagree	26	8.1
Strongly Disagree	22	6.8
Total	322	100.0

Data presented in Table 4.50 indicates that, 85.1% agreed that mass media is a source of sexuality information while only 14.9% disagreed. A question was put to the head teachers on their view on the media as a source of sexual related information on secondary school students. Their responses are tabulated in the Table 4.51.

Table 4.51: Head teachers' view on Media as a Source of Sexual Information.

Rate of scale	Frequency	Percentage
1-Very adequate	24	44.4
2-Adequate	21	38.9
3-Inadequate	9	16.7
4-Very inadequate	-	-
Total	54	100.0

Information in Table 4.51 shows that majority of head teachers felt that the media is a major source of sexual information with 44.4% saying it was very adequate, 38.9% as adequate and only 9% saying inadequate. The same views sought from teacher counselors elicited similar views as shown in the Table 4.52.

Table 4.52: Teacher counsellors' opinion on Media as a Source

Rate of scale	Frequency	Percentage
1-Very adequate	18	42.9
2-Adequate	18	42.9
3-Inadequate	6	14.2
4-Very inadequate	-	-
Total	40	100.0

Information in Table 4.52 reveal that majority of teacher counsellors claim that media is a major source of sexual information where 42.9% felt it is very adequate, 42.9% as adequate and only 14.2% felt it was inadequate. Media as a source of sexual related information was the only independent variable outside students' microsystem, as it is in the mesosystem according to Bronfenbrenners ecological systems theory. Yet it happens to be the variable with the greatest influence on students' sexual behavior compared to the other four variables.

Adolescents are active consumers of messages on radio and television, printed in magazines and books, distributed on the internet and presented in video

games. Access to these varying types has become common due to advance in technology. Studies support this findings that both adults and children have been reported to believe in what they watch from the media (Malamuth & Impett, 2001). Content analysis performed on print media, television and movies and computerized media to determine the types of messages delivered have shown that adolescents are being exposed to both implicit and explicit sexual content (Ward & wyatt, 1994). Collins, (2003) examined impact of Television sex on teenagers' sexual beliefs and activities. Results supported earlier findings that watching shows with sexual content hastens the initiation of teen sexual activity. Sexual talk on television has the same effects on adolescents as depictions of sex.

Some adolescents may succumb to media influence depending on their rate of development, while individual personality may also influence the type of media they select and find gratifying (Malmath & Impett, 2001). Roberts (1993) established that some adolescents may not be cognitively equipped to interpret the media images they encounter, leading to differences in how messages are processed and utilized by adolescents. Other co relational studies indicate that exposure to sexually suggestive materials is associated with premarital sex (Malamuth, 2001).

It is also widely believed that Television plays a role in hastening the initiation of sexual activity in adolescents after a study by Collins et al (2004). Analysts surveyed 1762 adolescents aged 12-17 years of age. They were asked about their sexual experiences and also their television viewing habits and were surveyed again one year later. The results showed that heavy exposure to sexual content on television related strongly to adolescent initiation of

intercourse or progression to more advanced sexual activities (such as making out and oral sex) apart from intercourse in the following year. Adolescents who viewed more sexual content were two times more likely than those who viewed the smallest amount to initiate intercourse during the following year.

Although majority of research on the impact of media on sexuality focuses on harmful effects, findings indicate that learning also takes place indirectly particularly in the education regarding sexuality, sexual behavior and safe sex. Kangara (2004), shows with content in the media about contraception and pregnancy can help to educate adolescents about the risk and consequences of sex and can also foster beneficial dialogue between adolescents and parents. The effects of the media on young people’s sexual behavior are varied and of great interest to the members of the society in order to assist in addressing the problems of negative outcomes of irresponsible sexual behavior sexual.

4.28 Testing of Hypothesis 6.

The study sought to establish the influence of students’ personal characteristics of gender and age on secondary school students’ sexual behavior where a **sixth** hypothesis was tested. This hypothesis stated that; **Students personal characteristics do not significantly influence secondary school students’ sexual behavior.** Regression analysis of data on sexual activity by gender is presented in Table 4.53.

Table 4.53: Analysis of Sexual Activity by Students’ Gender

Table 4.54: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.557 ^a	.310	.308	.389

a. Predictors: (Constant), Gender of Respondent

The findings in Table 4.53 point out that the gender of a student significantly influences sexual activity. It is a strong determinant of secondary school students sexual encounter with a strong association of 55% ($R= 0.557$). This may be associated to the socialization of the male African child that being a man is having girlfriends and having sex with them is cool. Further presentation of the findings on ANOVA model is presented in Table 4.54.

Table 4.54: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.744	1	21.744	144.030	.000 ^b
	Residual	48.309	320	.151		
	Total	70.053	321			

a. Dependent Variable: Sexual Encounter

b. Predictors: (Constant), Gender of Respondent

Data in Table 4.54 point out that the gender of a student significantly influences sexual activity at 0.000 and is less than 0.05 level of significance. The study had compiled data on students who indicated that they were sexually active with a view for further analysis of students' personal characteristics and sexual activity. Regression analysis of the data was computed and findings presented in Table 4.55

Table 4.55: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
	1	(Constant)	.815			.075
	Gender of Respondent	.535	.045	.557	12.001	.000

a. Dependent Variable: Sexual Encounter

Results in Table 4.55 point out that the gender of a student has a strong association with involvement with sexual activity at 0.815. If we presented sexual behavior by letter B, and Sexual encounter by letter S, the model equation is given by $B = 0.815 + 0.535 \times S + \text{Error}$. This shows that the probability of a male student being sexually active is high compared to that of a female student.

The study had compiled data on students who indicated that they were sexually active with a view for further analysis of students' personal characteristics and sexual activity. A cross tabulation of 'sexual encounter' and 'gender of respondents' was done to find out whether the gender of a student influences chances of engaging in sexual activity. The findings are shown in the Table 4.56

Table 4.56: Students' Sexual- encounter by Gender

Student responses by gender on sexual encounter	Male-%	Female-%	Total- %
Yes	77.7	22.3	100.0
	65.0	11.6	32.0
	24.8	7.1	32.0
	19.6	80.4	100.0
No	35.0	88.4	68.0
	13.4	54.7	68.0
	38.2	61.8	100.0
	100.0	100.0	100.0
Total	38.	61.8	100.0

The analysis in Table 4.56 reveals that out of all respondents who said yes, 77.7% were male students while 22.3% were females. Those who said that

they had no sexual encounter were, 19.6%) males, and (80.4%) girls. Of all the boy respondents, 65% said yes while 35% said they had not experienced sexual activity. Of all the girl respondents, 11.6% said yes while 88.4% said they have never engaged in sexual intercourse. This therefore supports the observation that the gender of the student increases or reduces chances of experiencing sex as a student. This is attributed to stereotyping of sex for men as a sign of maturity and ability to ‘conquer’ the feminine gender. Earlier on, the study had analyzed data on students personal characteristics by gender. Results are tabulated on figure 4.58

According to Nganda (2008) boys are coached by their ‘carers’ during rites of passage on how to convince a girl to give in to sexual activity, which may explain the rates of young boys engaging in premarital sex as being higher than the rate of girls in the same age group. Boys are known to share stories of their conquests in dormitories after school holidays. Those perceived as “killers” (“conquerors” of girls) are very popular among their peers. Parents are also known to deliberately ignore their male children’s sexual escapades (and are covertly proud of it) while they are overprotective of daughters.

The other aspect of personal characteristics of respondents subjected to regression analysis was the age of students and sexual activity. The findings are illustrated in Table 4.57

Table 4.57: Analysis of Sexual Activity and Student’s Age

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.182 ^a	.033	.030	.460

a. Predictors: (Constant), Age of Respondent

The findings presented in Table 4.57 indicates that there is a strong association between sexual activity and the age of respondents by 18.2% (R=182). The data was are further presented on ANOVA Model and pertinent findings are summarized in Table 4.58

Table 4.58 **ANOVA^a**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2.331	1	2.331	11.013	.001 ^b
Residual	67.722	320	.212		
Total	70.053	321			

a. Dependent Variable: Sexual Encounter

b. Predictors: (Constant), Age of Respondent

Findings in Table 4.58 reveal that age of student has influence on sexual activity at a significant level of 0.001 which is less than 0.05. This means that the younger a student is, the less likely to have a chance to engage in sexual activity compared to older ones.

The same data was subjected to regression analysis of coefficient. The results are presented in Table 4.59.

Table 4.59: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.977	.093		21.219	.000
Age of Respondent	-.085	.025	-.182	-3.319	.001

The information in Table 4.59 reveal that students' age is a strong factor in influencing sexual activity at 1.977. If we represented age by the letter B, sexual activity by the letter S, the model equation would be $B=1.977-0.085 \times S + \text{Error}$. This is a strong association. These findings affirm the importance of providing information to students earlier because this is known to delay onset

of sexual activity for longer (Kirby, 2007; USAID, 2012). The results also show that as students grow older they are more likely to engage in sex than when they were younger. This is a good reason to justify the need to provide sex education earlier before they attain this age. The results are similar to the findings by (Kalinga, 2010; Wanyonyi, 2014; and USAID, 2012).

