



**DETERMINANTS OF SEXUAL DEBUT AMONG IN-SCHOOL
ADOLESCENTS IN NYAMIRA COUNTY,
SOUTH-WESTERN KENYA**

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REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY IN AFRICAN WOMEN STUDIES
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2022

DECLARATION

This thesis is my original work and has not been submitted for examination in any other university or institution for certification.

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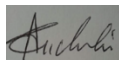
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DEDICATION

I would like to dedicate this thesis to the young people of Nyamira County; that as they strive for academic excellence, may they grow to be well rounded individuals, healthy at all levels - physically, mentally and socially.

ACKNOWLEDGEMENTS

First and foremost, I would like to thank the Almighty God for his guidance and mercy in seeing me through my doctoral studies.

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Special thanks to all the participants in Nyamira county whose contribution made this study a reality. I would also like to extend special thanks to my Research Assistants with whom I was able to carry out data collection seamlessly and fruitfully, and to my statistician for the data analysis.

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ABSTRACT

Sexual intercourse is commonly initiated during adolescence. When an adolescent begins to have sex, the path taken and the outcome depend on factors that can influence their behavior at each stage, that is, economic, political, religious, biopsychosocial and cultural factors. Adolescent sexuality is a subject of great social concern due to its association with negative outcomes such as teenage pregnancies and sexually transmitted infections. Worldwide, nearly a third of new HIV infections are among adolescents. In Sub-Saharan Africa, the burden is very high with new infections constituting 85% of all adolescents living with HIV. In Kenya in 2017, 23.7% of the new HIV infections were diagnosed among adolescent girls. The national adolescent fertility rate stands at 106 births per 1000 adolescent females, which is more than double the global fertility rate of 44 births per 1000 adolescent females. The teenage pregnancy rate in Nyamira County is quite high standing at 28%. Initiators for sex among adolescents exist both in the school environment and in the broader community. Those in mixed schools continually interact with the opposite sex both in and out of school, while those in single sex schools only interact with the opposite sex during interschool functions and school closures for the holidays. It is therefore important that the determinants of sexual debut among in-school adolescents be understood in order to determine whether the type of school among other factors have a role to play in adolescent students' sexual debut particularly in the setting of Nyamira County. This will inform the next course of action towards improving adolescent sexual and reproductive health in the County.

The Social Learning, Theory of Reasoned Action and the Marxist theories guided the inquiry. The study used surveys, focus group discussions, case narratives and key informant interviews to collect data from adolescents (n=400) and key informants over a six-month period between January and June 2019. Quantitative data was captured and analyzed using SPSS Version 20

statistical software. Similarly, qualitative data was transcribed and analyzed through thematic analysis approach with MAXQDA software Version 2018.2.

The study revealed that majority of the students, 61% (244) had ever had sex, with more students (63.5%) in mixed day schools having ever had sex compared to single sex schools (58.5%). However, this was not statistically significant ($p=0.19$). The students' gender, age, marital status and coming from polygamous homes were found to be associated with ever having sex ($p=0.03$). Male students were more likely to have ever had sex compared to female students ($p=0.03$). Peer pressure was reported by most male students as a driver towards initiating sex, while most female students reported poverty. Older sexual partners were viewed to provide parental love. Most students (75.3%) had normal self-esteem. The level of self-esteem did not vary between students who had ever had sex and those who hadn't, both in mixed-day secondary school ($p=0.809$) and in single-sex secondary school students ($p=0.089$).

The study findings imply a high likelihood of a pluralist environment where peer pressure, cultural norming, poverty and popular culture on social and mainstream media all contribute to early sexual debut among in-school adolescents in Nyamira County. Community engagement and participation should be encouraged to ensure that adolescent sex and its consequences are openly discussed, challenges identified and solutions gotten. The Nyamira county government should work with non-governmental organizations (NGOs) in the area to come up with adolescent/youth friendly programs that will impart the young people with technical and social skills. Positive peer pressure should be encouraged among boys. Economic growth of families in Nyamira County through job creation by the Nyamira County Government will help curb poverty as a driver towards sexual debut especially among female adolescents. There is also need for future research into interventions that can be put in place to reduce the incidence of sexual initiation among adolescents.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS Acquired Immune Deficiency Syndrome

ASRH Adolescent Sexual and Reproductive Health

FGD Focus Group Discussion

HIV Human Immunodeficiency Virus

KDHS Kenya Demographic Health Survey

KNH Kenyatta National Hospital

KPHC Kenya Population and Housing Census

LMIC Low- and Middle-Income Countries

MOH Medical Officer of Health

NACOSTI National Commission for Science, Technology and Innovation

PTA Parents and Teachers Association

STIs Sexually Transmitted Infections

UoN University of Nairobi

OPERATIONAL DEFINITION OF TERMS

Adolescent – according to the World Health Organization, this refers to any person between the ages of 10 and 19 years. For purposes of this study, an adolescent referred to a person between the ages of 14 and 18 years, and only those in secondary school were studied.

Sex –refers to penetrative penile-vaginal intercourse.

Sexual debut – refers to the first time having sex; the first sexual experience.

Perceptions of self – refers to awareness of the characteristics that constitute oneself, how one defines self, thoughts of the adolescents towards self.

Social-cultural factors refer to the social environment of a young person, that is the family structure (2 parent, single parent home), parents' relationship with each other, parental support and availability of a support system – friends and family. It also refers to a young person's religious affiliation, whether Roman Catholic, Protestant, Muslim, other or none. This also refers to peer pressure, influence from interacting with people living outside the school environment, and visiting night clubs, beer shops and guest houses.

Economic factors refer to a young person's residence, parents' level of education, parents' employment status and occupation.

Media influence refers to the impact of what the youth see in the televisions, X-rated magazines and the internet.

Societal values on sex – refer to societal perceptions of adolescents engaging in sexual practices and societal acceptability of adolescent sex.

CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Sexual debut refers to one's first sexual experience. Shrestha, Karki & Copenhaver, (2016) defined early sexual debut as having had the first sexual intercourse by the age of 16 years. In 2015, the global mean age for sexual debut was 15.4 years (15.3 years for girls and 15.5 years for boys). The girls having a slightly earlier age at sexual debut was thought to be due to girls going into puberty earlier than boys. Of the world's adolescents, 7.5% had been sexually initiated by the age of 14 years (7.8% and 7.2% for girls and boys respectively). (Kastbom, et al., 2015) In Sub-Saharan Africa, young people were reported to have already had their first sexual experience by age 20 with the inter-quartile age at first sex being 16-19 years (Lowenthal, et al., 2014). In Kenya, according to the KDHS 2014, of the women aged between 20 and 49 years, fifteen percent had been initiated into sex by the age of 15 years, 50% by the age 18 years, and 71% by 20 years. For men in the same age bracket, 22 percent had had their sexual debut by age 15, fifty six percent by age 18, and seventy six percent by age 20. In Nyamira County, the mean age for sexual initiation for women was 17.1 years and for men 18.1 years. Mean age of first sexual experience was lower in rural areas (17.3 years for both men and women) compared to urban areas (18.8 years for women, 17.6 years for men) (KDHS, 2014). A study comparing high school girls in Nairobi with their rural counterparts found that 24% of the urban and 58% of the rural girls were sexually active. This finding was inconsistent with the popular generalization that urban schoolgirls are more sexually active than rural schoolgirls due to the influence of mass media, being a cosmopolitan population and being in a more sexually stimulating environment (Maggwa, 1987).

In 2013, adolescents were reported to comprise 17.5% of the world's populace, and in developing countries, this group made up 23% of the population (Hindin, et al., 2013). In Kenya, according to the 2009 Kenya Population and Housing Census (KPHC), adolescents

made up 24% of the country's total population (9.2 million). Majority of the world's young people (two thirds) were in countries where preventable and treatable health-related conditions are rampant. In 2004, 2.6 million deaths were reported among the world's 1.8 billion youth aged 10 to 24 years, and 97% of these deaths were in Low- and Middle-Income Countries (LMIC). Over 50 years leading to his write-up, Sawyer (2012) found the progress in health of adolescents to be slower compared to younger children. Early sexual initiation has been shown to be associated with adverse reproductive health outcomes such as unwanted adolescent pregnancies, sexually transmitted infections (STIs), cervical cancer and early marriages. (Shrestha, et al., 2016) Kastbom, et al., (2015) showed that sexual debut among adolescents subsequently led to increased risk-taking sexual behavior, and other risky behavior such as substance use. Bearinger, et al, reported in 2007 that teenage pregnancy was associated with increased risk of major complications and that of the new HIV infections, 40% were among the youth (age-group 15-24 years). Adolescent girls and boys who initiated sex at a younger age ended up having more sexual partners than those with later sexual initiation. (Kastbom, et al., 2015) According to Patton (2016), the fastest rising risk factor for adverse health outcomes among young persons aged 10–24 years over the 23 years prior to his reporting was unsafe sex. It had risen from thirteenth position in 1990 to second position in 2013. Depression caused the bulk of ill health among those aged 10–24 year olds, affecting approximately ten percent. Alcohol remained a significant risk factor, causing seven percent of the disease burden, followed by drug use (2.7%). He concluded that behaviors that began in adolescence had lifetime consequences. Patton also found that sexual and reproductive health problems, mental health conditions, common infectious diseases and injuries were the main health problems in young people (Patton, 2016). Kastbom, et al., (2015) noted that because of girls' biologic predisposition of having an immature cervix, they had increased risk of contracting STIs. Kaestle, et al., (2005) also found that sexual initiation at a younger age was associated with

higher odds of STI when compared to older groups, but the effect significantly reduced with increasing current age. They reported this to be due to less developed physiological barriers towards infection.

The primary fact about adolescence is that a young person's body evolves and is now able to reproduce. Biological changes interact with psychological ones. Everything about a person is directed towards becoming a sexual being. Chilman (1983) reported that in adolescence, interpersonal relationships were especially strenuous as the young person moved from immersion in the family and simple social systems towards involvement in complex social systems and greater independence, which sometimes left the young person feeling extremely vulnerable.

Globally, from the Global School-based Health Survey data, older age, loneliness, mental health problems (such as anxiety and suicidal ideation), being bullied, school truancy, substance abuse and being overweight were associated with early sexual initiation among adolescents. On the other hand, parental monitoring and peer support were seen to be protective against early sexual initiation. Assessment by regions revealed that in South-east Asia, suicidal ideation and substance abuse were strongly associated with sexual debut compared to other regions. In the Americas, being overweight, getting into physical fights and physical activity were seen to associated with adolescent sexual debut compared to other regions. Determinants of sexual debut are heavily influenced by socio-cultural norms and gender scripts which defer from region to region. In Sub-Saharan Africa, in studies done across multiple countries, culture, religion and ethnicity have been shown to play a great role. Culture encourages men to have sex early, while shaming girls for doing so. A woman's ability to negotiate sex is also limited, resulting in most female first sexual experiences being coerced or even forced. (Kushal, et al., 2022)

According to a 2014 UNDP report, social class depicted differences in health seeking power which possibly subsequently led to variations in life chances. Young people, particularly young women, lack basic knowledge on sexuality and reproductive health services. Muhwezi, et al., (2015) reported that cultural norms didn't allow for free engagement between adolescents and parents/guardians, despite them having gone through the same stage of life and possessing a world of experience on the subject. Similarly, teachers were also found to be uncomfortable providing young people with information on sexuality. This scarcity of knowledge on reproductive health increased the chances of adolescents ending up with unintended pregnancies, STIs and HIV.

Family structure has a huge impact on sexual debut whether the family structure is a single parent home, with biological parents or with adoptive parents. Kastbom, et al., (2015) found a protective factor against early sexual debut in adolescents living with both or at least one of the biological parents. This was however not present if the mother was young, not well educated, or if either parent abused drugs. Young people from unstable homes had a tendency to be more sexually active. There was a positive correlation between dysfunctional families and early first sexual experience. A parent being overprotective or not caring seemed to be a predisposing factor for early sexual initiation, especially among boys. In a study by Davis et al, the structure of the family did not significantly influence adolescents' sexual debut. Rather it was the family context that was associated with adolescent sexual initiation, whether the child was able to have a discussion with the parent on the subject of sex (Davis & Friel, 2001). In another study by Moore & Chase-Lansdale (2001), it was found that those from married households had lower risks of sexual debut and pregnancy. There was a positive correlation between strong parent-child bonds with delayed sexual initiation. This correlation was also found between adolescents having great mentors in their social networks and lowered risk of pregnancy.

Parental support has been shown to lower levels of adolescent risky sexual behavior. Kerpelman, et al. (2016) found that supportive parenting was protective against adolescent sexual initiation. Sexually experienced 15-16 year olds reported less familial support than their sexually inexperienced counterparts. A warm home environment was associated with young people having fewer sexual partners. It was postulated that supportive parents in open warm relationships with their adolescents could discuss with them their values on sexuality, which in turn led to a less likelihood of engaging in sex. Parental support was positively correlated with higher self-efficacy and greater social initiative by adolescents.

The need for happiness, acceptance and belonging could also be a driver in the increased incidence of sexual initiation among adolescents. Shulman et al., (2009) found that depression in young girls led them to be involved in short romantic encounters. In their study, they showed that this further led to a vicious cycle of short romantic relationships lacking in authenticity and intimacy, resulting in more feelings of depression. This was found to be the case only in females. However, those in stable romantic relationships, for both sexes, showed no increased depressive affect.

Drug use plays a role in early sexual debut among adolescents. According to Peltzer and Pengpid (2015), early sexual initiation was more likely in adolescents who smoked. They found those with an early sexual experience to be more likely to have tried different kinds of drugs, such as heroin. Use of marijuana was positively associated with early sexual debut in both sexes. Among boys, anabolic steroid use played a role in their being initiated into sex early. Kastbom (2015) reported that earlier Swedish studies had shown that those at risk of engaging in the use of tobacco, alcohol and drugs, and engaging in physical violence were teenagers who'd already had their first sexual experience by age 14. Early sexual debut and antisocial behavior were found to be linked to each other.

Studies have shown that when it comes to adolescent sexual activity and family planning use, the primary influencers include parents and peers, while distant social influencers include social institutions (like schools, religion, the law) and youth culture (meaning their beliefs and their role models of sexual behavior). The studies showed that peers turned to peers for advice mostly because they didn't trust adult discretion. (Cueto & Leon, 2016) (Nigatu, 2017)

Adolescents have few, if any, positive role models for healthy sexual behavior. (Nigatu, 2017) reported that most of what young people modeled about sex was what they observed from televisions, movies, popular music and magazines. He postulated that is because sex mostly happens in private and is not openly discussed. He further reported that majority of this modeled behavior (early sexual debut, violent sex, not using condoms, viewing of women as passive victims, sexual beings and as play things) was counter what family life educators were trying to impact in young people.

Laina & Bay-Cheng (2003) noted that instilling values and beliefs into children to act as a moral compass when faced with challenges was very important, and not just concentrating on the dangers and risks of engaging in sexual intercourse. They suggested that issues of gender, race and class should also be addressed in these lessons.

The larger contextual and structural landscape within which young people live, that is peer pressure, the desire to conform and belong should also be addressed. Schools provide a good setting for delivery of behavioral interventions as they can reach a large number of youth at a time, often prior to sexual debut. There is need to reduce the overall stigma around this subject. Mathematical models have suggested that, over the long term, it is more efficient to have these programs in adolescents than in other age groups.

1.2 PROBLEM STATEMENT

Sexual debut among adolescents is associated with significant adverse health outcomes such as unwanted pregnancies, sexually transmitted infections and cervical cancer. Therefore, determining the factors associated with early sexual debut is the first step to averting these outcomes. Most of the local studies on adolescent sexual debut have been based in the capital city of Kenya, Nairobi, and more so in the informal settlement areas (Marston, et al., 2013) (Ochieng', 2013) (Wanjohi, 2014). The findings and recommendations are therefore not applicable to a rural setting like Nyamira County. The KDHS (2014), which was also conducted in Nyamira County, focused on individuals 20 to 49 years and referenced them back to their first sexual experience, which could not, establish real-time data as is the current study.

Other studies (Tenkorang & Maticka-Tyndale, 2008) (Okigbo & Speizer, 2015) employed quantitative approaches in data collection which didn't provide detailed ethnographic accounts on adolescent sexual debut and its determinants. Additionally, (Khasakhala & Mturi, 2008) examined sexual debut among out-of-school adolescents.

Given the aforementioned, there was need for a study that would look into sexual debut among in-school adolescents in a rural set-up using a mixed methods approach. Because of this recognized knowledge gap, this study sought to study determinants of sexual debut among in-school adolescents in Nyamira County.

To answer the foregoing, this study responded to the following research questions:-

1. What are the socio-cultural determinants of sexual debut among in-school adolescents in Nyamira County?
2. What are the economic determinants of sexual debut among in-school adolescents in Nyamira County?

3. What perceptions of self as guided by social constructs exist among in-school adolescents in Nyamira County?

1.3 STUDY OBJECTIVES

1.3.1 OVERALL OBJECTIVES

To investigate the determinants of sexual debut among in-school adolescents in Nyamira County.

1.3.2 SPECIFIC OBJECTIVES

1. To assess socio-cultural determinants of sexual debut among in-school adolescents in Nyamira County.
2. To evaluate economic determinants of sexual debut among in-school adolescents in Nyamira County.
3. To determine perceptions of self as guided by social constructs that could lead to sexual debut among in-school adolescents in Nyamira County.

1.4 ASSUMPTIONS

This study was based on the following assumptions:

1. Culture and peer pressure influences decision making when it comes to sexual debut among in-school adolescents
2. Low socio-economic status is a contributor to sexual debut among in-school adolescents
3. Low self-esteem is a driver of poor choices as regards sexual debut among in-school adolescents

1.5 JUSTIFICATION OF THE STUDY

Nyamira County has been shown to have the fourth highest burden of teenage pregnancy and motherhood in the country, standing at 28% against a national average of 18%. According to the KDHS 2014, sexual debut in women age 20-49 years in Nyamira County was found to be 17.1 years while for men in the same age group was 18.1 years, against a national average of 18.0 years and 17.4 years respectively. At country level, men were found to have a younger age at first sexual experience compared to women. However, in Nyamira County, the reverse

was the case with women having an earlier sexual debut. In this regard, it was useful to know the determinants of sexual debut among in-school adolescents in Nyamira County and also find out whether these determinants differed according to gender.

Students in mixed day secondary schools continually interact with the opposite sex both in and out of school. The initiators for sex are both in the school environment and the broader community. Students from boarding single-sex secondary schools, on the other hand, only get to interact with the opposite sex during interschool functions and when schools close for the holidays. This study therefore also sort out to determine whether any differences in sexual debut existed according to the type of school.

1.6 SCOPE AND LIMITATIONS

This study was conducted in Nyamira County in mixed day secondary schools, girls only boarding and boys only boarding secondary schools. The study assessed the determinants of in-school adolescent sexuality in Nyamira County. The focus areas of the research study included perceptions of self by the adolescents influencing their decision making to engage in sex, and socio-cultural and economic determinants of sexual debut among in-school adolescents.

The study limitations anticipated in this study included limitation of trust by the adolescents and limitation in the use of theories. For the limitation of trust by the adolescents, it was expected that some students would not open up fully and give truthful information. Therefore, to mitigate against this and minimize on information bias, students were assured of utmost confidentiality and informed that data collected would purely be utilized for research.

On the limitation in the use of theories, with the social learning theory, it was found that what was taught at home was different from what was taught in schools. We found that sexual debut amongst adolescents was mostly acceptable at home but not in schools.

CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviews existing literature on topics related to determinants of sexual debut among adolescents. The review has been carried out along the following subtopics: socio-cultural and economic factors, and perceptions of self. It highlights key knowledge gap areas and concludes with a discussion on the theoretical and conceptual frameworks used to interpret the study context.

2.2 SOCIO-CULTURAL DETERMINANTS OF SEXUAL DEBUT

Culture refers to a particular way of life. It is the intricate process by which humans engage and comprises a shared language, shared symbols and shared behavior. Culture includes family, language, religion, law, music, art, organization, policies, sexual behavior, health care, among other capabilities acquired by humans in a social setting (Douglas & Feldman, 1990). Age at sexual initiation varies among young people and their understanding in sex is influenced by prescribed social scripts which learn from peers, parents, the media (Wanjohi, 2014).

2.2.1 Family and Community

Sexual behavior is primarily biological in nature but is greatly impacted by culture through the learning process (Vance, 2001). People's behaviors, perceptions, beliefs, family structure, religion, diet, body image, dressing, etc. are influenced by culture. In some societies, sex is considered a taboo, and no one should have a discussion about it.

Parenting practices strongly influence the sexual behavior of adolescents. (Lenciauskiene & Zaborskis, 2008) (Scharf & Mayseless, 2008) (Coley, et al., 2009) (DeGraaf, et al., 2012). Parenting involves monitoring, behaviour management, motivation, and impacting of values, goals and norms (Borawoski, et al., 2003). However, studies looking into correlations between

parenting practices and sexual activity addressed only one parenting practice - monitoring (Romer, et al., 1999) (Stanton, et al., 2000) (DiClemente, et al., 2001). Despite their potentially important influence on children, the other parenting practices have been little studied (Stattin & Kerr, 2000) (Donenberg, et al., 2002) (DeGraaf, et al., 2012)

On parental support, most studies have reported that high parental support is positively associated with delayed sexual initiation (Dittus & Jaccard, 2000) (Fingerson, 2005) (Longmore, et al., 2001) (DeGraaf, et al., 2012). Lammer (2000) found positive correlations among the early adolescents; while other studies found these correlates to be stronger for female adolescents (Davis & Friel, 2001) (McNeely, et al., 2002) (Nagamatsu, et al., 2008). De Graff, et al., (2012) showed that low familial cohesiveness led to romantic involvement which further led to initiation of sex. However, this was only found to be significant among early adolescent girls. Girls with better relationships with their mothers were found to have later entrance into sexually romantic relationships.

Dissemination of information on sex and sexual health to young people is viewed negatively by most societies. This stems from the need to shield adolescents from information which may be perceived could lead to initiation of sex in people who might not have considered it had they not been exposed to the information (George & Jaswal, 1995) (Zelaya, et al., 1997) Empirical evidence from studies, however, suggests the contrary; that adolescents who openly discuss sexuality with their parents are less likely to be sexually active. (Gupta, et al., 1996).

Among the Abagusii community, virginity was highly valued and a woman who was not a virgin when being married was treated with contempt and was heavily fined. However, the effect of general community disorganization and the influence of external values by the process of modernization has led to more permissiveness resulting in less effective supervision, control and concern by parents and by the community as a whole. Of import, the extended family

setting which was responsible for such supervisory and guiding services is disintegrating, making such services significantly less available than they were before. In the large family, the links of kinship were strengthened by the exchange of services which tied the individual very closely to his parents and relatives because he could not survive materially without them. The strong dependency of the individual on the large family was compensated for by the unflinching duty to obey the powerful group's behavioral model. With police like checks on sexual matters, the safe guard of honour was not just the adolescent's relatives, but of an entire community. (Omari, 1994) Now, the girl child may have too much freedom of movement hence have more time for mischief and be more prone to engage in sexual activity. Current society is undermined by making greater concessions for the autonomy of young people (Bogue, 1976). Some adults have lost their traditional values regarding sexual behavior and acted irresponsibly among young people.

Adolescents in rural setting are in search for a modern way of life, generally involving conflict with the traditions of the rural community. The transition from childhood to adulthood is a critical process in any community and today it is made more so by the accelerating process of social change which is affecting so many societies. This accelerating process of social change has affected many values which previously governed society.

2.2.2 Peer Pressure

Young people are very curious about sex and are easily influenced by friends. Due to fear rejection, they conform to their peers' behavioral patterns (Wanjohi, 2014). Young people tend to have shared attitudes and have shared motivation which includes a curiosity about everything, to be free from parental control, provocative dressing, drinking, alcohol and drug abuse and trying sexual activities.

There is this perception among young people that most of their peers are active sexually, when this might not be the case. They also perceive that the rewards of sexual involvement outweigh the consequences and that overall sex is rewarding (DiBlasio & Benda, 1990).

Cindy (2002), in her study in Singapore of 6000 adolescents aged 14-19 years concluded that young people thrived in developing their own culture. This was viewed as a way of establishing independence from parents. American media was found to greatly influence this process. But local culture was also found to play a big role in shaping these young people.

2.2.3 Contraception Use

An outcome of sexual debut among adolescents is unwanted teenage pregnancies. Most adolescent mothers are forced to drop out of school to take care of their newborn. Adolescent mothers are also at risk of health-related complications as a result of unsafe abortion and child birth. Contraceptive use could reduce the level of unwanted pregnancy and consequent health related adverse outcomes.

Koome, (2001) demonstrated that youth attending school were more motivated to avoid pregnancy through contraceptive use compared to those not attending school. Pregnancy was seen as a barrier to attainment of educational goals. (Koome, 2001). Baker, et, al. (1996) found that people who bore positive attitudes towards condom use, were more likely to intentionally use condoms. This however, was with casual partners and not steady partners. Female participants who made it a necessity for their male sex partners to use barrier protection were mostly influenced by social norms.

Christina & Marie-Harvey (1995) in their study showed that the male gender and perception of benefits of using condoms were positively associated with the intention to use condoms and the actual use of condoms. Benefits of condom use analyzed included dual protection: the

prevention of pregnancy and protection against STIs and HIV/AIDS transmission, and curbing risky sexual behavior.

On parental support and condom use, it has been found that adolescents are more likely to utilize family planning methods if in healthy relationships with their mothers or if positively communicate with both parents. This satisfactory relationship might delay sexual onset of adolescents (Jaccard, et al., 1998).

2.2.4 Media

According to Paik (2001), young people were considered active consumers of messages shown on radio, television, uploaded on the internet, printed in magazines, and presented in video games. With the advance of technology, the various types of media have become easily accessible in most households in the United States: 98% of homes have at least one television, 70% of these are connected to cable, and a further 51% have a computer. Portable resources such as portable video game players, handheld televisions and internet access on smart phones add to the numerous sources of media access (Gerbner, et al., 1986). Adolescents tend to utilize media in an isolated manner and many do this in the privacy of their bedrooms (Larson, 1995).

Media is seen as a central source of information on sex and sexuality by both children and adults (Malamuth & Impett, 2001). Most of the programming aired have stories of a sexual nature. Wanjohi (2014) reported that an analysis performed on all forms of media to determine the kind of messages delivered, showed that adolescents are being exposed both explicitly and implicitly to sexual content (Wanjohi, 2014).

Steele (1999) showed that gender differences exist in how young people select their media of choice. Young girls preferred print media (books and magazines) more than young men. Magazines were discussion points and supplemented sex education classes among girls. However, this to boys was considered unmanly behavior (Kehily, 1999). Donnerstein & Smith

(2001) reported that girls had a preference for media showing romance hence increasing their likelihood of being exposed to material of sexual nature.

2.2.5 Gender Double Standard

Gender-based double standard has largely been justified in a social context in most societies in the world. What young people know and perceive as normal about sex is influenced by gender norms and culture that present different dynamics for men and women as regards sexuality. In men, it is socially accepted for them to have sex before marriage and have multiple sex partners. But women who engage in sex before marriage are considered promiscuous. Boys are rewarded for engaging in sex while girls are castigated. The role of gender becomes even more complex in communities with unequal power dynamics which diminishes a woman's ability to negotiate sex. This leads to forced or coerced sex. (Kushal, et al., 2022) In Lao society, the main source of sexuality information differs along gender lines (Sychareun, et al., 2014). Men's sexuality information was accrued from personal experience, peers, and mass media, while for women, they got their information from peers and mass media. Of note, parents, educators and health care workers were rarely seen as sources of sexuality information.

2.2.6 Education

Ruthiru (1992) in his study of adolescent fertility in Meru district found out that the level of education and frequency of intercourse among adolescents was inversely related, that is the higher the level of education the less the frequency of intercourse. Speizer, et al., (2013) found higher educational attainment was associated with delayed sexual debut among 12-19 year olds. They found that with each age group, adolescents with higher education were less likely to have initiated sex. Okigbo & Speizer (2015) reported that secondary education was associated with delayed sexual debut. In a study by Marston, et al., (2013), it was shown that sexual initiation was positively correlated with dropping out of school and also with never

attending school. A study looking at parents' education status found that the age of sexual debut increased with parents' level of education (Chinomso, et al., 2016).

2.3 ECONOMIC DETERMINANTS OF SEXUAL DEBUT

Most people are driven by material gains and adolescents are no exception. The need for material gain may predispose one to early sexual debut. Below are some economic determinants that may lead adolescents to have early sexual debut.

2.3.1 Household Economic Status

Some girls engage in sexual activity due to pressing economic needs (Liku, 1987). A study by Dinkelman, Lam & Leibbrandt (2008) showed that girls from poor households were more likely to be sexually active. (Nyaga, 1989) found that adolescents whose parents had better income had fewer cases of adolescent pregnancies. A contradiction would be a study by Speizer, et al., (2013) in Kenya which showed richer female adolescents as being more likely to have first sex when compared to their poorer counterparts.

2.3.2 Transactional Sex

The need for money and resources may predispose adolescents to early sexual debut. Ankomah, et al., (2011) in his study showed that those who engaged in early sex mainly did it for gifts, cash and other favours. (Kyegombe, et al., 2020) demonstrated in their study three types of transactional sex. The first was a girl being forced to have sex with a man because she had received money and/or resources from him thus implying she was on board with the arrangement. The second was a girl accepting to have sex with a man who was insistent about having sex because she had previously received gifts from him. The third was being driven to have sex by tough economic times and peer pressure to uphold modern lifestyles, in that one willingly engaged in sex for economic gain.

2.4 PERCEPTIONS OF SELF INFLUENCING SEXUAL DEBUT

Like everyone else, adolescents have basic needs – the desire for self-worth, personal safety, a sense of belonging and positive contribution to the world around them. These needs have to be met for an adolescent to morph into a healthy adult. In years past, society has relied on families and communities to address these needs, but current research reveals that few adolescents experience this internal and external support to prepare them for adulthood. This has resulted in early sexual activity, violence, higher substance use and problems in school (Lezin, et al., 2007).

A decline in self-esteem is usually experienced during adolescence. This is due to the biological and psychological changes that create new powerful emotions and conflicts in the adolescent. Forces outside of the young person, such as the environment then determine how the individual integrates those feelings (Koome, 2001). Marston, et al., (2013) found that adolescent males with high perception of self-worth were more likely to initiate first sex compared to those with low self-esteem. However, Ankomah, et al., (2011) found that abstinent adolescents were more confident, with greater determination and greater ability to deploy refusal skills in delaying first sex.

Determinants of self-perception that may lead to early sexual debut include:

2.4.1 Family Instability

(Merkaš, 2014) demonstrated that family instability breeds insecurity amongst adolescents lowering their self-esteem. According to (Mensch, et al., 1998), family instability encourages young people to seek sexual relationships to compensate for the lack of parental love and attention. The relationships further lower self-esteem, efficacy to refuse unwanted sex and use of contraceptives by the young people.

2.4.2. Dating Identity Exploration

Dating identity exploration is consistent with self-esteem and has the implication that the more time an adolescent spends in discovering who they are as regards dating, the higher the odds of them considering the implications of having sex. Mruk, (2013) showed that adolescent girls and boys in relationships who delayed engaging in sex may have greater chances of discovering who they are in the dating scene. Culturally, this has been emphasized several times. The importance of getting to know a person before considering having sex. Therefore, dating identity exploration promotes first developing serious relationships where they know each other better before considering engaging in sexual activity. This helps delay sexual activity in adolescents.

2.4.3 Stress

Farid, et al., (2015) found that adolescents with high stress levels were more likely to engage in sex to relieve this pent-up pressure. Tenkorang & Maticka-Tyndale (2008) in their study found that adolescent girls were more likely to be forced to engage in early sex by social and environmental factors.

2.5 RESEARCH GAPS

The following research gaps were identified: -

Stakeholders' view (key informants) – these are people who interact with the young people in the area. Their input had been missing in past studies done. These included people like counsellors, area chiefs, sub-county heads of education and sub-county medical officers of health dealing with young people in the area.

Economic factors as a cause rather than as a consequence – most studies done had looked at economic factors associated with the effects of adolescent sexuality such as teenage

pregnancies and burden in terms of healthcare. The gap identified was low socioeconomic status (lack of resources) as a driver to engaging in sex by a young person in Nyamira County.

Self-esteem - Psychological states as precursors of premarital sexual behavior had been poorly studied. Important relationships were postulated to exist between how adolescents thought and felt about themselves, and their involvement in early sexual behavior.

2.6 THEORETICAL FRAMEWORK

Singleton (1993) holds that all studies should be grounded in a theory, meaning be conducted scientifically and be empirically testable (Singleton, 1993). A theory is a set of interrelated concepts, definitions and proportions that present a systematic view of phenomena by specifying relations between variables, for the purpose of explaining and predicting the phenomena (Kerlinger, et al., 1964). Theoretical frameworks are essential to the understanding of factors that may influence or are associated with an identified problem. In this section, we discussed the theoretical frameworks adopted in the study. Four theories were used to show how they related to the topic of study and these were the Social Learning theory, Theory of Reasoned Action, the Marxist theory and the Gender theory.

2.6.1 Social Learning Theory

Canadian Psychologist Albert Bandura stated that most of our behavior is learnt observationally through modelling. That from watching others, one establishes an idea of how new behaviors are done and later this stored information serves as a guide for action. (Bandura, 1977)

His theory utilized two theories: the cognitive learning theory (that learning is driven by psychological factors) and the behavioral learning theory (that learning is dependent on responses to environmental stimuli). He then developed four prerequisites for learning to take

place: observation, retention, reproduction, and motivation. He called this combinative approach the social learning theory.

The theory reiterates that adolescents learn through observing other's behaviors, attitudes and outcomes. Young people tend to imitate the character of the people who are aggressive and prestigious as their role models. Through observation learning, a young person becomes acquainted with the general concept of a situation as well as a specific behavior. By watching what others are doing, the young person can choose to imitate or not.

One's state of mind is also very important when it comes to learning. Bandura was of the opinion that both exogenous and endogenous reinforcements affected learning and behavior. Endogenous reinforcement would be taken to be an internal reward system, a good feeling following certain conduct. This could be taken to be self-accomplishment, confidence and satisfaction towards oneself.

