# INFLUENCE OF SEXUAL ATTITUDES, GENDER NORMS AND SEXUAL VALU ES ON THE EDUCATION PARTICIPATION OF SECONDARY SCHOOL GIRLS IN HOMA BAY COUNTY

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Award of the Degree of Doctor of Philosophy in Educational Psychology of Masinde Muliro University of Science and Technology

JULY, 2023

### DECLARATION

This thesis is my original work and has not been presented for examination in any other university.

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# SUPERVISORS' APPROVAL

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# DEDICATION

This thesis is dedicated to my mentor Padre Pio, mystic and priest for his fascinating

teaching on the transcendence of the human spirit in whatever situation.

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#### ABSTRACT

Secondary schooling for girls is associated with much vulnerability. The threat of pregnancy and gender-based inequalities are among the widely studied ones. Sufficient research has yet to be made to understand the underlying attitudes, gender norms and sexual values that instigate these vulnerabilities at an individual level. This study aimed at filling this gap by investigating the influence of sexual attitudes, gender norms and sexual values on the education participation of secondary school girls in Homa Bay County (HBC). The objectives of the study were to determine the influence of sexual attitudes on the educational participation of secondary school girls in HBC, to assess the influence of gender norms on the educational participation of secondary school girls in HBC, and to evaluate the influence of sexual values on the education participation of secondary school girls in HBC. The study adopted a Concurrent Transformative research design- majorly quantitative with an embedded qualitative bit. The study took place in Homa Bay County. The targeted population comprised all secondary school girls in HBC. The sample population was limited to 21315 secondary school girls in the three sub-counties of Ndhiwa, Rachwonyo East and Rachwonyo South. Using Solvin's formula, a sample size of 393 was determined and the respondents were chosen by stratified sampling method from 6 mixed secondary schools and 6 pure girls' schools. Additionally, one guidance/counselling teacher, one principal from each of the participating schools and three sub-county education directors were purposefully included in the study to provide complementary qualitative data. Data from female students was collected by means of questionnaires while interview schedules were used to collect data from the rest of the participants. A pilot study was conducted to ensure instrument efficiency and reliability. Convergent validity for the four latent variables posted a mean average variance extracted (AVE) of 0.561 (education participation), 0.638 (sexual attitude), 0.692 (gender norms) and 0.618 (sexual values). Discriminant validity was confirmed by correlation values less than the square root of the corresponding AVE value. Instrument reliability was confirmed by the composite reliability index of 0.695. The quantitative data was coded and analyzed using SPSS version 24.0. Structural Equation Modelling was used to quantify the relationships between the variables. Qualitative data were analyzed thematically. Data triangulation was done through discussion. The study was guided by Problem Behaviour Theory. The relationship between each of the three independent variables and the dependent variable was found to be statistically significant at a p-value <.001,  $\alpha$ =0.05. Data evidence against the null hypotheses meant that alternative hypotheses were validated. The study found that the sexual attitudes of the majority of the girls in HBC were inclined towards sexual gratification. It also found a significant identification with mothering roles, unquestioning submissiveness to men and eroded confidence in sexual abstinence values. The study noted that these findings do not predict favourable education participation for secondary school girls in Homa Bay County. Based on these findings, the study recommends that school authorities promote the formation of girls' sexual sobriety peer teams (SSPT) that meet regularly to unpack the potential risks/costs of premature sex and blind adherence to certain gender norms. The study poses that interventions to improve girls' education participation in HBC will benefit from these findings. The study recommends similar studies in other counties to gauge the viability of generalizing these findings beyond HBC.

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# LIST OF ABBREVIATIONS AND ACRONYMS

AACSE	Age-Appropriate Comprehensive Sexuality Education
AIDS	Acquired Immune Deficiency Syndrome
AMOS	Analysis of Moment Structure
APA	American Psychological Association
ARHD	Adolescent Reproductive Health and Development
AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CSE	Comprehensive Sex Education
EFA	Exploratory Factor Analysis
FDSE	Free Day Secondary Education
GER	Gross Enrolment Ratio
GPI	Gender Parity Index
HBC	Homa Bay County
HIV	Human Immunodeficiency Virus
KDHS	Kenya Demographic Health Survey
KHSSP	Kenya Health Sector Strategic and Investment Plan
KNBS	Kenya National Bureau of Standards
KNSSP	Kenya National Sector Strategic Plan
КРНС	Kenya Population and Housing Census
MMUST	Masinde Muliro University of Science and Technology
MoEST	Ministry of Education Science and Technology
NACADA	National Authority for Campaign against Alcohol and Drug Abuse
NASRH	National Adolescent Sexual and Reproductive Health
NCATP	National Campaign Against Teenage Pregnancies
NCPD	National Council for Population and Development
NER	Net Enrolment Rate
PBT	Problem Behaviour Theory
RMSEA	Root Mean Square Error of Approximation
SEM	Structural Equation Modelling
SET	Social Exchange Theory
SMC	Squared Multiple Correlations
SPSS	Statistical Package for the Social Sciences

SSPT	Sexual Sobriety Peer Teams
SRH	Sexual and Reproductive Health
SRMR	Standard Root Mean Residual
SSA	Sub-Saharan Africa
STD/STI	Sexually Transmitted Disease/Infection
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization
YSRHEBI	Youth Sexual and Reproductive Health Evidence-Based Interventions

# CHAPTER ONE INTRODUCTION

### 1.1 Background of the Study

Globally, it is estimated that two-thirds of those who have no access to education are girls and women (Aziz, Quraishi & Kazi, 2018). About half a billion women are illiterate due to inadequate, incomplete schooling (Aikman & Unterhalter, 2013). Gender disparities in education participation are not without their aggravators. Adolescent girls face many challenges regarding their secondary school educational advancement (Baliamoune-Lutz & McGillivray, 2015). In the early stages of female development in adolescence, the body goes through several physical changes. In this period, adaptation to rapid physical developments and efforts to cope with these changes can be observed in females (Potki, Ziaei, Faramarzi, Moosazadeh & Shah Hosseini, 2017). It is during this period of adolescence that they have to learn to navigate responsibly against sexual enticements, marriages, work offers in homes and even attractive payments from commercial sex traffickers. These offers come with a price to pay in terms of their educational development (Abuya, Onsomu & Moore, 2014). Given that education has been highlighted as an important tool for social-economic development, girls should not be held back from making maximum use of it.

The majority of the education systems in the world are designed in such a way that entry into teenage brackets coincides with joining secondary or high school. The general societal expectation is that these teenage students will remain focused in school, study hard, pass their examinations, join tertiary institutions and eventually start their careers. Incidentally, it is still during these teenage years that the majority of them attain puberty and adolescence. In this age bracket (13-18), many teenagers begin to develop a great interest in sexual matters, and consequently, they begin to try out adult sexual behaviour while still in school (Gatwiri, 2019). The risk associated with teenage sexual activity includes unplanned pregnancy, HIV infection, Sexually Transmitted Infections (STIs), guilty feelings, and generally low self-esteem (Ogolla & Ondia, 2019). This more often than not result in consequences such as absentia from school, lack of morale for education, suspensions, expulsions, and school dropout culminating in shattered dreams.