4.29. Multiple Regression analysis

Further to carrying out regression analysis of the six hypotheses under study, multiple regression analysis was computed in order to find out the source of sexual information with the highest relative influence on students sexual behavior. The outcome is presented in Table 4.60.

Table 4.60: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.636	.267		9.867	.000
Gender of Respondent	.221	.079	.160	2.795	.006
Age of Respondent	.037	.037	.056	1.004	.316
School Curriculum	-.039	.041	-.061	-.943	.346
Family Members	.041	.044	.063	.929	.354
Religious Institutions	.024	.043	.037	.556	.578
Mass Media	-.126	.048	-.168	-2.599	.010
Peer Group	.003	.044	.004	.063	.950

a. Dependent Variable: behavior

Information in Table 4.60 indicates that out of all independent variables analyzed, the variables with most significant influence are only two. These are Gender of respondent with the value of P= 0.006 and Mass media with a value of P= 0.010. The structuring equation model (SEM) is

$$Y=c+ b_1x_1+b_2x_2+b_3x_3+b_4x_4+b_5x_5+b_6x_6+b_7x_7+error.$$

Therefore substituting the regression coefficient, we get the equation,

$$Y=2.636+0.221*x_1+0.037*x_2-0.039*x_3+0.041*x_4+0.024*x_5-0.126*x_6+0.003*x_7+error,$$

where;

Y= Behavior (Dependent variable)

x_1 =Gender of Respondent

x_2 =Age of Respondent

x_3 =School Curriculum

x_4 =Family Members

x_5 =Religious Institutions

x_6 =Mass Media

x_7 =Peer Group

Splitting the behavior into two sub variables, premarital and pervasive sexual behavior, the regression against premarital sexual behavior was carried out.

Results of the analysis are tabulated in Table 4.61

Table 4.61: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.600	.313		8.313	.000
School Curriculum	-.052	.049	-.069	-1.063	.289
Family Members	.088	.052	.114	1.689	.092
Religious Institutions	.026	.051	.034	.512	.609
1 Mass Media	-.166	.057	-.189	-2.938	.004
Peer Group	.033	.051	.041	.640	.006
Age of Respondent	.035	.044	.044	.793	.429
Gender of Respondent	.240	.093	.148	2.590	.010

a. Dependent Variable: premarital

Information in Table 4.61 reveals that Mass Media is the most significant at $p=0.004$ followed by gender at $p=0.010$. This confirms the earlier assertion in this study that mass media has overtaken the peer group as the strongest

influence on sexual behavior previously indicated by earlier studies. This indicates that when secondary school students engage in premarital sexual activities, such sex between students and unprotected sexual intercourse, the greatest influence is mass media.

Considering that students congregate for entertainment using one form of mass media or another, it is logical to conclude that most sexual encounters take place when students meet in parties or any other form of gathering where music is played. The communication may be taking place by use of mobile phones on what expect and how to prepare as revealed during interviews conducted with head teachers and teacher counselors during the study.

Further regressing of independent variables against pervasive sexual activities was conducted. The results are tabulated in Table 4.62.

Table 4.62: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.660	.295		9.010	.000
School Curriculum	-.045	.046	-.065	-.991	.322
Family Members	.022	.049	.030	.439	.661
Religious Institutions	.026	.048	.037	.544	.587
1 Mass Media	-.103	.053	-.125	-1.933	.054
Peer Group	-.027	.048	-.037	-.571	.568
Age of Respondent	.034	.041	.046	.819	.413
Gender of Respondent	.255	.087	.167	2.909	.004

a. Dependent Variable: perversion

Data in Table 4.62 obtained by regressing independent variables against pervasive sexual activities as sub dependant variable, indicate Gender has the greatest significance at P=0.004, followed by Media at p= 054. This implies that being male increases the chance of engaging in pervasive sexual activities

such as oral sex, homosexuality, and group sex than being a female. It concurs with data in other sections of this study showing that more boys than girls are sexually active. This practice is enhanced by cultural stereo typing of sexual multiple sexual escapades among males as a demonstration of being a male is a real man (Anyangu, 2009).

4.30. Students’ Views on Introduction of Sex Education in Schools

When student respondents were requested to indicate whether there was need for sex education, all (100%) responded in the affirmative. A similar question to head teachers and teacher counselors on whether sex education should be introduced in schools received 100% support. Some respondents said the society was ‘burying its head in the sand’ and would continue to pay dearly with the lives of its youth.

The study further sought to find out suggestions from the respondents on what they would consider as sufficient information for sex education. All students proposed comprehensive sex education, while 91.7% of head teachers and 90.1% of teacher counselors supported comprehensive education.

The study again, sought to find out from the head teachers and teacher counselors the content they would propose to be included in a sexual related information program for secondary school students. The responses of head teachers are contained in Table 4.63.

Table 4.63: Head teachers’ views on the Content Sex education.

Content	frequency	percentage
Comprehensive	10	45.5
Contraceptives	10	45.5
Limited sex education	2	9

Data in Table 4.63 indicates that 45.5% of head teachers support comprehensive education; another 45.5% specified it should include use of

contraceptives while 9.1% support limited sex education. A similar pattern emerges in the views of the teacher counselors in Table 4.64.

Table 4.64: Teacher counsellors' views on Content of Sex education.

Content	Frequency	Percentage
Comprehensive	10	47.6%
Contraceptive	10	47.6%
Limited sex education	1	4.8%

Results in Table 4.64 reveals that 47.6% of teacher counselors support provision of comprehensive sex education with 47.6% specifying that it includes information about contraceptive, while 4.8% only limited sex education should be provided to students. In depth discussion on the issue, teacher counselors stated that students should be given information on the use of contraceptives but at the same time they should be discouraged from using them. It was clear that sex education should put more emphasis on values than on use of contraceptives.

4.31. Preferred Agents in Transmission of Sex Education by Students.

The study sought to find out from the respondents their opinion on who should be entrusted with the role of teaching the comprehensive sex education. Responses from the student respondents are presented in Table 4.65

Table 4.65: Students' Preferred Agents of Sexual Information

Agent	frequency	Percentage
Teacher counselors	114	21.7%
Media	105	20.3%
Family members	101	19.3
Peer counselors	96	18.3%
Teachers	45	8.6
Religious education	19	3.6
Practical experience	3	0.6
Porn stars	2	0.4
Specialized personnel	17	3.2
mentors	19	3.6
Religious youth leaders	3	0.6
Total	524	100

Data in Table 4.65 reveals that the most preferred agents of transmitting sexual information according to student respondents are teacher counselors 21.7%, media, 20.3% and family members, 19.3%. Peer counselors are chosen closely to the other three with 18.3%, teachers 8.6%, religious education and mentors with 3.6%, specialized personnel with 3.2%, religious youth leaders and practical experience 0.6% while porn stars was preferred by 0.4%.

When views from the teacher respondents were sought, they stated that the teaching of sex education should be done by specially trained teachers. In addition the subject of sex education should be offered as a stand alone subject. Most of teacher counselors suggested that sex education should be made examinable like other subjects for it to be taken with the seriousness it deserves. They also indicated that parents should be involved in the program so that what they teach at home should complement what they learn in school when they return home. Those who support provision of sex education argue that it would provide knowledge to school children on the consequences and evils of irresponsible premarital sex as well as on the dangers of premarital pregnancies (Wanyonyi 2014).

4.32. Students' views on Advantages of Abstaining from Sexual Activities

The study sought to find out students' opinion on advantages of abstaining from sexual activities as students. Their responses are presented in Table 4.66.

Table 4.66: Students' Opinion on Advantages of Abstaining from Sexual Activity

Advantage	Frequency	Percentage
Able to concentrate on studies/focused	58	19.3
Avoid pregnancy	56	18.7
Avoid sexually transmitted infections	43	14.3
Self-respect	36	12
No advantage	31	10.3
Avoid dropout	21	7
Save for marriage	19	6.3
Prevents HIV	19	6.3
Avoid emotional problems	10	3.4
Good relationship with God	7	2.4
Total	300	100

Data in Table 4.66 indicates students' view on advantages of abstaining from sexual activity as follows; 19.3% indicated that abstention enables students to concentrate/focus on studies, 18.7% enables them to prevent pregnancy, 14.3% , avoid sexually transmitted infections,12% contributes to self-respect, 10.3% said there are no advantages, 7% indicated it enables students to avoid dropping out of school, 6.3% said good to save sex for marriage and a happy future, 6.3% indicated prevention of HIV/AIDS infections, 3.4% enables

students avoid emotional problems and 2.4% indicated that it helps a student maintain good relationship with God.

These results confirm the overall outcome of the findings in this study that religious values are the least quoted for abstaining from sexual activity. Other values learned in a family setting, such as society norms are not used as advantages, which serves as an indication that they are rarely emphasized to students and therefore students may have no regards for them.