Bandura (1963) also emphasized on self-efficacy: the role of observational learning and one's social experiences in personality development. He defined self-efficacy as one's perception of their innate ability to succeed in certain circumstances. This played a major role when it came to how one approached goals, tasks and challenges. And all this was impacted by actions one had observed, especially being done by their parents and peers.

2.6.2 Theory of Reasoned Action

The originators of this theory were Fishbein and Ajzen's in 1975. They posited that one's intentions impact observed behavior. Intention is taken to be a function of two factors: one's attitude towards a behavior (how enticing the behavior appeared to the individual), and one's interpretation of societal norms regarding the action (what action one is expected to carry out by others). These attitudes and norms are then formed on the basis of certain views: views of the consequences of doing something (for example, I will acquire an STI), and views on the

sense of importance others perceive about the person effecting the behavior (for example, my best friend's opinion). According to Cooper, Shapiro and Powers (1998), a person's decision to act a certain way was dependent on the expected outcomes from that action. The outcomes for sex could be positive for example, pleasure and intimacy; or they could be negative, such as, unwanted pregnancy, STIs, HIV, parental and societal displeasure. Gillmore, et al. (2002) found that earlier sexual engagement was correlated to an increased rate of sexual intercourse showing that the pathway from behavior to intention was significant.

2.6.3 Gender Theory

Over the years a number of people have contributed to the study of gender, namely, Sigmund Freud, Julia Kristeva, Jacques Lacan and Bracha Ettinger. However, John Money in 1955, was the first person to describe gender as a human attribute. The gender theory is the study of what is considered to be masculine and/or feminine and/or weird behavior in a society or field of study such as philosophy, linguistics, sociology and religion. This is unlike sex which refers to the anatomical organ seen on the human body. Gender is socially learned. It refers to the social roles, behaviours and expectations attributed to men and women. A French philosopher, Simone de Beauvoir, stated that the Marxist, Freudian, literary and anthropological theories determined women's behaviour. That unlike men who acted in the way they viewed themselves, women did not have the same luxury. Women acted in the way men viewed them. (Jule, 2014) (Smith, 2022)

2.7 Relevance of the theories to the study

The social learning theory explains the perceptions of self and socio-cultural factors as determinants of sexual debut among adolescents. Most young people are exposed to sexual behaviors at a very tender age and therefore grow up with a tendency to develop a positive

attitude towards sex. Cultural attitudes towards adolescent sex also plays a key role. Because of peer pressure, these young people are compelled to indulge in risky sexual behaviors to fulfill their self-efficacy and retain their self-esteem.

The theory of reasoned action on the other hand, focuses on the organization of cognitive components that directly gauge intention and the resultant behavior, but does not include external predictors of beliefs, whether socio-cultural, biological or peculiar to an individual.

However, none of these explain the economic determinants of sexual debut among adolescents.

The Gender theory is key in this study as it brings out the gender roles between boys and girls in this community; what is expected of boys, what is expected of girls. This was key in understanding the impact of cultural norms on gender and sexual debut in the context of adolescents in Nyamira County.

2.8 CONCEPTUAL FRAMEWORK

Presented below is the Bongaarts and Potter's model (1983) that informs this study.

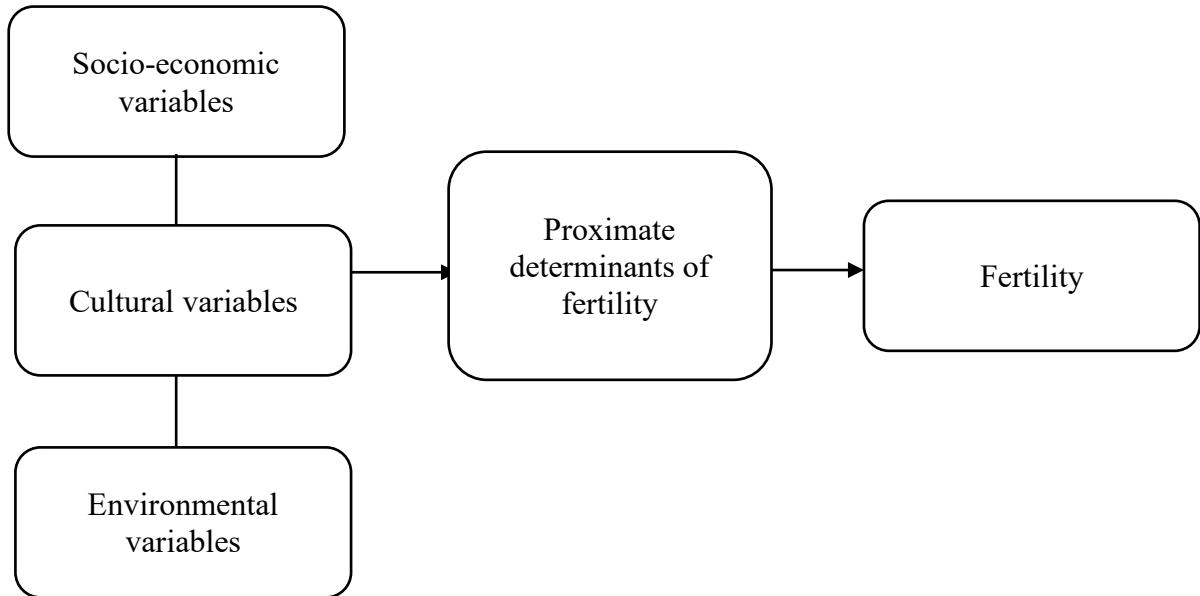
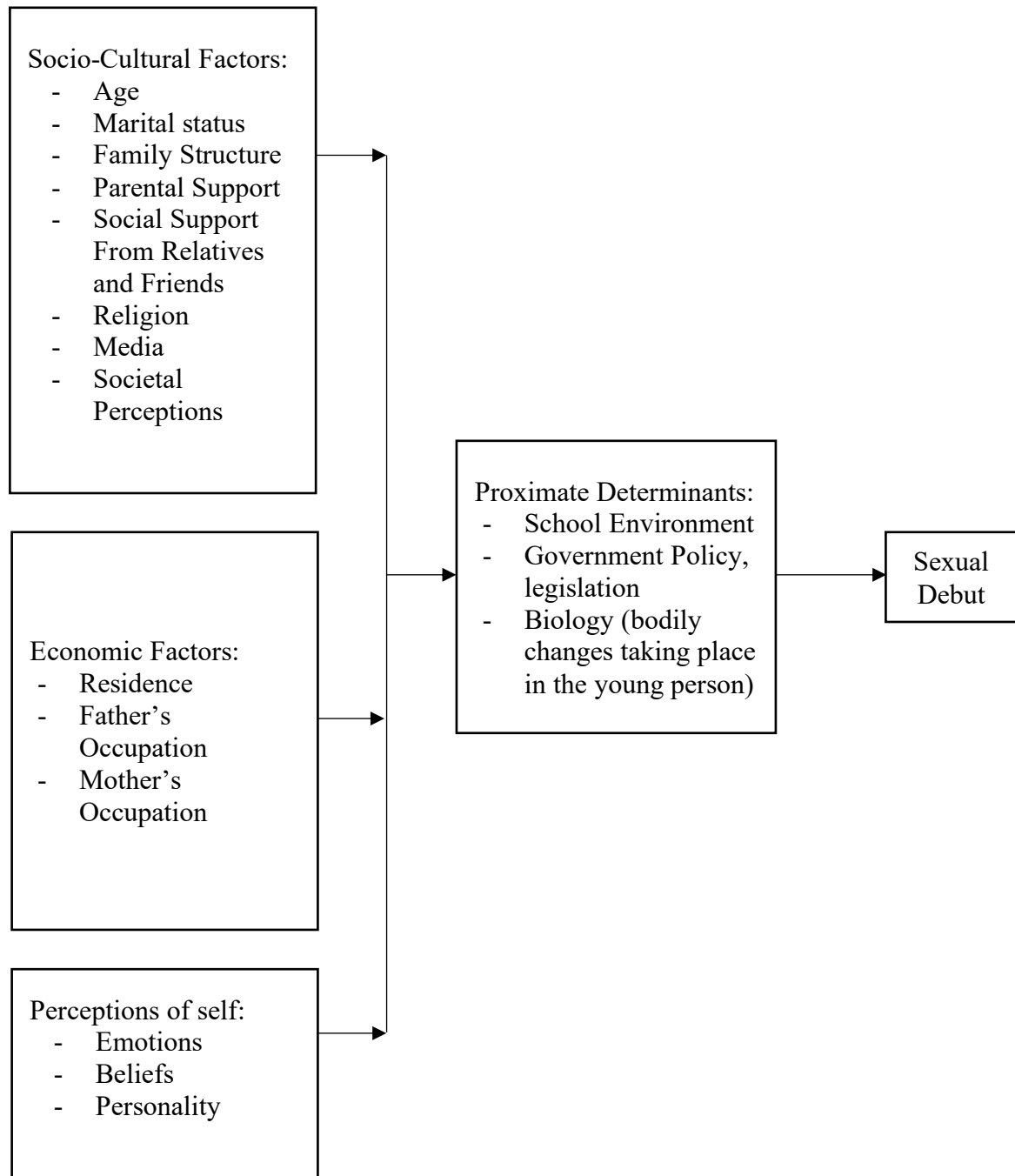


Figure 2.1: Bongaarts and Potter's model (1983)

The Bongaarts and Potter's model above summarizes the correlation between fertility and the proximate determinants of fertility. It explains that human fertility is directed by a number of immediate biological and behavioural factors (proximate determinants) which are in turn influenced by socio-economic and cultural factors. In order to understand the cause of changes and variations in fertility levels between populations over time, it is important to understand the framework through which these factors influence fertility. (Mahjabeen & Khan, 2011) In terms of modifications made, fertility was replaced with sexual debut and therefore looked at proximate determinants of sexual debut.

2.9 OPERATIONAL FRAMEWORK



Independent variables

Intervening variables

Dependent variable

Figure 2.2: Operational Framework for the Study on Determinants of Sexual Debut among In-school Adolescents in Nyamira County

Table 2.1: Variables for the study on determinants of sexual debut among in-school adolescents in Nyamira County

Objective	Variable Name	Measurement	Variable type
To assess the socio-cultural determinants of sexual debut among in-school adolescents in Nyamira county	Age	14 15 16 17 18	Independent
	Marital status	Married Single Other	Independent
	Religion	Catholic Protestant Muslim	Independent
	Type of family	Monogamous Polygamous	Independent
To evaluate economic determinants of sexual debut among in-school adolescents in Nyamira county	Father's occupation	Unemployed Self employed Salaried employment Casual labourer	Independent
	Mother's occupation	Unemployed Self employed Salaried employment Casual labourer	Independent
	Respondent's employment status	Unemployed Employed	Independent
To determine perceptions of self as guided by social constructs that could lead to sexual debut among in-school adolescents in Nyamira county	Self esteem	High Medium Low	Independent

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter presents a description of the study site, study design, the study population, the sample population and sampling procedures, the data collection methods and the methods that were used for data processing and analysis. In addition, it also discusses the ethical considerations that were observed in the process of the study.

3.2 Research site

3.2.1 Geographical Location of Nyamira County

The study was conducted in Nyamira County (fig 3.1) located in the south western part of Kenya. The county has 5 sub-counties, namely Nyamira North, Nyamira South, Manga, Borabu and Masaba North. It has 4 constituencies namely: Kitutu Masaba, West Mugirango, North Mugirango and Borabu constituencies. Each of the constituencies has the following wards (fig 3.1): Kitutu Masaba – Rigoma, Gachuba, Kemera, Magombo, Manga, Gesima; West Mugirango – Nyamaiya, Bogichora, Bosamaro, Bonyamatuta, Township; North Mugirango – Bogwagamo, Bokeira, Magwagwa, Ekerenyo, Itibo; and Borabu – Mekenene, Esise, Nyansiongo, Kiabonyoru. It covers an area of 912.5km² and has a population of 598,252 (Census 2009). It has warm and temperate climate with significant rainfall that follows a bimodal pattern: long rains (from December to June) and short rains (from July to November). The county experiences about 1200-2100mm of rainfall each year. (CIDP, 2018)



Figure 3.1: Map of Nyamira county (Inset: Map of Kenya, shaded region indicates the position of Nyamira county in Kenya) Source: Nyamira, 2021.

3.2.2 Economic Activities of Nyamira County

It is mainly an agricultural county, with more than 80% of the population directly or indirectly relying on agriculture. The main food crops grown in the county include maize, sweet potatoes, millet, sorghum, cassava, beans, fruits and vegetables. The main economic activities include tea, coffee, avocado, pyrethrum and dairy farming, banana plantations and brick making. The men in the county have recently taken up taxi services on motorcycles locally known as ‘*bodabodas*’. The natural resources in the county include arable land, livestock, pasture and water. The average size of land per household is 0.70Ha. Land has mostly been over subdivided making it uneconomical. Majority of the large-scale commercial farms are in Borabu Sub-county. Livestock kept in the county include cattle, sheep, goats, donkeys, rabbits, poultry and bees. Cattle are kept mainly for dairy and the county is self-sufficient in terms of milk production. Almost every homestead in the county has the indigenous chicken, which are kept on free range and are not labour intensive. There are isolated areas in the county where quarry stones can be procured for building and road construction. Brick making is mainly done in Sironga valley, Rigoma, Ekerubo, Mochenwa wetlands and Nyambaria. Nyamira’s tourist attractions include its picturesque hills, waterfalls (Kiomachingi and Keera Falls) and Manga Ridge. From the highest point in Nyamira County, Kiabonyoru, one can view Lake Victoria, Kericho town and Keroka town. The county has plans to develop some of these sites and make them profitable for the county and the surrounding communities. (CIDP, 2018)

3.2.3 Education in Nyamira County

The county has primary, secondary and tertiary institutions. There are 576 primary schools, 168 secondary schools and over 40 tertiary institutions. Among tertiary institutions there are 36 youth polytechnics, 8 commercial colleges, 1 university college, 1 medical training college and 1 teachers’ training college. The primary school net enrolment rate is 95.1% and the

secondary school net enrolment rate is 71.4%. The high enrollment rate can be attributed to free primary education and subsidized secondary education. Free day secondary education that was recently introduced has also played a role in increasing the secondary enrollment rate. Needy students are assisted through the county bursary fund. In public primary schools, the teacher-to-pupil ratio is 1:39 and in public secondary schools the ratio is 1:31. (CIDP, 2018)

3.3 RESEARCH DESIGN

A fully mixed concurrent equal status mixed method approach was employed in the collection of quantitative and qualitative data. An analytical cross-sectional study design was used to collect quantitative data. Data on the various sociocultural and economic characteristics of the in-school adolescents, how they perceived themselves and on the outcome variable of ever having sex were all collected at the same point in time using a structured questionnaire. The phenomenological study design was used for qualitative data to help understand the essence of the sexual debut experience by the in-school adolescents. Focus group discussions, case narratives and key informant interviews were used to collect the qualitative data. These interviews were conducted until key themes emerged. Use of a mixed method approach allowed for comprehensive triangulation of data and generation of in-depth information to respond to the study objectives.

3.4 STUDY POPULATION AND UNIT OF ANALYSIS

The population of interest were adolescents attending secondary schools in Nyamira County aged between 14 and 18 years. At the time of the study, there were 193 secondary schools in Nyamira County, 135 of which were mixed day secondary schools. There were, on average, 350 students in each school, with those aged 14 to 18 years possibly forming two thirds of the group. The estimated target population was therefore approximately 40000 students.

The unit of analysis was the individual adolescent boy or girl aged between 14 and 18 years in a secondary school. The rationale for choice of age-group was it is a government directive for children to start primary school at 6 years of age. therefore, this means that by the time students join secondary school, they are 14 years. The sample population was therefore adolescent boys and girls attending secondary schools in Nyamira County aged between 14 and 18 years.

Inclusion Criteria

These were all adolescents currently enrolled in mixed day secondary schools, girls-only boarding and boys-only boarding secondary schools aged between 14 and 18 years, assenting to participate in the interview.

Exclusion Criteria

The following were excluded from participating in the study: girls-only and boys-only day secondary schools, all mixed boarding secondary schools and all mixed day-and-boarding secondary schools. In the selected schools, those excluded were adolescents not willing to be interviewed, adolescents aged less than 14 years and those aged more than 18 years. It was the expectation that those less than 14 years and those more than 18 years would be few.

3.5 SAMPLING PROCEDURE AND SAMPLE SIZE

Multi-stage sampling method was employed. There are five sub counties in Nyamira county, but because of their homogeneity, the study was conducted in two sub counties (Manga and Nyamira South sub-counties). These were selected on the basis of their location to avoid the influence of the neighbouring counties which are Homabay to the North, and Kericho and Bomet counties to the East. These two sub-counties (Manga and Nyamira South) border with Kisii county to the west and south, a county that is considered to be similar to Nyamira county in socio-cultural and economic characteristics. In these two sub-counties, 2 mixed day secondary schools, 2 girls only boarding school and two boys only secondary schools were

randomly selected. The schools were categorized into 2 groups: mixed day secondary schools on one arm and girls-only/ boys-only boarding secondary schools on the other arm. Each of these arms had an equal number of students. Schools in the 2 sub-counties were picked by simple random sampling using the lottery method. There were 6 buckets; 3 for each subcounty one for mixed day schools, one for girls only and the other for boys only boarding schools in each subcounty. One school was drawn from each bucket giving a total of 6 schools; 2 mixed day and 4 single sex boarding schools. A sensitization meeting was held in the selected schools with the school administration for ownership, engagement and entry for social mobilization. Subsequently, in each school, students were assessed for study eligibility, selected by simple random sampling using the random number method. Students were assigned numbers and the numbers then picked using a random number table. Those selected were recruited for further interviews.

Cooper and Schindler (2003) defined sample size to be the selected subset of the population to be studied. They further recommended that in order to ensure that the sample was an accurate representation of the population, the researcher must calculate the required sample size and choose the best sampling method for selecting the sample from the study population.

According to the 2014 Kenya Demographic Health Survey, 50% of women aged between 20-49 years had first sexual intercourse before the age of 18 years whereas 56% of men of the same age group had sexual activity before 18 years. Based on these statistics, an average exposure of early sexual intercourse of 50% was assumed for both girls and boys for purposes of sample size determination.

The sample size was determined using Fisher's formula:

$$n = \frac{z^2 pq}{e^2}$$

Where:

n = required sample size

Z = Z score value at 95% confidence level (standard value of 1.96)

p = the proposed percentage of students with sexual debut.

q = 1-p (variance expected in the responses assumed to be 50:50 proportion rate)

e = Level of precision or margin of error at $\pm 5\%$ (standard value of 0.05).

Therefore,

$$n = \frac{(1.96)^2(0.5)(0.5)}{(0.05)^2}$$

$$= 384.16$$

Rounded off to the next 100 = 400

Thus, n=400 respondents

A sample of 400 students were utilized in this study. Half the students were on the mixed day secondary school arm and the other half on the girls-only and boys-only boarding secondary school arm. Each of the single sex schools had 50 students, while the mixed day secondary schools had 100 students each.

In choosing the key informants to be interviewed, purposive sampling was employed, a sampling method whereby the researcher chooses an informant on the basis of what he or she wants from them (Bernard, 2006). The key informants were selected on the basis of their knowledge on the subject under research and they included 2 parents (male and female from each school making a total of 12 respondents), the Head of counseling in each school (6 respondents), the sub-county heads of education (2 respondents), the sub-county Medical officers of Health (2 respondents), one chief based in the county selected by simple random

sampling and 1 member of the Abagusii cultural council. A total of 24 key informants were therefore interviewed.

The principal investigator trained two research assistants on the study objectives and the data collection tools. This enabled them to familiarize themselves and gain confidence in the study. It also facilitated the smooth assessment and recruitment of study participants, especially of those particular about the interviewer's gender.

The participants were then enrolled into the study after meeting the study inclusion criteria and providing voluntary informed consent.

3.6 DATA COLLECTION METHODS

3.6.1 Survey Method

A self-administered study questionnaire was used (appendix 3). This captured the students' basic demographic information, whether they had ever had sex, data on how they perceived themselves as well as their socio-cultural and economic characteristics. The Rosenberg Self Esteem Scale was coopted into the questionnaire to assist in the assessment of the adolescent's perception of their own self-worth. The questionnaire was piloted in Daraja Mbili Mixed secondary school in Kisii county by administering it to 50 students. Any flaws in the design of the questionnaire and clarifications on questions were identified and corrected before rolling out the study. This enhanced the questionnaires' validity. The same questionnaire design was used to collect information from 400 sampled in-school adolescent boys and girls aged 14 to 18 years. In each of the participating schools, students were settled in 2 classrooms and the questionnaires administered by the trained research assistants. This was done in a similar manner to an examination setting. The students were spaced out and each filled their questionnaire in silence. They would take about one hour to all complete the questionnaires.

These were then checked for completeness before being collected from all the students at the same time. In order to avoid double recruitment, participants were entered into a register upon recruitment for serialization.

3.6.2 Key Informant Interviews

A key informant interview guide was used to capture both the social-cultural and economic determinants of sexual debut among in-school adolescents in Nyamira county (Appendix 4). This was administered to individuals who interacted with adolescents in the area and possibly had extensive knowledge on the social-cultural and economic factors leading to early sexual debut among in-school adolescents. Twenty-four key informant interviews were conducted involving parents (12), the heads of counseling in each school (6), the sub-county Heads of Education (2), sub-county Medical officers of Health (2), a chief and a member of the Abagusii cultural council. The same tool was used all on the key-informants and greatly facilitated in bringing out what the stakeholders perceived the in-school adolescents were doing, what drivers they felt were contributing to the early sexual initiation and gave varied recommendations on how to curb the rise of early sexual debut among the in-school adolescents in the county.

3.6.3 Case narratives

A case narrative guide was used to capture the determinants of sexual debut among in-school adolescent students (appendix 5). This was done on adolescent boys and girls aged 14-18 years who reported sexual debut before the age of 14 years and were now exercising secondary virginity by intervention of the school or other medium. Three students (two male and one female) were free enough to participate in this and voluntarily provided the required

information. The aim of this was to find out if the behavior change model was working out for them.

3.6.4 Focus group discussions

Adolescents found to be sexually active were further interviewed in focus group discussions. These were conducted in each school and comprised of 10 students each. In mixed-day secondary schools, the sexes were interviewed separately, meaning 2 FGDs were conducted in each of the mixed day secondary school: one group of 10 students for the male students and another group of 10 for the female students. Therefore, since there were 4 single-sex boarding schools and 2 mixed day secondary schools, a total of 8 focus group discussions were conducted. Each FGD took 2 hours. Prior to beginning each discussion, a verbal consent to participate and have the discussion recorded was taken from all the students. They were assured that all that was discussed would remain confidential. A FGD guide was used to guide the discussion (appendix 6). Information gotten from the FGDs was utilized to develop consensus. It became apparent from the students, that a majority of student body was engaging in sex, corroborating the findings from the survey. Other possible contributory factors that had not been factored in the survey tool, were picked through the FGDs, for example, long distances to and from schools, the surrounding tea plantations providing an opportunity for young men to waylay and entice the students.

3.7 DATA PROCESSING AND ANALYSIS

Data from the questionnaires was entered into an Epidata client database. Each record was assigned a unique identifier and names dropped to maintain participants' confidentiality. Quality of data was assessed by conducting consistency checks and data was stored in a password protected computer.

The data was then transferred and analysed using SPSS Version 20 statistical software. Categorical variables were summarized using percentages and proportions while continuous variables were summarized using means and medians (IQR). Logistic regression to determine socio-economic and cultural determinants associated with sex among high school students was carried out. Determinants with $p < 0.05$ were taken as significant.

After the qualitative data was collected, the digital recordings were transcribed verbatim. This data was analyzed by two researchers aimed to reduce bias and improve the consistency and reliability. Thematic analysis was used. Data analysis was done concurrently with data collection. Data analysis was a continuous process until a well-developed interpretation of their understanding emerged. Textual data in the form of transcripts was explored inductively using content analysis to generate the three themes in line with the three objectives of the study using the software package MAXQDA Version 2018.2, a software that allows for coding and retrieval of data. Data coding was done by identifying statements that stood out or occurred frequently which were relevant to the research question. Data codes were then combined into categories based on their similarities and differences (Lecompte, 2000). The codes were then grouped together into themes (socio-cultural determinants, economic determinants and perceptions of self as guided by social constructs leading to sexual debut among in-school adolescents in Nyamira county). This was followed by employment of multiple data triangulation techniques, integration and interpretation to design an intervention model. Employment of the triangulation technique improved the study's validity and reliability.

3.8 ETHICAL CONSIDERATIONS

Approval to conduct the study was sought and granted by the National Commission for Science, Technology and Innovation (reference number NACOSTI/P/18/82597/23352), the KNH-UoN Ethics and Research Committee (reference number KNH-ERC/A/362), the Office

of the County Commissioner Nyamira County and the County Director of Education Nyamira County. Further approval to conduct the study was sought and approved by the Manga and Nyamira South Sub-County Offices of Education. Permission was also sought from the respective principals of the secondary schools where the study was conducted. The principals gave consent for the study to be conducted on the pupils in their respective schools. It was taken that once in school, the school principals and the teachers took responsibility for the students. The purpose, aims, risks and benefits of the study were explained to them before taking the informed consent. Assent to participate was sought from all the students who were aged below 18 years. Those aged 18 years gave informed consent to participate. The records were coded and participants' names were not used. Information collected was handled with utmost confidentiality and was used only for purposes of this study. No incentives were given to the study subjects.

CHAPTER FOUR: SOCIO-CULTURAL DETERMINANTS OF SEXUAL DEBUT AMONG IN-SCHOOL ADOLESCENTS IN NYAMIRA COUNTY

4.1 Introduction

This chapter presents the findings and discussion on the socio-cultural determinants of sexual debut among in-school adolescents in Nyamira County. The findings were accrued using a mixed method approach. Quantitative data is used to illustrate the demographic characteristics of the study participants as well as sociocultural characteristics that could possibly be associated with sexual debut among these participants. Four hundred students (200 males and 200 females) in mixed day secondary schools and single sex boarding schools were interviewed. Of these 400 students, 244 had ever had sex, while 156 students had not had sex. Qualitative data further seeks to explore for deeper understanding into the sociocultural aspect of these students lives that could possibly lead to sexual debut. This qualitative data was gotten from one-on-one interviews with select students who by their own acknowledgement had already had sex, from focus group discussions from a further 60 students and from key informant interviews with parents, heads of counselling of schools, from sub-county heads of Education, sub-county heads of Health, a Chief and a Gusii Elder.

4.2 Results

4.2.1 Demographic characteristics of in-school adolescents in Nyamira County

Table 1 presents the demographic characteristics of the 400 in-school adolescents recruited into the study. Most of the students, 272(68.0%) were aged 17-18 years. Only 2.5% of the students were married, with the majority being single (97.5%). This is expected to some extent because at secondary school level, students are majorly dependent on their parents and also the legal marrying age in Kenya is 18 years.

When it comes to distribution in terms of religion, most of the students were of the protestant faith (61.3%), followed by Catholics (36.9%) and finally Muslims (1.8%).

This distribution in terms of age, level of education, marital status and religion was similar for both male and female students. Among the male students, 174(87.0%) were aged above 16 years, 192(96.0%) were single and 238(61.3%) were of the protestant faith. Of the female students, 181(90.5%) were aged above 16 years, 198(99.0%) were single and 133(66.5%) were of the protestant faith. Of note, of the married students, majority were male (80%).

Table 4.1: Demographic characteristics of in-school adolescents in Nyamira County

		Total n(%)	Gender	
			Male	Female
Age	14	22(5.5)	11(5.5)	11(5.5)
	15	23(5.8)	15(7.5)	8(4.0)
	16	83(20.8)	47(23.5)	36(18.0)
	17	151(37.8)	62(31.0)	89(44.5)
	18	121(30.2)	65(32.5)	56(28.0)
Education	Form 1	16(4.0)	7(3.5)	9(4.5)
	Form 2	71(17.8)	49(24.5)	22(11.0)
	Form 3	122(30.5)	70(35.0)	52(26.0)
	Form 4	191(47.8)	74(37.0)	117(58.5)
Marital status	Single	390(97.5)	192(96.0)	198(99.0)
	Married	10(2.5)	8(4.0)	2(1.0)
Religion	Catholic	144(36.9)	86(43.0)	58(29.0)
	Protestant	239(61.3)	106(53.0)	133(66.5)
	Muslim	7(1.8)	5(2.5)	2(1.0)

As illustrated in table 4.2, majority of the males (66.5%) and majority of the females (55.5%) had ever had sex. More students in mixed day schools (63.5%) had ever had sex when compared to single sex schools where 58.5% had ever had sex. All of the 10 married students

had had sex. Only gender, age and marital status showed evidence of association with ever having sex (p=0.03).

Table 4.2: Comparison between demographic characteristics of sexually active and non-sexually active in-school adolescents in Nyamira County

		Total n=400 n(%)	No sex n(%)	Ever had sex n(%)	Odds Ratio 95% Confidence Interval	p-value
Gender	Male	200(50.0)	67(33.5)	133(66.5)	1	0.03
	Female	200(50.0)	89(44.5)	111(55.5)	1.59(1.06-2.39)	
School type	Mixed	200(50.0)	73(36.5)	127(63.5)	1	0.19
	Single boarding	200(50.0)	83(41.5)	117(58.5)	1.23(0.83-1.85)	
Age	14	23(5.8)	10(43.5)	13(56.5)	1	0.03
	15	22(5.5)	10(45.5)	12(54.5)	1.08(0.33-3.51)	
	16	84(21)	36(42.9)	48(57.1)	0.98(0.38-2.47)	
	17	150(37.5)	65(43.3)	85(56.7)	0.99(0.41-2.41)	
	18	121(30.2)	35(28.9)	86(71.1)	0.53(0.21-1.32)	
Education	Form 1	16(4.0)	8(50.0)	8(50.0)	1	0.23
	Form 2	71(17.8)	26(37.1)	44(62.9)	0.59(0.20-1.76)	
	Form 3	122(30.5)	55(45.1)	67(54.9)	0.82(0.29-2.33)	
	Form 4	191(47.8)	67(34.9)	125(65.1)	0.54(0.19-1.49)	
Marital status	Single	390(97.5)	156(40.0)	234(60.0)	1	0.03
	Married	10(2.5)	0(0.0)	10(100.0)	6.62(0.84-52.26)	
Religion	Catholic	144(36.9)	50(34.7)	94(65.3)	1	0.20
	Protestant	239(61.3)	100(41.7)	140(58.3)	1.30(0.85-1.99)	
	Muslim	7(1.8)	2(33.3)	4(66.7)	0.92(0.16-5.21)	

It was a general societal perception that young people were having sex. One parent from a boys boarding secondary school commented:

'Students today, there is no faithful student. All of them engage in sex.'
[KII_F_Parent_M_SS: 4-4 (0)]

The deduction that many adolescents were having sex was also made because of the high teenage pregnancy rates in the county. An elder said:

'We have cases of young girls becoming pregnant and having children, so that means they are having sex.' [KII_Village Elder _70: 8 - 8 (0)]

This was emphasized by the education officer from Nyamira South sub-county. He said:

'It has been happening and it is happening and there are so many cases of teenage pregnancy. Young mothers dropping out of school is common to a point it's like fashion.'

Like this year, we had three children sitting KCPE and giving birth and 11 others were pregnant during KCSE. And we discovered that when you address it, it's like people are not bothered. It's like the way of life.'

[KII_EO : 18 - 18 (0)]

Table 4.3: Comparison between demographic characteristics of sexually active and non-sexually active male in-school adolescents in Nyamira County

		Total n=400 n(%)	No sex n(%)	Ever had sex n(%)	Odds Ratio 95% Confidence Interval	p-value
School type	Mixed	100(50.0)	33(33.0)	67(67.0)	1	0.88
	Single boarding	100(50.0)	34(34.0)	66(66.0)	1.05(0.58-1.88)	
Age	14	12(6.0)	4(33.3)	8(66.7)	1	0.13
	15	14(7.0)	4(28.6)	10(71.4)	1.25(0.24-6.68)	
	16	47(23.5)	20(42.6)	27(57.4)	0.68(0.18-2.56)	
	17	62(31.0)	26(41.9)	36(58.1)	0.69(0.19-2.55)	
	18	65(32.5)	13(20.0)	52(80.0)	2.00(0.52-7.68)	
Education	Form 1	7(3.5)	2(28.6)	5(71.4)	1	<0.001
	Form 2	48(24.0)	16(33.3)	32(66.7)	0.80(0.14-4.59)	
	Form 3	70(35.0)	36(51.4)	34(48.6)	0.38(0.07-2.08)	
	Form 4	75(37.5)	13(17.3)	62(82.7)	1.91(0.33-10.93)	
Marital status	Single	192(96.0)	67(34.9)	125(65.1)	1	0.04
	Married	8(4.0)	0(0.0)	8(100)	1.54(1.39-1.70)	
Religion	Catholic	86(43.7)	29(33.7)	57(66.3)	1	0.94
	Protestant	107(54.3)	36(33.6)	71(66.4)	1.00(0.55-1.83)	
	Muslim	4(2.0)	1(25.0)	3(75.0)	1.53(0.15-15.33)	

Among the male students, majority of those in mixed day (67%) and majority of those in single sex boarding schools (66%) had ever had sex, but the difference was not statistically significant. Regardless of age, most students had ever had sex, and the 18-year-olds were twice as likely to have ever had sex (OR 2.00, 95% CI 0.52-7.68) compared to the 14-year olds. Majority of single males (65.1%) had ever had sex. In all types of religion, majority of the students had ever had sex.

Strong evidence of association was seen between education and ever having sex, with those in higher classes being more likely to have ever had sex ($p < 0.001$). Marital status was also found to be associated with ever having sex ($p = 0.04$), with those married being 1.5 times more likely to have ever had sex when compared to the single students.