Risky sexual behaviours are an ally of gender inequality in education given that girls who engage in risky sexual behaviour are more likely to suffer educational setbacks than those who do not. Risky sexual behaviours are defined as sexual activities that may make an individual liable to the risk of sexually transmitted infections including Human Immunodeficiency Virus (HIV) and unplanned pregnancies (Tesfaye & Agenagnew, 2020). Adolescents are at high risk of developing sexual risk behaviours (Carroll, 2018). Adolescents experience sexuality in diverse ways and include sexual identities, sexual norms, sexual practices and behaviours, feelings, desires, fantasies and experiences related to sexual awareness, arousal and sexual acts, developing intimate partnerships, sexual orientation, sexual feelings as well as culture (Thurston & Allan, 2018; Tiefer, 2018; Benvenuto, 2018; Michels, 2018). Nevertheless, it is the sexuality of the adolescent who is mostly in secondary schools that has gained much interest.

Ombati and Ombati (2012) argue that in Sub-Saharan African countries, the provision of education for boys and girls is uneven, and biased through gender, location, class, and region- resulting in high illiteracy rates for girls and women. The paper posits that political instability and violence, poverty and economic challenges, negative cultural values, female genital mutilation, early marriage, and sexual harassment are some of the

leading contributors to gender inequality in education. Strategies and interventions that have the potential to eliminate gender disparities should be deployed as a matter of urgency. In several countries of the SSA, attendance of girls in secondary education range between 32 to 36% (Ombati & Ombati, 2012), which is lower participation rates compared to boys (Abuya, Onsomu & Moore, 2014). Although some regions in Kenya have recorded improved female participation, the overall gender parity education index remains lower than the global average (Kenya Demographics Health Survey-KDHS, 2014). Low female participation in education has persisted for long periods over the last two decades despite numerous efforts to eradicate barriers that affect the participation of girls in education (Ouma, 2013; Aseta, Ayaga, Ayodo & Sigei, 2016). Despite multiple policy initiatives, and notwithstanding repeated promises of "education for all," several studies have documented gender inequality in secondary school participation in several countries of Sub-Saharan Africa including Kenya (Ombati & Ombati, 2012; Shahidul & Karim, 2015). For instance, Delprato et al. (2015) have studied widely on cultural norms and their impact on the girl's education. Jones and Ramchand (2016) have also given their study evaluation on socioeconomic contexts that affect the education of girls.

Gender inequality that keeps predominantly the girl-child out of school has been identified and discussed in various studies. Leung, Shek, Leung & Shek (2019) points out cultural practices that encourage early marriages, child slavery, child trafficking, prostitution, poverty, and multiple household duties for girls as some of the contributing factors. Girls are seen as a source of wealth that can be earned easily through dowry payments. Equally, girls are seen as a source of cheap labour on the farm for agricultural produce (Muyaka, 2018). In all secondary schools, the proportionate loss between each successive year of schooling is greater for girls than for boys.

Singh, Both, and Philpott (2021) carried out a study in Uganda entitled 'I tell them that sex is sweet at the right time'-A qualitative review of 'pleasure gaps and opportunities' in sexuality education programs in Ghana and Kenya'. The study found that in both countries in countries, educators needed more support to speak out comfortably about sexuality, young people were not getting enough information and hence seeking information elsewhere - including turning to porn. Amongst the CSE facilitators in Ghana and Kenya, some were comfortable with discussing sex and sexuality while others were not. The primary reason for discomfort was religious values and beliefs, particularly around masturbation and sexual diversity (i.e. they believed that these are sinful), and sexual activity among young people outside of marriage, i.e. that it should not take place, or that young people should abstain until marriage. This study exposes how sex education policies can affect either positively or negatively the relationship between the sexual attitudes, gender norms, sexual values, and education participation of girls in secondary schools. Girls who are deprived of comprehensive education on sexuality issues operate in an unsafe environment that puts them at risk and by extension their education at riskespecially in cases where pregnancy occurs or serious STDs, including HIV/AIDS.

Panchaud et al. (2019) carried out a comparative analysis of the policy environment governing school-based CSE in four low- and middle-income countries at different stages of Programme implementation: Ghana, Peru, Kenya, and Guatemala. The study noted that the successful implementation of comprehensive sex education (CSE) programs in schools depend on the development and implementation of strong policy in support of CSE. Their analysis showed that all four countries benefited from a policy environment that, if properly leveraged, could lead to the stronger implementation of CSE in schools. A good implementation can reduce school drop-outs precipitated by pregnancy and early marriages.

As girls become adolescents, especially at the secondary school age, pregnancy becomes a major factor in early withdrawals from school (Hakura et al., 2016). Pregnancy emerges as a major cause of adolescent school girls leaving school, firstly due to its frequency and secondly because the fear of pregnancy pushes some parents to withdraw their daughters from school as they approach puberty (Ahmed, & Bett, 2018). The health implications of teenage pregnancy include a very high risk of death and illness for the adolescent mother and child. A study has shown that secondary school girls who have been pregnant are twice more likely to report poor health than those with no history of pregnancy (Efevbera, Bhabha, Farmer & Fink (2019). The increasing indications of significant levels of illegal abortions, particularly in the urban areas, and related health risks for young women are also discussed widely, suggesting that the pregnancies are not planned and there is a significant demand for contraception among teenagers (KDHS, 2014). Exposure to sexually transmitted diseases, infertility, and vulnerability to HIV/AIDS is now a matter of public concern.

Adolescents face greater adverse complications during pregnancy because they are not fully physiologically and biologically prepared for pregnancy due to among other factors gynecological immaturity and incomplete pelvic growth (Dei, 2016). Other underlying factors include smoking, substance abuse, anemia, malaria, HIV and AIDS as well as other sexually transmitted infections. Adolescents may be disadvantaged in maintaining a healthy pregnancy due to poor health education, inadequate access to antenatal care and skilled birth attendance among other healthcare services, or the inability to afford costs of pregnancy and childbirth. Adolescent pregnancy, whether intended or unintended, increases the risk of maternal mortality and morbidities including complications of unsafe abortion, prolonged labour, delivery, and post-natal period (Mwenje, 2015).

Analyses of interventions through sex education reveal conflicting outcomes. For instance, Sidze et al. (2017) carried out a study in which the aim was to provide a robust, comprehensive analysis of policies and curricula regarding sex education in Kenya and their implementation in secondary schools, with a focus on three geographically and ethnically diverse counties: Homa Bay, Mombasa, and Nairobi. Specific objectives included documenting policies and curricula on sexuality education, describing the implementation of these, assessing the comprehensiveness of the content, examining the opinions and attitudes of students and teachers regarding sexuality education, and providing recommendations to inform the design and implementation of such programs in schools in Kenya and beyond. In their analysis, they found out that there is support for sex education from the Kenyan government, but education-sector policies have largely promoted an abstinence-only approach, which has resulted in a lack of comprehensiveness in the range of topics offered in secondary school curricula. There noted that there is strong support for teaching sexuality education among principals, teachers, and students alike, but the topics that are integrated into compulsory and examinable subjects are limited in scope, and there is little incentive for teachers and students to prioritize them, an observation also supported by Mwenje (2015) and Momanyi, Nyamwange and Nyakan (2019).