To sum up this section, the analysis reveals that sexual-related information obtained through mass media has the greatest influence on secondary school students' sexual behavior. The school curriculum has significant influence and it appears to be proportionate to the little that is offered. The peer group appears to be guiding each other to watch what is in the media because many students admitted to be accessing information from friends, but as far as the level of significance to sexual behavior was concerned lower than that of the media. The family and religious institutions have the least influence if any, although significant number students indicated they would like to have the family offering sexual-related information. The study also indicates that students, teachers and teacher counselors support provision of comprehensive sex education for students in schools.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS.

5.1 Introduction

This chapter has presented summary of the major findings and the conclusions of the study. In addition the chapter has outlined pertinent recommendations on the basis of the findings.

5.2 Summary of the study

The purpose of this study was to investigate how sexual information from various sources influences secondary school students' sexual behavior. Six specific study objectives were formulated to guide data collection and analysis. The objectives were: to determine extent to which sexual information obtained through the school curriculum influence secondary school students' sexual behavior; establish how sexual information received through the family setting influence secondary school students' sexual behavior; determine the extent to which sexual information received through religious teachings influence secondary school students' sexual behavior; establish how sexual information obtained through the peer group influence secondary school students' sexual behavior; to what extent sexual information accessed through mass media influence secondary school students' sexual behavior and how personal characteristics influence secondary school students' sexual behavior.

The study design survey method using descriptive survey. The study was conducted among students and teachers, specifically secondary school students in their final year of secondary education, head teachers and teacher counselors from the same secondary schools as student respondents.

The secondary schools were sampled from Thika West Sub County according to the different categories and types of secondary schools in order to have

students from all social classes represented. The secondary schools were sampled randomly from different lists per category, with the exemption of national schools which happened to be only two in that sub-County. Further purposeful selection was done where a particular type of school was being sought in terms of gender and status as a boarding or a day secondary school.

The review of related literature covered six themes addressed by the objectives of the study, namely the school curriculum, family, religious institutions, mass peer group, mass media and students as sources of sexual information. Personal characteristics of students were studied as contributing factor to sexual behavior with or independently from the five sources. All these were reviewed with the aim of indicating the knowledge gap that the study needed to fill. The study identified the importance of sex education to provide the right sexuality information as a way of promoting positive sexual behavior. This would be an important tool in reduction of incidences of interruption of secondary school students' education.

Data was collected from twelve (12) secondary schools, eight (8) of which were government sponsored secondary schools while four (4) were private. Twelve (12) head teachers and eleven (11) teacher counselors out of twelve (12) were interviewed. Three hundred and twenty two (322) students filled and returned questionnaires out of the expected four hundred and eighty (480).

The questionnaire was the major research instrument used in data collection from student residents. This was further supplemented by interview schedules of head teachers and teacher counselors which assisted through in-depth investigation in ascertaining information obtained from students. Research findings were analyzed both quantitatively and qualitatively. Qualitative data

was subjected to content analysis from which relevant information was extracted, and coded thematically according to the hypothesis. Quantitative data was processed and analyzed with the help of SPSS software program and were summarized into frequency tables and percentages. Test of significance of 0.05% was carried out using regression model of analysis. Overall, the interpretation of the results point to the fact that sexual information received through the media has the greatest influence on students' sexual behavior.

Ecological systems theory was used to interpret key concepts in the study. Systems concepts are used to understand better how people achieve or fail to achieve goodness of fit with various aspects of their environment, as they are explained in terms of the actions of complex systems which they are part. Systems concepts also attempt to answer the critical question of how well a person and those systems are adapting to each other and the implications of that adaptation on a person's ability to get his needs met

5.3 Major findings of the study

The major findings of this study are anchored on the hypotheses. Prior to analyzing the influence of sources of information on sexual behavior, the study sought to establish the kind of behavior manifested among students. Results indicate that 80% of secondary school students agreed that secondary school students engage in sexual activities. In total, 32% confirmed to being sexually active. Out of that number that is sexually active, 77.7% were male students while 22.3% were female students. The kind of sexual activities they engage in ranges from sexual intercourse between students and married people, oral sex, homosexuality, lesbianism, group sex and prostitution.

The study also found out that reasons for student engagement in sexual activities included peer pressure 52.8% media influence 12.2%, for pleasure 11.3%, curiosity 9.6% money 3.7%, ignorance 3.4%, poor communication from significant others 3.1%, being immoral 2.2%, drugs 1.1%, and to practice for marriage 0.6%.

Those who abstain from sexual activity do so out of self respect 19.3%, fear of getting pregnant 15.4%, fear of getting a sexually transmitted infection 14.3%, religious reasons 10.2%, fear of HIV/AIDS 9.6%, waiting for the right time 8.7%, fear of outcome 4.9%, lack of opportunity 4.3%, good parental upbringing 3.8%, and guidance and counseling 3.3%, focused on studies 2.9%, being outdated 1.8%, fear of breaking virginity 0.9%, avoid judgment from society 0.3%, ashamed for being circumcised 0.3%.

The findings have also revealed that information from parents and religious leaders is mainly in form of warnings and threats against sexual activity, while that from the peers is relevant to what they need to know. Thus, majority of secondary school students are of the opinion that teachers, parents and religious leaders conceal the most important information which they get from friends and peers, media and also through self-discovery.

The sexuality information normally withheld from the youth by stake holders includes names of sexual organs in the learners' mother tongues, sexual intercourse, using condoms and contraceptives, sex as being pleasurable, how to play safe sex and how to maintain boy/girl relationships. Other findings have also shown that all students, head teachers and teacher counselors support introduction of comprehensive sex education in the school

5.4. Findings based on objective 1 and supported by hypothesis 1.

The findings relating to influence of sexual information offered through the school curriculum revealed that it had little significance on students' sexual behavior at 13%. Those who agreed that they get information through the school curriculum were 55% while 45% disagreed. Study findings also show that the kind of sexual-related information received through school curriculum is mostly on reproduction through subjects like biology and morality through Religious Education. Life skills education was seen as offering little or no sexual-related information.

The study has shown that most frequently named sources of sexual-related information are mass media, referring to internet, movies, TV, magazines, music and peers. This is indicated from analysis of responses to an open ended question that sought to find out from students additional sources of sexual-related information that students use. The results pointed out that 51.9% indicate none apart from the five in the structured question, another 10.3% use magazines, 5.9% internet, 5.1% pornography, 4.5% friends, 3.3% social media, 2.4% personal experience, 2.1% counseling, 1.8% seminars, 1.2% camps, 0.9% aunties (referring to house girls), 0.9% discussion, 0.9% family members, 0.9% parties, 0.9% phones, 0.9% sex with a teacher, 0.6% indicated that they learn from domestic animals, 0.6% secular music, 0.6% games, 0.6% general knowledge, 0.3% neighborhood, 0.3% morality lectures, 0.3% market place talks. From the responses, it is evident that young people seem to learn types of different relationships and sexual scripts depending on source(s) that is readily available and perceived to be offering 'relevant information'.

Key informants interviewed supported provision of sex education in schools by 100% due to the challenges they are facing in the aspect of students' sexuality. They attributed the surge in sexual-related cases to extreme media exposure to students and especially now that majority of them have basic ICT skills that enable students to access information easily. Mobile phones and cybercafés have become favorite tools for students to gather whatever kind of information they require. Most school administrators referred to a rise in cases of 'coupling' among students, that is, intimacy between boys and girls, student love affairs with outsiders, homosexuality and lesbianism.

Support for sex education through the school curriculum has been indicated by the majority of students as the preferred agent to teach sexual knowledge. Majority indicated that they would rather be taught by teacher counselors, at 21.7% and school teachers 8.6% (total 30.3%), while 20.3% prefer use of media, 19.3% family sources and 18.3% prefer peers counselors.

5.5. Findings based on objective 2 supported by hypothesis 2.

The hypothesis that sexual information received through the family does not significantly influence secondary school students' sexual behavior is confirmed. The study findings showed that it does not significantly influence sexual behavior. Only 37% agreed to having received information from family sources while 62% disagreed. An imminent feature of this study is that parents do not provide concrete instruction to their children in the matter of sexual morality and sexual intercourse. Time spent between parents and adolescents involves instructions on fulfillment of duties and development of sense of responsibility which can become monotonous. A motivating feature on time

spent with peers is that they spend time eating, playing, entertainment and talking about things of common interest.

This study also found out that family boundaries need to be permeable to accommodate social changes as societies are dynamic. A social campaign should be carried out to create awareness on the importance of replacing the traditional structure with a modern platform to provide sexual knowledge. Studies have shown parents as being shy to discuss sexual matters, supporting the view that there exists a vacuum in that space when a young adult is transiting into adulthood, that is being filled by social media.

Findings also showed that students would welcome sexual related information from their relatives, and more so their own parents. Parents were ranked as the third most preferred providers of sex education after schools and media consecutively. The wish is in line with the head teachers and teacher counselor's suggestion that even parents should be consulted and involved in planning and providing sex education programs to secondary school students.