Table 4.4: Comparison between demographic characteristics of sexually active and non-sexually active female in-school adolescents in Nyamira County

		Total n=400 n(%)	No sex n(%)	Ever had sex n(%)	Odds Ratio 95% Confidence Interval	p-value
School type	Mixed	100(50.0)	40(40.0)	60(60.0)	1	0.20
	Single boarding	100(50.0)	49(49.0)	51(51.0)	1.44(0.82-2.52)	
Age	14	11(5.5)	6(54.5)	5(45.5)	1	0.39
	15	8(4.0)	6(75.0)	2(25.0)	0.40(0.05-2.93)	
	16	37(18.5)	16(43.2)	21(56.8)	1.58(0.41-6.10)	
	17	88(44.0)	39(44.3)	49(55.7)	1.51(0.43-5.31)	
	18	56(28.0)	22(39.3)	34(60.7)	1.85(0.50-6.82)	
Education	Form 1	9(4.5)	6(66.7)	3(33.3)	1	0.58
	Form 2	22(11.0)	10(45.5)	12(54.5)	2.40(0.47-12.13)	
	Form 3	52(26.0)	19(36.5)	33(63.5)	3.47(0.78-15.51)	
	Form 4	117(58.5)	54(46.2)	63(53.8)	2.33(0.56-9.78)	
Marital status	Single	197(98.5)	88(44.7)	109(55.3)	1	0.70
	Married	3(1.5)	1(33.3)	2(66.7)	1.62(0.14-18.10)	
Religion	Catholic	58(30.1)	21(36.2)	37(63.8)	1	0.31
	Protestant	133(68.9)	64(48.1)	69(51.9)	0.61(0.32-1.15)	
	Muslim	2(1)	1(50.0)	1(50.0)	0.57(0.03-9.55)	

As depicted in table 4.4, among the female students, majority of those in mixed day schools (60%) had ever had sex. In boarding schools about half of the girls (51%) had ever had sex. On age, most of the younger students (14-15 years) had not had sex, while most of the older students (16-18 years) had ever had sex. Correspondingly, majority of the form 1 students were likely to not have had sex, when compared to the form 2, 3 and 4 students of whom majority had ever had sex. However, none of the demographic characteristics showed evidence of association with ever having sex.

Table 4.5: Comparison between demographic characteristics of sexually active and non-sexually active in-school adolescents in mixed-day secondary schools in Nyamira County

		Total n=400 n(%)	No sex n(%)	Ever had sex n(%)	Odds Ratio 95% Confidence Interval	p-value
Gender	Male	100(50.0)	33(33.0)	67(67.0)	1	0.30
	Female	100(50.0)	40(40.0)	60(60.0)	1.35(0.76-2.41)	
Age	14	11(5.5)	6(54.5)	5(45.5)	1	0.04
	15	13(6.5)	7(53.8)	6(46.2)	1.03(0.21-5.15)	
	16	31(15.5)	8(25.8)	23(74.2)	3.45(0.82-14.47)	
	17	79(39.5)	35(44.3)	44(55.7)	1.51(0.42-5.36)	
	18	66(33.0)	17(25.8)	49(74.2)	0.31(0.08-1.14)	
Education	Form 1	13(6.5)	6(46.2)	7(53.8)	1	0.33
	Form 2	31(15.5)	12(38.7)	19(61.3)	1.36(0.37-5.02)	
	Form 3	60(30.0)	26(43.3)	34(56.7)	1.12(0.34-3.74)	
	Form 4	96(48.0)	29(30.2)	67(69.8)	1.98(0.61-6.41)	
Marital status	Single	193(96.5)	73(37.8)	120(62.2)	1	0.15
	Married	7(3.5)	0(0.0)	7(100.0)	4.2(0.51-34.84)	
Religion	Catholic	64(32.0)	20(21.2)	44(68.8)	1	0.57
	Protestant	131(65.5)	51(38.9)	80(61.1)	0.71(0.38-1.34)	
	Muslim	5(2.5)	2(40.0)	3(60.0)	0.68(0.11-4.40)	

In Mixed Day secondary schools as shown in table 4.5 above, majority of the male (67%) and female students (60%) had ever had sex. Of the younger students, majority had not had sex when compared to the older students (16-18 years), majority of whom had ever sex. In all the levels of education, majority of the students had ever had sex. No matter the religion, most of the students had ever had sex. However, only age showed evidence of association with ever having sex (p=0.04).

Table 4.6: Comparison between demographic characteristics of sexually active and non-sexually active in-school adolescents in single sex boarding secondary schools in Nyamira County

		Total n=400 n(%)	No sex n(%)	Ever had sex n(%)	Odds Ratio 95% Confidence Interval	p-value
Gender	Male	100(50.0)	34(34.0)	66(66.0)	1	0.03
	Female	100(50.0)	49(49.0)	51(51.0)	1.87(1.06-3.30)	
Age	14	12(6.0)	4(33.3)	8(66.7)	1	0.27
	15	9(4.5)	3(33.3)	6(66.7)	1.00(0.16-6.26)	
	16	53(26.5)	28(52.8)	25(47.2)	0.45(0.12-1.66)	
	17	71(35.5)	30(42.3)	41(57.7)	0.68(0.19-2.48)	
	18	55(27.5)	18(32.7)	37(67.3)	1.03(0.27-3.87)	
Education	Form 1	3(1.5)	2(66.7)	1(33.3)	1	0.54
	Form 2	39(19.5)	14(35.9)	25(64.1)	3.57(0.30-42.99)	
	Form 3	62(31.0)	29(46.8)	33(53.2)	2.28(0.20-26.42)	
	Form 4	96(48.0)	38(39.6)	58(60.4)	3.05(0.27-34.85)	
Marital status	Single	197(98.5)	83(42.1)	114(57.9)	1	0.14
	Married	3(1.5)	0(0.0)	3(100.0)	1.728(1.53-1.95)	
Religion	Catholic	81(40.5)	31(38.3)	50(61.7)	1	0.50
	Protestant	118(59.0)	52(44.1)	66(55.9)	0.79(0.44-1.40)	
	Muslim	1(0.5)	0(0.0)	1(100.0)	0.62(0.04-10.28)	

In single sex boarding schools, majority of the boys (66%) had ever had sex, when compared to the girls (51%). On age, apart from the 16 year olds, majority of the students had ever had sex. Only gender was found to be statistically significant with ever having sex ($p=0.03$).

4.2.2 Sociocultural determinants of sexual debut among in-school adolescents in Nyamira County

Table 4.7: Sociocultural characteristics of in-school adolescents in Nyamira County

		Total n(%)	Gender		
			Male	Female	
Type of family	Monogamous	303(75.8)	149(49.2)	154(50.8)	
	Polygamous	97(24.2)	51(52.6)	46(47.4)	
Living with both parents	Yes	296(74.0)	151(51.0)	145(49.0)	
	No	104(26.0)	49(47.1)	55(52.9)	
Reason not living with both parents	Deceased	Father deceased	36(34.6)	17(47.2)	19(52.8)
		Mother deceased	14(13.5)	8(57.1)	6(42.9)
		Both deceased	12(11.5)	6(50.0)	6(50.0)
	Separated	28(26.9)	14(50.0)	24(50.0)	
	Never been together	14(13.5)	4(28.6)	10(71.4)	
In single parent, parent living with	Father	27(26.0)	16(59.3)	11(40.7)	
	Mother	77(74.0)	33(42.9)	44(57.1)	
If polygamous, number of wives	Two	64(66.0)	28(43.8)	36(56.2)	
	More than 2	33(34.0)	23(69.7)	10(30.3)	
Relationship with parents	Harmonious	341(85.2)	171(50.1)	170(49.9)	
	Disharmonious	59(14.8)	29(49.2)	30(50.8)	
Father's occupation	Unemployed	77(23.7)	30(39.0)	67(55.8)	
	Self employed	120(36.9)	67(55.8)	53(44.2)	
	Salaried	85(26.2)	49(57.6)	36(42.4)	
	Casual	43(13.2)	17(39.5)	26(60.5)	
Mother's occupation	Unemployed	148(39.6)	59(39.9)	89(60.1)	
	Self employed	150(40.1)	87(58.0)	63(42.0)	
	Salaried	39(10.4)	18(46.2)	21(53.8)	
	Casual	37(9.9)	23(62.2)	14(37.8)	
Currently have a boy/girlfriend	Yes	263(65.8)	136(51.7)	127(48.3)	
	No	137(34.2)	64(46.7)	73(53.3)	
Other partners while with current friend	Yes	115(43.7)	74(64.3)	41(35.7)	
	No	148(56.3)	55(37.2)	93(62.8)	
Fulfilled in relationship	Yes	190(72.2)	100(52.6)	90(47.4)	
	No	73(27.8)	36(49.3)	37(50.7)	
Boy/Girlfriend from the same school	Yes	43(16.3)	28(65.1)	15(34.9)	
	No	220(83.7)	108(49.1)	112(50.9)	
Age of boy/girlfriend	Younger than	92(35.0)	72(78.3)	20(21.7)	
	Older than	63(24.0)	8(12.7)	55(87.3)	
	Same age	108(41.1)	56(51.9)	52(48.1)	
Boy/Girlfriend employed	Yes	56(21.3)	12(21.4)	44(78.6)	
	No	207(78.7)	124(59.9)	83(40.1)	
Marital status of Boy/Girlfriend	Single	239(90.9)	131(54.8)	108(45.2)	
	Married	24(9.1)	5(20.8)	19(79.2)	

Table 4.7 presents the sociocultural characteristics of the 400 in-school adolescents interviewed in the study. Majority of the students came from monogamous families 303(76%) and lived with both parents 296(74%). The reason given by most of those who didn't live with both parents 62(60%) was one or both parents being deceased. Of those from single parent homes, majority lived with the mother 77(74%). Most of the students reported having a harmonious relationship with their parents 341(85%). Of the fathers, 24% of them were not employed and 40% of the mothers were also unemployed. Majority of the students 263(66%) reported having boyfriends and girlfriends at the time of the study. Of these, 44% reported having other partners apart from the current partner. Most of the boyfriends and girlfriends (84%) were not from the same school as the study participants. The boys tended to have younger girlfriends, while the female students tended to have older boyfriends.

Table 4.8: Comparison between sociocultural characteristics of sexually active and non-sexually active in-school adolescents in Nyamira County

		Total n(%)	No sex	Ever had sex	Odds Ratio 95% CI	p- value	
Type of family	Polygamous	97(24.2)	26(28.8)	71(73.2)	1	0.01	
	Monogamous	303(75.8)	130(42.9)	173(57.1)	0.49(0.30-0.81)		
Living with both parents	Yes	296(74.0)	114(38.5)	182(61.5)	1	0.74	
	No	104(26.0)	42(40.4)	62(59.6)	1.08(0.69-1.71)		
Reason not living with both parents	Deceased	Father deceased	36(34.6)	12(33.3)	24(66.7)	1	0.50
		Mother deceased	14(13.5)	8(57.1)	6(42.9)	0.38(0.11-1.33)	
		Both deceased	12(11.5)	2(16.7)	10(83.3)	2.50(0.47-13.27)	
	Separated	28(26.9)	15(53.6)	13(46.4)	0.43(0.16-1.20)		
	Never together	14(13.5)	5(35.7)	9(64.3)	0.90(0.25-3.28)		
In single parent, parent living with	Father	27(26.0)	12(44.4)	15(55.6)	1	0.62	
	Mother	77(74.0)	30(39.0)	47(61.0)	1.80(0.33-1.94)		
If polygamous, number of wives	Two	64(66.0)	17(26.6)	47(73.4)	1	0.94	
	More than 2	33(34.0)	9(27.3)	24(72.7)	1.04(0.40-2.67)		
Relationship with parents	Harmonious	341(85.2)	135(39.6)	206(60.4)	1	0.56	
	Disharmonious	59(14.8)	21(35.6)	38(64.4)	0.84(0.47-1.50)		
Father's occupation	Unemployed	77(23.7)	20(26.0)	57(74.0)	1	0.001	
	Self employed	120(36.9)	48(40.0)	72(60.0)	0.53(0.28-0.99)		
	Salaried	85(26.2)	38(44.7)	47(55.3)	0.43(0.22-0.84)		
	Casual	43(13.2)	27(62.8)	16(37.2)	0.22(0.11-0.44)		
Mother's occupation	Unemployed	148(39.6)	58(39.2)	90(60.8)	1	0.70	
	Self employed	150(40.1)	56(37.3)	94(62.7)	1.08(0.68-1.73)		
	Salaried	39(10.4)	13(33.3)	26(66.7)	1.29(0.61-2.71)		
	Casual	37(9.9)	17(45.9)	20(54.1)	0.76(0.37-1.57)		
Currently have a boy/girlfriend	No	137(34.2)	87(63.5)	50(36.5)	1	<0.001	
	Yes	263(65.8)	69(26.2)	194(73.8)	4.89(3.14-7.62)		
Fulfilled in relationship	Yes	190(72.2)	52(27.4)	138(72.6)	1	0.50	
	No	73(27.8)	17(23.3)	56(76.7)	0.81(0.43-1.51)		
Boy/Girlfriend from the same school	Yes	43(16.3)	15(34.9)	28(65.1)	1	0.16	
	No	220(83.7)	54(24.5)	166(75.5)	0.61(0.30-1.22)		
Age of boy/girlfriend	Younger than	92(35.0)	18(19.6)	74(80.4)	1	0.14	
	Older than	63(24.0)	21(33.3)	42(66.7)	0.49(0.23-1.01)		
	Same age	108(41.1)	30(27.8)	78(72.2)	0.63(0.33-1.23)		
Boy/Girlfriend employed	Yes	56(21.3)	14(25.0)	42(75.0)	1	0.81	
	No	207(78.7)	55(26.6)	152(73.4)	0.09(0.55-2.14)		
Marital status of Boy/Girlfriend	Single	239(90.9)	65(27.2)	174(72.8)	1	0.26	
	Married	24(9.1)	4(16.7)	20(83.3)	0.54(0.18-1.63)		

As illustrated in table 4.8 above, only the type of family ($p=0.01$), the father's occupation ($p=0.001$) and currently having a boy/girlfriend ($p<0.001$) were found to be associated with ever having sex. Those from monogamous homes were seen to have a 51% less chance of ever having sex when compared to those from polygamous families (OR=0.49, 95%CI 0.30-0.81). The father having some form of employment appeared to be protective against having sex. Those having boyfriends and girlfriends were almost five times more likely to have sex compared with those with none (OR 4.89, 95%CI 3.14-7.62).

One student narrated that she came from a polygamous home. The first wife could not conceive leading to her father marrying her mother. However, her parents also separated and she ended up staying with her father who married someone else. On getting pregnant, she started disagreeing with the stepmother a lot to a point her father moved her away to her own rented house. She alludes this to the fact that the stepmother couldn't have children. At the time of the interview, she was living with the paternal grandmother and her son.

In one school, the head of counselling said:

'Most of our students do not have both parents. And some of them, their mothers are not married. So I think that makes them feel that it's just right to have sex. And then they are so poor. Some of them live with their grandmothers...you know how they are soft with their grandchildren. And so, they do not have any problem with them having sex.' [KII_F_G&C_Mixed day school: 24 - 24 (0)]

Distance to schools causing students going to leave early while still dark was thought to predispose to sex. The village elder said:

There is need to reduce the distances covered to school. Like here there is a school about 6 km away so you find students set off as early as 5 in the morning. It is not good for girls to walk in such hours of the night. [KII_Village Elder _70: 142 - 142 (0)]

This was collaborated by a parent from Tombe girls whose 2 daughters in mixed day secondary schools got pregnant and he attributed their having to leave home while still dark as a contributor.

From FGDs it was seen that girls preferred older men. One of the female students said:

'Mostly girls have sex with older men.' [FGD_F_SS: 14 - 14 (0)]

Most boys went out with girls their age or younger, but a few went out with older women. In a case narrative, a male student said:

'The eldest I have had sex with is 38 years.'
[FGD_M_SS (case narrative 2): 206 - 206 (0)]

When asked why, he said:

'Maybe that's the way I am. I like the elderly people because I consider them romantic. Those 28-30. Especially, when you lack parental love. You get to have sex with that people because they provide that love.'
[FGD_M_SS (case narrative 1): 176 - 176 (0)]

On being asked how they compare to school girls, he said:

'A very big difference. These people bath well. They are very romantic.'
[FGD_M_SS (case narrative 1): 193 - 194 (0)]

Table 4.9: Comparison between sociocultural characteristics of sexually active and non-sexually active male in-school adolescents in Nyamira County

		Total n(%)	No sex	Ever had sex	Odds Ratio 95% CI	p- value	
Type of family	Polygamous	51(25.5)	10(19.6)	41(80.4)	1	0.02	
	Monogamous	149(74.5)	57(38.3)	92(61.7)	0.39(0.18-0.85)		
Living with both parents	Yes	151(75.5)	50(33.1)	101(66.9)	1	0.84	
	No	49(24.5)	17(34.7)	32(65.3)	1.07(0.54-2.12)		
Reason not living with both parents	Deceased	Father deceased	17(34.7)	5(29.4)	12(70.6)	1	0.99
		Mother deceased	8(16.3)	5(62.5)	3(37.5)	0.25(0.04-1.47)	
		Both deceased	6(12.2)	0(0.0)	6(100.0)	2.50(0.24-26.48)	
	Separated	14(28.6)	6(42.9)	8(57.1)	0.56(0.13-2.46)		
	Never together	4(8.2)	1(25.0)	3(75.0)	1.25(0.10-15.11)		
In single parent, parent living with	Father	16(32.7)	6(37.5)	10(62.5)	1	0.77	
	Mother	33(67.3)	11(33.3)	22(66.7)	0.83(0.24-2.89)		
If polygamous, number of wives	Two	28(54.9)	4(14.3)	24(85.7)	1	0.24	
	More than 2	23(45.1)	6(26.1)	17(73.9)	2.12(0.52-8.67)		
Relationship with parents	Harmonious	171(85.5)	58(33.9)	113(66.1)	1	0.76	
	Disharmonious	29(14.5)	9(31.0)	20(69.0)	0.88(0.38-2.05)		
Father's occupation	Unemployed	30(18.4)	5(16.7)	25(83.3)	1	0.003	
	Self employed	67(41.1)	22(32.8)	45(67.2)	0.41(0.14-1.21)		
	Salaried	49(30.1)	18(36.7)	31(63.3)	0.34(0.11-1.06)		
	Casual labourer	17(10.4)	12(70.6)	5(29.4)	0.14(0.04-0.47)		
Mother's occupation	Unemployed	59(31.6)	19(32.2)	40(67.8)	1	0.17	
	Self employed	87(46.5)	24(27.6)	63(72.4)	1.25(0.61-2.56)		
	Salaried	18(9.6)	6(33.3)	12(66.7)	0.95(0.31-2.92)		
	Casual labourer	23(12.3)	12(52.2)	11(47.8)	0.44(0.16-1.16)		
Currently have a girlfriend	No	64(32.0)	42(65.6)	22(34.4)	1	<0.001	
	Yes	136(68.0)	25(18.4)	111(81.6)	8.48(4.32-16.63)		
Fulfilled in relationship	Yes	100(73.5)	17(17.0)	83(83.0)	1	0.49	
	No	36(26.5)	8(22.2)	28(77.8)	1.40(0.54-3.58)		
Boy/Girlfriend from the same school	Yes	28(20.6)	7(25.0)	21(75.0)	1	0.31	
	No	108(79.4)	18(16.7)	90(83.3)	0.60(0.22-1.62)		
Age of boy/girlfriend	Younger than	72(52.9)	14(19.4)	58(80.6)	1	0.81	
	Older than	8(5.9)	1(12.5)	7(87.5)	1.69(0.19-14.87)		
	Same age	56(41.2)	10(17.9)	46(82.1)	1.11(0.45-2.73)		
Boy/Girlfriend employed	Yes	12(8.8)	1(8.3)	11(91.7)	1	0.31	
	No	124(91.2)	24(19.4)	100(80.6)	2.64(0.33-21.45)		
Marital status of Boy/Girlfriend	Single	131(96.3)	25(19.1)	106(80.9)	1	0.36	
	Married	5(3.7)	0(0.0)	5(100.0)	0.81(0.75-0.88)		

As shown in table 4.9 above, the type of family, father's occupation and currently having a girlfriend were found to be statistically significant with ever having sex, p-values of 0.02, 0.003 and less than 0.001 respectively, with those from polygamous homes, having unemployed fathers and having girlfriends being more likely to have ever had sex.

Table 4.10: Comparison between sociocultural characteristics of sexually active and non-sexually active female in-school adolescents in Nyamira County

		Total n(%)	No sex	Ever had sex	Odds Ratio 95% CI	p- value	
Type of family	Polygamous	46(23.0)	16(34.8)	30(65.2)	1	0.13	
	Monogamous	154(77.0)	73(47.4)	81(52.6)	0.59(0.30-1.17)		
Living with both parents	Yes	145(72.5)	64(44.1)	81(55.9)	1	0.87	
	No	55(27.5)	25(45.5)	30(54.5)	1.06(0.57-1.97)		
Reason not living with both parents	Deceased	Father deceased	19(34.5)	7(36.8)	12(63.2)	1	0.44
		Mother deceased	6(10.9)	3(50.0)	3(50.0)	0.58(0.09-3.72)	
		Both deceased	6(10.9)	2(33.3)	4(66.7)	1.17(0.17-8.09)	
	Separated	14(25.5)	9(64.3)	5(35.7)	0.32(0.08-1.36)		
	Never together	10(18.2)	4(40.0)	6(60.0)	0.88(0.18-4.21)		
In single parent, parent living with	Father	11(20.0)	6(54.5)	5(45.5)	1	0.50	
	Mother	44(80.0)	19(43.2)	25(56.8)	0.63(0.17-2.40)		
If polygamous, number of wives	Two	36(78.3)	13(36.1)	23(63.9)	1	0.52	
	More than 2	10(21.7)	3(30.0)	7(70.0)	0.76(0.17-3.45)		
Relationship with parents	Harmonious	170(85.0)	77(45.3)	93(54.7)	1	0.59	
	Disharmonious	30(15.0)	12(40.0)	18(60.0)	0.81(0.37-1.78)		
Father's occupation	Unemployed	47(29.0)	15(31.9)	32(68.1)	1	0.08	
	Self employed	53(32.7)	26(49.1)	27(50.9)	0.49(0.22-1.10)		
	Salaried	36(22.2)	20(55.6)	16(14.4)	0.38(0.15-0.92)		
	Casual labourer	26(16.0)	15(57.7)	11(42.3)	0.34(0.13-0.93)		
Mother's occupation	Unemployed	89(47.6)	39(43.8)	50(56.2)	1	0.47	
	Self employed	63(33.7)	32(50.8)	31(49.2)	0.76(0.40-1.44)		
	Salaried	21(11.2)	7(33.3)	14(66.7)	1.56(0.57-4.24)		
	Casual labourer	14(7.5)	5(35.7)	9(64.3)	1.40(0.44-4.53)		
Currently have a boyfriend	No	73(36.5)	45(61.6)	28(38.4)	1	<0.001	
	Yes	127(63.5)	44(34.6)	83(65.4)	3.03(1.67-5.51)		
Fulfilled in relationship	Yes	90(70.9)	35(38.9)	55(61.1)	1	0.12	
	No	37(29.1)	9(24.3)	28(75.7)	0.51(0.21-1.20)		
Boy/Girlfriend from the same school	Yes	15(11.8)	8(53.3)	7(46.7)	1	0.11	
	No	112(88.2)	36(32.1)	76(67.9)	0.41(0.14-1.23)		
Age of boy/girlfriend	Younger than	20(15.7)	4(20.0)	16(80.0)	1	0.32	
	Older than	55(43.3)	20(36.4)	35(63.6)	0.44(0.13-1.49)		
	Same age	52(40.9)	20(38.5)	32(61.5)	0.40(0.12-1.37)		
Boy/Girlfriend employed	Yes	44(34.6)	13(29.5)	31(70.5)	1	0.38	
	No	83(65.4)	31(37.3)	52(62.7)	1.42(0.65-3.12)		
Marital status of Boy/Girlfriend	Single	108(85.0)	40(37.0)	68(63.0)	1	0.18	
	Married	19(15.0)	4(21.1)	15(78.9)	0.45(0.14-1.46)		

Among the female students, as shown in table 4.10 above, only currently having a boyfriend was significantly associated with ever having sex ($p < 0.001$).

Table 4.11: Comparison between sociocultural characteristics of sexually active and non-sexually active in-school adolescents in mixed-day secondary schools in Nyamira County

		Total n(%)	No sex	Ever had sex	Odds Ratio 95% CI	p- value	
Type of family	Polygamous	69(34.5)	19(27.5)	50(72.5)	1	0.06	
	Monogamous	131(65.5)	54(41.2)	77(58.8)	0.54(0.29-1.02)		
Living with both parents	Yes	138(69.0)	50(36.2)	88(63.8)	1	0.91	
	No	62(31.0)	23(37.1)	39(62.9)	1.04(0.56-1.93)		
Reason not living with both parents	Deceased	Father deceased	19(30.6)	6(31.6)	13(68.4)	1	0.32
		Mother deceased	8(12.9)	3(37.5)	5(62.5)	0.77(0.14-4.33)	
		Both deceased	9(14.5)	1(11.1)	8(88.9)	3.69(0.37-36.57)	
	Separated	16(25.8)	9(56.2)	7(43.8)	0.36(0.09-1.43)		
	Never together	10(16.1)	4(40.0)	6(60.0)	0.69(0.14-3.40)		
In single parent, parent living with	Father	17(27.4)	6(35.3)	11(64.7)	1	0.86	
	Mother	45(72.6)	17(37.8)	28(62.2)	1.11(0.35-3.56)		
If polygamous, number of wives	Two	42(60.9)	12(28.6)	30(71.4)	1	0.81	
	More than 2	27(39.1)	7(25.9)	20(74.1)	0.88(0.29-2.60)		
Relationship with parents	Harmonious	164(82.0)	60(36.6)	104(63.4)	1	0.96	
	Disharmonious	36(18.0)	13(36.1)	23(63.9)	0.98(0.46-2.08)		
Father's occupation	Unemployed	46(29.9)	14(30.4)	32(69.6)	1	0.05	
	Self employed	62(40.3)	24(38.7)	38(61.3)	0.69(0.31-1.56)		
	Salaried	23(14.9)	6(26.1)	17(73.9)	1.24(0.40-3.81)		
	Casual labourer	23(14.9)	14(60.9)	9(39.1)	0.28(0.10-0.80)		
Mother's occupation	Unemployed	77(42.1)	28(36.4)	49(63.6)	1	0.04	
	Self employed	65(35.5)	23(35.4)	42(64.6)	1.04(0.52-2.08)		
	Salaried	16(8.7)	2(12.5)	14(87.5)	4.0(0.85-18.90)		
	Casual labourer	25(13.7)	14(56.0)	11(44.0)	0.45(0.18-1.12)		
Currently have a boy/girlfriend	No	78(39.0)	52(66.7)	26(33.3)	1	<0.001	
	Yes	122(61.0)	21(17.2)	101(82.8)	9.62(4.95-18.71)		
Fulfilled in relationship	Yes	94(77.0)	15(16.0)	79(84.0)	1	0.50	
	No	28(23.0)	6(21.4)	22(78.6)	1.44(0.50-4.14)		
Boy/Girlfriend from the same school	Yes	25(20.5)	6(24.0)	19(76.0)	1	0.23	
	No	97(79.5)	15(15.5)	82(84.5)	0.58(0.20-1.69)		
Age of boy/girlfriend	Younger than	45(36.9)	5(11.1)	40(88.9)	1	0.48	
	Older than	24(19.7)	7(29.2)	17(70.8)	0.30(0.08-1.09)		
	Same age	52(43.3)	9(17.0)	44(83.0)	0.61(0.19-1.98)		
Boy/Girlfriend employed	Yes	32(26.2)	6(18.8)	26(81.2)	1	0.79	
	No	90(73.8)	15(16.7)	75(83.3)	0.87(0.30-2.47)		
Marital status of Boy/Girlfriend	Single	113(92.6)	20(17.7)	93(82.3)	1	0.52	
	Married	9(7.4)	1(11.1)	8(88.9)	0.58(0.07-4.91)		

As depicted in table 4.11 above, in mixed day secondary schools, only the father's ($p=0.05$) and mother's ($p=0.04$) occupation and currently having a boy/girlfriend ($p<0.001$) were associated with ever having sex. Those with parents not employed were likely to have ever had sex.

Table 4.12: Comparison between sociocultural characteristics of sexually active and non-sexually active in-school adolescents in single sex boarding secondary schools in Nyamira County

		Total n(%)	No sex	Ever had sex	Odds Ratio 95% CI	p- value	
Type of family	Monogamous	28(14.0)	7(25.0)	21(75.0)	1	0.06	
	Polygamous	172(86.0)	76(44.2)	96(55.8)	0.42(0.17-1.04)		
Living with both parents	Yes	158(79.0)	64(40.5)	94(59.5)	1	0.58	
	No	42(21.0)	19(45.2)	23(54.8)	1.21(0.61-2.41)		
Reason not living with both parents	Deceased	Father deceased	17(40.0)	6(35.3)	11(64.7)	1	0.99
		Mother deceased	6(14.3)	5(83.3)	1(16.7)	0.11(0.01-1.16)	
		Both deceased	3(7.1)	1(33.3)	2(66.7)	1.09(0.08-14.66)	
	Separated Never together	12(28.6)	6(50.0)	6(50.0)	0.55(0.12-2.46)		
		4(9.5)	1(25.0)	3(75.0)	1.64(0.14-19.39)		
In single parent, parent living with	Father	10(23.8)	6(60.0)	4(40.0)	1	0.24	
	Mother	32(76.2)	13(40.6)	19(59.4)	0.46(0.11-1.94)		
If polygamous, number of wives	Two	22(78.6)	5(22.7)	17(77.3)	1	0.48	
	More than 2	6(21.4)	2(33.3)	4(66.7)	1.70(0.24-12.17)		
Relationship with parents	Harmonious	177(88.5)	75(42.4)	102(57.6)	1	0.49	
	Disharmonious	23(11.5)	8(34.8)	15(65.2)	0.73(0.29-1.80)		
Father's occupation	Unemployed	31(18.1)	6(19.4)	25(80.6)	1	0.01	
	Self employed	58(33.9)	24(41.4)	34(58.6)	0.34(0.12-0.96)		
	Salaried	62(36.3)	32(51.6)	30(48.4)	0.23(0.08-0.62)		
	Casual labourer	20(11.7)	13(65.0)	7(35.0)	0.13(0.04-0.46)		
Mother's occupation	Unemployed	71(37.2)	30(42.3)	41(57.7)	1	0.57	
	Self employed	85(44.5)	33(38.8)	52(61.2)	1.15(0.61-2.19)		
	Salaried	23(12.0)	11(47.8)	12(52.2)	0.80(0.31-2.05)		
	Casual labourer	12(6.3)	3(25.0)	9(75.0)	2.20(0.55-8.80)		
Currently have a boy/girlfriend	No	59(29.5)	35(59.3)	24(40.7)	1	0.001	
	Yes	141(70.5)	48(34.0)	93(66.0)	2.83(1.51-5.28)		
Fulfilled in relationship	Yes	96(68.1)	37(38.5)	59(61.5)	1	0.10	
	No	45(31.9)	11(24.4)	34(75.6)	0.52(0.23-1.14)		
Boy/Girlfriend from the same school	Yes	18(12.8)	9(50.0)	9(50.0)	1	0.13	
	No	123(87.2)	39(31.7)	84(68.3)	0.46(0.17-1.26)		
Age of boy/girlfriend	Younger than	47(33.3)	13(27.7)	34(72.3)	1	0.51	
	Older than	39(27.7)	14(35.9)	25(64.1)	0.68(0.27-1.70)		
	Same age	55(39.0)	21(38.2)	34(61.8)	0.62(0.27-1.43)		
Boy/Girlfriend employed	Yes	24(17.0)	8(33.3)	16(66.7)	1	0.94	
	No	117(83.0)	40(34.2)	77(65.8)	1.04(0.41-2.64)		
Marital status of Boy/Girlfriend	Single	126(89.4)	45(35.7)	81(64.3)	1	0.23	
	Married	15(10.6)	3(20.0)	12(80.0)	0.45(0.12-1.68)		

Father's occupation ($p=0.01$) and currently having a boy/girlfriend ($p=0.001$) were shown to be associated with ever having sex among in-school adolescents in single sex boarding secondary schools as shown in table 4.12 above. Those whose father was unemployed and those having boyfriends or girlfriends were more likely to have ever had sex.

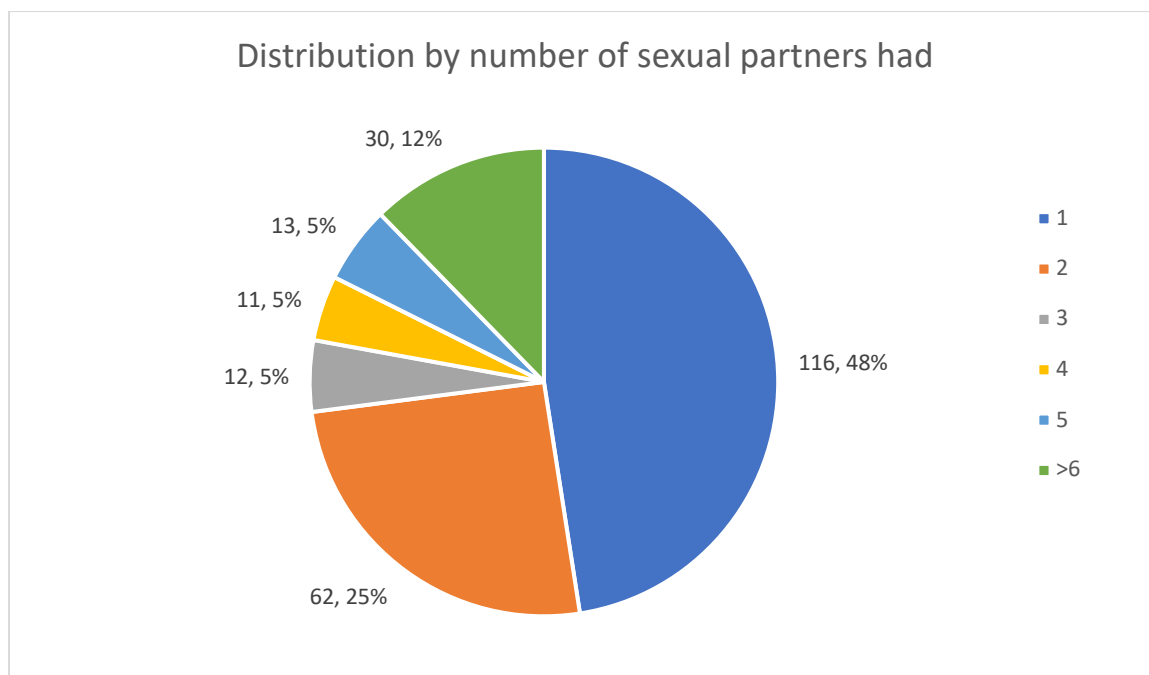


Figure 4.1: Distribution of sexual partners had by sexually active in-school adolescents in Nyamira County

As shown in figure 4.1 above, 116(48%) students reported having had one sexual partner, followed by 62(25%) students who had 2 sexual partners. At least 30(12%) students reported having had 6 or more sexual partners.