Several factors have been associated with adolescent pregnancies. While many adolescents may choose to get pregnant, many pregnancies occur in the context of human rights violations such as child marriage, coerced sex, or sexual abuse (Mwenje, 2015 & Muyaka, 2018). Broader socio-economic factors such as poverty, lack of education, and limited economic opportunities among girls may also contribute to adolescent pregnancy rates. Furthermore, the lack of reproductive healthcare services for adolescents particularly a lack of contraceptive education and affordable, available contraceptive commodities means contraceptive use among married and unmarried adolescents is generally low in developing regions (Negeri, 2014).

Moreover, from the education perspective, these girls who give birth prematurely are often forced to drop out of school for some time to nurture their babies. Again, in scenarios where these girls return to school, their social circumstances crowd up their education focus, leading to poor grades (Mwenje, 2015). In the end, such young mothers end up as housemaids in unstable employment with poor returns. Some studies suggest that girls that drop out of school early do not usually confer to their kids a life of economic security and dignity (Siu-ming et al., 2019). Instead, these young mothers pass on to their kids a cycle of poverty and predispose them to a similar life. If no interventions are made to limit or eradicate these unfavourable situations, a bright future is denied to them with serious socio-economic consequences.

According to the Kenya National Sector Strategic Plan -KNSSP of 2018-2022, Gross Enrolment Ratio (GER) and Net Enrolment Rate (NER) are low even though the GER gained by 16% while the NER gained by 14% between 2013 and 2018. The GER was estimated at 70.3% and NER was estimated at 53.2%, respectively, in 2018. Hence, about

53% of eligible children attend secondary school against the world's average of 65%, and close to 47% of the eligible children do not attend secondary schools- the majority of these being girls. This is attributed to costs; long distances covered to schools; and inadequate facilities, which hinder access to secondary schooling, among other causes.

To remedy the worrisome situation in girls' education, certain interventions have been made by the Kenya government. Way back in 1994, the then-president of Kenya Daniel Moi directed that girls who became pregnant should be re-admitted to the same schools to continue with their education after giving birth (Mwenje, 2015). The 'return to school policy' was hailed as a good intervention which helped many girls complete their educational cycle. But on the negative side, it did entrench the feeling that 'for the girl, it is good enough to finish school'. Good grades were not necessarily targeted in such scenarios (MacNaughton & Koutsioumpas, 2017). Later the policy was adjusted to allow pregnant girls to attend lessons up to as close as possible to delivery. Notwithstanding this move, several studies have shown that many female adolescents do not make it back to school after giving birth, thus leading to low education participation (Ikamari, Izugbara & Ochako, 2013).

Data from Kenya Demographic and Health Survey (2014) shows that 1 in every 5 girls between 15-19 years is either pregnant or already a mother. Statistics from the Global Childhood Report (2019) puts Kenya as the third-highest country in terms of teenage pregnancy at 82 births per 1,000 births. In March 2020, the Government of Kenya responded to a widespread outcry about teenage pregnancy and launched a National Campaign Against Teenage Pregnancies, through the National Council for Population and Development (2020) seeking an end to teen pregnancy and boost the education participation of girls in both primary and secondary schools. The campaign focused on galvanizing communities on the need to end teen pregnancies through awareness and advocacy citing its negativity on socio-economic growth and education of girls.

Other interventions came on the legal front. The 2001 Children's Act outlawed child sex and marriage below the age of 18. Three years later in 2006, 'The Sexual Offences Act went further and criminalized underage sex and attached to it hefty fines and lengthy prison sentences. Finally, the 2010 Constitution of Kenya cemented the right to education under the Bill of Rights that the state guarantees for its citizens. Initiatives such as the issuance of bursaries and free day secondary schooling are part of the state's efforts to provide education to all its citizens at least up to the completion of secondary level (Ouma, 2013). While this has made some success, hidden costs imposed by many school boards and principals continue to make the attainment of this right elusive for girls from economically vulnerable backgrounds.

Regrettably, the statistics of the consequences of teen sexual activity are consistently increasing and are perturbing. For instance, according to Reports from the Kenya National Bureau of Statistics (2020), out of 310,000 abortions that occur every year in Kenya, 16% (49,600) of the admitted cases are teenagers. Against this trend, some scholars argue that romantic and sexual relationships during adolescence are normative and an integral part of adolescent identity development, therefore what the teens need is closer accompaniment and provision of appropriate aid (Irwin & Shafer, 2021). Still, other scholars have supported the use of contraceptives as a remedy (Roudsari et al., 2013), yet others have warned about the effectiveness of placing contraceptives in the hands of teens, whose sexual exploits are majorly unplanned, random and who also lack

the requisite adult maturity (Danieli, Stamatopoulou & Dias., 2018). It is clear that remedies to improve girls' education participation are lost in non-agreement on the best way forward.

Concerning Homa Bay County, the target area for this study, prior conversations with elders and other knowledgeable people about the education of girls in the County confirm awareness of the challenges facing girls in their education. But they are also quick to express helplessness in terms of interventions to improve the situation. Blame is apportioned to parenting styles, poverty, eroded family values and the promiscuous culture that no longer hides anything sexually inappropriate to adolescents. Single-headed families were also identified as breeding grounds for girls that get into premature sexual behaviour. On further probing, the experts acknowledged that some men in the community (Luo) see women (including school-going girls) majorly in terms of sexual gratification, a matter also acknowledged by Lutta (2015). Within such a context, school-going girls are constantly challenged to divert from their educational goals to side issues that eventually erode their educational participation and achievements.

## **1.2 Statement of the Problem**

Girls' education participation is increasingly becoming susceptible to rising trends of sexual activity and incidences of premature pregnancy (Rath & Wadhwa, 2017). Similarly, persistent patriarchal systems of social organization continue to justify gender-based practices that undermine the education participation of girls (Roudsari et al., 2013). The Kenya National Bureau of Statistics (2020) reported that Homa Bay County had a teenage pregnancy rate of 23% in the ages 15-19 in the year 2019, making it the 2<sup>nd</sup> highest among non-arid and semi-arid counties in Kenya. On a national level, several

attempts to remedy the problem through 'return to school policy', guidance & counselling programmes, and the enacting of relevant laws (Children's Act, 2001 & The Sexual Offenses Act, 2006) to bring about sexual sobriety appear to be insufficient (Chepkoech 2018; Mwenje, 2015; Wood et al., 2017).

There is a need therefore to explore additional interventions since the problem is not abating (Birchall et al., 2018; Mlyakado & Timothy, 2014). While considerable research has gone into assessing the impact of pregnancy and gender-based inequalities on the girls' education participation, there has remained limited interest by scholars in trying to understand the underlying attitudes, gender norms and sexual values that engender behaviours that undermine the girls' education participation. A preliminary literature survey suggests that limited research has been carried out on this topic. This study, therefore, filled this gap by investigating the influence of sexual attitudes, gender norms and sexual values on the education participation of secondary school girls in Homa Bay County. Failure to Improved girls' education participation risks their future social and economic wellbeing in terms of attaining good grades and competitive professional training. The knowledge benefits of this study will help guidance and counselling teachers to improve their existing interventions.

### **1.3 Purpose of the Study**

The purpose of the study is to investigate the influence of sexual attitudes, gender norms, and sexual values on the education participation of girls in Homa Bay County (HBC).