5.6. Findings based on objective 3 supported hypothesis 3.

The influence of information from religious sources on the sexual behavior of secondary students was investigated and the results showed that only 38% of students agreed, while 62% disagreed that they received sexual-related information from religious sources. Further analysis of level of significance indicate a very low at 4% showing that we cannot predict the behavior of students based on what they learn from religious institutions.

Study findings show that students continue to experience negative consequences of sexual behavior in a country whose majority of the population confess to belonging to the Christian faith and the minority are

either Muslims, Hindus and atheists. The majority of student respondents said that they are either Catholics or Protestants although information from key informants indicates that youths rarely go to churches or those who go have other motives other than worshipping.

Further, key informants indicated that churches lack services cut for the youth and in addition churches avoid discussion of controversial topics like sexuality as it is considered to be a taboo subject in most African cultures.

5.7. Findings based on objective 4 supported by hypothesis 4.

The Peer group as a source of sexual information indicated that 83% agreed and only 17% disagreed that they received sexual-related information from the peer group. Level of significance is $0.033 < 0.05$. Findings of this study also revealed that information on intimate sexual relationships and use of contraceptives was obtained from friends, peers or self discovery in addition to media. This study findings also showed that out of the students who admitted to being sexually active, 52% indicated it was as a result of peer pressure. It is also clear that being sexually active earns an adolescent admiration rather than condemnation as it used to be the case in the past, and more so within the peer group.

5.8 Findings based on objective 5 supported by Hypothesis 5.

Mass media was investigated as a source of sexual information where 85% agreed and 15% disagreed that they receive sexual related information. Analysis of the data showed that there was significant association between mass media and sexual behavior at 18% which is a strong association with a level of significance of $0.001 < 0.05$

Findings in this study show an increase in the use of digital gadgets like the smart phones which are able to transmit images taken from one person to another within seconds from any part of the world. Student recipients of such images were alleged to pass the mobile phones around in class for fellow students to see, sometimes as the lesson is going on. Information from key informants gave cases of male students with mobile phones with images of naked women used as their screen savers. Scientific research continues to show that information passed through visual mode of communication has the capacity to arouse the viewer leading to sexual arousal and desire to engage in it.

5.9 Findings based on objective 6 supported by Hypothesis 6.

Personal characteristics of students influence students' sexual behavior to a certain extent. The study revealed that students' gender and age is a strong determinant in students' decision to become sexually active or not. More boys engage in sexual activity during teen age than girls do. The findings in this study have indicated that 77% are boys against 23.3% are sexually active. Results on sexual activity against age also indicate that the older the adolescent advance in teenage, the higher the chances of becoming sexually active, even without receiving appropriate information about sex. This finding can be used to justify support of providing sexual-related information to the students in order to save them from pitfalls of consequences of ignorance in sexual matters.

5.10. Relative Importance of Study Variables.

After obtaining results on each study variable separately, multiple regression analysis of the hypotheses was carried out. The structuring equation model

(SEM) used was $Y=c+b_1x_1+b_2x_2+b_3x_3+b_4x_4+b_5x_5+b_6x_6+b_7x_7+error$. By substituting the regression coefficient, the equation is;

$$Y=2.636+0.221*x_1+0.037*x_2-0.039*x_3+0.041*x_4+0.024*x_5-$$

$0.126*x_6+0.003*x_7+error$, where: Y= Behavior (Dependent variable); X1=Gender of Respondent; X2=Age of Respondent; X3=School Curriculum; X4=Family Members; X5=Religious Institutions; X6=Mass Media; X7=Peer Group. Results revealed that the highest source of influence on students' sexual behavior is Gender at $p=0.006$ and Mass Media at $p=0.10$. The rest of the variables such as school curriculum, family, religious institutions and peer group were found to be of little significance.

Similar results were revealed on regressing independent variables against dependant sub variable pervasive sexual practices, where Gender is the greatest influence at $P=0.004$ followed by Media at $p=0.054$. This implies that being male increases the chance of engaging in pervasive sexual activities. This presents an interesting scenario showing the effect of contradictions in value standards on sexual behavior between males and females in the society. Male students are socialized to believe that they require having sexual intercourse with females to prove their manhood while female students are socialized to resist the sexual advances from males to retain their dignity. The resultant outcome is confusion leading to pervasive practices and irresponsible sexual practices that lead to negative consequences among the students.

On regressing independent variables against premarital sex as a dependant sub variable, Mass Media is presented as the most significant at $p=0.004$ followed by gender at $p=0.010$. We can therefore assert that according to the results of

this study, mass media has the greatest contribution in influencing irresponsible sexual behavior in Thika West Sub-County.

5.11 Study Conclusion

On the basis of the findings, the following conclusions have been advanced;

- i. The final conclusion is that there lacks any one reliable source of sexual information that adolescents and in particular, secondary school students can rely on.
- ii. The number one factor influencing students' sexual behavior is media, followed by peer group in position two and school curriculum as number three. Family sources are fourth and religious institutions holding the last position. The implication of these findings is that, if we want to create interventions to correct youth sexual behavior, we should create interventions on media and peer group as that would create positive values and behavior. Such interventions may be implemented through the school curriculum for them to be carried out professionally to avoid repercussions of unprofessional conduct in handling such a sensitive topic. Unfortunately, challenges in doing this has been the perennial opposition by religious leaders and some parents, yet many study findings are proof of the importance. Instead, the youth are left to learn from foreign movies, internet and other forms of mass media to the detriment of their education.
- iii. The school curriculum does not offer adequate information on sexual matters. Education is a process of transmitting information, knowledge and skills that enables the learner to fit in the society

and become a productive member of that society. Cases of negative consequences of sexual behavior continue to ravage students leading to unwanted pregnancies, abortions, sexually transmitted infections, HIV/AIDS/infections and school dropouts, due to lack of proper information on sexual matters. Students and teachers support provision of sex education in schools and majority of students prefer teacher counselors as the best in handling the subject. The responses led to the conclusion that if more sexual related information was to be channeled through the school curriculum, there might be some degree of sexual behavior change among students

- iv. The findings in this study show that family sources and especially parents are very poor providers of sexual information to their adolescent children. The parents being the primary teachers of sexual information appear to have lost the battle due to the breakdown of traditional structures and social changes in modern living conditions. The study concludes that parents need to liaise with the teachers as the alternative sources of sexual information for their children. The study showed that students value the input of their parents on sexual information and older members of the family. These findings should therefore conclude the debate between parents, teachers and the government on whether to introduce sex education in the curriculum. The debate should now be how soon the education can be provided.

- v. Religious institutions, just like the parents appear to have abandoned a section of their flock by failing to address the need for sexual knowledge among the youth. The religious leaders are portrayed as not playing any significant role among the youth on sexuality issues. It was also evident is that the school programs that were recommended by religious bodies such as Family Life Education and Life Skills Education fall short of providing adequate sexual information leaving the youth to search for the rest from unreliable sources. The findings of this study have also led to the conclusion that although most students indicated they are members of different religious faith, their religious institutions do not provide them with sexual information.

- vi. Analysis of influence of sexual information received through the peer group revealed a strong level of significance. Considering that the knowledge they share comes from sources that are not intent on promoting morals, what they share is of little moral value and no wonder their expected sexual behavior is wanting. Over-reliance on peers for information about sexual matters exposes students to misleading information. Consequently, most of sexually active students are at the risk of contracting HIV/AIDS, sexually transmitted infections, unwanted pregnancies among girls which can result to school dropout or health complications as young girls attempt to abort. Analysis of data on the agent that the students prefer to teach the subject on sexuality and its management reveals that a significant percentage of students would like peer counselors

to handle the subject. This leads to the conclusion that success of a sex education program must involve peer counselors.

- vii. The media has come out as the most influential source of sexual information. Communication and Technological development has opened access to universal sexual habits unknown to older generations especially parents. The young are accessing more than what they deserve and need guidance on what to consume and what to discard. As a result of media popularity as a source of sexual information, this study concludes that using the same as a tool to teach the correct sexual knowledge would attract the attention of the youth.
- viii. Students' gender and age has indicated a strong relationship to sexual activity. It is important that the community modifies their stereotyping of gender in matters of sexuality. Socializing one gender to be sexually active is manly and the other gender is socialized to abstain is like shooting ourselves in the leg. Society needs to modify their attitudes towards sexuality and eliminate double standards in the expectations of responsible behavior.

5.12 Recommendations from the study

On the basis of the findings and conclusions of the study, a number of recommendations have been made. These recommendations are:

- i. The education system should include a comprehensive sex education curriculum throughout the school cycle appropriate to the age of the learner at each stage.