Table 4.13: Number of sexual partners had among sexually active in-school adolescents in Nyamira County by Gender and School type

		Total n(%)	Number of sexual partners		Odds Ratio 95% CI	p-value
			Single	Multiple		
Gender	Male	133(54.5)	47(35.5)	86(64.7)	1	<0.001
	Female	111(45.5)	69(62.2)	42(37.8)	0.33(0.20-0.56)	
School type	Mixed day	127(52.0)	54(42.5)	73(57.5)	1	0.10
	Single sex boarding	117(48.0)	62(53.0)	55(47.0)	0.66(0.40-1.09)	

Majority of the male students 86(65%) had multiple sexual partners at any one time while female students, majority 69(62%) had maintained only one sexual partner.

More students in mixed day secondary schools 73(58%) had multiple sexual partners, whereas in single sex boarding schools, more students 62(53%) had one sexual partner at any one time.

Gender was found to have strong association with the number of sexual partners had ($p < 0.001$), with female students being 73% less likely to have multiple sexual partners compared to male students.

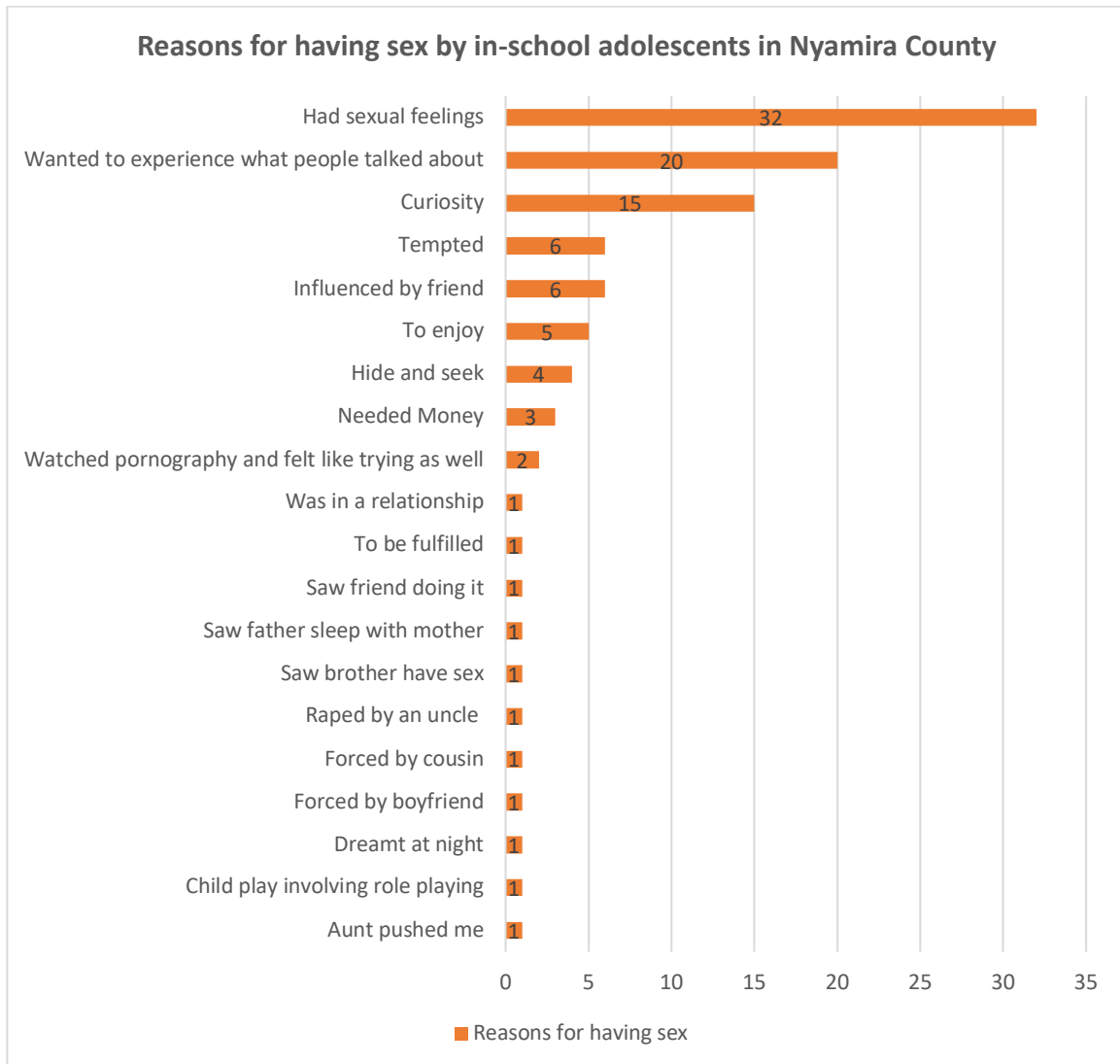


Figure 4.2: Reasons by in-school adolescents in Nyamira County for having sex for the first time

In figure 4.2 above, majority of the students reported having sexual feelings, wanting to experience what people talked about and curiosity as reasons for their having sex for the first time. One student reported being raped by her uncle, one other by the cousin and another by the boyfriend.

Giving a case narrative, one student from a boys boarding secondary boarding school commented about discos and the temptations that came with it. He said:

'In disco places. Let's say during the dance one develops some emotions. It fills one until they engage in sex.' [FGD_M_SS (case narrative 1): 31 - 31 (0)]

Another student from the same school said:

'I met her in a club. So, we dated. After a period of less than a week, we met, went to her place and we had sex. She told me she was single.'

[FGD_M_SS (case narrative 2): 206 - 206 (0)]

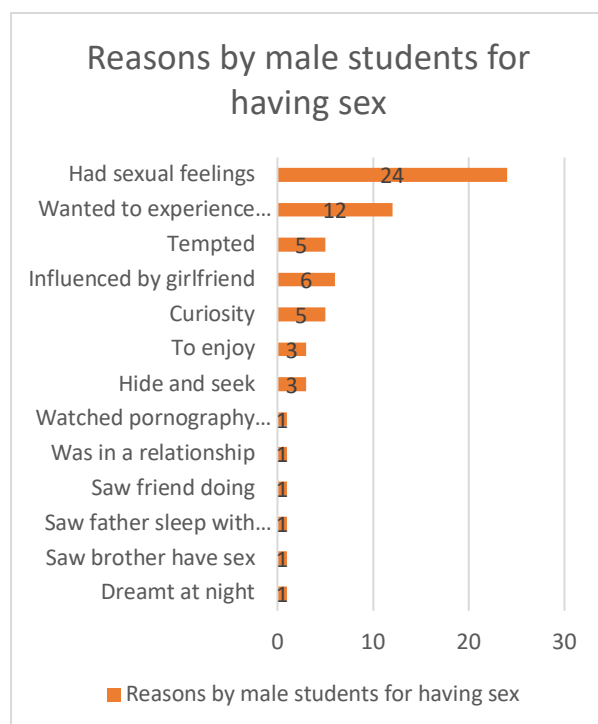


Figure 4.3: Reasons by male in-school adolescents in Nyamira County for having sex for the first time

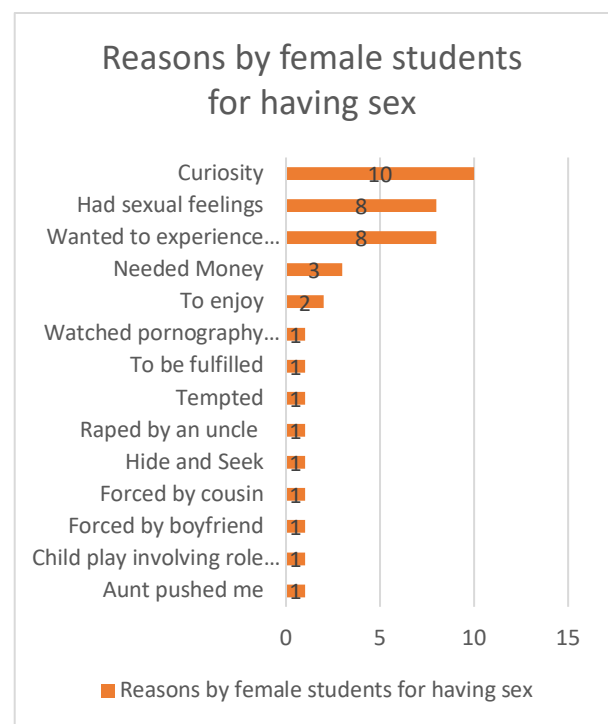


Figure 4.4: Reasons by female in-school adolescents in Nyamira County for having sex for the first time

Most of the male students said they had sex for the first time because they had feelings and wanted to experience what people talked about (figure 4.3). This was the same for female students, majority of whom said they had sex for the first time out of curiosity, had sexual feelings and because they wanted to experience what people talked about (figure 4.4).

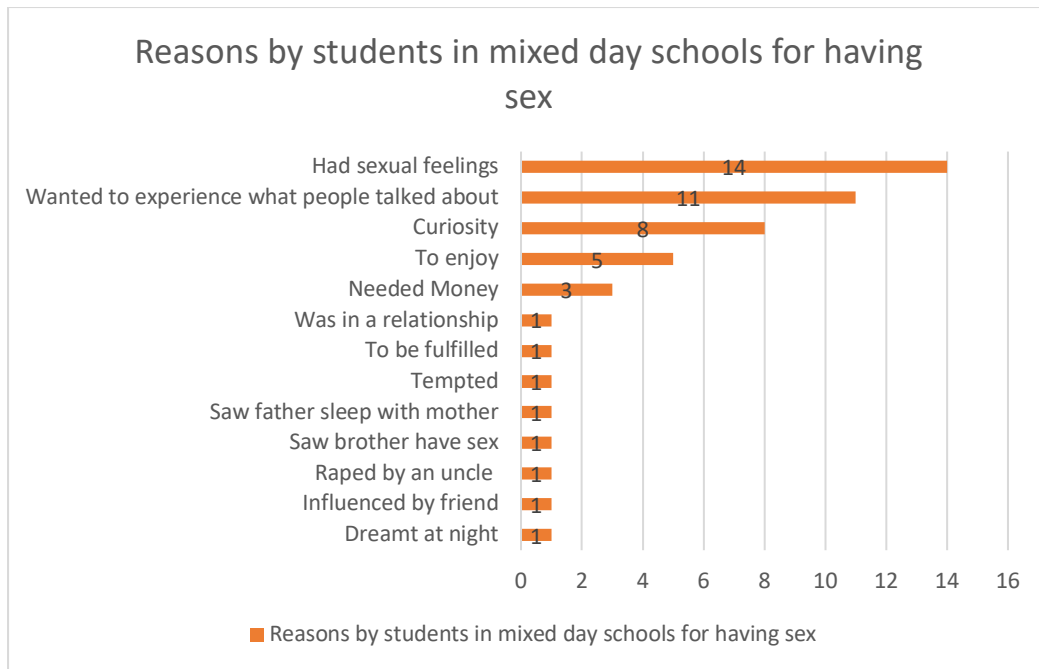


Figure 4.5: Reasons by in-school adolescents in Mixed day secondary schools in Nyamira County for having sex for the first time

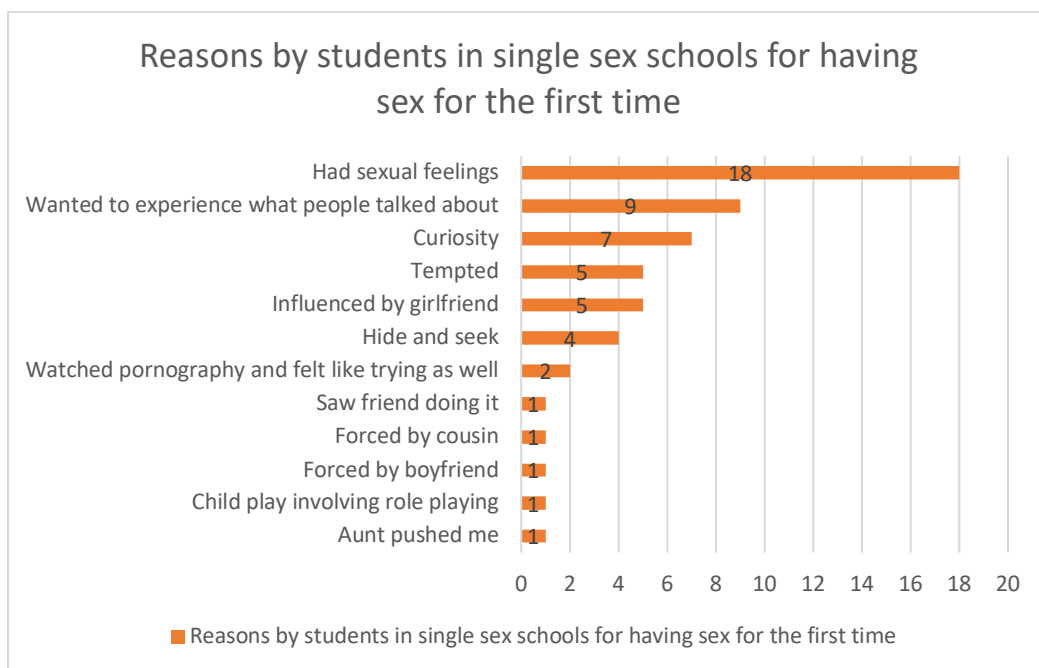


Figure 4.6: Reasons by in-school adolescents in single sex boarding schools in Nyamira County for having sex for the first time

Having sexual feelings and wanting to experience what people talked about were the commonest reasons given by students in mixed day secondary schools for having sex for the first time (figure 4.5).

In single sex secondary schools, most students reported having sexual feelings and wanting to experience what people talked as reasons for their sexual debut (figure 4.6).

In table 4.14, it can be seen that majority of the students 279(69.8%) got their sexual health knowledge from movies, followed by music videos 199(49.8%) and then the internet 172(43.0%). Students could have multiple sources of knowledge on sexual health. Majority 238(59.5%) watched pornography, with more male students 141(70.5%) than female students 97(48.5%) doing so. Most students got their knowledge from sexual health from their parents 142(35.5%). However, when this was analysed according to gender, majority of male students 81(61.8%) preferably got their advice from friends, while majority of the female students 100(70.4%) preferably got their sexual health advice from parents. Male students were seen to have a 73% less chance of discussing sex with their parents compared to their female counterparts and this was significant at $p < 0.001$. For those who discussed sex with their parents, the go-to parent for girls was the mother and this was significant at $p < 0.001$. For girls who didn't discuss sex with their parents, it's because their parents were twice as likely to assume they were taught in school rather than not being free with their children [OR=1.93, 95% CI (1.10-3.37), $p=0.02$]. Majority of the parents 266(79.2%) didn't know that their children had boyfriends and girlfriends. This was the same for boys and girls. Of the parents who knew, the girl's parents were more likely to approve of the relationship compared to the parents of the male students and this was found to be significant ($p=0.04$). Most of the students knew that sex before marriage was not right for boys 329(82.2%) and for girls 339(84.8%). However, most of them 281(70.2%) felt that, in the current times, it is impossible for boys and girls to avoid sex. Majority of the students 165(41.2%) felt that one could decline sex if they wanted to. Majority of the students 339(84.8%) knew that it wasn't right to have unprotected sex. Most of them knew about the risk of unwanted pregnancies (169(42.2%)) and STIs/HIV (214(53.5%)) and majority knew that STIs affect one's fertility (249(62.2%)).

Table 4.14: Sexual Health Perceptions of in-school adolescents in Nyamira County by Gender

		Total n(%)	Gender		OR	p-value
			Male	Female		
Source of knowledge	Magazines	129	54(41.9)	75(58.1)	1	0.31
	Movies	276	136(49.3)	140(50.7)	0.74(0.49-1.13)	
	Music videos	199	93(46.7)	106(53.3)	0.82(0.52-1.28)	
	Internet	172	75(43.6)	97(56.4)	0.93(0.59-1.48)	
	Books	140	55(39.3)	85(60.7)	1.11(0.68-1.81)	
Watches pornography	Yes	238(59.5)	141(70.5)	97(48.5)	1	<0.001
	No	162(40.5)	59(29.5)	103(51.5)	2.54(1.68-3.83)	
Go to person for sexual advice	Parents	142(35.5)	42(29.6)	100(70.4)	1	<0.001
	Teachers	63(15.8)	34(54.0)	29(46.0)	0.36(0.19-0.66)	
	Friends	131(32.8)	81(61.8)	50(38.2)	0.26(0.16-0.43)	
	Sisters	27(6.8)	12(44.4)	15(55.6)	0.53(0.23-1.22)	
	Brothers	17(4.2)	16(94.1)	1(5.9)	0.03(0.01-0.20)	
	Relatives	12(3.0)	11(91.7)	1(8.3)	0.04(0.01-0.31)	
	Boyfriend	8(2.0)	4(50.0)	4(50.0)	0.42(0.10-1.76)	
Discusses sex with parents	Yes	155(38.8)	48(31.0)	107(69.0)	1	<0.001
	No	245(61.2)	152(62.0)	93(38.0)	0.27(0.18-0.42)	
If yes, which parent	Father	24(15.5)	18(75.0)	6(25.0)	1	<0.001
	Mother	103(66.5)	13(12.6)	90(87.4)	20.77(6.97-61.88)	
	Both	28(18.1)	17(60.7)	11(39.3)	1.94(0.59-6.42)	
Reason for not discussing issues	Not free with parents	88(35.9)	63(71.6)	25(28.4)	1	0.02
	Parents assume students taught in school	157(64.1)	89(56.7)	68(43.3)	1.93(1.10-3.37)	
Others with whom sex related issues are discussed with	School teacher	41(11.2)	13(31.7)	28(68.3)	1	<0.001
	Friends	216(59.0)	120(55.6)	96(44.4)	0.37(0.18-0.76)	
	Sisters	31(8.5)	6(19.4)	25(80.6)	1.93(0.64-5.86)	
	Brothers	15(4.1)	13(86.7)	2(13.3)	0.07(0.01-0.36)	
	Relatives	13(3.6)	9(69.2)	4(30.8)	0.21(0.05-0.80)	
	Nobody	45(12.3)	21(46.7)	24(53.3)	0.53(0.22-1.28)	
	Boy/girlfriend	5(14)	1(20.0)	4(80.0)	1.86(0.19-18.30)	
Parents ever known of a boy/girlfriend	Yes	70(20.8)	33(47.1)	37(52.9)	1	0.35
	No	266(79.2)	142(53.4)	124(46.6)	0.78(0.46-1.32)	
If yes, parent's reaction to this	Approve	32(45.7)	11(34.4)	21(65.6)	1	0.04
	Disapprove	20(28.6)	9(45.0)	11(55.0)	0.23(0.06-0.93)	
	No reaction	18(25.7)	13(72.2)	5(27.8)	0.20(0.06-0.71)	
In your society, sex before marriage allowed	Yes	52(13.0)	32(61.7)	20(38.5)	1	0.07
	No	348(87.0)	168(48.3)	180(51.7)	1.71(0.94-3.11)	
Sex before marriage right for boys	Yes	43(10.8)	32(74.4)	11(25.6)	1	0.003
	No	329(82.2)	156(47.4)	173(52.6)	3.23(1.57-6.62)	
	Don't Know	28(7.0)	12(42.9)	16(57.1)	3.88(1.41-10.70)	
Sex before marriage right for girls	Yes	37(9.2)	29(78.4)	8(21.6)	1	0.001
	No	339(84.8)	159(46.9)	180(53.1)	4.10(1.82-9.24)	
	Don't Know	24(6.0)	12(50.0)	12(50.0)	3.63(1.18-11.10)	
Age for boys to start having sex	10-14	21(5.2)	10(47.6)	11(52.4)	1	0.02
	15-19	149(37.2)	90(60.4)	59(39.6)	0.60(0.24-1.49)	
	20-25	141(35.2)	58(41.1)	83(58.9)	1.30(0.52-3.26)	
	>25	64(16.0)	31(48.4)	33(51.6)	0.97(0.36-2.60)	
	Don't Know	25(6.2)	11(44.0)	14(56.0)	1.16(0.36-3.71)	
Age for girls to start having sex	<10	14(3.5)	10(71.4)	4(28.6)	1	0.04
	10-14	97(24.2)	56(57.7)	41(42.3)	1.83(0.54-6.25)	
	15-19	71(17.8)	41(57.7)	30(42.3)	1.84(0.52-6.39)	
	20-25	138(34.5)	59(42.8)	79(57.2)	3.35(1.0-11.20)	
	>25	57(14.2)	23(40.4)	34(59.6)	3.70(1.03-13.22)	
	Don't Know	23(5.8)	11(47.8)	12(52.2)	2.73(0.66-11.27)	
Thoughts on boys and girls avoiding sex these days	Is possible	119(29.8)	56(47.1)	63(52.9)	1	0.44
	Not possible	281(70.2)	144(51.2)	137(48.8)	0.85(0.55-1.30)	
Can one decline having sex	Yes	165(41.2)	79(47.9)	86(52.1)	1	0.16
	No	115(28.8)	66(57.4)	49(42.6)	0.68(0.42-1.10)	
	Don't Know	120(30.0)	55(45.8)	65(54.2)	1.09(0.68-1.74)	
Whether ok to have sex without condoms	Yes	61(15.2)	38(62.3)	23(37.7)	1	0.04
	No	339(84.8)	162(47.8)	177(52.2)	1.81(1.03-3.16)	
Knowledge of dangers of unprotected sex	Unwanted pregnancy	169(42.2)	76(45.0)	93(55.0)	1	0.15
	STI/HIV	214(53.5)	113(52.8)	101(47.2)	0.73(0.49-1.09)	
	Death	17(4.2)	11(64.7)	6(35.3)	0.45(0.16-1.26)	
Whether STDs can affect one's future fertility	Yes	249(62.2)	123(49.4)	126(50.6)	1	0.23
	No	40(10.0)	25(62.5)	15(37.5)	0.59(0.29-1.16)	
	Don't Know	111(27.8)	52(46.8)	59(53.2)	1.11(0.71-1.73)	

Only 155(39%) of students discussed sex with their parents. It was common for students (59%) to discuss sex related matters with their friends. However, 12.3% of the students didn't discuss sex with anyone. From the FGD, fear of gossip came across as a strong deterrent to discussing sexual matters. One student from girls boarding secondary school said:

'There will be rumors about you. People will talk about it. Then the rumors spread.'
[FGD_F_SS: 203 - 203 (0)]

Another student in the same school said during a case narrative:

'Sometimes I would rather keep it to myself, because sometimes when you share it with others, they go tell it to other students. So, I would rather just feel the pain alone.'
[FGD_F_SS: 172 - 172 (0)]

A boy from boys boarding secondary school said:

'I don't tell them about myself because they may use my case as an example.' [FGD_M_SS (case narrative 1): 114 - 114 (0)]

The education officer said they were having challenges as sexual cases were not being reported greatly affecting his work. He said:

'You discover that people ...ok...sexual cases are not reported. Because if you report then it will be seen like opening up your own secrets.' [KII_EO_: 18 - 18 (0)]

Go to people for sexual advice as reported by a student:

'The grandfathers may discuss the issues freely with you. The grandmothers may advise you. They are old and will not discuss this with someone else. They are experienced. So, they will give you pieces of advice.'
[FGD_M_SS (case narrative 1): 109 - 109 (0)]

The elder also reported as follows:

'Teachings on this subject were done by the grandmother and even the mother...even the parents...but mostly the grandmothers who are missing today... We as the village elders sit down with the young people and talk to them and inform them of the diseases and that they should concentrate in school for a better future for themselves and their families.' [KII_Village Elder _70: 80 - 80 (0)]

While majority of the students (87%) responded that sex before marriage was not allowed, the head of counselling at Bogwendo mixed secondary school felt that there was a societal permissiveness towards sex. She said:

'Maybe the permissiveness in the society that engaging in sex is no big deal is contributing to the students having sex. Parents don't care if they have sex or not. When you ask them whether their daughter is pregnant and why they haven't come to school to address the issues, they kind of don't care. The culture is very bad.'
[KII_F_G&C_Mixed day school: 18 - 18 (0)]

A parent from boys boarding secondary school said:

'Today parents don't care for their children. They don't care where they sleep. So, they have sex. Outside. Some children may claim that they have gone to see their friends but then they go and engage in wrong habits.'
[KII_F_Parent_M_SS: 22 - 22 (0)]

Children are seen as the woman's responsibility and this was collaborated by the education officer and a female parent. He said:

'Especially in the domestic arena, women are seen as providers and caretakers. While men are basically seen as money makers and not as caretakers and providers. So, women take up their responsibilities at very early stages.'

'This leads to adolescent sex because there is very little time that fathers have for their children especially for the girlchild. The responsibility is left for the mother who is overburdened. And therefore, the role of the father is minimal. Save for the families where the fathers are elites. Of which is not a majority.'

[KII_EO : 30-32 (0)]

The female parent said that the husband kept on referring to their daughters as 'your girls'.

Female genital Mutilation (FGM) was seen to contribute to adolescent sex. Despite it being illegal, it was still being done in the County. The education officer said:

'And then there is this practice called FGM. That once a girl has undergone FGM, that she is now free to engage in sex.'

[KII_EO : 18-18 (0)]

The Manga subcounty quality assurance officer said:

'You know the whole structure was that once you get circumcised, then you get married. But now they are circumcised when they are still in school. So, you cannot stop school to go and get married. But now they feel like they have permission to have sex because culturally they have been prepared but they are still in school.'

[KII_Quality Assurance: 32-32 (0)]

The education officer also commented on the effect of lack of fathers on girls. He said:

'There is that fatherly touch on the girl child. That counselling. The idea that my father is there to provide. And when this is missing the girl may get it elsewhere.'

[KII_EO_: 34-34 (0)]

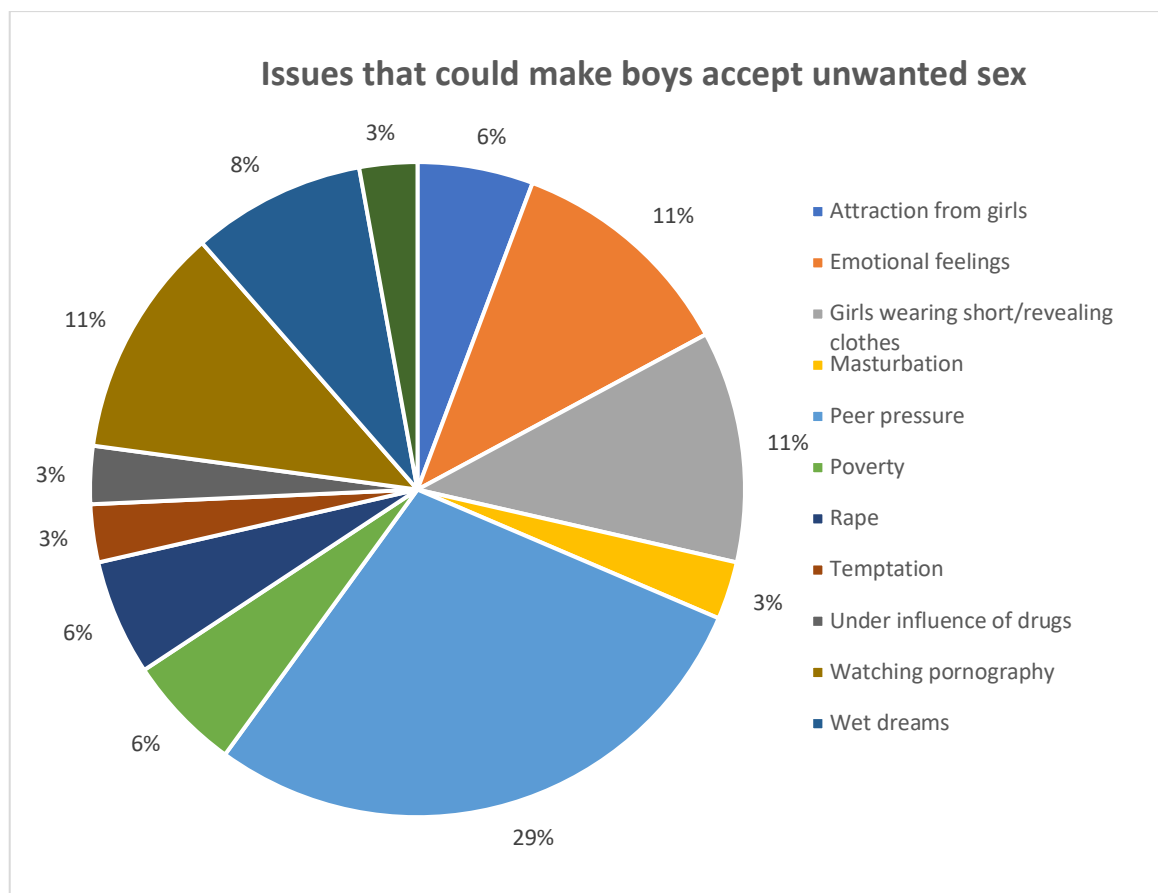


Figure 4.7: Issues that could make boys accept unwanted sex as relayed by in-school adolescents in Nyamira County

In figure 4.7 above, it can be seen that most of the students (29%) felt that peer pressure could make boys accept unwanted sex. This was followed by emotional feelings (11%), watching pornography (11%) and girls wearing short revealing clothes (11%).

A male student commented on female teachers sometimes dressing inappropriately exciting them.

The village elder spoke about dressing in general. He said:

'For the young people it is the way they dress...it's one of the issues...so like in the past, a girl was taught how to dress and how to walk...talk.'

[KII_Village Elder_70: 78-78 (0)]

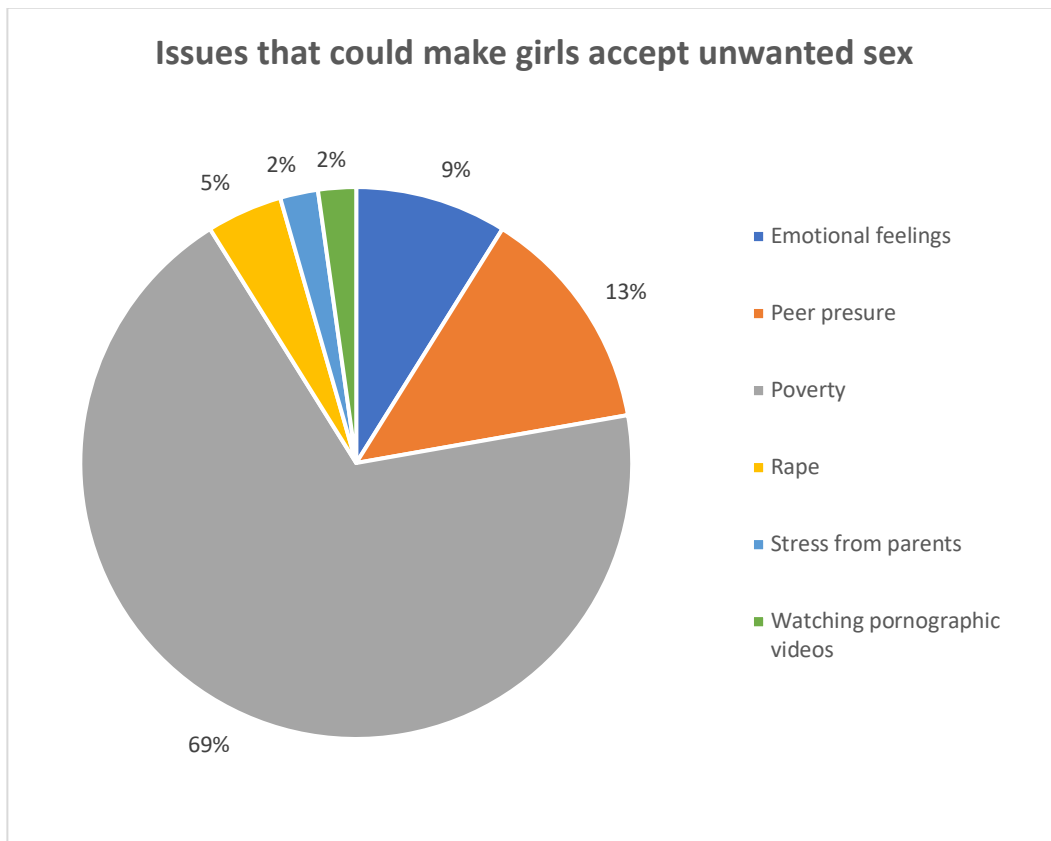


Figure 4.8: Issues that could make girls accept unwanted sex as relayed by in-school adolescents in Nyamira County

As shown in figure 4.8 above, majority of the girls (69%) reported poverty as an issue that could make girls accept unwanted sex. This was followed by peer pressure at 13% and emotional feelings at 9%.

During FGDs, in the mixed day secondary school, students described the pressure to have sex as intense, while in girls boarding school the peer pressure was described as moderate.

A reason given by a girl in a mixed secondary school was:

'In instances where you have a boyfriend and then he threatens to leave. So, you feel stressed and you accept to have sex.'