# **1.4 Objectives of the Study**

The objectives of the study will be:

- To determine the influence of Sexual Attitudes on the educational Participation of Girls in Secondary Schools of HBC
- 2. To evaluate the influence of Gender Norms on the educational participation of girls in secondary schools of HBC
- 3. To assess the influence of sexual values on the educational participation of girls in secondary schools of HBC

## 1.5 Hypotheses of the Study

The research hypotheses of this study defined in terms of null and alternative will be:

H<sub>0</sub>1: Sexual attitudes do not influence the educational participation of girls in secondary schools of Homa Bay County

 $H_02$ : Gender norms do not influence the educational participation of girls in secondary schools in Homa Bay County.

H<sub>0</sub>3: Sexual values do not influence the educational participation of girls in secondary schools in Homa Bay County.

### **1.6 Significance of the Study**

This study examines the influence of sexual attitudes, gender norms and sexual values on the education participation of secondary school girls in Homa Bay County. Despite the subsidized secondary school education having removed some key hurdles to secondary schooling, still, many girls in secondary schools are not receiving the maximum benefits as envisioned due to several issues that entangle their educational path. It is an open fact that many girls' educational participation and achievements are hampered by entanglement into binding sexual relationships, premature pregnancies and early marriages. And many others are held captive in sexual fantasies that are re-echoed by the sexual media and internet that ultimately divert their focus from pursuing singleheartedly their educational goals.

Three decades ago, a visibly pregnant girl sitting in class was unthinkable. Today it is becoming increasingly normal to encounter such scenarios. While the policy of allowing girl mothers and pregnant girls to continue with their schooling as far as they are able is praise-worthy, education experts and school authorities agree that this phenomenon is undermining these girls' education participation and limiting their opportunities of accessing lucrative training opportunities at tertiary levels because of the poor grades they post.

Secondary schooling coincides with a period in the girls' lives when they grapple with developing acceptable sexual attitudes, gender norms and sexual values for purposes of dealing with sexual matters responsively. Limited research, though, has been carried out to ascertain the influence of these underlying variables on the education participation of secondary school girls. Understanding the influences of these variables on the education

participation of girls will place teachers and school authorities in a privileged position to teach appropriate life skills to their female students so that being female does not necessarily mean being disadvantaged educational-wise. Not countering with researched knowledge may lead to teachers resorting to trial and error methods that are not assured of success.

### **1.7 Assumptions of the Study**

The study made the following assumptions:

- 1. The respondents were willing to participate in the study freely and gave truthful responses.
- 2. The sample of respondents was a representative sample of the larger population and therefore permitted the capture of traits typical of the larger population.
- 3. The procedures deployed to collect, analyze and interpret data were valid and reliable

# **1.8 Scope of the Study**

The scope of this study will be limited to the issues of sexual attitudes, gender norms and sexual values of secondary school girls from Homa Bay County, specifically in the subcounties of Rachwonyo East, Rachwonyo South and Ndhiwa of Homa Bay County. The study will seek to establish the influence of sexual attitudes, gender norms and sexual values on the education participation of girls in the three Sub-Counties above. The unit of analysis are secondary school girls in Homa bay county. The targeted population is about 60,000 students (Homa Bay County Education Director, 2021). The sample population will be limited to secondary school girls enrolled in the sub-counties of Ndhiwa, Rachwonyo East and Rachwonyo South. The Principals and Guidance and Counselling Teachers presenting students in the sample will also be interviewed. The three Sub-County Directors of Ndhiwa, Rachwonyo East, and Rachwonyo South will also be interviewed by the researcher. However, the involvement of guidance and counselling teachers, principals and sub-county education directors in the study is only for purposes of giving evaluative data. The unit of analysis remains secondary school girls as outlined in the methodology in Chapter Three and as specified in the research topic. Therefore, the study's focus was on the secondary school girls in Homa Bay County.

### **1.9 Limitations of the Study**

The findings of this study have to be seen in light of some limitations as enumerated below:

**Sample Bias**: Despite the study following the scientific prescribed process of choosing the sample using a proportionate stratified sampling procedure, the study was still vulnerable to sample bias that may have led to a sample of respondents that did not fully reflect the general population of interest. Therefore, the study recommends that more similar studies be carried out in the future to provide a wider base of findings that can either validate or invalidate the current study's findings.

Limited Research: Prior studies directly relevant to the study were limited, thus denying this study the theoretical foundations for the research questions that were being investigated. Prior studies on the research could have helped the study frame the research questions perhaps differently to fill some of the gaps that had been pointed out. On that account, the study recommends that more related research be carried out not only in Homa Bay County but also in other jurisdictions so that a richer literature review is available to help those whose duty it is to guide girls in secondary schools to focus on their education and avoid pitfalls associated with sexual allurements and other practices that pose risks to their education.

**Methodological Issues:** Analysis of the data revealed the need to have included in the study views of girls in upper primary (standards 7 & 8) and views of their teachers (Principals & guidance masters) since sexual issues and the related variables are already in play before beginning of secondary schooling, and any interventions that seek to ensure girls' secondary education participation moves on smooth must start early and timely.

Limited access to data: Some data of interest to the study from the form four girls could not be accessed due to reasons beyond the study. Their input in the study could probably have affected the study's findings in a certain direction. The study, therefore, recommends that similar studies be undertaken that include all the classes (Form I-IV). The findings of that study can be compared to this study for any similarities and differences.

## **1.10 Theoretical Framework**

The theoretical framework for this study was provided by the Problem behaviour theory (PBT). The study resonated with this theory on account of its ability to explain deviant behaviour among adolescents (Madkour et al. (2010). PBT was originally proposed by Richard Jessor as a way of predicting teen proneness to deviance or unconventionality (Jessor, 2014). He defined 'problem behaviour' as those behaviours that are viewed to be problematic or undesirable during adolescence by adult society. In other words, these are behaviours that elicit either formal or informal social responses designed to control them (Jessor and Jessor, 1977 as cited in Jessor 2001). Within PBT any behaviour may be

deemed a 'problem behaviour' depending on the context in which it occurs and the personal and social consequences with which it is associated. In general, problem behaviours are defined by age and societal norms. For example, an eleven-year-old teen engaging in sex is conceptualized as a social norms' transgression while the same thing for a twenty-one-year-old would be seen as normal. Jessor et al. (2016) defined variables which instigate deviance as *risk factors*, and those which prevent or reduce the likelihood of problematic behaviours occurring as *protective factors*. The theory is useful in predicting proneness to deviant behaviour, such as sexual permissiveness among teenagers. It is also useful in contextualizing deviant behaviours from the perspective of societal cultural norms. Any behaviour may be deemed a problem behaviour depending on the context in which it occurs and the personal and social consequences with which it is associated.

In the context of this study, problem behaviour theory allows the study to level school girl behaviours that are in contradiction to expected behaviours as problem behaviour. Guidance and counselling interventions in schools are provided on the assumption that they enhance the capacity for the girls to practice acceptable and eliminate undesirable behaviour. This approach is based on the fact that the problem behaviour theory holds that behaviour is the balance between the risk factors and protective factors in the individual's life (Peltzer, 2010).