- ii. Teachers should be trained to handle the subject while still in college in order to make them confident when tackling the topic. The study recommends introduction of sex education in Teacher Training Institutions as an optional stand-alone teaching subject that teachers can specialize in.
- iii. Parents should be sensitized about the whole question of adolescent sexuality so that they get more involved in supporting what students learn about the same to complement what teachers are doing
- iv. The religious leaders should engage in familiarizing themselves with modern sexuality trends grounded on research, so that they play a more active role in educating the adolescents on sexual matters.
- v. Since adolescents find it easy to gather information from their peers, the study recommends that peer counselors be trained and provided with the right content on sexuality. This would enable them to provide the right information whenever it is required by the other students.
- vi. The study recommends the use of media in disseminating sexual information in order to make it attractive and acceptable. As technology is used in simulation of natural activities like the earthquakes and volcanic actions, the same can be used to communicate realities of irresponsible use of sex as well as the negative consequences.
- vii. Finally, the study recommends that more studies should be carried out in other parts of the country in order to compare the findings. This would serve as a way of assessing the needs of students in different parts of the country when formulating solutions to sexual-related issues.

REFERENCES.

- Alfonso, C.& López, T.(1995). *The Truth and Meaning of Human Sexuality* Pontifical Council guideline of Vatican council.
- Amuyunzu, M.M. (2005). *Qualitative evidence on adolescents' view of sexual and reproductive health in sub-Saharan Africa*. New York:
- Anyangu, S. (2009). *The reality of adolescent sexual practices*. National Population Studies- IPS 2009; Government Press
- Bandura, A. (1977). *Social Learning Theory*. New York; General learning Press
- Barnett, B. & Schudler, J. (2000). *Meeting the needs of young clients; A guide to providing reproductive Health Services to adolescents*. Family Health International, funded by USAID.
- Bearman, P. Bruckner, H. (1999). *Power of Numbers: Peer Effects on Adolescent Girls' Sexual Debut and Pregnancy*. Washington, DC: National Campaign to Prevent Teen Pregnancy.
- Blake, S. (2002). *Sex and Relationship Education; A Step-by-Step Guide for Teachers* London: David Fulton publishers
- Bronfenbrenner,U.(1999). *Ecological Systems Theory* Psycnet.apa.org/psycinfo/199298662- 005
- Browning. J.R, Hatfield. E, Kessler. D, Levin. T, (2000). *Sexual Motives, Gender, and Sexual Behavior*. Archives of Sexual Behavior, April Vol. 29, Issue 2,pp135-153
- Candace, L. (2015). *Offering Teens a real Choice: Long lasting reversible Cont Pathfinder: June 4, 2015*.
- Centre for Disease Control, (2007). *Report on President's Emergency Aids Relief Fund*. Retrieved on June 15, 2011 on <https://en.wikipedia.org/wiki/centre-for-control-and-prevention>
- Centre for the Study of Adolescents, (2009). *Calculating Women Sexual and Reproductive Risk in Sub-Saharan Africa*. Population Action International-Report Card. ISBN:1966-9845-3-4
- Centre for the Study of Adolescents (2009) *Report of the proceedings of a Workshop on advocacy for national approaches to Adolescent Reproductive Health*, Naivasha, Kenya. January 26-30.
- Chemutai, A. (2011). *Factors Influencing Implementation of Life Skills Education in Public Primary Schools. Case study of Nakuru District*. MA Unpu Thesis, University of Nairobi
- Creel, C. & Perry R. (2003) '*Improving the quality of Reproductive Health Care for Young People*'. Population Reference Beureau.
- Collins, R. L., Marc N., Elliot, Sandra H.B., David E.K., and Sara B.Hunter. (2003). *Entertainment Television as a healthy Sex Educator: The Impact of Condom Efficacy*. Paediatrics, Vol,112,No.5.
- Collins, R. L., Marc N., Elliot, Sandra. H.B., David E.K., Dale K., Sara B.H.& Angela, M. (2004). '*Watching Sex on Television Predicts Adolescent Initiation of Sexual Behaviour*', Paediatrics, Vol.114, No.3
- Commission on Status of Women, (1973). *Women empowerment on Reproduc health 51st Family Planning Perspective*. Vol.4.Jan, 1972 pg.2
- Darling, C.A. & Hicks, M.N. (1982). *Parental Influence on Adolescence Sexuality: Implications for Parents as Educators*. "Journal of

Adolescent and Adolescence II.

- Donel, I., Stuave .A., Agronick, G., Simmons, .W.R., and Duran, R. & Jeanbaptiste .V.(2005) *Saving Sex for Later: An Evaluation of a Parent Education Intervention*, Journal- Perspectives of Reproductive health. Vol.37, no.4, December2005.Available at <https://www.guttmacher.org/pubs/journals/3716605.html>
- Family Planning Perspectives, (1998). *Family Communication about sex. What are Parents saying and are their adolescents listening?* Published by:
- Guttmacher Institute Article DOI: 10.2307/2991607 Stable URL: <http://www.jstor.org/stable/2991>
- Fisher.T, (2001). *Women’s Sexual Behaviors May be Close to Men’s than Previously Thought*. The Journal of Sex Research. Retrieved from <http://researchnews.osu.edu/archive/sexsurv.htm>
- Forrest, S. (2002). *A comparison of Student evaluation of Peer-delivered Sex Education Program and Teacher-led programme*.Sex education2(3).
- Fox and Inanzu, J.K. (1980). *Mother-Daughter Communication about Sex*. Family Relations.Vol.29. pp347-352
- Freud, S. (1992). cited in 2004 Planned Parenthood Federation of America.
- Frost, J.& Darrock,F. J. (1995). *Understanding the impact of teenage pregnancy*. Prevention programs. Family Planning Perspectives, Vol.27, 118-195
- Garbara, B.(1985). *Adolescent fertility in Kenya*. Boston; Pathfinder Fund
- Gachuhi, J.M. (1973). *Youth attitudes towards sex in Kenya*. Working paper no. 94- UoN, IDS Papers.
- Gachuhi, M.L. (1983). “*Coping with adolescent fertility*” Initiatives in population, vol.no.2, pp19-24 and 37
- Githaiga, N., Gathanwa L., Thinguri R.(2014). *An Exploration of Teachers’ Attitude towards Life Skills Education: A Case Study of Secondary Schools in Thika West District, Kiambu County, Kenya*. Journal of Education and Practice ISSN 2222-1735 Vol.5, No. 34, 2014
- Holder, D.W.,(2000).*The association between adolescent sexual spirituality and voluntary sexual activity*. Journal of Adolescence Health 2000; 26: 295-302.
- International Planned Parenthood Federation, (1995) ‘*Understanding adolescents’ African Region*. Africa Link, October.
- Isam, R. N. (1974). *Commission Report on Sex Education Challenges*.
- United Committee on Reproductive Health, working paper vol.1 pg 92
- Janice, J. (2010). *A review of adolescent high risk behavior in Kenya*: Population Communication Africa. Ukweli Vol.2, No.5.(c)
- Joint National Council for Population and National Development & Ministry

- of Planning and National Development (2004). Kenya's Progress in Implementing the International Conference on Population and Development Program of Action-12004.<https://opendata.go.ke/education/kenya-secondary-schools/qerb-uv8q>
- Joint United Nations Programme on HIV/AIDS (UNAIDS) (2006). *Report on the Global AIDS Epidemic*. Geneva: UNAIDS; 2006. Available at:www.unaids.org/en/HIV-data/2006GlobalReport/default.asp.
- Joint United Nations Programmes on HIV/AIDS, United Nation's Children's Fund U.S. Agency for International Development; Children on the Brink (2004); *A joint Report of New Orphan Estimates and Framework for Action*. New York: UNAIDS, UNICEF, USAID;2004.
- Joint U.S Agency for International Development, Prevention Technologies with the assistance of Interagency Youth Working Group (2012). *Making Comprehensive Sexuality Education Available at a National Scale: A case study About Tailoring International Guidance for Kenya*. Cooperative Agreement GHO-A-00-09-00016- 00.
- Joint U.S Agency for International Development, U.S President's Emergency Plan for AIDS Relief under the terms of Cooperative Agreement with support from Path finder; *A case Study, Community-Based HIV/AIDS Prevention, Care, and Support Program, 2007*. Measure Evaluation, Carolina Population Centre. Available at measure@unc.edu <http://www.cpc.unc.edu/measure>
- Joint United Nations Programme on HIV/AIDS and World Health Organization, 2007. *Sub-Saharan Africa AIDS epidemic update regional summary*. a UN Publication
- Jurs,T. (1984). *Correlation of Moral development with use of birth control and pregnancy among Teenage girls*. Psychological Reports, vol.55, No.3, pp.109- 1010
- Kahn, S. (2008). *Youth reproductive and sexual health*. Calverton, Maryland: Macro International Inc.
- Kaiser Family Foundation. (1997). *National survey of teens: Teens talk about Dating ,intimacy, and their sexual experiences*. Menlo Park, CA: Kaiser Family Foundation.www.kff.org.
- Kalinga, L.K. (2011). *The Effects of Sex Education on Adolescents' Sexual Behaviour in Secondary Schools in Thika District, Kenya*. URL:<http://jr-library.ku.ac.ke/handle/123456789/529>
- Kamara, E. (2005). *Gender, Youth Sexuality & HIV/AIDS: A Kenyan Experience*. Eldoret: Amecca Gaba Publishers.