[FGD_F_Mixed day school: 55-55 (0)]

Table 4.15: Sexual Health Perceptions of in-school adolescents in Nyamira County by School type

		Total n(%)	Mixed day	Single sex boarding	OR (95% CI)	p-value
Source of knowledge	Magazines	129(32.2)	59(45.7)	70(54.3)	1	0.75
	Movies	276(69.7)	126(45.7)	150(54.3)	1.0(0.66-1.53)	
	Music videos	199(50.3)	92(46.2)	107(53.8)	0.98(0.63-1.53)	
	Internet	172(43.4)	70(40.7)	102(59.3)	1.23(0.77-1.95)	
	Books	140(35.4)	67(47.9)	73(52.1)	0.92(0.57-1.48)	
Watches pornography	Yes	238(59.5)	107(45.0)	131(55.0)	1	0.02
	No	162(40.5)	93(57.4)	69(42.6)	0.61(0.41-0.91)	
Go to person for sexual advice	Parents	142(35.5)	75(52.8)	67(47.2)	1	0.34
	Teachers	63(15.8)	29(46.0)	34(54.0)	1.31(0.72-2.38)	
	Friends	131(32.8)	66(50.4)	65(49.6)	1.10(0.69-1.77)	
	Sisters	27(6.8)	14(51.9)	13(48.1)	1.04(0.46-2.37)	
	Brothers	17(4.2)	9(52.9)	8(47.1)	1.00(0.36-2.73)	
	Relatives	12(3.0)	4(33.3)	8(66.7)	2.24(0.64-7.77)	
	Boyfriend	8(2.0)	3(37.5)	5(62.5)	2.99(0.76-11.71)	
Discusses sex with parents	Yes	155(38.8)	79(51.0)	76(49.0)	1	0.76
	No	245(61.2)	121(49.4)	124(50.6)	1.07(0.71-1.59)	
If yes, which parent	Father	24(15.5)	11(45.8)	13(54.2)	1	0.28
	Mother	103(66.5)	57(55.3)	46(44.7)	0.68(0.28-1.67)	
	Both	28(18.1)	11(39.3)	17(60.7)	1.31(0.43-3.95)	
Reason for not discussing issues	Not free with parents	88(35.9)	43(48.9)	45(51.1)	1	0.90
	Parents assume students taught in school	157(64.1)	78(49.7)	79(50.3)	0.97(0.57-1.63)	
Others with whom sex related issues are discussed with	School teacher	41(11.2)	24(58.5)	17(41.5)	1	0.31
	Friends	216(59.0)	103(47.7)	113(52.3)	1.55(0.79-3.05)	
	Sisters	31(8.5)	17(54.8)	14(45.2)	1.16(0.45-2.98)	
	Brothers	15(4.1)	8(53.3)	7(46.7)	1.24(0.38-4.06)	
	Relatives	13(3.6)	3(23.1)	10(76.9)	4.71(1.12-19.70)	
	Nobody	45(12.3)	26(57.8)	19(42.2)	1.03(0.44-2.43)	
	Boy/girlfriend	5(1.4)	2(40.0)	3(60.0)	2.21(0.32-14.07)	
Parents ever known of a boy/girlfriend	Yes	70(20.8)	29(41.1)	41(58.6)	1	0.07
	No	266(79.2)	143(53.8)	123(46.2)	0.61(0.36-1.04)	
If yes, parent's reaction to this	Approve	32(45.7)	15(46.9)	17(53.1)	1	0.39
	Disapprove	20(28.6)	9(45.0)	11(55.0)	0.29(0.07-1.29)	
	No reaction	18(25.7)	5(27.8)	13(72.2)	2.29(0.66-7.95)	
In your society, sex before marriage allowed	Yes	52(13.0)	29(55.8)	23(44.2)	1	0.23
	No	348(87.0)	171(49.1)	177(50.9)	1.31(0.73-2.35)	
Sex before marriage right for boys	Yes	43(10.8)	20(46.5)	23(53.5)	1	0.06
	No	329(82.2)	160(48.6)	169(51.4)	0.92(0.49-1.74)	
	Don't Know	28(7.0)	20(71.4)	8(28.6)	0.35(0.13-0.96)	
Sex before marriage right for girls	Yes	37(9.2)	21(56.8)	16(43.2)	1	0.45
	No	339(84.8)	165(48.7)	174(51.3)	1.38(0.70-2.74)	
	Don't Know	24(6.0)	14(58.3)	10(41.7)	0.94(0.33-2.65)	
Age for boys to start having sex	10-14	21(5.2)	15(71.4)	6(28.6)	1	0.02
	15-19	149(37.2)	81(54.4)	68(45.6)	2.10(0.77-5.71)	
	20-25	141(35.2)	68(48.2)	73(51.8)	2.68(0.98-7.32)	
	>25	64(16.0)	22(34.4)	42(65.6)	4.77(1.62-14.03)	
	Don't Know	25(6.2)	14(56.0)	11(44.0)	1.96(0.57-6.74)	
Age for girls to start having sex	<10	14(3.5)	9(64.3)	5(35.7)	1	0.01
	10-14	97(24.2)	50(51.5)	47(48.5)	1.69(0.53-5.42)	
	15-19	71(17.8)	46(64.8)	25(35.2)	0.98(0.30-3.24)	
	20-25	138(34.5)	66(47.8)	72(52.2)	1.96(0.63-6.16)	
	>25	57(14.2)	18(31.6)	39(68.4)	3.90(1.14-13.31)	
	Don't Know	23(5.8)	11(47.8)	12(52.2)	1.96(0.50-7.69)	
Thoughts on boys and girls avoiding sex these days	Is possible	119(29.8)	60(50.4)	59(49.6)	1	0.50
	Not possible	281(70.2)	140(49.8)	141(50.2)	1.02(0.67-1.57)	
Can one decline having sex	Yes	165(41.2)	81(49.1)	84(50.9)	1	0.74
	No	115(28.8)	61(53.0)	54(47.0)	0.85(0.53-1.38)	
	Don't Know	120(30.0)	58(48.3)	62(51.7)	1.03(0.64-1.65)	
Whether ok to have sex without condoms	Yes	61(15.2)	30(49.2)	31(50.8)	1	0.89
	No	339(84.4)	170(50.1)	169(49.9)	0.96(0.56-1.66)	
Knowledge of dangers of unprotected sex	Unwanted pregnancy	169(42.2)	73(43.2)	96(56.8)	1	0.07
	STI/HIV	214(53.5)	118(55.1)	96(44.9)	0.62(0.41-0.93)	
	Death	17(4.2)	9(52.9)	8(47.1)	0.68(0.25-1.84)	
Whether STDs can affect one's future fertility	Yes	249(62.2)	117(47.0)	132(53.0)	1	0.01
	No	40(10.0)	29(72.5)	11(27.5)	0.34(0.16-0.70)	
	Don't Know	111(27.8)	54(48.6)	57(51.4)	0.94(0.60-1.46)	

In table 4.15 above, an association was seen between watching pornography ($p=0.02$), age for boys to start having sex ($p=0.02$), whether STIs can affect future fertility ($p=0.01$) and school type.

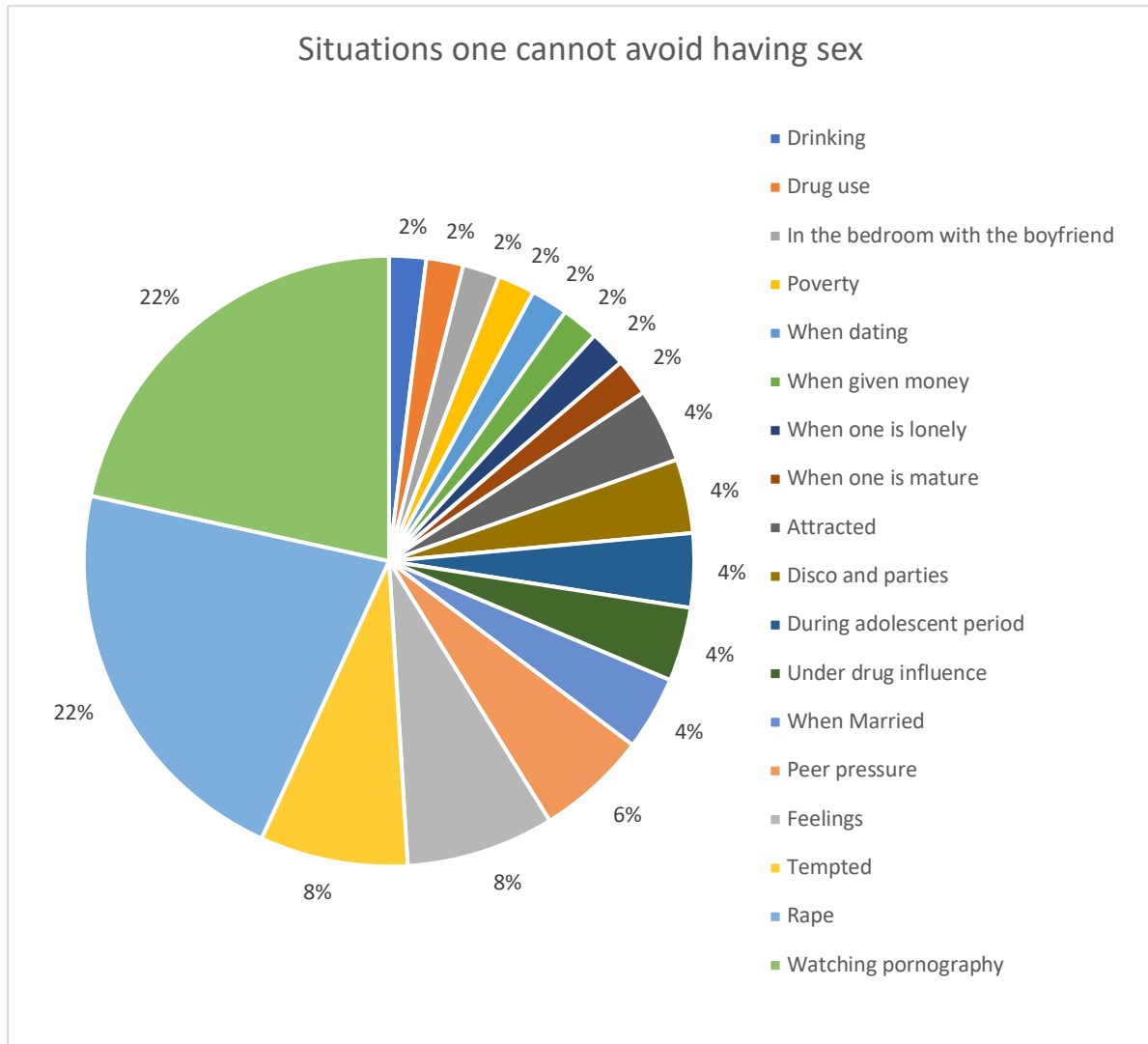


Figure 4.9: Situations one cannot avoid having sex as relayed by in-school adolescents in Nyamira County

In figure 4.9, majority of the students reported watching pornography (22%) and rape (22%) as situations where one cannot avoid having sex.

A student from a boys secondary boarding school giving a case narrative commented about meeting a lady at a disco. He said:

'I met her in a club. So, we dated. After a period of less than a week, we met, went to her place and we had sex. She told me she was single.' [FGD_M_SS (case narrative 2): 206-206 (0)]

When commenting about peer pressure, a female student from a single sex boarding school said:

'I had a friend who had a boyfriend and she used to tell me how they enjoyed sex and the good things that were bought for her. So, I decided to also have a taste of it. Because I felt left out.' [CN_F_SS: 22-22 (0)]

Another student said:

'A friend who likes having sex told me about sex and how she enjoyed it. So, I was tempted to also engage to have a feeling.' [FGD_S_SS: 54-54 (0)]

A boy from a single sex boarding school said:

'When one is interacting maybe with a close friend, they may tell you what they do with girls. So that would promote because the more you are with them then you will be influenced.' [FGD_M_SS (case narrative 1): 33-33 (0)]

Another boy said:

'To be sincere ...we don't wait. Once we are attracted to the girl and they love us, then we have sex.' [FGD_M_SS (case narrative 2): 93-93 (0)]

The same student on school events said:

'Let's say on a sports day and a girl comes here and we become friends. When I go home, I invite her to my place and we have sex.' [FGD_M_SS (case narrative 2): 95-95 (0)]

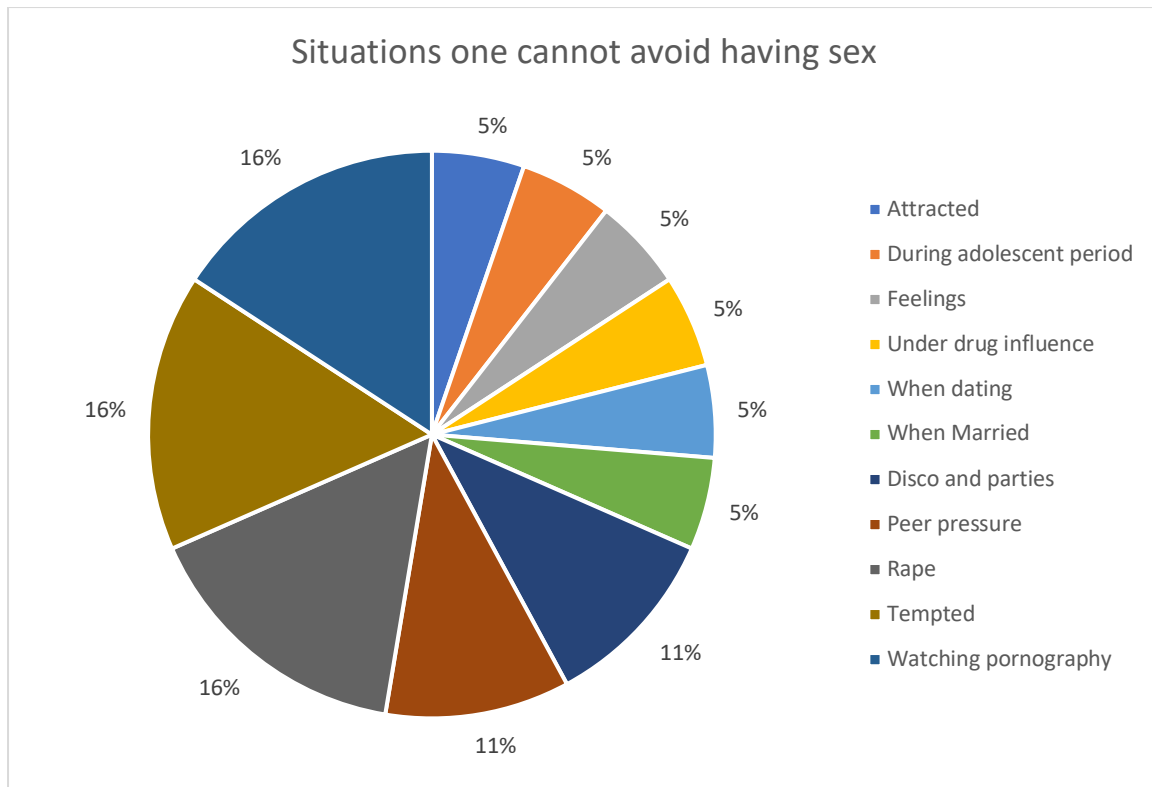


Figure 4.10: Situations one cannot avoid having sex as relayed by male in-school adolescents in Nyamira County

Most of the male students reported being tempted (16%), rape (16%) and watching pornography (16%) as situations where one cannot avoid having sex (Figure 4.10).

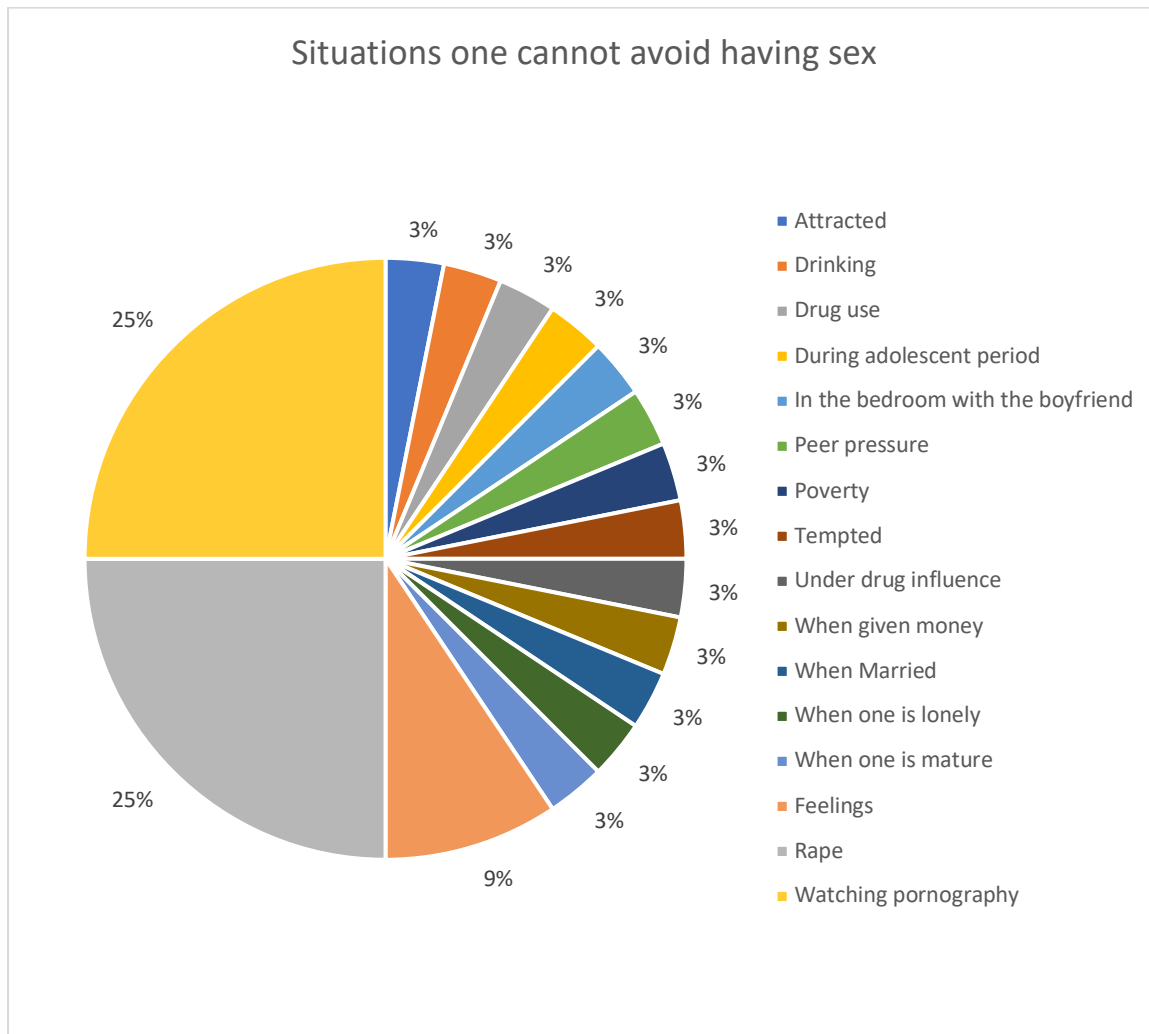


Figure 4.11: Situations one cannot avoid having sex as relayed by female in-school adolescents in Nyamira County

Majority of the students reported watching pornography (25%) and rape (25%) as situations where one cannot avoid having sex (Figure 4.11).

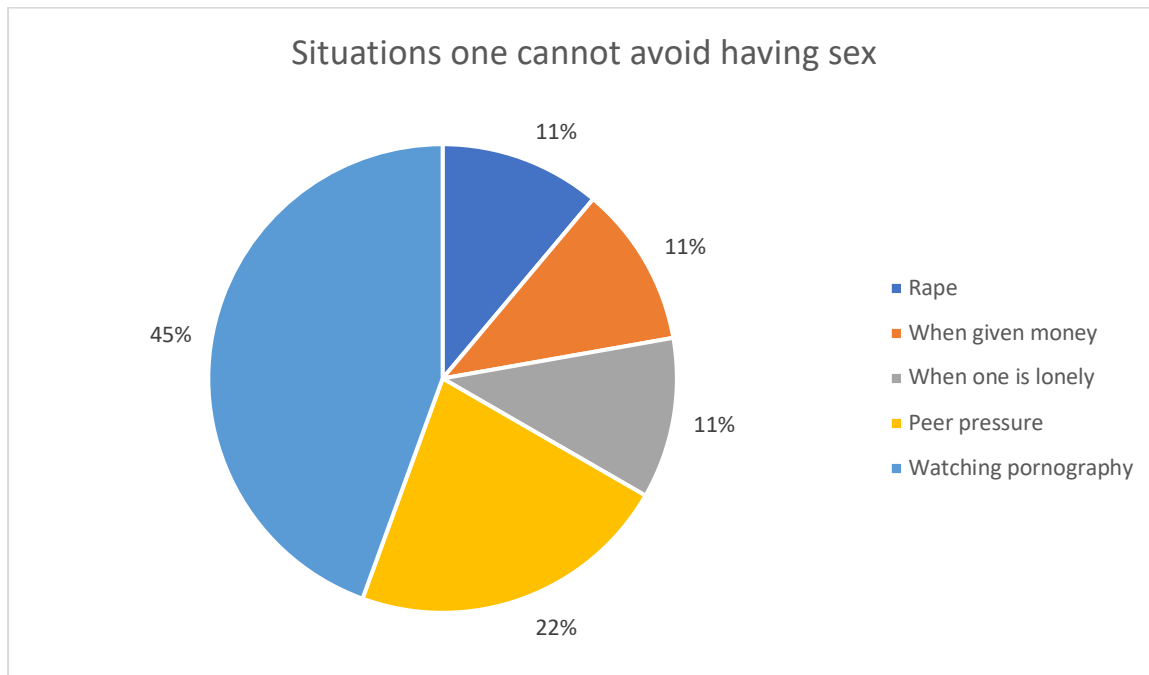


Figure 4.12: Situations one cannot avoid having sex as relayed by in-school adolescents in Mixed day secondary schools Nyamira County

In the mixed day schools, majority of the students (45%) reported watching pornography as a situation where sex cannot be avoided. This was followed by peer pressure at 22% (Figure 4.12).

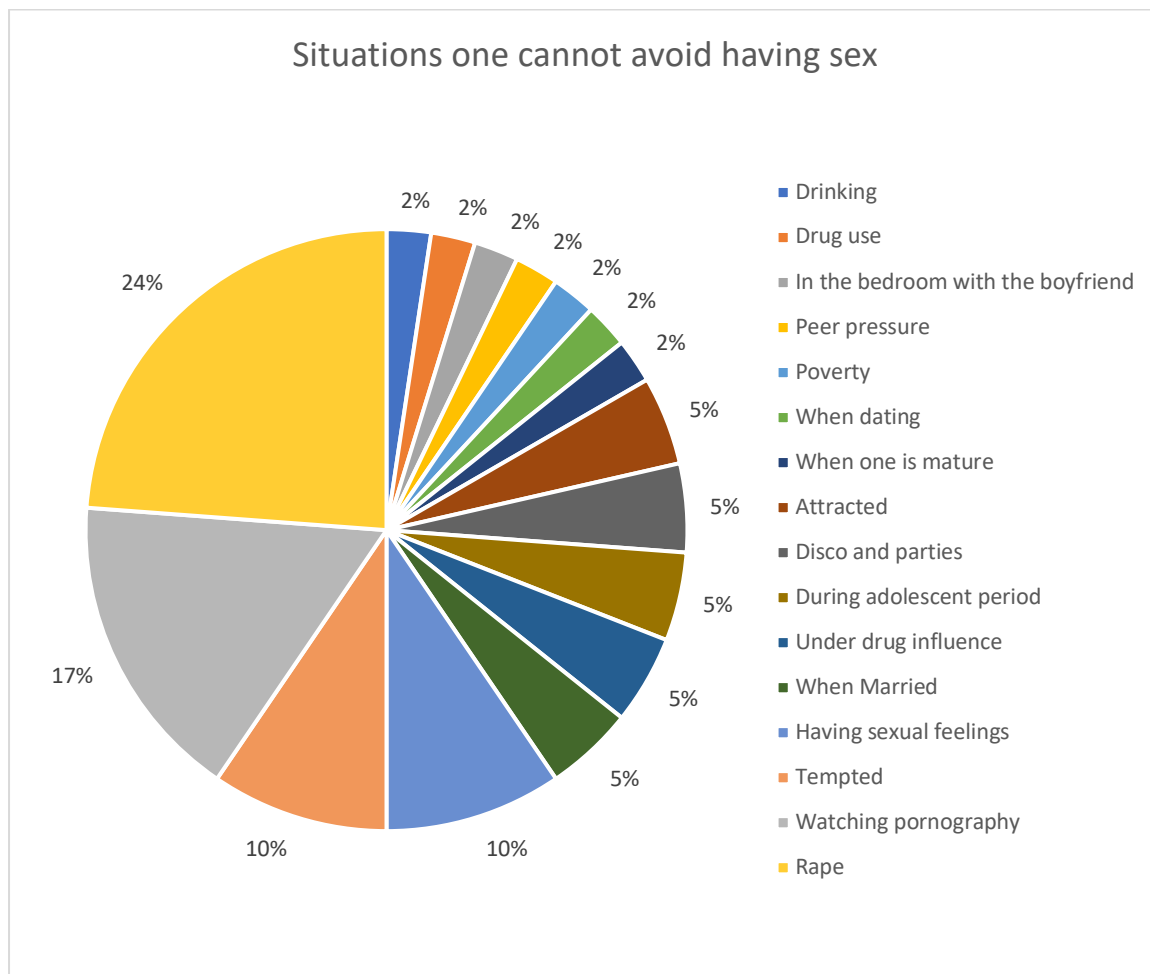


Figure 4.13: Situations one cannot avoid having sex as relayed by in-school adolescents in single sex boarding secondary schools Nyamira County

As seen in figure 4.13 above, in single sex secondary schools, most of the students (24%) reported rape as the leading trigger to having sex, followed by watching pornography (17%), having sexual feelings (10%) and being tempted (10%).

Table 4.16: Substance abuse by in-school adolescents in Nyamira County

		Total n(%)	Gender		OR (95% CI)	p-value
			Male	Female		
Use of cigarettes	Yes	12(3.0)	9(75.0)	3(25.0)	1	0.08
	No	388(97.0)	191(49.2)	197(50.8)	3.09(0.83-11.60)	
If yes, duration of use	<1 year	5(41.7)	3(60.0)	2(40.0)	1	0.20
	1-5 years	3(25.0)	2(66.7)	1(33.3)	0.75(0.04-14.97)	
	>5 years	4(33.3)	4(100.0)	0(0.0)	0.38(0.02-6.35)	
If yes, number of sticks per day	<3	4(33.3)	3(75.0)	1(25.0)	1	0.41
	3-10	3(25.0)	3(100.0)	0(0.0)	1.00(0.04-24.55)	
	>10	3(25.0)	2(66.7)	1(33.3)	1.50(0.06-40.64)	
	Stopped using	2(16.7)	1(50.0)	1(50.0)	1.50(0.06-40.64)	
Use of alcohol	Yes	56(14.0)	37(66.1)	19(33.9)	1	0.01
	No	344(86.0)	163(47.4)	181(52.6)	2.16(1.20-3.91)	
If yes, duration of use	<1 year	46(61.3)	28(60.9)	18(39.1)	1	0.32
	1-5 years	13(17.3)	5(38.5)	8(61.5)	2.49(0.70-8.81)	
	>5 years	16(21.3)	10(62.5)	6(37.5)	0.93(0.29-3.02)	
If yes, frequency taken	<once a week	17(23.0)	10(58.8)	7(41.2)	1	0.77
	1-2 times/week	10(13.5)	6(60.0)	4(40.0)	0.95(0.19-4.68)	
	>=thrice/week	9(12.2)	5(55.6)	4(44.4)	1.14(0.22-5.84)	
	No longer takes	38(51.4)	21(55.3)	17(44.7)	1.16(0.36-3.68)	
Use of other substances	Yes	49(12.2)	27(55.1)	22(44.9)	1	0.45
	No	351(87.8)	173(49.3)	178(50.7)	1.26(0.69-2.30)	
Frequency of taking substances	<once a week	15(28.8)	9(60.0)	6(40.0)	1	0.10
	1-2 times/week	11(21.2)	10(90.9)	1(9.1)	0.15(0.02-1.50)	
	>=thrice/week	7(13.5)	3(42.9)	4(57.1)	2(0.32-12.33)	
	No longer takes	19(36.5)	8(42.1)	11(57.9)	2.06(0.52-8.17)	

Table 4.16 above shows that only 12(3%) students had smoked cigarettes, 56(14%) had drunk alcohol and 49(12%) had used other substances (Table 4.16). There was evidence of an association between gender and alcohol use, with male students being at least twice as likely to use alcohol when compared to female students (OR=2.16, 95%CI 1.20-3.91), p=0.01.

The education officer said that the reason some students were into drugs was because of the parents. He said:

'When I talk about drug abuse, the parents are also hooked to drugs. Talk about alcoholism. The very parent is also hooked to it.' [KII_EO_: 50-50 (0)]

The village elder also said:

'There are instances where both the parents and the children are alcoholics. And they can't tell who is who.' [KII_Village Elder _70: 64-64 (0)]

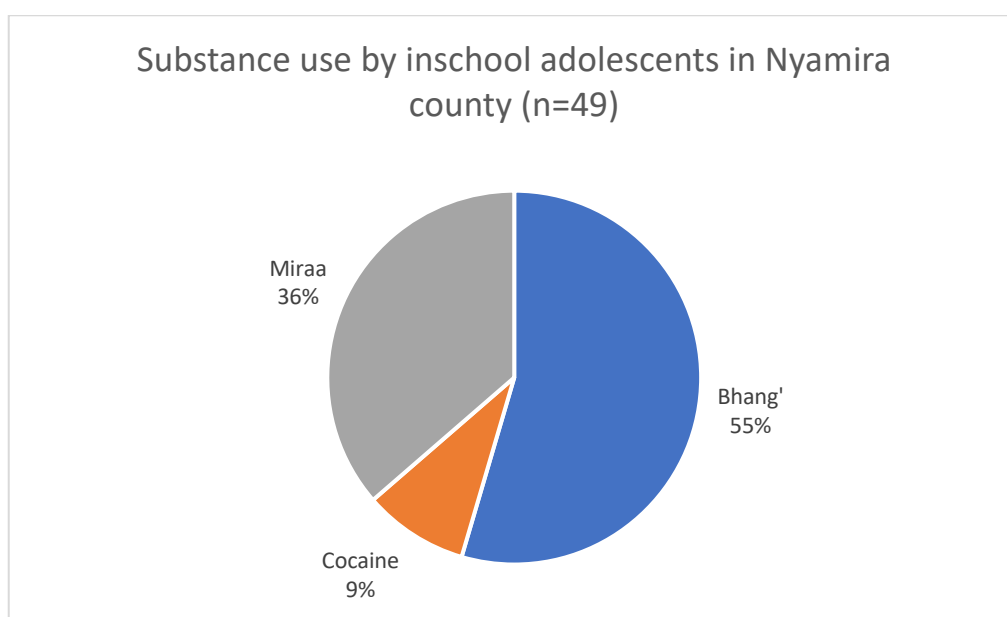


Figure 4.14: Other substances used by in-school adolescents in Nyamira County

In figure 4.14, other substances used by the in-school adolescents were mostly Marijuana which is Bhang' (55%) and Khat locally called Miraa (36%).

Table 4.17: Comparison of sexually active and non-sexually active in-school adolescents in Nyamira County in terms of substance use

		Total n(%)	No sex	Ever had sex	Odd ratio 95% CI	p-value
Cigarettes	Yes	12(3.0)	2(16.7)	10(83.3)	1	0.09
	No	388(97.0)	154(39.7)	234(60.3)	3.29(0.71-15.22)	
Alcohol	Yes	56(14.0)	15(26.8)	41(73.2)	1	0.04
	No	344(86.0)	141(41.0)	203(59.0)	1.90(1.01-3.56)	
Other substances used	Yes	49(12.2)	16(32.7)	33(67.3)	1	0.33
	No	351(87.8)	140(39.9)	211(60.1)	1.37(0.73-2.58)	

As illustrated in table 4.17, alcohol use was associated with ever having sex ($p=0.04$), with those not drinking alcohol 1.9 times more likely to have ever had sex (OR 1.90, 95% CI 1.01-3.56).