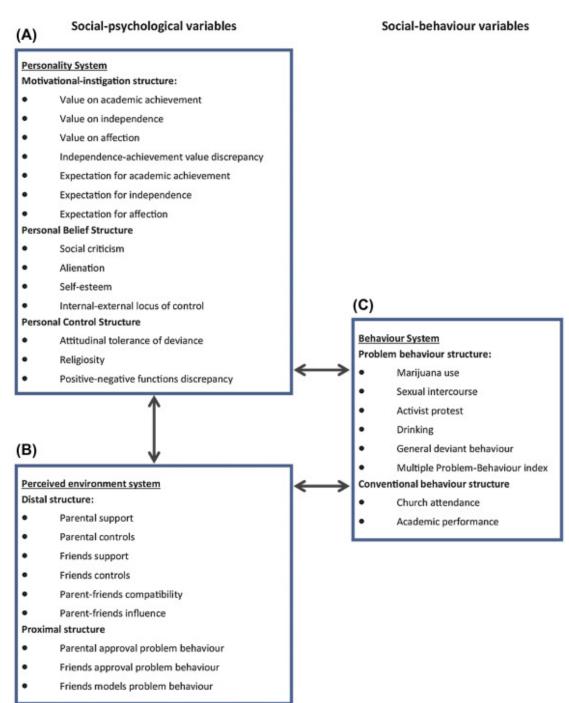


Figure 1.1 Presents a Schematic Representation Of Problem Behaviour Theory

Figure: 1.1: Problem Behaviour Theory Model

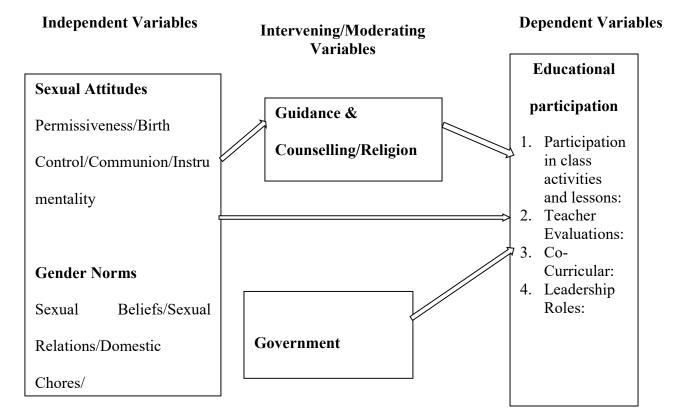
Source: Teenagers: Sexual Health Information, 2020.

The model comprises three systems of psychosocial influences, that is, the personality system (expectations, beliefs, and values), the perceived environmental system (family and peer expectations), and the behaviour system (behavioural structures such as churchgoing and substance abuse. The three systems of the PBT each rely on different variables that either influence the problem (such as sexual permissiveness) to occur or decrease the likelihood of it occurring. Problem Behaviour Theory also specifies that there is significant covariation among adolescent risk behaviour; that is, adolescents who engage in one problem behaviour such as sexual permissiveness are likely to also engage in other problem behaviour, the conventional-unconventional behaviours of the individual must be considered (Jessor et al., 2016). This overall level of proneness is termed psychosocial conventionality and reflects an individual's commitment to the attitudes, values, and expectations of conventional society.

In the context of this study, girls who are prone to sexual permissiveness may be victims of family inappropriate backgrounds or other factors that help to increase the occurrence of unwanted behaviour. A girl focusing on academic achievement and a good career in the future can be seen as benefitting from protective factors that nurture societally acceptable behaviour. On the other hand, non-compliance with expected sexual values for a school-going girl can be interrupted as problem behaviour, one that reflects risk factors in the background.

### **1.11 Conceptual Framework**

A conceptual framework represents the researcher's synthesis of the literature on how to explain a phenomenon (Creswell, 2014). It maps out the actions required in the course of the study, given his previous knowledge of other researchers' points of view and his observations on the subject of research. In other words, the conceptual framework is how the researcher understands of how the particular variables in his study connect. It is the researcher's "map" in pursuing the investigation (Creswell & Creswell, 2018). The conceptual framework for this study is presented in Figure 1.2.



# Figure 1.2: *Conceptual Framework* Source: Researcher, 2021

The first independent variable in the Conceptual Framework is Sexual attitudes. Several empirical studies have reported an association between attitude and behaviour (Barasa,

2014; Kastbom, Sydsjo, Bladh, Prieba & Svedin, 2015). If for example, a girl hold holds the view that her relationship with a boy is 'boring' if there is no sex between them, then her response towards sex when requested by the boy is already compromised. Such a girl will consider sex as part and parcel of the deal with her man. And with that position, she is most at risk since she may not completely have power over the choices the boy makes about her safety in terms of pregnancy and transmission of STDs. Her education participation will be affected in the event she becomes pregnant and is forced to skip lessons.

The next factor that is associated with poor education participation of female students is gender norms that are primarily defined and imposed by men in most cultures (Khaemba, 2015). Cultural norms that demean a woman can negatively affect the educational participation of girls. The predominant inhabitants of Homa Bay County are Luos. According to Ngore (2012), the Luo is a Patriarchal society and men hold higher positions as compared to women. A good example of this is the way the levirate rite (inheriting a widow) is performed with complete disregard for the widow's preferences (Lutta, 2015). A girl socialized in this kind of environment is less likely to challenge a man in matters of sex, and she may become a victim of unsafe sex or sexual violence. This can account for the predominantly higher prevalence of teenage pregnancy in Homa Bay County (Kenya Demographic Health Survey, 2014).

The third independent variable in the conceptual framework is sexual values. Values have been moderately associated with behaviour, including sexual behaviour (Kalmijn & Kraaykamp, 2018). In the context of this study, if a girl's values have placed an unlimited value on money and far less on her values of integrity, then she is likely to hawk herself around in sexual relationships that bring money in for her. HIV/AIDS and other STDs can affect her health negatively and lower her level of education participation in school. In the event of pregnancy, this may require her to drop out of school for a time to care for her baby. This again lowers her educational engagement in school and may lead to low levels of education that are generally associated with poverty (Ninsiima et al., 2018).

The outcome variable in the study is 'education participation. The scale has four subscales. The first is involvement in class activities. Here the areas of interest are the girl's participation in answering questions, doing homework as well as sitting tests. Also included here is her participation in group activities such as discussions and peer presentations in class. The second sub-scale highlights the girls' performance from the teacher's point of view, namely teacher remarks and grades. The third sub-scale focuses on co-curricular activities such as drama, sports, and ball games. Here again, information is sought to gauge to what extent is the girl involved at whatever level, even as little as being part of the cheering squad. This involvement is important as it gives an indicator of the girl's interests and emotional attachment to the school, a key indicator of her overall education participation. And the final sub-scale is the exploration to gain some knowledge regarding the girl's involvement in any leadership roles, even in temporal roles such as acting secretary for a group or for a school club.

The conceptual framework has one intervening variable and one moderating variable. The moderating variable is religion and the intervening variable is government policies. This study adopted Pokhariyal (2019) definitions of intervening and moderating variables. According to Pokhariyal, a moderating variable is generally qualitative in nature (race, gender, religion) but affects the direction and/or strength of the relationship between the predictor variable and the outcome variable. Pokhariyal adds that such influence on the part of the moderator is motivational, persuasive soft in nature. In the context of this study, religious affiliations and doctrines moderate the influence of the predictor variable on the outcome depending on the levels of religiosity in the individual actor. Similarly, Pokhariyal also defines an intervening variable as one that is external to both the predictor variable and the outcome variable but intervenes in the relationship between the two variables. In the context of this study, government policies are identified as interveners because the school authorities have no power over them, they are simply given to them as indicative of the direction of how they should proceed. Neither the students nor teachers have the power of these policies, yet they apply and intervene in the relationships governing the different participants in the school. Concretely, the government policies regarding pregnant girls constantly intervene to ensure that such girls return to resume their studies as soon as they are ready to come back.