- Kangara, L. (2004). *Youth, Church and Sexuality in Kenya*. Africa Regional Sexuality Resource Centre for Post-Sexuality Leadership Development Fellowship Report Series No. 7.
- Karanja, D. (2004). *Youth perception to sex education in Kenya*. Unpublished MA Thesis. University of Nairobi
- Kenya Central Bureau of Statistics (1999). *National Population Census*, Nairobi, Kenya: Kenya Central Bureau of Statistics; 1999
- Kenya Central Bureau of Statistics (2005). *Poverty Data by Ds and Constituencies, Kenya*: Kenya Bureau of Statistics; 2005. Available at: www.health.go.ke
- Kenya Ministry of Health & National AIDS and STD Control Programme (Kenya). HIV-sentinel surveillance 2004(slides). Available at www.aidskenya.org/Surveillancereport
- Kenya Demographic and Health Survey (2014). *Teenage Fertility Rates*. Kenya National Bureau of Statistics and ICF Macro (2010) Calverton, Maryland: KNBS and ICF Macro.
- Kenya Government Data Website (2007): <https://opendata.go.ke/education/kenya-secondary-schools/qerb-uv8q>
- Kenya legal and Ethical Issues Network (2011). *Promotion and protection of HIV-related Human Rights in Kenya*. www.stopto.org/partners.partner_profiles2.asp
- Kenyatta, J. (1938). *Facing Mt. Kenya*. London. Martin Secker & Warbourg Ltd
- Kiragu, S.W. (2006). *Exploring sexuality education and the burdened teacher: A participatory approach in a rural primary school in Kenya*. Cambridge University Press.
- Kiragu, K. (1995). *Contraceptive use among high school students in Kenya*. International Family Planning Perspective, vol.21, No.3, 108, September.
- Kiragu, K. & Zabin, L.S (1993). 'Correlates of premarital sexual activity among school age adolescents in Kenya. International Family Planning Perspectives. Vol.19, No.3, pp 92-97 and 109
- Kirby, D. (1991). *HIV-Transmission and Prevention in Adolescents Health* In site knowledge National Campaign to Prevent Teen Pregnancy. Base Chapter. San Francisco: University of California.
- Kirby, D. (2007). *"Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases"*. National Campaign to Prevent teen Pregnancy <http://www.thenationalcampaign.org/ea2007/>
- Kirby, D. (2011). *The Impact of Sex Education on the Sexual Behaviour of Young People* Population Division; United Nations New York. Expert Paper No.2011/12
- Knauls, B.&Rich,S. (1992). *Influence on Adolescent Sexuality in Nigeria and Kenya*:

- Findings from recent F.G.D studies in Family Planning. Vol 23, no.3
PP199- 210.
- Lema, V. (1990). *Determinants of Sexuality among adolescent school girls in Kenya*. East African Medical Journal, vol.19, no.1
- Makhoha, A.E. (1980). *Maternal Mortality-Kenyatta National Hospital*. East Africa Medical Journal Volume 57, No.7, pp451-461. June display,1980
- Malamuth, N., & Impett, E. (2001). Research on Sex in the media: What do we Know About effects on children and adolescents? In D.Singer & J.Singer (Eds.). *Handbook of children and the media* (pp.289-307). Thousand Oaks, CA: Sage Publications.
- Marsiglio, W, Scanzoni, J. H., & Broad, K. L. (2000). *Sexual behavior patterns*. In Edgar. F. Meyer, C. (1995). *The eco-systems perspective: Implications for practice*. In C. Meyer & M. Mattaini (Eds). *The Foundations of social work practice* (pp 16-27) Washington DC: NASW Press
- Mbiti, J.S. (1998). *African Religions and Philosophy: 2nd Edition*. Oxford Heinemann
- Mbugua, N. (2007). *Factors inhibiting educated mothers in Kenya giving meaningful sex-education to their daughters*. Journal of Social Science and Medicine, 64(5), 1079–1089.
- Millen, R. & Roll, A. (1977). *Obstetric fistula: A preventable tragedy*. Journal of Midwifery & Women's Health, 50(4), 286–294.
- Ministry of Education Science & Technology, (1984). *Family Life Education Syllabus*. Kenya Institute of Education
- Ministry of Education, (2008). *Primary Education Curriculum. Life Skills Syllabus*. Kenya Institute of Education.
- Ministry of Education, (2008). *Secondary Life Skills Education. Teachers' Handbook*. Kenya. Institute of Education
- Ministry of Health-Directorate of Reproductive Health, (2005). *National Guidelines and provision of Adolescent Youth Friendly Services in Kenya*. Government Printer
- Ministry of Planning and National Development, (1977) National Population Policy, Government Printer
- Montmay. R. (1982). 'Relationship between Parent adolescent conflict and Amount of time adolescents spend alone with peers'. Journal of Child Development. Vol.52, no.4, pp 1512-1579.
- Muhunzu I. (2010). *Sexual debut among young women in Kenya aged 15-24 years*.(s.n):(s:n), Unpublished Thesis, University of Nairobi
- Nahom. D, Wells.E, Gilmore.M.R, Hoppe. M, Morrison.M.D, (2001). *Differences by Gender and Sexual Experience of Adolescent Sexual Behavior: Implications for Education in HIV prevention*. Journal of School Health. April 2001, Vol.71, No.4. 153

- National Campaign to Prevent Teen Pregnancy, (2001). *Faithful Nation: What American Adults and Adolescents Think about Faith, Morals, Religion and Teen Pregnancy ;A national Survey*. Washington, DC: The Campaign, 2001
- National Population Council & ICF Macro (2009): *Nigeria Demographic and Health Survey 2008*. Abuja, Nigeria. National Population Commission and ICF Macro Internet: <http://www.measuredhs.com>.
- Nganda, S. (2008). *Sex education: Do our teens need it? Paper presented at Kenyatta University, Department of Psychology, Nairobi, Kenya* Retrieved November 20, 2010, from <http://www.arsrc.org/downloads/uhsss/nganda.pdf>
- Njau, P. W. (1987). 'Social and Cultural factors associated with pregnancy among unmarried teenage girls' in K.O.Rogo(ed) *adolescent fertility proceedings of a workshop held in Kwale, Kenya, August 1986*, Nairobi: Kenya Medical Association
- Njau, P. & Radney, S. (1994). 'Adolescence in Kenya: The facts. Nairobi Centre for Study of Adolescence. . Population Action International- Report Card. ISBN:1993-985-2-3
- National Aids Control Council, (2002). *Preventing HIV and Teen Pregnancy In Kenya: Teacher Training and Education subsidies*. <http://www.nacc.or.ke/>
- National Campaign to Prevent Teen Pregnancy, (2001). *Faithful Nation: What American Adults Think About Faith, Morals, Religion and Teen Pregnancy: A National Survey*. Washington D.C: The Campaign, 2001.
- Nyamongo, I. (1995). *Investigation into condom acceptability, sexual behavior and attitudes about HIV infection and AIDS among adolescent students in Kenya*. Nairobi, Kenya, Institute of African Studies. University of Nairobi.(Unpublished final report submitted to the program in January, 1995)
- National Coordinating Agency for Population and Development (2005). *Theme: Youth and Development*. Ken pop. News vol.1 no.3
- Oduor, L.A. (2006). *Management of pre-marital sex among the youth in secondary schools; A case study of Embakasi District*, Unpublished M.ED Thesis
- Ohon, P.W (2002). *Family Background Characteristics and Parent Communication on Sexuality: Case Study of Nairobi*. Unpublished MATHesis.
- O'Donnel, S. & Agronik, J. (2005). *Saving sex for later: developing a parent-child communication intervention to delay sexual initiation among young adolescents*. Sex education, 2005 (forthcoming).
- Orodho, A.J. (2003). *Essentials of Educational and Social Science Research Methods*. Masola Publisher