Effects of substance abuse were reported as follows:

A female student from a single sex boarding school said:

'When one is drunk, they can get raped. Other than getting raped, you may find yourself in a compromising situation...someone may approach you but because you are not sober, you accept to have sex.' [FGD_F_SS: 90-90 (0)]

A male student from a single sex school speaking about drug use said:

'Sometimes, there are some drugs you use and you feel like you are a super power. For example, when you use something like kuber...so you find one is attracted to a girl. Sometimes because of how you talk to the girls, they may know that you are on drugs.' [FGD_M_SS (case narrative 1): 54-54 (0)]

The education officer commenting on drug use and sex said:

'There is normally very little self-control and once somebody has become hooked to alcoholic substances and drugs, there is likelihood of addiction and therefore they say sex and addiction go together.' [KII_EO_: 46-46 (0)]

The Medical Officer of Health said:

'When one is under the influence of drugs, their judgment is usually impaired and so maybe you may find them engaging in sexual activities. Some of them even without protection.' [KII_MoH: 48-48 (0)]

Table 4.18: Substance abuse by in-school adolescents in Nyamira County

		Total n(%)	School type		OR (95% CI)	p-value
			Mixed Day	Single sex		
Use of cigarettes	Yes	12(3.0)	9(75.0)	3(25.0)	1	0.08
	No	388(97.0)	191(49.2)	197(50.8)	3.09(0.83-11.60)	
If yes, duration of use	<1 year	5(41.7)	3(60.0)	2(40.0)	1	0.20
	1-5 years	3(25.0)	2(66.7)	1(33.3)	0.75(0.04-14.97)	
	>5 years	4(33.3)	4(100.0)	0(0.0)	0.38(0.02-6.35)	
If yes, number of sticks per day	<3	4(33.3)	3(75.0)	1(25.0)	1	0.41
	3-10	3(25.0)	3(100.0)	0(0.0)	1.00(0.04-24.55)	
	>10	3(25.0)	2(66.7)	1(33.3)	1.50(0.06-40.64)	
	Stopped using	2(16.7)	1(50.0)	1(50.0)	1.50(0.06-40.64)	
Use of alcohol	Yes	56(14.0)	30(53.6)	26(46.4)	1	0.56
	No	344(86.0)	170(49.4)	174(50.6)	1.18(0.67-2.08)	
If yes, duration of use	<1 year	46(61.3)	29(63.0)	17(37.0)	1	0.52
	1-5 years	13(17.3)	7(53.8)	6(46.2)	1.46(0.42-5.07)	
	>5 years	16(21.3)	12(75.0)	4(25.0)	0.57(0.16-2.05)	
If yes, frequency taken	<once a week	17(23.0)	12(70.6)	5(29.4)	1	0.24
	1-2 times/week	10(13.5)	7(70.0)	3(30.0)	1.03(0.19-5.68)	
	>=thrice/week	9(12.2)	7(77.8)	2(22.2)	0.69(0.10-4.52)	
	No longer takes	38(51.4)	21(55.3)	17(44.7)	1.94(0.57-6.61)	
Use of other substances	Yes	49(12.2)	26(53.1)	23(46.9)	1	0.65
	No	351(87.8)	174(49.6)	177(50.4)	1.15(0.63-2.09)	
Frequency of taking substances	<once a week	15(28.8)	10(66.7)	5(33.3)	1	0.01
	1-2 times/week	11(21.2)	10(90.9)	1(9.1)	0.20(0.02-2.03)	
	>=thrice/week	7(13.5)	3(42.9)	4(57.1)	2.67(0.42-16.83)	
	No longer takes	19(36.5)	6(31.6)	13(68.4)	4.33(1.02-18.38)	

No association was found between school type and use of cigarettes, alcohol use and use of substances (Table 4.18).

4.3 Discussion

This study aimed to demonstrate the extent of sexual debut among in-school adolescents in Nyamira County. It also aimed to determine the sociocultural factors associated with sexual debut among in-school adolescents in Nyamira County.

The findings in this study highlighted that majority of the students had engaged in sex. Of the 400 students (200 male and 200 female), 244(61%) had ever had sex. A study by (Morhason-Bello IO, 2008), reported a lower prevalence of 28.3 % among in-school adolescents in Ibadan Nigeria. This could be explained by the differences in culture and religion. The percentage of Muslims was 34% compared to our study where Muslims were only 2%. Despite premarital sex not being acceptable in most religions, Muslims tend to be stricter (Abdulla, 2014). In our study, more students in mixed day schools (63.5%) had ever had sex when compared to single sex schools where 58.5% had ever had sex. However, there was no evidence of an association between the school type and ever having sex ($p=0.19$). More males (66.5%) than females (55.5%) had ever had sex, with males being 1.6 times more likely to have ever had sex compared to girls. All of the 10 married students had ever had sex. This is not surprising since marriage bestows culturally and legally unfettered grounds for sexual intercourse (Amo-Adjei & Tuoyire, 2018). On the demographic characteristics, only gender, age and marital status showed evidence of association with ever having sex among the in-school adolescents ($p=0.03$).

In mixed day secondary schools, in all levels of education, majority of the students had ever had sex. Majority (54.2%) of the younger students (14 & 15 years) had not had sex compared to the older students (16-18 years), majority (64.8%) of whom had ever sex. In single sex

schools, students of all ages (apart from 16-year olds) and students of all levels of education had ever had sex. It had been postulated in this study that those in mixed day secondary schools would be predisposed to engaging in sex (due to in-school and out of school interactions with the opposite sex) compared to their counterparts in single sex boarding schools who only interact with the opposite sex during school functions and school holidays. However, this was not the case with the prevalence of having had sex being comparable in the two school types. Only significant differences were on gender with male students being more likely to have ever had sex compared to their female counterparts.

Among the male students, older students, those in advanced classes and those who were married were more likely to have ever had sex. Majority of those in mixed day (67.0%) and majority of those in single sex boarding schools (66.0%) had ever had sex. However, school type was found not to be associated with having sex, ($p=0.88$). The prevalence of having ever had sex between mixed day secondary schools and single sex boarding schools was comparable.

Among the female students, 60.0% of those in mixed day secondary schools had ever had sex while only 51.0% of those in single sex boarding schools had ever had sex. Despite the huge difference in prevalence of having ever had sex in the two school types, this was not statistically significant ($p=0.20$).

Most students (75.8%) came from monogamous households with most (74.0%) living with both parents. In single parent homes, most of the students (74.0%) lived with their mothers. Majority of the students (85.2%) reported harmonious relationship between their parents. Most parents had some form of occupation. However, 23.7% of fathers and 39.6% of mothers were unemployed. Of note, in the study, the father having some form of employment was protective against the students having sex ($p=0.001$), however there was no association between the mother's employment status and a student ever having sex.

Students in monogamous homes were less likely to start having sex compared to those from polygamous families (OR=0.49, 95%CI 0.30-0.81, (p=0.01)). Majority of the students in our study (74%) lived with both parents. In a Nigerian study by (Udigwe, et al., 2014), they found that “not living with both parents” and poor family background, were markedly associated with increased likelihood to engage in sexual activity. Living with both parents was considered protective because it postulated to be associated with more parental monitoring and greater familial wealth (Tenkorang & Adjei, 2015). Lack of parental attachment was also shown to be associated with early sexual debut among in-school adolescents in six Caribbean countries (Peltzer & Pengpid, 2015). Also, hostile parental control was shown to be associated with sexual debut among adolescents (Donenberg GR, 2003). A parent’s connectedness with their child, parental communication and particularly a parent’s disapproval of adolescent sex delayed sexual debut among African American adolescents (Ohalete, 2007).

Distance from school was also perceived as a predisposing factor to the students debuting in sex. Longer distances meant students had to leave a lot earlier from their homes while it was still dark or use bodabodas (motorbikes) in order to make it to school on time. This made the female students particularly vulnerable to being molested or being lured by young boys and men lurking in the tea plantations. The girls were most often lured with gifts and free motorbike rides. Most had sex in the very same tea plantations or were taken to lodgings in the surrounding areas.

Some students had older sexual partners. They said that these older individuals provided parental love that they lacked in their own families.

Adolescents had no preferential source of information on sex and had varied sources of information on the subject from magazines, movies, music videos, books and the internet, with 238(60%) saying they watched pornography. (Donnerstein & Smith, 2001), however, showed that gender differences existed in how the young people selected their media of choice. They

found young girls preferred print media (books and magazines) more than young men. Girls preferred media showing romance hence increasing their likelihood of being exposed to material of sexual nature. However, this to boys was considered unmanly behavior. Watching pornography was seen as a major predictor of sexual debut in a study done on High School female students from Ethiopia (Nigatu, 2017). This was also noted by (Kastbom, et al., 2015) in their study. In our study male students were 2.54 times more likely to watch pornography compared to the female students and this was significant at $p < 0.001$. Watching pornography was the most quoted by students, regardless of school type and gender, as the commonest cause of adolescent sexual debut.

The go to person for sexual advice for male students was friends followed by parents, but for female students it was parents followed by friends. Most male students didn't discuss sex with their parents while most female students discussed sex with their parents. For those who discussed with the parents, the go to parent for advice was fathers for male students and mothers for female students. Reasons given for not discussing with the parents were not being free to discuss the topic with the parents (35.9%) and the parents assuming that this was taught in school (64.1%). Another reason that came out of the interviews is the parents being too busy to have time to talk to their children. Most students reported that their parents didn't know that they had boy/girlfriends. Also, in the interviews, grandparents were considered go-to people for sexual advice. There is however a small portion of the student population (12.3%) who didn't discuss sexual matters with anybody, citing fear of gossip and people talking about them. In a study done in Kilifi County, Kenya, it was reported that parents played a key role in guiding their adolescent children positively by encouraging abstinence from sex, keeping track of their children's pastimes and friendships. In this study, mothers were shown to play a key role in educating their girls about contraceptives. (Ssewanyana, et al., 2018)

Most students (65.8%) had boy/girlfriends at the time of the study and this was strongly

associated with ever having sex ($p < 0.001$). Similar findings were reported in a study done on adolescents in Rural Jamaica (Ekundayo, 2007). In our study, of those with boy/girlfriends, 43.7% reported having other partners while with the current boy/girlfriend. At the time of the study, majority of the students (52%) had had more than one sexual partner. At least 12% of the students reported having had at least 6 sexual partners. Male students were more likely to have had multiple sexual partners compared to female students (who were likely to have had only one sexual partner). This was statistically significant at $p < 0.001$. Society condones men having multiple sexual partners and shuns women who do so (Odimegwu & Somefun, 2017). This came out clearly in our study. More students in mixed day secondary schools had multiple sexual partners compared to single sex schools, however this was not statistically significant ($p = 0.10$). Majority of the students (83.7%) reported that their boy/girlfriend was not from the same school as them. Most of the male students reported that their girlfriends were younger than them, while most of the female students reported that their boyfriends were either older or the same age as them. One of the boys who had an older female sexual partner, said he preferred it that way because she offered parental love that he lacked. Another male student said that the older women were very romantic unlike the younger girls. Majority of the boy/girlfriends were single (90.9%) and unemployed (78.7%). Most students in Nyamira County had sex out of curiosity, because they had sexual feelings and wanted to experience what people talked about.

Among the in-school adolescents in Nyamira county, peer pressure was reported by most male students as a driver towards their initiating sex, but this was not so among female students. Most girls were driven by poverty. In an Ethiopian study by (Oljira L., 2012), girls were similarly found to be less influenced by peer pressure to begin having sex. In mixed day secondary schools, the pressure to engage sex was described as intense while in single sex boarding schools, the pressure was described as moderate.

According to the students, sex before marriage was not allowed, regardless of gender. However, key informant interviewed gave a different perspective. It was interesting to note that sexual debut among adolescents was mostly acceptable at home but not in schools. It was the opinion of key informants that there was societal permissiveness towards adolescents having sex. This was also demonstrated by (Peltzer & Pengpid, 2015) in their study done in six Caribbean countries. It was noted that having more permissive attitudes towards sex was associated with sexual debut among in-school adolescents.

Majority of the students said the right age to start having sex was 15-19 years, while for girls is 20-25 years. Most students (70.2%) thought it was impossible to avoid sex in this day and age. Most students (84.8%) were aware that it wasn't right to have sex without condoms. Majority of the students (95.7%) knew about the dangers of having unprotected sex – unwanted pregnancies and STIs/HIV. Most students (62.2%) knew that STIs could affect one's future fertility.

Female genital mutilation was considered by key informants to be a driver for sexual debut among in-school adolescents. Once circumcised, culturally one was considered to an adult. To young people, being an adult means free to do adult things, one of which is to engage in sex.

Most students in Nyamira County didn't partake of substances. Only 12(3%) students had smoked cigarettes, 56(14%) had drank alcohol and 49(12%) had used other substances. There was evidence of an association between gender and alcohol use, with male students being at least twice as likely to use alcohol when compared to female students ($p=0.01$). Similar findings were reported by Fatusi & Blum in their study done on a nationally representative sample of Nigerian adolescents (Fatusi & Blum, 2008). Some of the key informants stated that the students' parents were also addicted to drugs, hence it was no surprise that their children were also addicts. Only 49(12.2%) students in the study used other substances, with majority using Bhang (Cannabis), then Miraa (Khat) and lastly cocaine (9%). The students were aware

that the use of these substances impaired one's judgement and also predisposed them to getting raped. This was shown to be the case in a Norwegian study where alcohol consumption was shown to be associated with sexual abuse among high school students. (Dahle, et al., 2010) Substance use between mixed day secondary schools and single sex secondary schools was comparable.

Consistent with the social learning theory, sexual debut in this study was affected by several socialization factors. This study was able to demonstrate that sexual debut among in-school adolescents is influenced by a wide range of sociocultural factors and that how youth behave is deep-rooted within their sociocultural context.

CHAPTER FIVE: ECONOMIC DETERMINANTS OF SEXUAL DEBUT AMONG IN-SCHOOL ADOLESCENTS IN NYAMIRA COUNTY

5.1 Introduction

This chapter presents findings and a discussion on economic factors that could lead in-school adolescents in Nyamira County to start engaging in sex.

5.2 Results

Table 5.1 presents the economic characteristics of in-school adolescents in Nyamira county. Majority of the students 355(88.8%) got their pocket money from their parents, with most of them 247(61.8%) receiving less than 500 Kenya shillings per month. Ninety nine percent of the students did not engage in work to get extra money, with a hundred percent of the female students not engaging in any kind of income generating work. Most of the students 353(88.2%) didn't have sex in-exchange for gifts and of those who did, 37(89.4%) were given money. At least 18(81.8%) male students and 19(95.0%) female students reported being given money as gifts in exchange for sex.

Table 5.1: Economic characteristics of in-school adolescents in Nyamira County

		Total	Gender	
		n(%)	Male	Female
Source of pocket money	Parents	355(88.8)	175(87.5)	180(90.0)
	Relatives	6(1.5)	4(2.0)	2(1.0)
	Boy/Girlfriend	17(4.2)	1(0.5)	16(8.0)
	Self-earnings	22(5.5)	20(10.0)	2(1.0)
Amount given per month (Kenya shillings)	<500	247(61.8)	129(64.5)	118(59.0)
	500-1000	88(22.0)	39(19.5)	49(24.5)
	1000-2000	40(10.0)	20(10.0)	20(10.0)
	>2000	25(6.2)	12(6.0)	13(6.5)
Occupation of student (if working)	None	397(99.2)	197(98.5)	200(100.0)
	Business	1(0.2)	1(0.5)	0(0.0)
	Construction	1(0.2)	1(0.5)	0(0.0)
	Betting	1(0.2)	1(0.5)	0(0.0)
Source of presents	Parents	237(59.2)	165(82.5)	164(49.8)
	Self	34(8.5)	25(12.5)	9(26.5)
	Relatives	8(2.0)	4(2.0)	4(50.0)
	Boy/girlfriend	29(7.2)	6(3.7)	23(79.3)
	Nobody	92(23.0)	49(24.5)	43(46.7)
Had sex in exchange for gifts	Yes	47(11.8)	26(13.0)	21(44.7)
	No	353(88.2)	174(87.0)	179(50.7)
If yes, gifts given	Money	37(89.4)	18(81.8)	19(95.0)
	Mobile phone	1(2.1)	1(4.5)	0(0.0)
	Books	1(2.1)	1(4.5)	0(0.0)
	Food	1(2.1)	0(0.0)	1(5.0)
	Jewelry	2(4.3)	2(9.1)	0(0.0)

Of those who got pocket money from boyfriends and girlfriends, the occupation of their benefactors included bodaboda (motorbike) riders, teachers, policemen, supermarket employees, other company employees, brick makers, farmers, those working in hotels, those doing manual jobs, drivers. Essentially people with money.

The village elder commented as follows:

'You will find young people with the elderly...sometimes you find an old man engaging with girls at school because he has money.' [KII_Village Elder _70: 22-22 (0)]

Parents had the following comments:

One said:

'Most of them come from poor backgrounds. So maybe the boys may find a girl from a rich family and so they befriend them. So, the girls provide for them.' [KII_F_Parent_Male_SS: 4-4 (0)]

Another said:

'Because of the challenges they go through, they decide to look for a man to cater for their needs. And women look for young boys so as to assist them.' [KII_Parent_F_Mixed day school: 22-22 (0)]

A male student spoke of the older girlfriend paying the bills.

A female student commenting about her former boyfriend said:

'I was engaged to a man who was a policeman working in Sotik. We were in a relationship for five months. He would take me for shopping, buy good things for me. He bought me a phone so we could chat. He gave me everything I needed.' [CN_F_Mixed day school: 10-10 (0)]

The head of counselling in one of the single sex boarding schools said:

'Sometimes they come seeking leave from school in the name of seeking for medication and at the end of the day you realize they are going to see their boyfriends and the parents of the girl are aware because they know they are going to be given something. And some would come with sugar or something.' [KII_F_G&C_SS: 22-22 (0)]

The love for nice things also came out. A student from a mixed day secondary school said:

'Even fashion. Other girls have nice clothes and they say it is from their boyfriends. You admire and are tempted. So, you also look for one.' [FGD_F_Mixed day school: 62-63 (0)]

A student from a single sex boarding school said,

'Copying other people's lives...maybe you want to live like they do...to get good shoes.' [FGD_F_SS: 16-16 (0)]

The village elder commented about the current lack of resources and skills by the young people unlike in his earlier years.

The education officer said the lack of concern by parents to pay fees especially for girls drove some of the students to look for benefactors. This was collaborated by a female student during a case narrative.

On pressure for basic needs, the village elder commented:

'Maybe they use the money to buy body lotions...sometimes when they go to school that is far from home and maybe she walks to school...she has no means of transport so she uses the money to board a motorbike.' [KII_Village Elder _70: 72-72 (0)]

The village elder also commented on some students coming from well off homes and having money. He said:

'Some of them get money from their parents. The parents give them money for their use. So sometimes they may have a lot of money at school. And this is problem.' [KII_Village Elder _70: 108-108 (0)]

As illustrated in table 5.2, source of presents was the only one found to be associated with ever having sex ($p=0.02$), with those receiving gifts from boy/girlfriends having four times the odds (OR 4.04, 95% CI 1.36-11.97) of ever having sex compared to those receiving presents from parents.

Table 5.2: Comparison between economic characteristics of sexually active and non-sexually active in-school adolescents in Nyamira County

		Total n(%)	No sex	Ever had sex	Odd ratio 95% CI	p-value
Source of pocket money	Parents	353(88.7)	144(40.6)	211(59.4)	1	0.08
	Relatives	6(1.5)	2(33.3)	4(66.7)	1.36(0.25-7.55)	
	Boy/Girlfriend	17(4.3)	4(23.5)	13(76.5)	2.22(0.71-6.94)	
	Self-earnings	22(5.5)	6(27.3)	16(72.7)	1.82(0.70-4.76)	
Amount given per month (Kenya shillings)	<500	247(61.8)	99(40.1)	148(59.9)	1	0.22
	500-1000	88(22.0)	38(43.2)	50(56.8)	0.88(0.54-1.44)	
	1000-2000	40(10.0)	11(27.5)	29(72.5)	1.76(0.84-3.69)	
	>2000	25(6.2)	8(32.0)	17(68.0)	1.42(0.59-3.42)	
Source of presents	Parents	237(59.2)	93(39.2)	144(60.8)	1	0.02
	Self	34(8.5)	13(38.2)	21(61.8)	1.04(0.50-2.18)	
	Relatives	8(2.0)	2(25.0)	6(75.0)	1.94(0.38-9.80)	
	Boy/girlfriend	29(7.2)	4(13.8)	25(86.2)	4.04(1.36-11.97)	
	Nobody	92(23.0)	44(47.8)	48(52.2)	0.70(0.43-1.14)	

A parent said:

'You know, sometimes you find there are challenges at home. Maybe there is no food. So, the child decides to look for a man to take care of her, instead of looking for work...so they go with men who tell them that they don't need to go through challenges. So, the girl accepts to relate with such men and then after 2 or 3 months they become pregnant.'
[KII_Parent_F_Mixed day school: 33-33 (0)]

One male student commented about rich older people. He said:

'For instance, someone from a poor family and they are in boarding school. And today we have sponsors. They would offer good things and one cannot refuse. So that would continue until now they start demanding for sex. So, in that case one is tempted.'
[FGD_M_SS (case narrative 1): 43-43 (0)]

The MOH commented about the tea bonus said:

'You know whenever they have that bonus, they run around with ladies and you find most in lodgings. There are usually problems concerning sexual activity around this area.'
[KII_MoH: 42-42 (0)]

About motorbike riders, the MOH said:

'The boda boda guys...they normally lure them with free rides maybe to or from school. So, I think that's why ...they normally take advantage of those girls who cannot afford to pay the boda boda.' [KII_MoH: 26-26 (0)]

The village elder thought young people having a lot of money will predispose them to having sex. He said the converse was also true. He said:

'Sometimes you will find a very young girl...9-12 years engaging in sex because of poverty.' [KII_Village Elder _70: 66-68 (0)]

He spoke of inducement sometimes being simple things like drinks (soda) and lunch.

The head of counselling at a girls boarding school said:

'In some families where they lack funds, over the holidays the girls have sex for money to use at school. Some are provided for by relatives like brothers. So, they have sex with them so as to get money. Sometimes, it's the bread winner and the rule is they don't

disclose. They are threatened that support will be withdrawn if they disclose. And if it is the father then he says if you disclose then he will kill you and the mother.'
[KII_F_G&C_SS: 23-23 (0)]

A female student from a mixed day secondary school said:

'You don't get your daily meals. So, you decide to go to the boyfriend so maybe you get food from there. So, because of money we engage in sex.'
[FGD_F_Mixed day school: 58-58 (0)]

Another female student said:

When one does not have money, they may be cheated into sex by men. [FGD_F_SS: 42-42 (0)]

Another student said:

'When maybe you do not have money. Then you have sex with someone so as to get money.' [FGD_F_Mixed day school: 33-33 (0)]

The education officer said:

'You know in Nyamira...the population is high and increasing steadily and land is becoming limited. The main activity is agriculture. And as resources become scarce....this brings about poverty at home because they can no longer farm for economic activities... the farm is majorly subsistence. So, they need to look for other alternative ways. As a result, there is that pressure on the girl child, not only to meet their basics needs, but to meet their desires to live like other people. And that is why at early stages, sex is seen as pleasure....but as they grow, it is seen as a source of income.' [KII_EO_ : 40-40 (0)]

In table 5.3, among male in-school adolescents, neither the source of pocket money, the amount given per month nor the source of the presents were found to be statistically significant. None of them showed an association with ever having sex.

Table 5.3: Comparison between economic characteristics of sexually active and non-sexually active male in-school adolescents in Nyamira County

		Total n(%)	No sex	Ever had sex	Odd ratio 95% CI	p- value
Source of pocket money	Parents	175(87.5)	60(34.3)	115(65.7)	1	0.61
	Relatives	4(2.0)	1(25.0)	3(75.0)	1.57(0.16-15.37)	
	Girlfriend	1(0.5)	0(0.0)	1(100.0)	1.04(0.09-11.74)	
	Self-earnings	20(10.0)	6(30.0)	6(30.0)	0.52(0.16-1.69)	
Amount given per month (Kenya shillings)	<500	129(64.5)	43(33.3)	86(66.7)	1	0.57
	500-1000	39(19.5)	16(41.0)	23(59.0)	0.72(0.34-1.50)	
	1000-2000	20(10.0)	5(25.0)	15(75.0)	1.50(0.51-4.40)	
	>2000	12(6.0)	3(25.0)	9(75.0)	1.50(0.39-5.83)	
Source of presents	Parents	116(58.0)	37(31.9)	79(68.1)	1	0.36
	Self	25(12.5)	10(40.0)	15(60.0)	0.70(0.29-1.71)	
	Relatives	4(2.0)	1(25.0)	3(75.0)	1.41(0.14-13.97)	
	Boy/girlfriend	6(3.0)	0(0.0)	6(100.0)	2.81(0.33-24.19)	
	No body	49(24.5)	19(38.8)	30(61.2)	0.74(0.37-1.48)	

Among female in-school adolescents, source of pocket money and source of the presents were found to be associated with ever having sex, with p-values of 0.04 and 0.02 respectively. (Table 5.4)

Table 5.4: Comparison between economic characteristics of sexually active and non-sexually active female in-school adolescents in Nyamira County

		Total n(%)	No sex	Ever had sex	Odd ratio 95% CI	p-value
Source of pocket money	Parents	180(90.0)	84(46.7)	96(53.3)	1	0.04
	Relatives	2(1.0)	1(50.0)	1(50.0)	0.88(0.05-14.21)	
	Boyfriend	16(8.0)	4(25.0)	12(75.0)	2.63(0.82-8.45)	
	Self-earnings	2(1.0)	0(0.0)	2(100.0)	1.75(0.16-19.65)	
Amount given per month (Kenya shillings)	<500	118(59.0)	56(47.5)	62(52.5)	1	0.51
	500-1000	49(24.5)	22(44.9)	27(55.1)	1.11(0.57-2.16)	
	1000-2000	20(10.0)	6(30.0)	14(70.0)	2.11(0.76-5.86)	
	>2000	13(6.5)	5(38.5)	8(61.5)	1.45(0.45-4.68)	
Source of presents	Parents	121(60.5)	56(46.3)	65(53.7)	1	0.02
	Self	9(4.5)	3(33.3)	6(66.7)	1.72(0.41-7.21)	
	Relatives	4(2.0)	1(25.0)	3(75.0)	2.58(0.26-25.55)	
	Boy/girlfriend	23(11.5)	4(17.4)	19(82.6)	4.09(1.31-12.74)	
	No body	43(21.5)	25(58.1)	18(41.9)	0.62(0.31-1.25)	

In table 5.5, in mixed day secondary schools, at least 167(84%) students received pocket money from their parents, with most 140(70%) receiving less than 500 shillings. Only source of presents showed evidence of an association with ever having sex (p=0.04).

Table 5.5: Comparison between economic characteristics of sexually active and non-sexually active in-school adolescents in mixed-day secondary schools in Nyamira County

		Total n(%)	No sex	Ever had sex	Odd ratio 95% CI	p-value
Source of pocket money	Parents	167(83.5)	63(37.7)	104(62.3)	1	0.35
	Relatives	4(2.0)	2(50.0)	2(50.0)	0.61(0.08-4.41)	
	Boyfriend	8(4.0)	2(25.0)	6(75.0)	1.82(0.36-9.28)	
	Self-earnings	21(10.5)	6(28.6)	15(71.4)	1.51(0.56-4.10)	
Amount given per month (Kenya shillings)	<500	140(70.0)	52(37.1)	88(62.9)	1	0.75
	500-1000	28(14.0)	10(35.7)	18(64.3)	1.06(0.46-2.48)	
	1000-2000	17(8.5)	6(35.3)	11(64.7)	1.08(0.38-3.10)	
	>2000	15(7.5)	5(33.3)	10(66.7)	1.18(0.38-3.65)	
Source of presents	Parents	117(58.5)	39(33.3)	78(66.7)	1	0.04
	Self	21(10.5)	7(33.3)	14(66.7)	1.00(0.37-2.68)	
	Relatives	4(2.0)	2(50.0)	2(50.0)	0.50(0.07-3.68)	
	Boy/girlfriend	17(8.5)	2(11.8)	15(88.2)	3.75(0.82-17.23)	
	No body	41(20.5)	23(56.1)	18(43.9)	0.39(0.19-0.81)	

In single sex boarding schools, majority of the students 188(94%) got their pocket money from their parents, with most students 107(54%) receiving less than 500 Kenya shillings. As regards the source of presents, at least 120(60%) received from their parents. However, none of these were found to be significantly associated with ever having sex. (Table 5.6)

Table 5.6: Comparison between economic characteristics of sexually active and non-sexually active in-school adolescents in single sex boarding secondary schools in Nyamira County

		Total n(%)	No sex	Ever had sex	Odd ratio 95% CI	p-value
Source of pocket money	Parents	188(94.0)	81(43.1)	107(56.9)	1	0.09
	Relatives	2(1.0)	0(0.0)	2(100.0)	1.51(0.13-16.99)	
	Boyfriend	9(4.5)	2(22.2)	7(77.8)	2.65(0.54-13.09)	
	Self-earnings	1(0.5)	0(0.0)	1(100.0)	0.76(0.05-12.29)	
Amount given per month (Kenya shillings)	<500	107(53.5)	47(43.9)	60(56.1)	1	0.12
	500-1000	60(30.0)	28(46.7)	32(53.3)	0.90(0.47-1.69)	
	1000-2000	23(11.5)	5(21.7)	18(78.3)	2.82(0.98-8.15)	
	>2000	10(5.0)	3(30.0)	7(70.0)	1.83(0.45-7.45)	
Source of presents	Parents	120(60.0)	54(45.0)	66(55.0)	1	0.16
	Self	13(6.5)	6(46.2)	7(53.8)	0.95(0.30-3.01)	
	Relatives	4(2.0)	0(0.0)	4(100.0)	3.27(0.36-30.15)	
	Boy/girlfriend	12(6.0)	2(16.7)	10(83.3)	4.09(0.86-19.47)	
	No body	51(25.5)	21(41.2)	30(58.8)	1.17(0.60-2.27)	

5.3 Discussion

This study examined the economic determinants of sexual debut among in-school adolescents in Nyamira county.

Low socio-economic status has been thought to play a role in adolescent sexual debut. The Kenya National Bureau of Statistics demonstrated in their 2014 survey that adolescents from poor households were more likely to engage in sex, both in urban and rural areas. (KNBS, 2014) Some adults use poverty to lure unsuspecting adolescents with promises of providing their basic needs in exchange for sex. Adolescent girls have been noted to be particularly at risk compared to adolescent boys. (Handa, et al., 2017) In a study by (Ssewanyana, et al., 2018), materialism was reported as a driver for adolescent sexual debut. Sex was seen by the young girls as a transaction allowing them to acquire things they otherwise wouldn't afford. In Ethiopia, (Mulugeta & Berhane, 2014) reported that it was not uncommon for female adolescent students to engage sexually with local business men and police officers in exchange for money and gifts. (Ssewanyana, et al., 2018) also found that, at family level, inability of caregivers to provide their adolescent children with basic needs such as food, clothing, money for transport, sanitary pads in the case of girls, drove the young people to engage in transactional sex. This was also evident in our study, with most of those engaging in transactional sex, doing so in exchange for money for basic needs and also to compete with their fellow students. Some girls in our study were forced to have sex with their benefactors after being threatened that payment of their school fees would be withdrawn if they refused. Some mothers allowed their girls to be molested by their fathers for fear of being thrown out of the house with their children.

Also, the effect of money may be different for adolescent girls and boys, with wealth influencing sexual debut in boys and girls differently. Young women may be unable to resist sexual pressures due to poverty leading to them engaging in their first sex. Young men on the

other hand, out of affluence, may seek out sexual opportunities. (Amo-Adjei & Tuoyire, 2018) This was the case in our study with poverty being seen to drive sexual debut in in-school adolescent girls but not boys. Similar findings were reported by (Peltzer, 2010) in his study. Also, in an analysis done by of nationally representative data from three countries in Sub-Saharan Africa, Malawi, Ghana and Burkina Faso, it was found that female adolescents from poorer homes were more likely to engage in sex compared to students from wealthier homes (Melhado, 2008).

(Kastbom, et al., 2015) demonstrated in their study that young people less than 14 years of age were more likely to engage in transactional sex compared to their older counterparts. They found that younger adolescents were more likely to find themselves in situations where they had sex for payment. In our study, most of the students got spending money (89%) and gifts (60%) from their parents. However, those who received gifts from boy/girlfriends were found to have four times the odds of ever having sex (OR 4.04, 95% CI 1.36-11.97). From the FGDs, the case narratives and the key informant interviews, it came out strongly that due to their need for money for sustenance and/or pleasure, the young people were lured, sometimes forced, to start engaging in sex. This proved the Marxist theory of the effect of the rich on the poor; those with money being able to get sex from those in need of it. For those in need of money for basic needs and upkeep, poverty came out as a driver for sexual debut.

In a study done by (Pascoe, et al., 2015) in rural Zimbabwe, low socio-economic status was associated with increased risk of high-risk sexual behavior such as early sexual debut, having multiple sexual partners, having older sexual partners and engaging in transactional sex among young women. Poorer women were more likely to engage in sex for material and financial support. Also, those who reported having insufficient food were more likely to engage in earlier sexual debut. These women were also less likely to have used a condom at their last sex, showing their inability to negotiate for safer sex due to their financial need or their inability to

afford condoms/contraceptive. Lack of condom use puts these women at risk of getting sexually transmitted infections and HIV. Similar findings were seen in a study by (Santelli, et al., 2015) who found that coming from a poor economic background was associated with early sexual initiation. (Yakubu & Waliu, 2018) also concluded that poverty was a driver towards early sexual debut and its sequelae. Looked at from a different perspective, (Asante, et al., 2020) found that young people from rich households were less likely to initiate early sexual debut.

The fact that most students in our study got their money for upkeep from their parents suggests that other factors could be at play in early sexual initiation among adolescents such as peer pressure, cultural norms and popular culture on social media. It could also mean that for poverty to be a driver for sexual debut, one must be so poor to a point of being hungry due to insufficient food and in dire need of basic needs to engage in transactional sex in order to survive.

Our study findings therefore underscore the enormous impact of poverty on adolescent sexual debut.

CHAPTER SIX: PERCEPTIONS OF SELF AS GUIDED BY SOCIAL CONSTRUCTS INFLUENCING SEXUAL DEBUT AMONG IN-SCHOOL ADOLESCENTS IN NYAMIRA COUNTY

6.1 Introduction

This chapter presents findings and a discussion on perceptions of self as guided by social constructs that could lead in-school adolescents in Nyamira County to start engaging in sex. The Rosenberg's Self Esteem Scale was utilized to determine the self-esteem score for the students. Professor Morris Rosenberg, a leading figure on research in self-esteem, came up with this self-esteem Scale which measures a subject's perception of their own self-worth (Christensen, 1985). This scale has been validated for use in adults and adolescents. In a recent study, its use was extended to those 7-12 years of age. (Wood, et al., 2021) A set of 10 statements were posed to the students who were then scored according to their responses. Scores between 15-25 suggested normal self-esteem, while scores below 15 suggested low self-esteem.

6.2 Results

6.2.1 Self perceptions by in-school adolescents in Nyamira County

As illustrated in table 6.1 below, majority of the students had normal self-esteem 301(75%), with the students having a mean score of 15.64. The findings were similar when analyzed according to gender and school type.