In general, Sex education programs aim at improving the girls' knowledge of their reproductive life and preparing them to assume responsibility for their bodies to keep them safe during their schooling life (Dei Jnr, 2016). These are positive interventions and can help a girl exercise oversight responsibility on sexuality and ensure sustainable and acceptable reproductive health. Appropriate and gender-friendly educational policies can help lessen the likelihood of girls getting interrupted due to pregnancies or other sexrelated issues. This will in turn increase female participation in education. National Campaign against Teenage Pregnancies, through the National Council for Population and Development (2020) was launched in March 2020 to mitigate the negative effects on the education of girls caused by teenage pregnancy. The Government through the Ministry of

Education is equally active in encouraging sex education that will equip youth with knowledge, values, skills, and attitudes that will help them make pro-education choices in matters of sexuality and avoid pitfalls that lead to pregnancy and dropping out of school.

# **1.12 Operational Definition of Terms**

- Casual Sex: In the context of this study, it refers to sexual interactions (virginal) that take place between girls of ages 12-19 and their male counterparts.
- Education participation: This refers to the extent to which the girl involves herself in academics, i.e., attendance of lessons/answering questions/class teacher evaluations/doing assignments and tests; co-curricular school activities, i.e., involvement in sports/games/leadership in a particular school where she is enrolled.
- Gender Norms: In the context of this paper, it refers to the standards and expectations of behaviour that girls between the ages of 12-19 years are generally expected to conform to, within a range that defines a particular society, culture, community or school.
- Life Skills The ability of secondary school girls to engage in adaptive and positive behaviour that enables them to deal effectively with the demands of sexual desires or drives.
- Sexual Attitude: In the context of this paper, it refers to the disposition towards engaging in sexual activity by a secondary school girl. This disposition is based on cultural, and family views and previous sexual experience.

- Sex education: This encompasses the provision of information by the school regarding the girl's bodily and sexual development with the aim of empowering her to make informed decisions, including sexual decisions that are appropriate and enhance her overall goal of focusing on her education participation.
- Sexual values: Sexual values in the context of this study are defined as beliefs and principles that a secondary school girl considers to be right and acceptable to govern and characterize her sexual behaviour.
- Sponsor:In this study, a sponsor refers to any male who supports a<br/>girl's education in exchange for sexual favours.
- Sponyo Culture:This refers to widespread acceptance by girls of the notion<br/>that it is normative to have a hidden provider for your<br/>needs and with whom you have a sexual relationship.

# CHAPTER TWO LITERATURE REVIEW

### **2.1 Introduction**

This chapter reviews and examines studies by other researchers on related literature on human and more particularly female sexuality and the educational participation of girls. The study appreciates the scope of the study by other researchers on what has been done and identifies the gaps in the current study.

### 2.2 Sexuality and Adolescents

The majority of the education systems in the world are designed in such a way that entry into teenage brackets coincides with joining secondary or high school. The general societal expectation is that these teenage students will remain focused in school, study hard, pass their examinations, join tertiary institutions and eventually start their careers. Incidentally, it is still during these teenage years that the majority of them attain puberty and adolescence. In this age bracket (12-19), many teenagers begin to develop a great interest in sexual matters, and consequently, they begin to try out adult sexual behaviour while still in school (Gatwiri, 2019).

The risk associated with teenage sexual activity includes unplanned pregnancy, HIV infection, Sexually Transmitted Infections (STIs), guilty feelings, and generally low selfesteem (Ogolla & Ondia, 2019). This more often than not result in consequences such as absentia from school, lack of morale for education, suspensions, expulsions, and school dropout culminating in shattered dreams. Regrettably, the statistics of the consequences of teen sexual activity are consistently increasing and are perturbing. The initiation of romantic and sexual relationships during adolescence is a normative and integral part of adolescent identity development. In the United States, the overwhelming majority of young people have romantic relationships and initiate sexual activity during their high school years; this trend has continued for decades (Prendergast, Toumbourou. McMorris & Catalano, 2019). American adult attitudes toward adolescent sexual behaviour, however, continue to be characterized by fear, concern, and a focus on risk, as evidenced by debates surrounding sex education in schools. Similarly, research on adolescent sexuality is largely focused on preventing sexual risk-taking and negative sexual outcomes, especially in the area of demography (Roudsari et al, 2013). For example, sexual initiation is often characterized as problem behaviour, and the focus is overwhelmingly on contraceptive use, sexually transmitted infections, and pregnancy.

Popular media often glamorize sexual activity and imply that it is appropriate for adolescents; in contrast, virginity pledges, abstinence programs, and other deferred sex campaigns, as well as admonitions from parents, teachers, and other adults increase adolescents' exposure to the view that sex is appropriate only for legally married adults (Dawson, Nic Gabhainn & MacNeela, 2019; Kellner & Share, 2019). Adolescents differentially reinforce these mixed messages: some teens strongly support virginity pledges and abstinence until marriage, whereas others view sex in adolescence as normative (Pound, Langford & Campbell, 2016). Individual teenagers must negotiate these contradictions, and many rely on their close friends and potential close friends to guide the local norms about acceptable behaviours (Pearson, 2018). Recent research using nationally representative data finds that the level of involvement with friends significantly contributes to conceptions of ideal sexual relationships and that these ideals influence whether young people subsequently have sexual intercourse; as the author of the study notes, teens rely on their peers for learning the "the ins and outs of romantic life".

Sidze et al., (2017) found out that nearly half (46%) of students were exposed to at least one topic in five key categories related to sex education, but only 2% of students reported learning about all of the topics that constitute a comprehensive program as defined by international standards. Some messages conveyed to students were reportedly fearinducing and judgmental or focused on abstinence, emphasizing that sex is dangerous and immoral for young people. They noted that students wanted more information on contraceptive methods-including how to use and where to access them-and requested more participatory teaching methods. On the other hand, teachers face significant challenges in the classroom, ranging from lack of time, materials, or resources to perceived community opposition, discomfort, and lack of knowledge or training on the topics. The improvement, systematizing, and scaling up of teacher training are essential to ensure that sex education is delivered accurately, appropriately, and effectively. They acknowledged that sexuality education is just one component in a multifaceted approach to address, and ultimately improve, the sexual and reproductive lives of young people, and recommended that the stakeholders should provide a structured opportunity for adolescents to gain knowledge and skills, to explore their attitudes and values, and to practice the decision making and other life skills necessary for making healthy informed choices about their sexual lives.

Ogolla and Ondia (2019) carried out a study that sought to establish the awareness, perception, and implementation of comprehensive sexuality education (CSE), by 170 teachers in 11 secondary schools in Kisumu central sub-county, Kenya. Purposive and simple random sampling techniques were used. Quantitative data was collected using a self-administered questionnaire and an observation checklist, while qualitative data were collected through key informant interviews using a semi-structured interview guide. The study found low awareness of key topics such as HIV/STIs, condom use, benefits of abstinence, and contraception. Most teachers were not trained in CSE, and CSE is not included in the curriculum. Personal biases, opinions, and values related to sex education threatened the delivery of CSE. Resource materials were also unavailable. The study concluded that teachers acknowledged the need for CSE. However, its delivery is severely inhibited by lack of training, non-inclusion of CSE in the curriculum, inadequate time allocation for CSE lessons, and lack of teaching resources.