- Orr, M.T (1982). 'Sex education and contraceptives education in United States Public High Schools'. Family Planning Perspective Vol.14, no.6, pp304- 313.
- Population Information Program, (2002). *Reducing disability via behavioral approach*. John Hopkins Population Information Program. <http://jhuccp.org/pip>. Retrieved, 2013
- Pick de Weiss, S., Atkin, L.C., Gribble, J.N. & Andrade, P.P. 2000. 'Sex Contraception and Pregnancy among Adolescents in Mexico City. Studies in Family Planning perspective. vol.122, No 2, pp74-82
- Ramsey, G.V.(1980). 'Sex Information of Young Boys'' in. J. M. Siedman (ed). *The adolescent: A book of readings*, New York: Holt, Rinehart and Wilson.
- Reigh, J. (2006). *Program for Appropriate Technology in Health*; Philadelphia Open University Press
- Republic of Kenya, (1999). *AIDS in Kenya*, Sessional Paper No.4, vol.1.p.5. Government Printer.
- Republic of Kenya, (1984). *Youth Education and Development*. Sessional Paper no.1 vol.no 2. Government Printer
- Roberts, D.F. (1993). *Adolescents and the media: From 'leave It to Beaver' to 'Beverly Hills 90210.'* Teachers College Records, 94, 629-644
- Roberts, P. (2009). "Pregnancy, STDs on the Rise Again Among U.S. Teens". abcnews.com
<http://abcnews.go.com/Health/Healthday/story?id=8105118&page=1>. Retrieved July 20, 2009.
- Rothery, M.(1999). *Theoretical Perspectives for Direct Social Work Practice*. Peter Lehman Phd-lcw. Springer Publishing Company. Amazon.com
- Rothery, M., Lehman, P.(2001). *Theoretical Perspectives for Social workers*. Books.google.com
- wledge, attitude and Practice; Survey
- Rukaria, M.& Oyieke, J. (1992). *Kno Contraception among male and female undergraduate students in a University in Kenya*; Journal of Obstetrics' and Gynecology of East and Central Africa, vol.10, No. 2, pp 65-69.
- Sara Mae Sincero, (Mar.14, 2012) *Ecological Systems Theory*. Retrieved Jan, 2005. from Explorable.com: <https://explorable.com/ecological-systems-theory>
- Sex Information and Education Committee of United States (2009). *Report of Public Support of Sexuality Education From* http://www.siecus.org/school/sex_ed/sex.ed0002.html; Retrieved June 2, 2009
- Shahid, I.R., (2005). *Influences of family, peers and school on Senegales adolescents* Psychological Reports, Vol.48, No 3, pp807-810
- Simanski, J.W.(1998). *The Birds and the Bees: An analysis of Advice at Parent through Popular Press Adolescence*. Brock & Jennings.
- Snergrof, P.(1995). *Contraceptive and the adolescent*. Outlook, vol.5, No. 2. P.2.

- Story, C, Chandra, G & Gorski, J (2013). Global perspectives on peer education For College Students. *International Education*, vol.42 Issue (2). Retrieved from <http://trace.tennessee.edu/internationaleducation/vol42/iss2/6>
- Strouse, J.S & Buerkel-Rothfuss, N. (1987). *Media exposure and sexual attitudes and the behaviors of college students*. *Journal of Sex Education and Therapy*, 13(2), 43-51.
- Swan, C., Bowe, K., Mocormick, G. & Kosmin, M. (2003). *Teenage Pregnancy and Parenthood. A review of reviews: Evidence briefing*. London: Health Development Agency.
- United Nations Education Scientific and Cultural Organization, (2007). *The Truth and Meaning of Human Sexuality*. The World Development Report vol.4 no.2. (<http://www.legalmomentum.org/site/docserver.retrieved2007-525>).
- United Nations Education Scientific and Cultural Organization. *Decade on Education And Sustainable Development*, (2005). Division for the Promotion of Quality Education. www.unesco.org/education/desd
- UNICEF Innocenti Research Centre, (2007). *51st Commission on Status of Women*. www.unwomen.org/en/csa
- United Nations General Assembly Special Session on HIV (1981) *International Youth Year: Participation Development*. UN New York
- United Nations General Assembly (2006), *Promotion and protection of the Rights of the Children*. Retrieved on 16 June, 2013 from <http://www.unhcr.ch/html/menu6/2/fs19.htm#>
- United Nations International Children's Education Fund (2004), *Girls , HIV/AIDS and Education* .http://www.unicef.org/lifeskills/index_8657.html. Retrieved November 20, 2010
- United Nations General Assembly on World Program for Human Rights Education, (2004). *Plan of Action and different phases of the world Program for human Rights Education, 2005-on going*. United Nations Regional Information Centre for Western Europe. www.humanrightseducation.info/.../237-edu-program-for-human-rights
- United States Aid for International Development, (2010) *International Technical Guidance On Sexuality Education--Skills Education in Kenya: A comparative Analysis and Stakeholder Perspectives*
- United States Aid for International Development (2009), *Achieving the MDGs: The contribution of family planning, Kenya*. http://www.usaid.gov/our_work/global_kenya.pdf Retrieved November 20, 2010,
- United States Aid for International Development, (1997). *Integrating STD/HIV prevention in the school setting: a Position paper*. Geneva, http://www.unicef.org/lifeskills/index_8657.html
- Vandewiele, M. (1981). *Influences of family, peers, and school on Senegalis adolescents*; *Psychological Reports*, vol.48, no.3, pp807-810a.

- Vincent, S. & Ingham, R., ((1987). *Sources of Information on Sexuality for Young Adults in Kenya: Implications for Education*. University of Southampton, United Kingdom (Script kept at Population Council Library, University of Nairobi)
- Vu, Q.V. (1996). *Survey on young adults' reproductive behavior: KAP study*. Hanoi, Vietnam, National Committee on Population and Family Planning. (Unpublished final report submitted to the programme in January, 1996)
- Wanyonyi, S.H. (2014). *Youth Sexual Behaviour and Sex Education*. International Journal of Education and Research. Vol.2 No.3 March 2014 ISSN:2201-6333, on www.ijern.com
- Ward, L.M., & Wyatt, G.E., (1994). *The effect of childhood sexual messages on Afro-American and white women adolescent sexual behaviour*. Psychology of Women Quarterly, 18. 183-201
- Were, M. (2007). *Determinants of teenage pregnancies: The case of Busia District in Kenya*. Economics & Human Biology, 5(2), 322-339.
- Werner, R.J; Fitzharris, J.L; and Morrissey, M.M. (2004) *'Adolescent and parent perceptions of media influence on adolescent sexuality*. Adolescence.
- Wilson, W. & Liedke, V. (1984). *'Movie inspired sexual practices'*. Psychological Reports vol.54, No. 1, p32
- Wirakartakusumah, D. (1977). *Indonesian Teenage Reproductive Health*. Jakarta, Indonesia University of Indonesia (Unpublished final report submitted to the program in January, 1997)
- World Health Organization. (2007). *World Health Organization: Sexually Transmitted Infections*. Retrieved from <http://www.who.int/mediacentre/factsheets/fs110/en/index.html>.
- World Health Organization (2006), *Global strategy for the prevention and control of STIs*. Retrieved from <http://whqlibdoc.who.int/hq/2006/WHO-RHR-06.10-eng.pdf>
- World Health Organization, (1996). *Partners In Life Skills Education- conclusion from a United Nation Inter-agency Meeting*, Geneva
- World Population Fund (2005). *The world starts with me*. Retrieved November 20, 2010, from <http://www.theworldstarts.org/start/visitors.html>
- World Youth Report 2003: Report of the Secretary-General (Official document: A/58/79 & E/CN.5/2003/4)
- Wyatt, T.J., & Oswalt, S.B. (2011). *Letting Students be innovative! Using mini-grants to fund student-designed HIV/AIDS education*. Health Promotion Practice, 12 (3), 414-424. doi:10.1177/1524839909348745.
- Youniss, J., (1980). *Parents & Peers in Child Development; A Sullivan-Piaget Perspective*. University of Chicago Press
- Zabin L. (1998). *To whom do minors talk to? Family Planning Perspectives* vol.12, no.5, pp 233-2
- Zaleski, E.H; Schiaffino, K.M (2000) *Religiosity and sexual risk-taking behavior during transition to college*. Journal of Adolescence 2000; 23:223-7
- Zimmerman, R. (2008). *Effects of school-based, theory driven HIV and*

pregnancy prevention curriculum. Perspectives on sexual and Reproductive Health, vol.40, No.1, pp.42-51
In uniform by day and prostitutes by night. Secondary school Students' double life. The Nairobiian, (2015, February, 16th-22nd Edition www.standardmedia.co.ke.
Alarm as abortion cases hit new high (2012, October 27th). Daily Nation, p10-11. *Horror of schoolgirl pregnancy* (2012, October 13th) Daily Nation p4.
Digitally wayward the Kenyan varsity way. (2011, May, 2nd), Daily Nation DN2 p.
Minister decries pre marital pregnancy among students in primary schools (2011, March 1st) daily Nation, p.1.

APPENDIX 1
STUDENT'S QUESTIONNAIRE.

To the respondent,

This is to request you to spare some time and fill this questionnaire. The purpose of this questionnaire is to collect data for my PhD studies that I am currently pursuing at the University of Nairobi. I am studying Influence of Sources of Sexual related Information and Secondary School Students' Sexual Behavior. I take this opportunity to ensure you that the information you provide will not be used for any other purpose except for what is stated here. Confidentiality will strictly be observed. Please respond to all the questions as honestly as possible. Do not write your name anywhere.

SECTION A

1. Indicate your gender. Male () Female ()
2. Indicate your age in years. 15 () 16 () 17 () 18 () Over 18 ()
3. Indicate the category of your school with a tick. National () County () District () Private ()
4. Indicate your ethnic background.....
5. Indicate your school type; Mixed day () Mixed boarding () Boys' day () Boys' boarding Girls' day () Girls' boarding ()
6. Indicate the marital status of your parents; Single (); Married () Separated () Divorced ()
7. Indicate with a tick the highest level of education of your mother and mother from the table presented here below.