Table 6.1: Self-perception by in-school adolescents in Nyamira County

		n(%)	Mode	Mean score
All students (n=400)	Low self esteem	99(24.8)	17	15.64
	Normal self esteem	301(75.3)		
Male students (n=200)	Low self esteem	44(22.0)	17	15.61
	Normal self esteem	156(78.0)		
Female students (n=200)	Low self esteem	55(27.5)	17	15.66
	Normal self esteem	145(72.5)		
Mixed day schools (n=200)	Low self esteem	42(21.0)	17	15.81
	Normal self esteem	158(79.0)		
Single sex boarding schools (n=200)	Low self esteem	57(28.5)	17	15.46
	Normal self esteem	143(71.5)		

In table 6.2, no association was seen between self-perception and ever having sex among all the students who participated in the study ($p=0.081$). When analysed according to gender and type of school (whether mixed day or single-sex boarding school), still no association was seen among males, females, mixed day secondary schools and single sex schools (p -values of 0.088, 0.371, 0.809 and 0.089 respectively).

Table 6.2: Comparison of self-perception between sexually active and non-sexually active in-school adolescents in Nyamira County

	Self esteem	n(%)	No sex	Ever had sex	Odd ratio 95%CI	p-value
All students (n=400)	Low	99(24.8)	45(45.5)	54(54.5)	1	0.081
	Normal	301(75.3)	111(36.9)	190(63.1)	0.70(0.44-1.11)	
Male students (n=200)	Low	44(22.0)	19(43.2)	25(56.8)	1	0.088
	Normal	156(78.0)	48(30.8)	108(69.2)	0.59(0.29-1.16)	
Female students (n=200)	Low	55(27.5)	26(47.3)	29(52.7)	1	0.371
	Normal	145(72.5)	63(43.4)	82(56.6)	0.86(0.46-1.60)	
Mixed day schools (n=200)	Low	42(21.0)	16(38.1)	26(61.9)	1	0.809
	Normal	158(79.0)	57(36.1)	101(63.9)	0.92(0.45-1.85)	
Single sex boarding schools (n=200)	Low	57(28.5)	29(50.9)	28(49.1)	1	0.089
	Normal	143(71.5)	54(37.8)	89(62.2)	0.59(0.32-1.09)	

During the FGDs, students were found to be aware of the role one's mental status plays in beginning to have sex.

One male student from a single sex secondary school said,

"Having good mental status will make someone have better self-control and will not rush to have sex to feel good. But may do so because of other reasons like watching pornography" [FGD_M_SS (case narrative 1): 40-40 (0)]

Another male student from the same school commented as follows:

'If you are anxious, and you come and find someone, a teacher, for example one coming for teaching practice and willing to have sex with you, you may mess around.' " [FGD_M_SS (case narrative 2): 56-56 (0)]

From the FGDs it was seen that girls preferred older men. One girl said:

'Mostly girls have sex with older men.' [FGD_F_SS: 14 - 14 (0)]

Another girl said:

'There are those who engage with older people not of their age and there are those with the same age.' [FGD_F_SS: 12 - 12 (0)]

Most boys went out with girls their age or younger, but a few went out with older women. In a case narrative, a male student said:

'The eldest I have had sex with is 38 years.' [FGD_M_SS (case narrative 2): 206 - 206 (0)]

When asked why, he said:

'Maybe that's the way I am. I like the elderly people because I consider them romantic. Those 28-30. Especially, when you lack parental love. You get to have sex with those people because they provide that love.' [FGD_M_SS (case narrative 1): 176 - 176 (0)]

On being asked how they compare to school girls, he said:

'A very big difference. These people bath well. They are very romantic.' [FGD_M_SS (case narrative 1): 193 - 194 (0)]

Reasons given by students for their having sex for the first time included having sexual feelings, wanting to experience what people talked about and curiosity. One student reported being raped by her uncle, one other by the cousin and another by the boyfriend.

Most male students had multiple sexual partners at any one time while most of the female students reported having only one sexual partner at the time of the study.

The lack of a support system in matters sex came out in the study with very few students saying they would discuss the subject with their parents. Half the students discussed with their friends but there were still those who said they wouldn't discuss with anyone.

One student from a girls boarding secondary school said:

'There will be rumors about you. People will talk about it. Then the rumors spread.'
[FGD_F_SS: 203 - 203 (0)]

Another student in the same school said during a case narrative:

'Sometimes I would rather keep it to myself, because sometimes when you share it with others, they go tell it to other students. So, I would rather just feel the pain alone.'
[FGD_F_SS: 172 - 172 (0)]

A boy from Nyansabakwa secondary school said:

'I don't tell them about myself because they may use my case as an example.' [FGD_M_SS (case narrative 1): 114 - 114 (0)]

The education officer said they were having challenges as sexual cases were not being reported greatly affecting his work. He said:

'You discover that people ...ok...sexual cases are not reported. Because if you report then it will be seen like opening up your own secrets.' [KII_EO_: 18 - 18 (0)]

On matters of contraception use, it came across that some used and some didn't use. There was understanding of HIV risk and some of those interviewed got pregnant as a result of having unprotected sex.

One girl said,

'I was in love, and I didn't think of that. So I didn't think of using protection and from there, I got pregnant.' [CN_F_Mixed day school: 17 - 20 (0)]

There was also the issue of inconsistent use of contraception. One boy said,

'You buy the condom, but on the scene, you use it on the first round or the girl would complain you are forced to remove.'

[FGD_M_SS (case narrative 1): 74 - 74 (0)]

There was however a general understanding of the risks of having unprotected sex, the risks of pregnancy, STIs and HIV. One student said,

'You have unprotected sex. And then after three months when you go for testing, you find yourself HIV positive.'

[FGD_M_SS (case narrative 2): 86 - 87 (0)]

6.3 Discussion

During adolescence, young people naturally experience a decline in self-esteem. This is due to the psychological and biological changes that create powerful new emotions and conflicts within the adolescent (Koome, 2001).

In our study, however, most students had normal self-esteem, both boys and girls. Students' level of self-esteem also did not vary between the single-sex boarding and the mixed day secondary schools. On further analysis, no association was found between perceptions of self and ever having sex among in-school adolescents in Nyamira county, the school type and gender of students regardless. In focus group discussions students were found to be aware that one's mental status played a role in one having sex. If stronger mentally, one was thought to have better self-control and hence have the ability to differ sexual engagement. It was interesting to note that some girls and boys preferred to have sex with older men and women because they considered them to be romantic and providing love (especially to those who

lacked parental love). The older men and women were considered to be more romantic when compared to their agemates and those younger.

The theory of reasoned action was therefore found to be unsatisfactory with this group of respondents since their self-perception and attitude towards sex did not drive their sexual debut. This could mean that there could be other socioecological factors driving sexual debut among these in-school adolescents in Nyamira county.

According to theorists, the following influence human behavior: individual factors such as an individual's level of self-esteem; interpersonal factors; community factors such as religion and parental involvement; institutional factors; and finally, public policy. Adolescents with low self-esteem tend to be anxiously unsure of themselves and are likely to use sex as a means of getting attention and approval from others. Therefore, there has been concerted efforts by sexuality educators to improve adolescents' self-esteem as a means of promoting healthy decision making and avoid the negative consequences of engaging in sex. (Ofole & Agokei, 2014)

However, many studies have produced conflicting results. For example, in this study, majority of the in-school adolescents had normal self-esteem, with no significant association between self-esteem and sexual debut, regardless of school type and gender. Marston, et al., (2013) reported that adolescent males with high self-worth were more likely to initiate first sex compared to those with low self-esteem. However, Ankomah, et al., (2011) in their study found that abstinent adolescents were more confident, with greater determination and more remarkable ability to deploy refusal skills in delaying first sex. Similar findings were found in a study done in Ethiopia (Oljira, et al., 2012).

Mental distress has been found to be associated with early sexual debut (Peltzer & Pengpid, 2015). However, this seems to be more so in female students than male students. Pre-debut

depressive symptoms have been found to be associated with earlier sexual debut among female but not male adolescents (Spriggs & Halpern, 2008). In a study by (Smith, 1997), she reported depression, often associated with low self-worth, had an impact on girls' sexual activity. She found no association for the same in boys. Depressed individuals may also lack optimism about future options and hence see sex as a means to an end. Similar findings to the above (associated in girls but no effect on boys) in a Croatia study by (Kuzman, et al., 2007). (Ekundayo, et al., 2007) posited that depressed adolescents may engage in sexual activity as a form of "self- medication".

On the other hand, (Ellis, 2001) argued that people with high self-esteem are more likely to minimize the consequences of risky behavior, rationalizing the risky behavior and convincing themselves that the behavior will not cause harm to themselves or others. This may contribute to behaviors like drinking, taking drugs, engaging in early sexual intercourse as well as other risk-taking behaviors.

In a study done in eight African countries by (Peltzer, 2010), it was found that early sexual debut among girls was associated with having no close friends (OR = 3.36, $p = 0.014$) and with poor parental connectedness (OR = 2.43, $p = 0.037$). This collaborated with findings in our study.

CHAPTER SEVEN: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

The chapter presents a summary of findings, conclusions and recommendations informed by the study findings and guided by the study objectives. The discussion looks into the sociocultural and economic determinants of sexual debut among in-school adolescents in Nyamira county; as well as self-perceptions among the in-school adolescents that could lead to their sexual debut as illustrated in the study findings and corroborated/ contrasted in existing literature. The conclusion summarizes the findings in the context of existing literature and the recommendations are aligned to the study objectives for future programme and policy development, and to inform future research initiatives.

7.2 Summary of Findings

7.2.1 Socio-cultural determinants of sexual debut among in-school adolescents in Nyamira County

The majority of the in-school adolescents in Nyamira County, 244(61%), were having sex. There was no evidence of an association between the school type and ever having sex ($p=0.19$). Gender, age and marital status showed evidence of association with ever having sex ($p=0.03$) among the in-school adolescents. All of the 10 married students had had sex. Students in monogamous homes were less likely to start having sex compared to those from polygamous families (OR=0.49, 95%CI 0.30-0.81, ($p=0.01$)). Distance from school was also perceived as a predisposing factor to the students debuting in sex. Those with older sexual partners said that these older individuals provided parental love that they lacked in their own families. Peer pressure was reported by most male students as their driver towards initiating sex, while most female students reported poverty. Adolescents had no preferential source of information on sex and had varied sources of information on the subject. Most of them, 238(60%) said they

watched pornography. It can therefore be seen that, consistent with the social learning theory, sexual debut in this study was affected by several socialization factors. This study was able to demonstrate that sexual debut among in-school adolescents is influenced by a wide range of sociocultural factors and that how youth behave is deep-rooted within their sociocultural context.

7.2.2 Economic determinants of sexual debut among in-school adolescents in Nyamira County

Most of the students got spending money (89%) and gifts (60%) from their parents. However, those receiving gifts from boy/girlfriends had four times the odds of ever having sex (OR 4.04, 95% CI 1.36-11.97). Qualitative data on the other hand revealed that the need for money for basic needs and also for pleasure played a significant role in early sexual debut among the adolescents. Some female students were driven to have sex by their parents in order to get money for sustenance for themselves and their families. They were used as a tool to get money for survival. Male students on the other hand mainly had sex for pleasure. This proves the gender theory on the role of sex in men and women in society; for men as a proof of masculinity, for women as a tool, a sex object, to be used to provide for the family.

7.2.3 Perceptions of self as guided by social constructs exist among in-school adolescents in Nyamira County

Most of the students had normal self-esteem and no association was seen between how they perceived themselves and their sexual debut. Most boys and most girls had normal self-esteem. Also, the level of self-esteem in students did not vary between the single sex secondary schools and the mixed day secondary schools. The theory of reasoned action was therefore found to

be unsatisfactory with this group of respondents since their self-perception and attitude towards sex did not drive their sexual debut.

7.3 Conclusions

Most in-school adolescents in Nyamira county have had their sexual initiation. Socio-culturally, coming from a polygamous home, peer pressure and watching pornography came out as strong determinants of sexual debut among in-school adolescents in Nyamira county bringing out the influence of a one's socialization on sexual debut. The economic factors identified influencing sexual debut among the students was mainly seen in female students rather than the male students enforcing the Gender theory on the role of women in society; the perception of women as a tool for economic gain. The same expectations were not ascribed to the male students. How the in-school adolescents perceived themselves was not associated with their sexual debut negating the role of the theory of reasoned action in this population. The findings of this study therefore imply a pluralist environment where all these factors contribute to early sexual debut among the in-school adolescents of Nyamira County.

7.4 Recommendations

The key recommendations are:

1. Role of government both national and county.
 - i. Most of the teachers in the schools assigned the role of guidance and counselling were regular teachers with no background in child psychology. The Ministry of Education to therefore consider increasing the number of teachers trained in counselling in schools or to facilitate visitation to schools by psychologists and psychiatrists to provide psychological support to the students.
 - ii. The Ministry of Health to form a board tasked with formation, dissemination and regulation of reproductive and sexual health related messages to the young people. Messages can be disseminated through social media platforms or through printing

of pamphlets that can be made available in schools and local health centres. This would ensure that the adolescents get correct information on the subject of sex.

- iii. The students felt it would be useful for them to get information from the experts. The County Ministry of Health can therefore consider sending medical experts to schools to give age appropriate sexual and reproductive health education to the secondary students on a regular basis.
- iv. The County Government of Nyamira should consider providing needy students with basic commodities such as sanitary towels, soap and body lotions through a kitty set up in the various schools, particularly day schools where the girls were most vulnerable.

2. Community ownership

- i. Use of community leaders and chiefs. These people are highly regarded and listened to by members of the community. Since they know their population best and know the challenges faced by their members, they need to be encouraged to conduct regular meetings with the parents and adolescents. If possible, they should conduct home visits in order to pick dire cases that need assistance, especially economic assistance. Children in abusive households can also be rescued from abusive parents.
- ii. Parents to be encouraged to talk about sex with their young children and to teach them about sexual matters way before sexual debut. This will ensure that they have the right information that will inform decision making when asked to engage in sex. Parents also need to be encouraged to participate in community adolescent pregnancy prevention programs.
- iii. Churches and non-governmental organizations in the area to work with the youth by coming up with youth programs that empower the youth on sexual health and teach technical skills that will help them be able to generate additional income hence removing poverty as a driver towards sexual debut by these in-school adolescents. In addition, these organizations should work with the parents of these adolescent children by building their capacity to teach and guide their children on sexual matters.

3. Recommendations for policy and further research

There is need for future research into interventions that can be put in place to reduce the incidence of sexual initiation among in-school adolescents aged between 14 and 18 years. These interventions should address all the determinants of sexual debut, both at

school level and at individual level. Some of the interventions that can be considered include:

- i. Context specific sex education in schools – most students learnt about sex from their peers, and very few from their parents and teachers. It was also noted that they did not have proper information regarding sex and its implications. It would therefore be important to have this taught in the school environment, in a non-judgement free manner that would allow the students to express themselves and learn. It would also ensure that the students get appropriate and right information for their age-group to inform decision making.
- ii. Standardized training material – this can be rolled out in an area and its impact compared to an area that did not use standardized material after a period of time. This will help determine whether for the locality this would be beneficial for the adolescents vis-a-vi what they have now of teachers freestyling and coming up with the teaching materials themselves.
- iii. Introduction of peer-to-peer mentorship – this study showed that the adolescents were more receptive to their peers and mostly got information from them. As an intervention, the students to offer the mentorship can be taken through a mentorship program where they are given the proper material and guided on how to reach their peers. Goals can be set by each class while guided by the master trainer for ownership.

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APPENDICES

Appendix I: INFORMED CONSENT

PART 1: INFORMATION SHEET

Introduction

Diana Ondieki, a PhD student of the African Women's Studies Centre, University of Nairobi, is currently carrying out a study: Determinants of sexual debut among in-school adolescents in Nyamira County. You are invited to participate in this study and can take all the time you need to decide if you want to participate or not. Kindly take time to read through the information provided. If there are any questions, comments or clarifications, please feel free to ask the Principal Investigator or the Research Assistants.

Purpose of the study

The aim of this study is to collect information on the socio-cultural determinants, economic determinants and perceptions of self as guided by general ideology leading to sexual debut among in-school adolescents in Nyamira County

Procedure

If you decide to participate in this study you will have to sign and also date the consent form. A copy of the completed form will be made and given to you to keep. You will then be invited for an individual interview or a group discussion. A member of the research team will be present for any questions or clarifications you may have and their contacts will also be provided.

Potential Risks

There are no anticipated risks associated with this study

Potential Benefits

The results from this study will help improve quality of family life education given in Kenya

Confidentiality

The information that you give will be very confidential. No names will be used and instead each participant will be assigned a unique code. Only the research team will have access to the information provided, which will be kept under lock and key. Upon completion of the study, results will be shared only to the relevant parties.

Right to refuse/withdraw

Participation in the study is solely voluntary, therefore, you do not have to take part if you do not desire to. You may decide to withdraw from the study at any time you wish. Declining from participating or withdrawing will not in any way influence your current or future treatments/interventions and all your rights will be respected.

PART 2: CONSENT

ASSENT

I have read and understood the information provided above. I have been fully explained to about the study and have had the opportunity to ask questions which have been answered to my satisfaction. I have agreed to participate in this study voluntarily and have not been coerced/manipulated or bribed in any way.

Participant's Name: -----

OR

Thumb Print of Participant

Participant's Signature: -----Date: -----

PARENTAL CONSENT

I agree to let my child participate in this study:

Parent/ Guardian's Name: ----- Parent/ Guardian's Signature -----

Date: -----

Statement by Researcher

I have explained to the participant about the study. I have given the participant an opportunity to ask questions relevant to the study, and I have answered correctly to the best of my abilities. I have confirmed the participant has given consent voluntarily.

Name of Researcher: -----

Signature: -----

Date: -----

Who to contact

For any questions or clarifications about the study, feel free to contact:

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RIDHAA YA MAFUNZO

SEHEMU YA KWANZA: MAELEZO

Utangulizi

Diana Ondieki, ni mwanafunzi wa Chuo Kikuu cha Nairobi, Idara ya African Women's Studies, anayesomea udaktari wa falsafa. Ninafanya utafiti kuhusiana na kuanza kushiriki ngono kwa vijana huku Kenya.

Lengo la utafiti

Madhumuni ya utafiti huu ni kujua mambo gani husababisha vijana kuanza kushiriki ngono mapema wakiwa wangali wachanga.

Namna

Ukiamua kushiriki katika utafiti huu, utatia sahihi na tarehe katika fomu ya makubaliano. Utabaki na nakala moja ya makubaliano haya. Utahitajika kujibu maswali utakayopatiwa, na kutakuwa na msaidizi iwapo maelezo zaidi yatahitajika.

Hasara inayotarajiwa

Hakuna hasara inayotarajiwa katika utafiti huu

Faida inayotarajiwa

Matokeo ya utafiti huu utasaidia kuboresha mafunzo ya kujammiana katika mashule huku Kenya.

Usiri

Matokeo ya utafiti huu yatawekwa siri. Hakuna majina yatumika na kila muhusika atapewa msimbo. Matokeo ya utafiti yatakabidhiwa kwa wanaohusika pekee yake.

Haki ya kukataa

Kushiriki katika utafiti huu, ni kwa kujitolea kwa hiari yako. Una haki ya kujitoa kwa utafiti wakati wowote bila ya madhara yoyote. Kutoshiriki ni haki yako, na haki hii itaheshimiwa.

SEHEMU YA PILI: MAKUBALIANO

KUTOKA KWA MWANAFUNZI

Nimesoma na nikaelewa ujumbe ulioko hapa juu. Nimeelezwa kwa makini kuhusu utafiti huu na nilipata nafasi ya kuuliza maswali yaliyojibiwa kamili. Nimekubali kushiriki katika utafiti huu bila kulazimishwa ama kupewa hongo.

Jina la Muhusika: au Alama ya Kidole.....

Saini ya Muhusika:

Tarehe:

KUTOKA KWA MZAZI

Nimemruhusu mtoto wangu kuingia katika utafiti huu.

Jina la Mzazi/ Mlezi.....Saini ya Mzazi/ Mlezi.....

Tarehe

Taarifa ya Mdadisi

Nimewaelezea wahusika kuhusu utafiti na nikawapatia nafasi ya kuuliza maswali. Nimeyajibu maswali yote niwezavyo. Nimehakikisha kuwa wanaohusika wamekubali kwa hiari yao.

Jina la mdadisi:

Saini:

Tarehe:

Kuwasiliana

Kwa maswali yoyote au ufafanuzi wowote wasiliana na:

Diana Ondieki

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Appendix 2: SCREENING FORM

Screener ID _____

Recruitment site _____

Date of screening _____

		Yes	No
Is the participant interested in finding out if she is eligible to participate in the study?			
If the participant answered “No”, please check reasons why	Not interested in the study		
	Wary about the study		
	Other (explain)		

If the participant answered “Yes”, then proceed with the following questions

	Yes	No
Are you between the ages of 14-18 years?		
Are you able to provide informed consent?		
Have you ever had sex?		

Inclusion criteria should have the answer “Yes” to all the above questions to be eligible.

	Yes	No
Is the participant eligible to enroll in the study?		

If the participant is found to be eligible, proceed with the informed consent process and then complete the remainder of this form.

Note: If the participant is eligible, please make sure the following section is completed before initiating study procedures.

	Yes	No
Did you present and explain the informed consent to the participant?		
Did you allow him/her to read the consent over and ask questions?		
Did the participant agree to participate and sign/date the informed consent form to enroll in the study?		
Was the informed consent signed, dated and timed correctly by the person obtaining the consent?		

Appendix 3: DATA COLLECTION QUESTIONNAIRE

STUDY NUMBER

--	--	--

MALE DATA COLLECTION QUESTIONNAIRE (to be used on male students)

A. SOCIO – DEMOGRAPHIC CHARACTERISTICS

1. What is your age in completed years?

--	--

2. What is your level of education?
 - a. Form 1
 - b. Form 2
 - c. Form 3
 - d. Form 4
3. What is your marital status?
 - a. Married
 - b. Single
 - c. Other _____
4. What type of family do you come from?
 - a. Monogamous
 - b. Polygamous
5. Do you live with both of your parents
 - a. Yes
 - b. No
6. If no, why
 - a. Deceased
 - i. Father deceased
 - ii. Mother deceased
 - iii. Both deceased
 - b. Separated
 - c. Never been together
7. If in a single parent home, which parent do you live with
 - a. Father
 - b. Mother
8. If in a polygamous home, how many wives does your father have?
 - a. One
 - b. Two
 - c. More than two
9. What kind of house do you live in?
 - a. Permanent house
 - b. Semi-permanent house
 - c. Temporary house

10. What is your father's occupation?
 - a. Unemployed
 - b. Self employed
 - c. Salaried employment
 - d. Casual labourer
11. What is your mother's occupation?
 - a. Unemployed
 - b. Self employed
 - c. Salaried employment
 - d. Casual labourer
12. How is your relationship with your parents?
 - a. Harmonious
 - b. Not good
13. Which religion are you?
 - a. Catholic
 - b. Protestant
 - c. Muslim
 - d. Others (please specify) _____

B. SEXUAL HISTORY

1. Have you ever had sex?
 - a. Yes
 - b. No
2. If yes,
 - i. How old were you when you first had sex?

--	--
 - ii. What made you have sex that first time?

 - iii. How many sexual partners have you had in your life

--	--
3. When did you last have sex?
 - b. Within the last 3 months
 - c. More than 3 months
 - d. Never had sex
4. Do you currently have a boy/girlfriend? Underline appropriate sex.
 - a. Yes
 - b. No
5. If yes, how old is she?

--	--

6. Is she from the same school?
 - a. Yes
 - b. No
7. As appertains your girl/boyfriend, tick the appropriate response (can be more than one)
 - a. Is younger than you
 - b. Is older than you
 - c. Is the same age
 - d. Is married
 - e. Is single
8. Do you feel fulfilled in this relationship?
 - a. Yes
 - b. No
9. Is she employed?
 - a. Yes
 - b. No
10. For how long in months have you been together

--	--
11. Have you had other sex partners while with your current friend
 - a. Yes
 - b. No
12. Have you ever had an abnormal urethral discharge?
 - a. Yes
 - b. No
13. How frequently do you have intercourse with your partner?
 - a. <3 times a week
 - b. 3 or more times a week
14. In terms of media, what you know about sex, where did you learn it from (You can choose more than one response, and number them from the most influential source to the least)
 - a. Magazines
 - b. Movies
 - c. Music videos
 - d. Internet
 - e. Books
 - f. Others (specify) _____
15. What time in the woman's month do you expect ovulation
 - a. During her period
 - b. Immediately after her period
 - c. In the middle of her month
 - d. At the end of the month
 - e. No idea

16. What are some of the risks of having sex without using condoms
-
-
17. Which STDs (sexually transmitted diseases) do you know about?
-
-
18. How does one get infected?
-
-
19. Can getting an STD affect one's fertility in future
- Yes
 - No
 - Don't know
20. The woman owes her female features to the
- Ovary
 - Uterus
 - Don't know
21. It is ok to have sex without using condoms
- Yes
 - No
22. Is family life education taught in your school?
- Yes
 - No
23. If yes, what are some of the benefits you've gotten from (what are some of the things you like about) family life education?
-
-
24. From whom would you rather get information on sexuality from
- Parents
 - Teachers
 - Pastors
 - Sunday school teachers
 - Older children
 - Peers
 - Media
 - Others (specify)_____
25. Have you watched pornography or viewed images with sexual content?
- Yes
 - No
26. In the current teaching of family life, what else would you like included
-
-
27. Most of what you know about sex, where did you learn it from?

28. Have you ever gone to a youth clinic?

- a. Yes
- b. No

C. SEXUAL HEALTH PERCEPTIONS

1.If you have a personal problem, who do you go to for advice?

- a. Parents
- b. Teachers
- c. Friends
- d. Sisters
- e. Brothers
- f. Relatives
- g. Other (specify)_____

2. Do you discuss sex-related issues with your parents?

- a. Yes
- b. No

3. If yes, which of the parents?

- a. Father
- b. Mother
- c. Both

4. If you do not discuss such issues, why?

- a. Not free to discuss with my parents
- b. They assume we are taught in school
- c. Other (specify)_____

5. Who else do you discuss sex-related issues with?

- a. School teacher
- b. Friends
- c. Sisters
- d. Brothers
- e. Relatives
- f. Nobody
- g. Other (specify)_____

6. If you have a girl/boy-friend, do your parents know about it?

- a. Yes
- b. No

7. If yes, what is their reaction?

- a. Approve
- b. Do not approve

- c. No reaction
- 8. In your society is sex before marriage allowed?
 - a. Yes
 - b. No
- 9. Do you think sex before marriage is right for boys?
 - a. Yes
 - b. No
- 10. Do you think sex before marriage is right for girls?
 - a. Yes
 - b. No
- 11. When should boys should start having sex?
 - a. 10-14 years
 - b. 15-19 years
 - c. 20-25 years
 - d. >25 years
- 12. When should girls start having sex?
 - a. <10 years
 - b. 10-14 years
 - c. 15-19 years
 - d. 20-25 years
 - e. >25 years
- 13. Do you think boys and girls can avoid sex these days?
 - a. Yes
 - b. No
- 14. In which situation can one not avoid sex?

- 15. Do you think someone can decline having sex?
 - a. Yes
 - b. No
- 16. What are some of the bad effects of sex before marriage?
 - a. Unwanted pregnancy
 - b. STI/HIV/AIDS
 - c. Death
 - d. Others (specify)_____
- 17. What problems do boys face so that they accept unwanted sex?

- 18. What problems do you think girls face so that they accept unwanted sex?

D. SOCIAL DETAILS

- 1. Have/ Do you smoke(d) cigarettes before?
 - a. Yes
 - b. No
- 2. If yes to 1 above, for how long?

- a. Less than 1 year
 - b. 1 – 5 years
 - c. More than 5 years
3. If yes to 1 above, how many sticks in a day?
 - a. Less than 3
 - b. 3 – 5
 - c. 5 – 10
 - d. More than 10
 - e. I stopped
 4. Have/ Do you take(n) alcohol?
 - a. Yes
 - b. No
 5. If yes in 4 above, for how long have you taken?
 - a. Less than 1 year
 - b. 1 – 5 years
 - c. More than 5 years
 6. How often do you take alcohol?
 - a. Less than once per week
 - b. 1 – 2 times per week
 - c. More than thrice per week
 - d. I stopped
 7. Have you tried any other substance of abuse?
 - a. Yes
 - b. No
 8. If yes, which one? _____
 9. How often do you take it?
 - a. Less than once per week
 - b. 1 – 2 times per week
 - c. More than thrice per week
 - d. I no longer take

E. ECONOMIC DETAILS

1. Who gives you your pocket money?
 - a. Parents
 - b. Relatives
 - c. Boyfriend
 - d. I earn it myself
 - e. Other (specify) _____
2. How much are you given/ how much do you earn per month?
 - a. Less than 500
 - b. 500-1000
 - c. 1000-2000
 - d. More than 2000
3. If working, what do you do? _____

4. If getting money from a boy/girlfriend, what is there occupation?

5. Who buys the nice things you have?
- Parents
 - Myself
 - Relatives
 - Boyfriend/Girlfriend
 - Other friends
 - Other (specify)_____
6. Have you ever had sex in exchange for gifts?
- Yes
 - No
7. If yes, what were you given?
- Gift (specify)_____
 - Money

F. PERCEPTIONS OF SELF

SELF ESTEEM SCALE

(For each question, circle what you feel applies to you)

- | | | | | |
|---|----------------|-----|----|---------------|
| 1. Overall, I feel satisfied. | Definitely yes | Yes | No | Definitely no |
| 2. Sometimes I feel I'm not any good. | Definitely yes | Yes | No | Definitely no |
| 3. I believe there are some positive things about me. | Definitely yes | Yes | No | Definitely no |
| 4. I'm able to perform as well as others do. | Definitely yes | Yes | No | Definitely no |
| 5. I feel I have very little to be proud of. | Definitely yes | Yes | No | Definitely no |
| 6. I feel useless sometimes. | Definitely yes | Yes | No | Definitely no |
| 7. I feel I'm equally worthy like others. | Definitely yes | Yes | No | Definitely no |
| 8. I wish I could respect myself more. | Definitely yes | Yes | No | Definitely no |
| 9. Overall, I feel like I'm a failure. | Definitely yes | Yes | No | Definitely no |
| 10. I very positive towards myself. | Definitely yes | Yes | No | Definitely no |

FEMALE DATA COLLECTION QUESTIONNAIRE (to be used on female students)

STUDY NUMBER

--	--	--

A. SOCIO – DEMOGRAPHIC CHARACTERISTICS

1. What is your age in completed years?

--	--

2. What is your level of education?

- a. Form 1
- b. Form 2
- c. Form 3
- d. Form 4

3. What is your marital status?

- a. Married
- b. Single
- c. Other _____

4. What type of family do you come from?

- a. Monogamous
- b. Polygamous

5. Do you live with both of your parents?

- a. Yes
- b. No

6. If no, why

- a. Deceased
 - i. Father deceased
 - ii. Mother deceased
 - iii. Both deceased
- b. Separated
- c. Never been together

7. If in a single parent home, which parent do you live with

- a. Father
- b. Mother

8. If in a polygamous home, how many wives does your father have?

- a. One
- b. Two
- c. More than two

9. What is your father's occupation?

- a. Unemployed
- b. Self employed
- c. Salaried employment
- d. Casual labourer

10. What is your mother's occupation?

- a. Unemployed
- b. Self employed
- c. Salaried employment
- d. Casual labourer

11. How is your relationship with your parents?

- a. Harmonious
- b. Not good

12. Which religion are you?

- a. Catholic
- b. Protestant
- c. Muslim
- d. Others (please specify) _____

B. SEXUAL HISTORY

1. Have you ever had sex?

- a. Yes
- b. No

2. If yes,

a. How old were you when you first had sex?

--	--

b. What made you have sex that first time?

c. How many sexual partners have you had in your life

--	--

3. When did you last have sex?

- a. Within the last 3 months
- b. More than 3 months
- c. Never had sex

2. Do you currently have a boy/girlfriend? Underline the relevant sex.

- a. Yes
- b. No

3. If yes, how old is he?

--	--

4. Is he from the same school?

- a. Yes
- b. No

5. As appertains your girl/boyfriend, tick the appropriate response (can be more than one)

- a. Is younger than you

- b. Is older than you
 - c. Is the same age
 - d. Is married
 - e. Is single
6. Do you feel fulfilled in this relationship?
- a. Yes
 - b. No
7. Is he employed?
- a. Yes
 - b. No
8. For how long in months have you been together
- | | |
|--|--|
| | |
|--|--|
9. Have you had other sex partners while with your current friend
- a. Yes
 - b. No
10. Have you ever had an abnormal urethral discharge?
- a. Yes
 - b. No
11. How frequently do you have intercourse with your partner?
- a. <3 times a week
 - b. 3 or more times a week
12. In terms of media, what you know about sex, where did you learn it from (You can choose more than one response, and number them from the most influential source to the least)
- a. Magazines
 - b. Movies
 - c. Music videos
 - d. Internet
 - e. Books
 - f. Others (specify) _____
13. What time in the woman's month do you expect ovulation
- a. During her period
 - b. Immediately after her period
 - c. In the middle of her month
 - d. At the end of the month
 - e. No idea
14. What are some of the risks of having sex without using condoms
-
-
15. Which STDs (sexually transmitted diseases) do you know about?
-
-

16. How does one get infected?

17. Can getting an STD affect one's fertility in future?
a. Yes
b. No
c. Don't know
18. The woman owes her female features to the
a. Ovary
b. Uterus
c. Don't know
19. It is ok to have sex without using condoms
a. Yes
b. No
20. Is family life education taught in your school?
a. Yes
b. No
21. If yes, what are some of the benefits you've gotten from (what are some of the things you like about) family life education?