Also, personal biases, opinions, and values related to sex education threaten the delivery of CSE. In yet another study, Obare and Birungi (2013) carried out a study in which they explored the sexual and reproductive health (SRH) policy context and the realities facing in-school young people in Kenya. The study based itself on the review of the health and education sector policy documents as well as data from self-administered questionnaires with 3624 male and female students from eight secondary schools in Nairobi. The study's findings showed that although the policies emphasize the right to access accurate SRH information, there were restrictions on the content of messages that can be provided to inschool young people. At the same time, students continued to be exposed to the risks of undesired SRH outcomes and the quest for comprehensive SRH information. The findings suggest the need for policy-makers, parents, teachers, and civil and faith-based organizations to debate the value and content of sex education in schools, without neglecting the input of views and experiences of students who are the intended beneficiaries of such education.

Kenya Demographic Health Survey (2014) says that awareness of AIDS is universal in Kenya. However, only 56 per cent of women and 66 per cent of men have comprehensive knowledge about HIV and AIDS prevention and transmission; that is, they know that both condoms use and limiting sexual intercourse to one uninfected partner can prevent HIV, they are aware that a healthy-looking person can have HIV, and they reject the two most common local misconceptions about HIV: that HIV can be transmitted by mosquitoes and by sharing food. Seventy-two per cent of women and 62 per cent of men know both that HIV can be transmitted through breastfeeding and that the risk.

Sexuality education is a key component in a multifaceted approach to address the high need for sexual and reproductive health information and services among adolescents (KDHS, 2014). Sexuality education policies have been identified as important inputs that help to equip young people with the right knowledge regarding a responsible exercise of their sexuality. This paper has adopted the definition of a moderating variable as given by Pokhariyal (2019). Pokhariyal quoting Baron and Kenny (1986) states that "a moderator is qualitative (e.g., sex, race, class) or quantitative (e.g., level of reward) variable that affects the direction and/or strength of the relationship between independent or predictor variable and a dependent or criterion variable". It can be inferred from this statement that for a research study the relationship to be formulated and then investigated is between independent and dependent variables, which is influenced by the moderator

variable. Such influence in general is motivational and somewhat persuasive as well as soft in nature. Under this section of the literature review, the study will review various studies that have looked at the impact of sexuality policies in Kenya and how they affect the general educational Programme of the students, with particular interest in the girl child in the age bracket of 12-19 years old.

### 2.3 Education Participation of Girls

Numerous reports are indicating that only about one-third of countries have achieved gender parity in education participation at the secondary level (Baily & Holmarsdottir, 2015; Chung, Jeon, Lee, Lee & Yoo, 2018) indicating a crisis that requires pertinent solutions. As there is a continued search for solutions, the goal of eliminating gender disparity in education participation by the year 2005 was missed in 122 countries (Psaki, McCarthy & Mensch, 2017) but achieved in 63% of the developed countries and 37% of the developing countries (Shannon et al., 2019). In Asia, it has been reported that even in countries that are attempting to eliminate gender differences in education, there are personal challenges experienced by individual learners, particularly girls from the low social family background who cannot access substantial education due to low retention in school (Wood et al, 2017). In the analysis, it was revealed that boys' enrolment rates were significantly lower than those of girls in Malaysia, Mongolia, the Philippines, and Thailand (Chapman & Sarvi, 2017; Mundle, 2018). A study carried out in the Philippines observed a marked improvement in gender enrolment following some incentives to improve boys' enrolment and participation in education (Hernandez & Cudiamat, 2018). Likewise, large gender differences in educational participation have been observed in Pakistan (Cheema & Iqbal, 2017). However, there is equal gender participation in Japan

where the government has rolled out programs to ensure that no gender is left behind in secondary education (Goodman, 2015; Sinha Mukherjee, 2015).

The girl child participation in secondary education level in Sub-Saharan Africa has remained rather low (Okeke, Babalola, Byarugaba, Djimde & Osoniyi, 2017). The problems affecting the girl child's participation in education include but are not limited to child labour, early marriage, pregnancy, poverty, lack of sponsorship, the quest for wealth, truancy, family conflicts and children engagement as house helps (Birchall, 2018; Efevbera et al., 2019). According to UNESCO estimates, 65 million girls between the age of 6 and 17 are out of school and 15 million girls of primary school age—half of them in sub-Saharan Africa— will never enter a classroom (UNESCO, 2016). Studies consistently reinforce that girls who face multiple disadvantages — such as low family income, living in remote or underserved locations, disability, or belonging to a minority ethnolinguistic group — are farthest behind in terms of access to and completion of education (Boateng, 2019).

According to a study conducted on education in northern Nigeria, the national summary statistics recorded girls' enrolment rate as low as 22% which was caused by parents' unwillingness to send their daughters to school due to gender discrimination in the family (Unterhalter, Ezegwu, Adedokun, Dodo & Dangaladim, 2017; Babatunde, Omoniwa & Ukemenam, 2019; Walu & Idris, 2019). In Somalia, the gender differences in educational access and participation are quite high and thus local non-governmental organizations engage in educating girls and more so those who have come from poor family backgrounds and those unable to pay school fees (Mohamed, 2015). In Southern Africa,

the enrolment figures in secondary school for girls in Zimbabwe have continued to decline to that of boys (Chikuvadze & Matswetu, 2013).

Mlyakado and Timothy (2014) attempt in their study established the association between sexual relationships and academic performance among secondary schools in Tanzania. A pragmatic approach was used and data were collected from 172 secondary school students. The study found that sexual relationships were present among the students. This was fueled by coercive behaviour and sexual desire. Sexual relations were also found to expose students to social and academic difficulties. The study concludes that sexual relations among students negatively affect their academic performance. The researchers recommended that a close relationship between parents and teachers should be fostered to assist students. Also, school-based sexual and reproductive education should be explored to create awareness among students of the dangers of their sexual activities. This study's variables are relevant to the current study. Its findings will be useful in the analysis of the current study. However, because the data is different due to socio-cultural differences between the two countries, it is necessary to carry out the current study to confirm or dispute such findings.

In Kenya, The Kenya 2010 Constitution (2010), chapter 4 article 53, states that every child has a right to education and forbids discrimination by religion, race, ethnicity, and sex in all areas; education being inclusive. Lack of school fees, cultural factors, socioeconomic backgrounds, type of school, and parental upbringing among others are among the problems affecting the girl child's school enrolment and participation in secondary school (Gatere, Kiumi & Ngugi, 2018). In communities where social-cultural ties were still strong, women were continuing to face discrimination such that they were often viewed for marriage at their tender ages a factor that put focus on their low access to higher levels of learning in most public institutions (Muyaka, 2018). Despite the introduction of FDSE (Free Day Secondary Education) in 2008 by the government of Kenya, the girl child's participation in secondary education continues to be limited (Chepkoech, 2018).