Level of education	Father	Mother	Guardian
No formal Education			
Primary Education			
Secondary Education			
Diploma Education			
University Education			

8. Indicate your religion; Protestant (); Catholic () Pentecostal () Islam () other(s) specify_____
9. Indicate religion of your parents. Protestant (); Catholic () Pentecostal () Islam () other(s) specify_____
10. Indicate parents' occupation:
 - Employed
 - Self-employed
 - Casual Laborer
 - Unemployed

Section B. Sexual activities

11. Rate with a tick (✓) your opinion on secondary school students' involvement in the types of sexual activities stated in the table below?

Sexual Activities	Strongly agree	Agree	Disagree	Strongly Disagree
i. Secondary school students do not engage in premarital sex with other students				
ii. Secondary school students do not engage in sex with some married people				

iii. Secondary school students do not engage in unprotected sex				
iv. Secondary school students do not engage in oral sex				
v. Secondary school students do not engage in homosexuality				
vi. Secondary school students do not engage in lesbianism				
vii. Secondary school students do not engage in group sex				
vii. Secondary school students do not engage in prostitution				

b) In your opinion what is the major reason that makes some secondary school students engage in sexual activities?

c) In the case of those who abstain from sex, what do you think is the major reason for abstaining?.....

12. Have you ever had sex? **YES** **NO**

b. If so what made you decide to engage in sex?

c. If not, what influenced your choice to abstain?

Section C. Sources of sex-related Information

13. Indicate with a tick [√] the extent to which you have obtained sexual-related information from the sources listed here-below.

Source of sexual-related information	Strongly agree	Agree	Disagree	Strongly disagree
The school curriculum				
The family members				
The religious institutions				
Mass media				
The Peer group				

b) Please indicate other sources of sexual-related information not listed in the table.....
.....
.....

14. The table below contains sexuality information. Indicate with a tick [√] **most important** sources per each statement from which you received most information on sexual matters.

Sexual-related information	Source					
	parents	Peer group	School curriculum	Religious institution	Mass media	Self-discovery
i. The names of sex organs in mother tongue						
ii. How babies are made						
iii. About wet dreams by boys						
iv. Menstruation by girls						
v. Physical changes during adolescence						
vi. How to abstain from sex						
vii. How to avoid HIV/AIDS infection						
viii. How to tell safe days of a girl						
ix. How to use pills						
x. How to maintain a boy/girl relationship						
xi. How to kiss						
xii. How to become assertive						
xiii. How to play safe sex						
xiv. How to use a condom						
xv. Sexual intercourse						
xvi. Sexual intercourse is painful						
xvii. Sexual intercourse is pleasurable						

Others specify _____

b). Among the statements in Table 14 listed above, list the best three sources that guide you apply when making decisions about your sexual practices.

(i) _____

(ii) _____

(iii) _____

15. Indicate with a tick [✓] the frequency of some of the consequences of irresponsible behavior which you consider as affecting students in your school today.

Consequences	Very Frequent	Frequent	Rare	None at all
Premarital Pregnancy				
School dropout				
HIV/AIDS infection				
Sexually Transmitted Infections				
Abortions				
Poor performance in school				
Emotional problems				
Early marriage				

Discipline problems in schools				
Drug and substance abuse				

16. Indicate with a tick [√] the most effective mode of teaching sex-related information.

Method	Very effective	Effective	Rarely Effective	Not Effective
i. when taught in class				
ii. through guidance & counseling				
iii. talk by elders				
iv. religious leaders 'programs				
vi. searching in the internet				
vii. airing on Radio				
viii. peer teaching				
ix. Mentoring				
x. Religious Education				

b). Suggest effective methods of providing sexual related information.

(i) _____

(ii) _____

(iii) _____

17. Suggest the agent you would like to be providing the information and why.

(i) _____

(ii) _____

(iii) _____

18. In your opinion what are advantages of abstaining from sexual involvement by school students?

(i) _____

(ii) _____

(iii) _____

APPENDIX 2

INTERVIEW SCHEDULE FOR TEACHER COUNSELOR.

Date.../.../...

To Respondent,

This is a request to you to spare some time and respond to the questions below. The purpose of this interview schedule is to collect data for my PhD studies that I am currently pursuing at the University of Nairobi. I am studying the Influence of sources of Sexual Related Information on Secondary School Students' Sexual Behavior. I take this opportunity to assure you that the information you provide will be use solely for this academic research, Confidentiality will be highly observed. Please fill in section A and respond to all the questions in both sections A and B as honestly as possible.

Section A. Background Information

1. Indicate your gender. Male () Female ()
2. Indicate your age.....years
3. Indicate your marital status.....
4. Indicate your ethnic background.....
5. Indicate your religious affiliation.....
6. Indicate your professional qualification.....
7. Indicate the number of years you have been teaching.....
8. What are your teaching subjects.....
9. Indicate any training you may have undergone on adolescent sexuality.....
10. Indicate any other responsibility you have in the school apart from Guidance and counseling.....
11. Indicate by a tick the category of your school. National () County () District ()
12. Indicate whether your school is; Mixed day () Mixed boarding () Boys day ()
Boys boarding () Girls day () Girls boarding ()

Section B. Key Informant Interview Guide

13. Tell me about the kind of sexual-related information available to students through;
 - The school curriculum (to probe content, mode, programs)
 - The Family sources (to probe cultural practices, religion, elders)
 - Religious Institutions.
 - The Peer Group (probe types of peer groups)
 - The Media (to probe TV, Radio, ICT-Internet, mobile phones, movies, books & magazines)

14. Describe the how sex-related information influences students' sexual behavior from each of the four sources mentioned above (probe from curriculum, family, media, and peer group)?

15. How can the provision of sex education can be improved to equip students with information that promotes responsible sexual behavior (probe what should be included or excluded, who should teach, how and when it should be taught)?

APPENDIX 3
INTERVIEW SCHEDULE FOR HEAD TEACHER.

Date.../.../...

To Respondent,

This is a request to you to spare some time and respond to the questions below. The purpose of this interview schedule is to collect data for my PhD studies that I am currently pursuing at the University of Nairobi. I am studying the Influence of sources of Sexual Related Information on Secondary School Students' Sexual Behavior. I take this opportunity to assure you that the information you provide will be use solely for this academic research, Confidentiality will be highly observed. Please fill in section A and respond to all the questions in both sections A and B as honestly as possible.

Section A. Background Information

1. Indicate your gender. Male () Female ()
2. Indicate your age. ()
3. Indicate your marital status.....
4. Indicate your ethnic background.....
5. Indicate your religious affiliation.....
6. Indicate your professional qualification.....
7. Indicate the number of years you have been teaching.....
8. What are your teaching subjects.....
9. Indicate any training you may have undergone on adolescent sexuality.....
10. Indicate any other responsibility you have in the school apart from Guidance and counseling.....
11. Indicate by a tick the category of your school. National () Provincial () District () Private ()
12. Indicate whether your school is; Mixed day () Mixed boarding () Boys day ()
Boys boarding () Girls day () Girls boarding ()

Section B. Key Informant Interview Guide

13. Tell me about the kind of sex-related information available/accessible to students through;
 - The school curriculum (to probe content, mode, programs)
 - The Family sources (to probe cultural practices, religion, elders)
 - Religious Institutions (to probe youth clubs, youth seminar, camps)
 - The Media (to probe TV, Radio, ICT-Internet, mobile phones, movies, books & magazines)
 - The Peer Group (probe types of peer groups)

14. Describe how sexual-related information influences students' sexual behavior from each of the four major sources.(probe from curriculum, family, media, and peer group)?

15. How can the provision of sex education be improved to equip students with information and skills that promote responsible sexual behavior (probe what should be included or excluded, who should teach, how and when it should be taught)?

APPENDIX 4
LIST OF SAMPLE SCHOOLS

National Schools:

- Boys Boarding; Mang'u High School
- Girls Boarding; Maryhill Girls High School

County Schools:

- Boys Boarding; Thika High School
- Girls boarding; St.Francis Mangu

District Schools:

- Boys day; Ruiru Boys
- Girls day; Ruiru Girls
- Girls boarding; Gikindu Girls

District Mixed schools:

- Githurai Kimbo mixed secondary
- Thika Memorial School

Private Schools:

- Boys Boarding; Equator High School
- Girls Boarding; St. Xavier Girls High school
- Mixed day and Boarding; Heights Academy

APPENDIX 5

Table 4.4: Ethnic distribution of Student Respondents

Ethnic background	Frequency	Percentage
Kikuyu	223	69.2
Luo	24	7.5
Luhya	20	6.2
Kamba	16	5.0
Kalenjin	9	2.8
Meru	8	2.5
Somali	7	2.2
Kisii	5	1.6
Taita	3	0.9
Pokomo	2	0.6
Arab	1	0.3
Digo	1	0.3
Ethiopian	1	0.3
Hadiya	1	0.3
Mitero	1	0.3
Pokomo	1	0.3
Total	322	100