22. From whom would you rather get information on sexuality from
a. Parents
b. Teachers
c. Pastors
d. Sunday school teachers
e. Older children
f. Peers
g. Media
h. Others (specify)_____
23. Have you watched pornography or viewed images with sexual content?
a. Yes
b. No
24. In the current teaching of family life, what else would you like included

25. Most of what you know about sex, where did you learn it from?

26. Have you ever gone to a youth clinic?
a. Yes

- b. No

C.SEXUAL HEALTH PERCEPTIONS

1.If you have a personal problem, who do you go to for advice?

a.Parents

- a. Teachers
- b. Friends
- c. Sisters
- d. Brothers
- e. Relatives

f. Other (specify)_____

2. Do you discuss sex-related issues with your parents?

- a. Yes
- b. No

3. If yes, which of the parents?

- a. Father
- b. Mother
- c. Both

4. If you do not discuss such issues, why?

- a. Not free to discuss with my parents
- b. They assume we are taught in school
- c. Other (specify)_____

5. Who else do you discuss sex-related issues with?

- a. School teacher
- b. Friends
- c. Sisters
- d. Brothers
- e. Relatives
- f. Nobody
- g. Other (specify)_____

6. If you have a girl/boy-friend, do your parents know about it?

- a. Yes
- b. No

7. If yes, what is their reaction?

- a. Approve
- b. Do not approve
- c. No reaction

8. In your society is sex before marriage allowed?

- a. Yes
- b. No

9. Do you think sex before marriage is right for boys?

- a. Yes

- b. No
- 10. Do you think sex before marriage is right for girls?
 - a. Yes
 - b. No
- 11. When should boys should start having sex?
 - a. 10-14 years
 - b. 15-19 years
 - c. 20-25 years
 - d. >25 years
- 12. When should girls start having sex?
 - a. <10 years
 - b. 10-14 years
 - c. 15-19 years
 - d. 20-25 years
 - e. >25 years
- 13. Do you think boys and girls can avoid sex these days?
 - a. Yes
 - b. No
- 14. In which situation can one not avoid sex?

- 15. Do you think someone can decline having sex?
 - a. Yes
 - b. No
- 16. What are some of the bad effects of sex before marriage?
 - a. Unwanted pregnancy
 - b. STD/HIV/AIDS
 - c. Death
 - d. Others (specify) _____
- 17. What problems do you boys face so that they accept unwanted sex?

- 18. What problems do you think girls face so that they accept unwanted sex?

D. OBSTETRIC DATA

- 1. Have you ever gotten pregnant?
 - a. Yes
 - b. No
- 2. If yes to question 1 above, what was your age at first pregnancy (in completed years)?

--	--

If answer to question 1 is b, skip to section C.

3. How many children were born after 7th month of pregnancy (dead or alive)?
4. How many pregnancies were lost before the 7th month?

--	--
5. Date of last menstrual period
a. Date _____ Month _____ Year _____
b. Not known
6. Which year was your last delivery?

--	--	--	--
7. Was your last pregnancy by the same partner?
 - a. Yes
 - b. No
8. Where did you deliver?
 - a. Health facility
 - b. Home
 - c. By the roadside
 - d. Others (specify) _____
9. In case of abortion, was it spontaneous or induced
Spontaneous = 1, Induced = 2

--	--
10. Was uterine evacuation done?
 - a. Yes
 - b. No

E. GYNAECOLOGIC DATA

1. How old were you when you received your first menstrual period (in completed years)

--	--
2. Have you ever used condoms

--	--

 - a. Yes
 - b. No
3. If yes, when did you use condoms
 - a. Every time
 - b. Some of the time
4. Have you used any other family planning method?
 - a. Yes
 - b. No
5. If yes to 7 above, which method (methods)?
 - a. Pills

- b. Implant
- c. 3 monthly injection
- d. Coil
- e. Natural method
- f. Others (Specify) _____

F. SOCIAL DETAILS

1. Have/ Do you smoke(d) cigarettes before?
 - a. Yes
 - b. No
2. If yes to 1 above, for how long?
 - a. Less than 1 year
 - b. 1 – 5 years
 - c. More than 5 years
3. If yes to 1 above, how many sticks in a day?
 - a. Less than 3
 - b. 3 – 5
 - c. 5 – 10
 - d. More than 10
 - e. I stopped
4. Have/ Do you take(n) alcohol?
 - a. Yes
 - b. No
5. If yes in 4 above, for how long have you taken?
 - a. Less than 1 year
 - b. 1 – 5 years
 - c. More than 5 years
6. How often do you take alcohol?
 - a. Less than once per week
 - b. 1 – 2 times per week
 - c. More than thrice per week
 - d. I stopped
7. Have you tried any other substance of abuse?
 - a. Yes
 - b. No
8. If yes, which one? _____
9. How often do you take it?
 - a. Less than once per week
 - b. 1 – 2 times per week
 - c. More than thrice per week
 - d. I no longer take

G. ECONOMIC DETAILS

1. Who gives you your pocket money?
 - a. Parents
 - b. Relatives
 - c. Boyfriend
 - d. I earn it myself
 - e. Other (specify)_____
2. How much are you given/ how much do you earn per month?
 - a. Less than 500
 - b. 500-1000
 - c. 1000-2000
 - d. More than 2000
3. If working, what do you do? _____
4. If getting money from a boy/girl friend, what is there occupation?

5. Who buys the nice things you have?
 - a. Parents
 - b. Myself
 - c. Relatives
 - d. Boyfriend/Girlfriend
 - e. Other friends
 - f. Other (specify)_____
6. Have you ever had sex in exchange for gifts?
 - a. Yes
 - b. No
7. If yes, what were you given?
 - a. Gift (specify)_____
 - b. Money

H. PERCEPTIONS OF SELF

SELF ESTEEM SCALE

(For each question, circle what you feel applies to you)

1. Overall, I feel satisfied.
Definitely yes Yes No Definitely no
2. Sometimes I feel I'm not any good.
Definitely yes Yes No Definitely no
3. I believe there are some positive things about me.
Definitely yes Yes No Definitely no
4. I'm able to perform as well as others do.
Definitely yes Yes No Definitely no
5. I feel I have very little to be proud of.
Definitely yes Yes No Definitely no
6. I feel useless sometimes.
Definitely yes Yes No Definitely no
7. I feel I'm equally worthy like others.
Definitely yes Yes No Definitely no
8. I wish I could respect myself more.
Definitely yes Yes No Definitely no
9. Overall, I feel like I'm a failure.
Definitely yes Yes No Definitely no
10. I very positive towards myself.
Definitely yes Yes No Definitely no

Appendix 4: KEY INFORMANT INTERVIEW GUIDE

– PARENT

Participant number _____

Name of Institution _____

1. What are some of the observed determinants of students having sex in the area?

2. Do young people in this area abuse substances (alcohol, smoking, etc)? If so, which ones?

3. Do you think use of these substances contributes to the young people engaging in early sexual initiation?

4. What is your opinion about young people having sex?

5. What are some of the challenges when trying to help young people as regards sexuality?

6. of the solutions that you propose can be implemented to try and help the young people before they become sexually active and after?

7. Do you think sex education should be taught in schools? Why?

KEY INFORMANT INTERVIEW GUIDE – HEAD OF COUNSELLING IN SCHOOL

Participant number _____

Name of Institution _____

Position _____

1. What are some of the observed determinants of students having sex in your school?

2. Do young people abuse substances in the school (taking alcohol, smoking, etc)? If so, which ones?

3. Do you think use of these substances contributes to the young people engaging in early sexual initiation?

4. What is your opinion about young people having sex?

5. What are some of the challenges when trying to help young people as regards sexuality?

6. What are you or is the school doing currently before youth become sexually active and after?

7. What are some of the solutions that you propose can be implemented to try and help the young people before they become sexually active and after?

8. Do you think sex education should be taught in schools? Why?

KEY INFORMANT INTERVIEW GUIDE – AREA CHIEF

Participant number _____

1. What is the extent to which adolescents in this area engage in sexual practices?

2. What are some of the observed determinants of students having sex in your area?

3. Do young people abuse substances in this area (taking alcohol, smoking, etc)? If so, which ones?

4. Do you think use of these substances contributes to the young people engaging in early sexual initiation?

5. What is your opinion about young people having sex?

6. What is being done to curtail delinquency among young people?

7. What are some of the challenges when trying to help young people as regards sexuality?

8. What are some of the solutions that you propose can be implemented to try and help the young people before they become sexually active and after?

9. Do you think parental monitoring and support can provide a solution to the rising number of young people engaging in early sex?

10. Do you think sex education should be taught in schools? Why?

KEY INFORMANT INTERVIEW GUIDE – COUNTY HEAD OF EDUCATION

Participant number _____

1. What is the extent to which adolescents in this area engage in sexual practices?

2. What are some of the observed determinants of students having sex in your area?

3. Do young people abuse substances in this area (taking alcohol, smoking, etc)? If so, which ones?

4. Do you think use of these substances contributes to the young people engaging in early sexual initiation?

5. What is your opinion about young people having sex?

6. What are some of the challenges when trying to help young people as regards sexuality?

7. What are some of the solutions that you propose can be implemented to try and help the young people before they become sexually active and after?

8. Do you think parental monitoring and support can provide a solution to the rising number of young people engaging in early sex?

9. Do you think sex education should be taught in schools? Why?

KEY INFORMANT INTERVIEW GUIDE – COUNTY HEAD OF REPRODUCTIVE HEALTH

Participant number _____

1. What is the extent to which adolescents in this area engage in sexual practices?

2. What are some of the observed determinants of students having sex in your area?

3. What reproductive health concerns/conditions are seen among young people in the County? _____

4. Are there Youth Centres in the health facilities where young people can access services or do they seek services in the main facility together with the general population?

5. Do young people abuse substances in this area (taking alcohol, smoking, etc)? If so, which ones?

6. Do you think use of these substances contributes to the young people engaging in early sexual initiation?

7. What is your opinion about young people having sex?

8. What are some of the challenges when trying to help young people as regards sexuality?

9. What are some of the solutions that you propose can be implemented to try and help the young people before they become sexually active and after?

10. Do you think parental monitoring and support can provide a solution to the rising number of young people engaging in early sex?

11. Do you think sex education should be taught in schools? Why?

KEY INFORMANT INTERVIEW GUIDE – MEMBER OF THE ABAGUSII CULTURAL COUNCIL

Participant number _____

1. What is the extent to which adolescents in this area engage in sexual practices?

2. What are some of the observed determinants of students having sex in your area?

3. Do you support young people below the age of 18 years engaging in sex?

4. What is your opinion about young people below the 18 years getting married?

5. What are some of the solutions that you propose can be implemented to try and help the young people before they become sexually active and after?

6. Do you think parental monitoring and support can provide a solution to the rising number of young people engaging in early sex?

7. Do you support reintroducing mentorship by elders into the community and would suggest this be done?

8. Do you think sex education should be taught in schools? Why?

Appendix 5: CASE NARRATIVE GUIDE

Introduction: My team and I are from the University of Nairobi, African Women's Studies Centre. We are interviewing young people to find out the issues they face and how best these can be addressed. Participate freely. All views are welcome. I would also like to inform you that I'll be recording the discussions on tape and on paper to ensure that all we say is captured. I would like to reassure you that no one will be identified by name. We shall treat the entire discussion with utmost confidentiality, and we request all of you to do the same for your colleagues. Welcome.

1. Tell me your story.
2. Where do you live?
3. Do you live with both of your parents?
4. What do they do for a living?
5. Do they adequately provide for you and your siblings?
6. What do you think about young people having sex?
7. Have you had sex yourself?
8. How many times have you had sex?
9. How many partners have you had? Tell me about them – their age, occupation and the circumstances around your having sex with them.
10. Tell me about the first time you had sex?
11. Why did you have sex that first time?
12. Did you experience regret and if so, why do you think you felt that way?
13. Do you currently have a boyfriend/girlfriend?
14. How old is she/he?
15. What does he/she do for a living?
16. Does he/she give you gifts?
17. Are you having sex with them?
18. Any particular reason you're having sex with them?
19. Where do you have sex?
20. Do you use condoms?
21. Are you aware of any consequences of having unprotected sex?
22. If so, which ones?
23. Do any of these consequences scare you? If so, why?
24. Do you think you would do things differently if you turned back the clock?
25. What would you do differently?

Appendix 6: FOCUS GROUP DISCUSSION GUIDE

Introduction: My team and I are from the University of Nairobi, African Women's Studies Centre. We are interviewing young people to find out the issues they face and how best these can be addressed. Participate freely. All views are welcome. I would also like to inform you that I'll be recording the discussions on tape and on paper to ensure that all we say is captured. I would like to reassure you that no one will be identified by name. We shall treat the entire discussion with utmost confidentiality, and we request all of you to do the same for your colleagues. Welcome to the discussion.

1. What do you think are some of the most important health issues affecting young people here in Nyamira county?
2. On sexual health, which are some of the most important issues affecting young people in Nyamira county?
3. How serious is the problem of STI, HIV and pregnancies here among the young people?
4. What do young people do to avoid these problems?
5. Any challenges you face when it comes to trying to avoid the problems?
6. How acceptable is it to use contraception by young people?
7. Do you use condoms?
8. What age do young people start having sex and with whom, the type of partners?
9. If in a relationship, what duration of time is considered acceptable before beginning to have sex?
10. What negotiations take place before having sex?
11. Can someone say no?
12. If in need of advice on sexual health, who would you approach?
13. If having relationship problems, who would you discuss them with? Why the preference of one over the other?
14. What organizations are here supporting youth – NGOs, churches, the school itself?
15. Are sexual health services available for you in this area and if so where?
16. What services are offered?
17. Where would you like the services provided? Give all the options>
18. What would stop someone from accessing services in these facilities?
19. Who would you want to provide you with service and the information?
20. What are the feelings of the parents and people generally in the society about young people having sex?
21. How would you describe the social pressure to have sex –is it mild, moderate or intense?
22. From where does the pressure to have sex come from?
23. What happens to those that get pregnant while still in school?
24. Does anything happen to an inschool boy who impregnate a girl?
25. Do students generally drop out of school to go and get married? If this does happen what is the estimated rate (number of students who drop out per year)?
26. What activities do you do in your free time? How do you engage yourself after school?
27. Where do young people generally hangout after school hours?
28. What are your main sources of information on sex?
29. Is the information given through the school system? If not, would you like for it to be taught?

Appendix 7: BUDGET

components	Unit of measure	Duration/Number	Cost (kshs)	Total (kshs)
Personnel				
Research assistant		1	40000	40000
Recording device		1	20000	20000
Printing				
Consent/Assent form		1000	10	10000
Screening form		1000	10	10000
Questionnaires		200	10	2000
Final report		1500	10	15000
Miscellaneous			10000	10000
Airtime			5000	5000
Total				KSH 112000

Appendix 8: WORK PLAN

Activity	a	s	o	n	d	j	f	m	a	m	j	j	a	s	o	n	d	j	f	m	a	m	j	j	a
Thesis proposal writing	■	■																							
Proposal defense			■	■	■	■																			
Data collection							■	■	■	■	■	■													
Data processing and analysis													■	■	■	■	■								
Thesis preparation and defense																		■	■	■	■				
Thesis correction and publication																							■	■	■

Appendix 9: KNH-UON ETHICAL RESEARCH COMMITTEE STUDY APPROVAL



UNIVERSITY OF NAIROBI
COLLEGE OF HEALTH SCIENCES
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Twitter: @UONKNH_ERC https://twitter.com/UONKNH_ERC



KENYATTA NATIONAL HOSPITAL
P O BOX 20723 Code 00202
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Ref: KNH-ERC/A/362

4th October 2018

Dr. Diana Kerubo Ondieki
PhD Candidate
African Women's Study Centre
College of Humanities and Social Sciences
University of Nairobi

Dear Dr. Ondieki

RESEARCH PROPOSAL – DETERMINANTS OF SEXUAL DEBUT AMONG IN-SCHOOL ADOLESCENTS: A CASE OF NYAMIRA COUNTY (P369/05/2018)

This is to inform you that the KNH- UoN Ethics & Research Committee (KNH- UoN ERC) has reviewed and **approved** your above research proposal. The approval period is 4th October 2018 – 3rd October 2019.

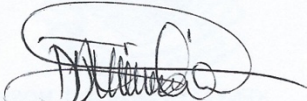
This approval is subject to compliance with the following requirements:

- a) Only approved documents (informed consents, study instruments, advertising materials etc) will be used.
- b) All changes (amendments, deviations, violations etc) are submitted for review and approval by KNH-UoN ERC before implementation.
- c) Death and life threatening problems and serious adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the KNH-UoN ERC within 72 hours of notification.
- d) Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to KNH- UoN ERC within 72 hours.
- e) Clearance for export of biological specimens must be obtained from KNH- UoN ERC for each batch of shipment.
- f) Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. (*Attach a comprehensive progress report to support the renewal*).
- g) Submission of an *executive summary* report within 90 days upon completion of the study. This information will form part of the data base that will be consulted in future when processing related research studies so as to minimize chances of study duplication and/ or plagiarism.

For more details consult the KNH- UoN ERC website <http://www.erc.uonbi.ac.ke>

Protect to discover

Yours sincerely,



PROF. M. L. CHINDIA
SECRETARY, KNH-UoN ERC

- c.c. The Principal, College of Health Sciences, UoN
 The Director, CS, KNH
 The Chairperson, KNH-UON ERC
 The Assistant Director, Health Information, KNH
 Supervisors:; Dr. Dalmas Ochieng Omia, Dr. Wanjiru Gichuhi, Dr. Marygorety Akinyi

Appendix 10: NACOSTI RESEARCH AUTHORIZATION



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/18/82597/23352**

Date: **14th July, 2018**

Dr. Diana Kerubo Ondieki
University of Nairobi
P.O Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *“Determinants of sexual debut among in school adolescents: A case of Nyamira County”* I am pleased to inform you that you have been authorized to undertake research in **Nyamira County** for the period ending **11th July, 2019.**

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

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nyamira County.

The County Director of Education
Nyamira County.

National Commission for Science, Technology and Innovation is ISO9001:2008 Certified

THIS IS TO CERTIFY THAT: DR. DIANA KERUBO ONDIEKI

Permit No : NACOSTI/P/18/82597/23352
Date Of Issue : 14th July, 2018

of UNIVERSITY OF NAIROBI, 0-202

Fee Received :Ksh 2000

NAIROBI, has been permitted to conduct research in Nyamira County

on the topic: DETERMINANTS OF SEXUAL DEBUT AMONG IN SCHOOL ADOLESCENTS:A CASE OF NYAMIRA COUNTY

for the period ending: 11th July, 2019



[Handwritten Signature]
.....

Applicant's Signature

[Handwritten Signature]
Director General
National Commission for Science, Technology & Innovation

Appendix 11: NYAMIRA COUNTY AND SUBCOUNTY RESEARCH APPROVAL LETTERS

REPUBLIC OF KENYA



THE PRESIDENCY

Ministry of Interior and Coordination of National Government

Telephone: 020-2012491

Fax: 058-6144446

Email: cc.nyamira@interior.go.ke

ccnyamira2012@gmail.com

OFFICE OF THE COUNTY COMMISSIONER

NYAMIRA COUNTY

P.O. BOX 2 - 40500

NYAMIRA

When replying please quote our

REF: NYRC/ED.2/VOL.II/188 DATE: 30th January, 2019

All Deputy County Commissioners

NYAMIRA COUNTY

RE: DR. DIANA KERUBO ONDIEKI – UNIVERSITY OF NAIROBI

RESEARCH AUTHORIZATION

Reference is made to letter Ref. No. NACOSTI/P/18/82597/23352 dated 14th July, 2018 from the Director General/CEO, National Commission for Science, Technology and Innovation, Nairobi authorizing *Dr. Diana Kerubo Ondieki* to carry out research on *“Determinants of sexual debut among in school adolescents: A case of Nyamira County.”*

This is to inform you that the planned research will be conducted in Nyamira County, upto *11th July, 2019.*

Kindly accord her the necessary assistance.

A handwritten signature in black ink, appearing to read 'Grace L. Nginda'.

GRACE L. NGINDA

FOR: COUNTY COMMISSIONER

NYAMIRA

Copy to:

National Commission for Science, Technology

& Innovation,

P.O. Box 30623

NAIROBI

County Director of Education

P.O Box 4

NYAMIRA



Telegram: "EDUCATION", Nyamira
Telephone: (058) 6144224

COUNTY DIRECTOR OF EDUCATION
NYAMIRA COUNTY
P.O. BOX 745
NYAMIRA

When replying please quote

NCEO/1/25 VOL.II/97

REF.....

31st January 2019

DATE:

TO WHOM IT MAY CONCERN

RE: AUTHORITY TO CONDUCT RESEARCH BY DIANA KERUBO ONDIEKI

The above named person is a student at **UNIVERSITY OF NAIROBI**. She has been given authority by the National Commission for Science, Technology and innovation to conduct Research on "**DETERMINANTS OF EXUAL DEBUT AMONG IN SCHOOL IN SCHOOL ADOLESCENTS**" in Nyamira County.

The research will commence immediately and end on **11TH JULY 2019**
Please accord her your assistance.

COUNTY DIRECTOR OF
EDUCATION-NYAMIRA
P. O. Box 745 - 40500 NYAMIRA

[Signature]
DATE: 31/01.....SIGN: 2019...

ROBERT ASUTA
FOR; COUNTY DIRECTOR OF EDUCATION
NYAMIRA COUNTY.



REPUBLIC OF KENYA
MINISTRY OF EDUCATION
(STATE DEPARTMENT OF EARLY LEARNING AND BASIC EDUCATION)

When replying Please Quote

Email Address: deomanga4@gmail.com

SUB COUNTY EDUCATION OFFICE
MANGA SUB COUNTY
P.O BOX 3116-40200
KISII

Ref: MG/ED/RES/142/VOL1/18

Date 7th February,2019

To All Headteachers/Principals
MANGA SUB COUNTY

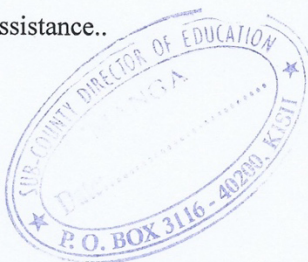
RE: PERMISSION TO CONDUCT RESEARCH, DIANA KERUBO ONDIEKI.

The above mentioned student of Nairobi University has been authorized by this office to carry out Research on “**Determinants of sexual debut among school adolescents**” : A case of Nyamira County”.

Kindly accord her the necessary assistance..

Thank you.


Kanditi M.O
Sub County Director of Education
MANGA



Copy to

County Director of Education
NYAMIRA

MINISTRY OF EDUCATION
STATE DEPARTMENT OF EARLY LEARNING & BASIC EDUCATION

Telegram: "EDUCATION", Nyamira
Email Address: sdenyamira@gmail.com



SUB COUNTY DIRECTOR OF EDUCATION
NYAMIRA SOUTH SUB COUNTY
P.O. BOX 4
NYAMIRA

When replying please quote

Ref.No. NYED/ED/1/88/242

Date: 11th February, 2019

To All Headteacher/Principals
NYAMIRA SUB-COUNTY

RE: RESEARCH AUTHORIZATION – DIANA KERUBO ONDIEKI

The above named student of Nairobi University has been authorized by this office to carry out research on "**Determinants of Sexual Debut among school Adolescents:**" A case of Nyamira County".

The research will commence immediately and ends on 11th July, 2019.

Kindly accord her the necessary assistance

Thank you.

FOR SUB-COUNTY DIRECTOR OF EDUCATION
NYAMIRA SOUTH
P. O. Box 4 - 40500,
NYAMIRA

WALTER AGWARO
FOR: SUB-COUNTY DIRECTOR OF EDUCATION
NYAMIRA SOUTH

Appendix 12: LIST OF SECONDARY SCHOOLS IN NYAMIRA COUNTY

	COUNTY	SUBCOUNTY	NAME OF SCHOOL
1	NYAMIRA	Nyamira North	Biego
2	NYAMIRA	Nyamira North	Egetonto
3	NYAMIRA	Nyamira North	Egentubi
4	NYAMIRA	Nyamira North	Enkinda
5	NYAMIRA	Nyamira North	Endiba Tech
6	NYAMIRA	Nyamira North	Eronge Deb
7	NYAMIRA	Nyamira North	Esanige
8	NYAMIRA	Nyamira North	Gisage
9	NYAMIRA	Nyamira North	Gekonge
10	NYAMIRA	Nyamira North	Gekendo
11	NYAMIRA	Nyamira North	Ikamu
12	NYAMIRA	Nyamira North	Ikonge Boys
13	NYAMIRA	Nyamira North	Ikonge PAG Girls
14	NYAMIRA	Nyamira North	Kaisser Nyamonge
15	NYAMIRA	Nyamira North	Kea SDA
16	NYAMIRA	Nyamira North	Kebabe
17	NYAMIRA	Nyamira North	Kenyoro
18	NYAMIRA	Nyamira North	Kiabonyoru
19	NYAMIRA	Nyamira North	Maagonga
20	NYAMIRA	Nyamira North	Matongo Lutheran
21	NYAMIRA	Nyamira North	Matongo Boys
22	NYAMIRA	Nyamira North	Misambi
23	NYAMIRA	Nyamira North	Mochenwa
24	NYAMIRA	Nyamira North	Ntana
25	NYAMIRA	Nyamira North	Nyagokiani
26	NYAMIRA	Nyamira North	Nyairanga
27	NYAMIRA	Nyamira North	Nyakenimo
28	NYAMIRA	Nyamira North	Nyakenyomisia
29	NYAMIRA	Nyamira North	Nyambiri
30	NYAMIRA	Nyamira North	Nyamiranga SDA
31	NYAMIRA	Nyamira North	Nyamusi Girls
32	NYAMIRA	Nyamira North	Nyamauro
33	NYAMIRA	Nyamira North	Nsicha
34	NYAMIRA	Nyamira North	Nyangoge
35	NYAMIRA	Nyamira North	Omorare PAG
36	NYAMIRA	Nyamira North	Omosaria Academy
37	NYAMIRA	Nyamira North	Riomego SDA
38	NYAMIRA	Nyamira North	St. A. Kenguso
39	NYAMIRA	Nyamira North	St. Francis Kerema
40	NYAMIRA	Nyamira North	St. John Nyakwerema
41	NYAMIRA	Nyamira North	St. Pauls Omonayo
42	NYAMIRA	Nyamira North	Joseph's Nyanchoka
43	NYAMIRA	Nyamira North	Riomego PAG
44	NYAMIRA	Nyamira North	St. Clare Gekendo

45	NYAMIRA	Nyamira North	Tombe
46	NYAMIRA	Nyamira North	Mageri
47	NYAMIRA	Nyamira North	Kiaboyoru Girls
48	NYAMIRA	Nyamira North	Moteoguto PAG
49	NYAMIRA	Nyamira North	Nyasio ELCK
50	NYAMIRA	Nyamira North	Mogongo Girls
51	NYAMIRA	Nyamira North	Kiabiraa Girls
52	NYAMIRA	Nyamira North	Gitwebe
53	NYAMIRA	Nyamira North	Omonono
54	NYAMIRA	Nyamira North	Ibara
55	NYAMIRA	Nyamira North	Iteresi
56	NYAMIRA	Nyamira North	Nyamwachania
57	NYAMIRA	Borabu	AIC Gietai
58	NYAMIRA	Borabu	Eronge SDA
59	NYAMIRA	Borabu	Itumbe
60	NYAMIRA	Borabu	Keginga
61	NYAMIRA	Borabu	Kineni
62	NYAMIRA	Borabu	Manga Girls
63	NYAMIRA	Borabu	Matutu Adventist Prv.
64	NYAMIRA	Borabu	Mecheo
65	NYAMIRA	Borabu	Menyenya
66	NYAMIRA	Borabu	Mogusii
67	NYAMIRA	Borabu	Mwongori
68	NYAMIRA	Borabu	Onsando Girls
69	NYAMIRA	Borabu	Rigoko
70	NYAMIRA	Borabu	St. Gonzaga Gonza
71	NYAMIRA	Borabu	St. James Nyaronde
72	NYAMIRA	Borabu	St. Joseph Lietego
73	NYAMIRA	Borabu	St. Mathias Mulumba
74	NYAMIRA	Borabu	St. Patrick Kahawa
75	NYAMIRA	Borabu	St. Pauls Nyandoche
76	NYAMIRA	Borabu	St. Thomas Moore
77	NYAMIRA	Borabu	Tindereti
78	NYAMIRA	Borabu	Nyansiongo
79	NYAMIRA	Manga	Bogwendo
80	NYAMIRA	Manga	Geke
81	NYAMIRA	Manga	Gesure ELCK
82	NYAMIRA	Manga	Ikobe
83	NYAMIRA	Manga	Kiabiraa
84	NYAMIRA	Manga	Kiamakondo
85	NYAMIRA	Manga	Kiendege
86	NYAMIRA	Manga	Ikonge SDA
87	NYAMIRA	Manga	Irianyi
88	NYAMIRA	Manga	Mokomoni SDA
89	NYAMIRA	Manga	Mokwerero
90	NYAMIRA	Manga	Morako
91	NYAMIRA	Manga	Miriri
92	NYAMIRA	Manga	Nyambaria

93	NYAMIRA	Manga	Nyaikuro
94	NYAMIRA	Manga	Nyaguku
95	NYAMIRA	Manga	Ogango
96	NYAMIRA	Manga	St. Theresa Gekano Prv
97	NYAMIRA	Manga	St. Thomas Gekano
98	NYAMIRA	Manga	St. Andrew Nyamwanga
99	NYAMIRA	Manga	St. Pauls Gekano
100	NYAMIRA	Manga	St. Pauls Nyachichi
101	NYAMIRA	Manga	St. Marys Ekerubo
102	NYAMIRA	Manga	St. Pauls Orotuba
103	NYAMIRA	Manga	Manga Girls Model
104	NYAMIRA	Manga	Tombe Mixed
105	NYAMIRA	Manga	Tombe Girls
106	NYAMIRA	Manga	Nyaisa Manga
107	NYAMIRA	Manga	Sengera Manga
108	NYAMIRA	Manga	Kenyerera PAG
109	NYAMIRA	Manga	Nyabigege
110	NYAMIRA	Manga	Sengereri
111	NYAMIRA	Masaba North	Bocharia
112	NYAMIRA	Masaba North	Esani
113	NYAMIRA	Masaba North	Karantini
114	NYAMIRA	Masaba North	Kebirichi
115	NYAMIRA	Masaba North	Kegogi
116	NYAMIRA	Masaba North	Kerongeta
117	NYAMIRA	Masaba North	Machururiati
118	NYAMIRA	Masaba North	Matutu PAG
119	NYAMIRA	Masaba North	Metamaywa
120	NYAMIRA	Masaba North	Mochenwa
121	NYAMIRA	Masaba North	Mongoni
122	NYAMIRA	Masaba North	Nyakongo
123	NYAMIRA	Masaba North	Nyamakoroto
124	NYAMIRA	Masaba North	Nyankoba
125	NYAMIRA	Masaba North	Nyariacho
126	NYAMIRA	Masaba North	Nyasumi
127	NYAMIRA	Masaba North	Omoyo Mixed
128	NYAMIRA	Masaba North	Riakworo
129	NYAMIRA	Masaba North	Riamoni
130	NYAMIRA	Masaba North	Rigoma
131	NYAMIRA	Masaba North	Riomanga
132	NYAMIRA	Masaba North	Riosiago
133	NYAMIRA	Masaba North	Riooga
134	NYAMIRA	Masaba North	Riyabe
135	NYAMIRA	Masaba North	St. Albert Girango
136	NYAMIRA	Masaba North	St. Don Bosco
137	NYAMIRA	Masaba North	St. Francis Nyatieko
138	NYAMIRA	Masaba North	St. Anatole Nyanchonori
139	NYAMIRA	Masaba North	St. Cyprian's Biticha
140	NYAMIRA	Masaba North	St. Danes Eronge

141	NYAMIRA	Masaba North	Sungututa
142	NYAMIRA	Masaba North	Nyaibasa
143	NYAMIRA	Nyamira South	Bomorito
144	NYAMIRA	Nyamira South	Bondeka
145	NYAMIRA	Nyamira South	Bonyunyu
146	NYAMIRA	Nyamira South	Bosiango
147	NYAMIRA	Nyamira South	Bugo
148	NYAMIRA	Nyamira South	Ekenyoro
149	NYAMIRA	Nyamira South	Embonga
150	NYAMIRA	Nyamira South	Enchoro
151	NYAMIRA	Nyamira South	Etono
152	NYAMIRA	Nyamira South	Gekomoni
153	NYAMIRA	Nyamira South	Gesiaga
154	NYAMIRA	Nyamira South	Gesore
155	NYAMIRA	Nyamira South	Geta
156	NYAMIRA	Nyamira South	Getaari
157	NYAMIRA	Nyamira South	Gianchore
158	NYAMIRA	Nyamira South	Gucha
159	NYAMIRA	Nyamira South	Kebirigo
160	NYAMIRA	Nyamira South	Kemasare
161	NYAMIRA	Nyamira South	Kenyenya
162	NYAMIRA	Nyamira South	Kiang'inda
163	NYAMIRA	Nyamira South	Kianungu
164	NYAMIRA	Nyamira South	Kuura
165	NYAMIRA	Nyamira South	Makairo
166	NYAMIRA	Nyamira South	Marani
167	NYAMIRA	Nyamira South	Marindi
168	NYAMIRA	Nyamira South	Masosa
169	NYAMIRA	Nyamira South	Mongorisi
170	NYAMIRA	Nyamira South	Motagara
171	NYAMIRA	Nyamira South	Nami
172	NYAMIRA	Nyamira South	Nyabisimba
173	NYAMIRA	Nyamira South	Nyachogochogo
174	NYAMIRA	Nyamira South	Nyachururu
175	NYAMIRA	Nyamira South	Nyagachi
176	NYAMIRA	Nyamira South	Nyaigwa
177	NYAMIRA	Nyamira South	Nyaisi
178	NYAMIRA	Nyamira South	Nyakemincha
179	NYAMIRA	Nyamira South	Nyakeore
180	NYAMIRA	Nyamira South	Nyamaiya
181	NYAMIRA	Nyamira South	Nyameru
182	NYAMIRA	Nyamira South	Nyamira boys
183	NYAMIRA	Nyamira South	Nyamontentemi
184	NYAMIRA	Nyamira South	Nyansabakwa
185	NYAMIRA	Nyamira South	Nyantaro
186	NYAMIRA	Nyamira South	Omosasa
187	NYAMIRA	Nyamira South	Rangenyo
188	NYAMIRA	Nyamira South	Rateti

189	NYAMIRA	Nyamira South	Riamandere
190	NYAMIRA	Nyamira South	Rirumi
192	NYAMIRA	Nyamira South	Senator
193	NYAMIRA	Nyamira South	Sironga