In Kenya, an assessment of education participation of both genders reported that enrolments at the secondary school level increased from 2.0 million in 2013 to 2.9 million in 2018 partly due to the Free Day Secondary School initiative (Kenya National Education Sector Plan of 2018-2022). The same document posits that in 2018, the secondary GER (Gender Enrolment Rate) and NER (Net Enrolment Ratio) were estimated at 70.3 per cent and 53.2 per cent, respectively. This implied that close to 50 per cent of secondary school-going-age children were not enrolled in secondary schools. The same report notes that secondary completion in North Eastern and Coast regions is about 3 times less than in Central and Nairobi. In the North-Eastern and Coast regions, more than 7 out of 10 do not attend up to the end of secondary education, the majority of whom are girls. While factors that hinder access to secondary school education are similar to those highlighted in the primary section, the main hindrances are cost, early marriages, and socio-cultural beliefs that have a gender bias.

The Kenya Demographic Health Survey (2014) acknowledges that not educating girls has a particularly widespread impact on development progress, in part because of the link between low educational attainment, child marriage, and early childbearing, and the risks that they entail for young mothers and their children. The government's projected enrolment growth of 8 per cent in the secondary sub-sector level indicates the need to invest more in secondary education to achieve 100% transition. Childbearing begins early in Kenya, with almost one-quarter of women giving birth by age 18 and nearly half by age 20. Eighteen per cent of adolescent women aged 15-19 are already mothers or pregnant with their first child. In the last five years, teenage pregnancy has remained unchanged (KDHS, 2014).

Hakura et al. (2016) argue out that inequality in education accounts for long-term income gaps between men and women. The lack of a comprehensive education places women in a disadvantaged position economically and promotes dependence on men. (Berhan & Berhan, 2015; LehMiller, 2017). Female sexuality is a powerful tool that may control the emotions, thinking, behaviour, actions, activities as well as overall life of the girl child especially in secondary schools at the adolescent stage. In terms of education, the sexuality of females has been implicated in affecting students' attendance at schools (Morawska, Walsh, Grabski & Fletcher, 2015; Peltzer & Pengpid, 2015) and critical thinking of solutions to the subjects being taught (Kim & Streeter, 2016), socialization with other students and relationships with teachers (Gatere et al., 2018). Available literature suggests that the study of the relationship between human sexuality and educational participation is just beginning to unfold (Mark, Garcia & Fisher, 2015; Cole, 2017), hence the limited studies that have been conducted that link female sexuality and educational participation especially in Kenya. The significance of this study is captured well in Figure 1.1 which gives a glimpse into real numbers both from the perspective of Gross Enrolment Rate (GER) and Net Enrolment Rate (NER).

### Table 2.1

	2014	2015	2016	2017	2018
Males	1,213,300	1,348,500	1,396,900	1,450,800	1,505.300
Females	1,118,400	1,210,500	1,323,600	1,380,000	1,437,400
GPI	0.92	0.90	0.95	0.95	0.95
(Net Diff.)	(94,900)	(138,000)	(73,300)	(70,800)	(67,900)
GER	58.7	63.3	66.8	68.5	70.3
NER	47.4	47.8	49.5	51.1	53.2

Secondary Education Enrolment & Retention in Kenya 2014-2018

Source: National Education Sector Strategic Plan 2018-2022

**GPI**: Gender Parity Index

GER: Gross Enrolment Ratio,

NER: Gender Enrolment Ratio

In some instances, high dropout rates among girls have been reported (Momanyi et al., 2019). Thus, several studies have been devoted to examining barriers affecting girl child participation in secondary schools.

A similar study in Kenya, Kakamega County on the same topic was done by Bwamoni and Namachi (2020) who investigated the degree to which students' exposure to internet pornography affected their academic performance. The study was based on data collected from secondary schools in Kakamega Central Sub County. An ex-post facto research design was adopted to collect qualitative and quantitative data. A sample size of 4073 participants included students; heads of department depart of guidance and counselling, and principals. The results from regression analysis showed that pornographic content from YouTube affected students' academic performance. The study concluded that the academic performance of students was affected by soap operas, YouTube, pornographic literature, and pictures. The researchers recommended that both parents and the government should take an active role to advise students on the dangers of online sex content and to block and prevent access.

Many of the issues of sexuality and its constructs rarely allow students to make the decisions necessary to reach attainment goals. Students most likely to succeed have aligned ambitions, meaning that they have high educational aspirations, complementary educational and occupational goals, and resources and detailed life plans for reaching goals (Kim, Klager & Schneider, 2019). They also understand the sequential nature of life events and the consequences of their actions, leading them to use time wisely and make smart decisions about academic activities. This study extends this concept to female sexuality, which can distract them from academic pursuits mentally or through unintended consequences.

Kashu (2014) investigated gender disparities' impact on academic performance among secondary students in Kenya. The study used KCSE data from the Kenya National Examination Council (KNEC). Kashu used a quantitative method to compare the performance of boys and girls using five-year data (2007-2011). The results showed that boys outperformed girls across subjects and in overall performance. Figure 1.1 below helps us appreciate this reality when looked at from the perspective of gender-based admission into universities.

	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Male	213, 967	259,618	297,813	330,387	302,639
Female	147,412	184,164	212,872	234,120	210,543
GPI	0.69	0.71	0.71	0.71	0.70
(Net Diff.)	(66,555)	(75,454)	(84,941)	(96,267)	(92,096)

 Table 2.2: Enrolment by Gender in Universities in Kenya 2014-2018

Source: KDHS, 2014

# GER=Gross Enrolment Ratio; NER=Net Enrolment Rate; GPI=Gender Parity Index

The conclusion that the study makes is that gender identity impacts the academic performance of girls and boys, and girls appear disfavored. In particular, girls appeared to have a negative attitude towards sciences and mathematics. Girls perceive these subjects to be more suited to boys. The perceived difficulty associated with sciences and mathematics is a factor that holds girls back, thereby reducing their effort in the subjects which consequently weakens their performance. Girls seemed to excel more in Home Science subjects which are regarded as a girls' domain.

### 2.4 Sexual Attitudes and Educational Participation of Girls

Studies reveal that students 'sexual relationship is on the increase and common in most African schools (Bwamoni & Namachi, 2020; Chingtham & Guite, 2017). The trend is gradually changing and the incidence of student-adolescents engaging in a sexual relationship is high and may constitute problems including social, health, and academic. Today's adolescent is different from those of earlier times due to changes in society and exposure to a variety of intellectual pursuits. Studies reveal that students 'sexual relationship is on the increase and common in most African schools (Rath & Wadhwa, 2017). The trend is gradually changing and the incidence of studentadolescents engaging in a sexual relationship is high and may constitute problems including social, health, and academic (Momanyi, Nyamwange & Nyakan, 2019).

Baams et al. (2015) carried out a study in the Netherlands to investigate how perceived realism moderates the relationship between sexualized media consumption and permissive sexual attitudes in Dutch adolescents. This study examined whether the development of sexualized media consumption and permissive sexual attitudes would be more strongly interrelated when adolescents perceived sexualized media images as highly realistic. They used data from a three-wave longitudinal sample of 444 Dutch adolescents aged 13–16 years at baseline. Results from parallel processes and multi-group analyses showed that higher initial levels of sexualized media consumption were associated with a higher initial level of permissive sexual attitudes. The study noted that increases in sexualized media consumption over time were associated with increases in permissive sexual attitudes over time. Findings for male and female adolescents were similar except for the relations between initial levels and subsequent development. Overall, the above results suggest that, in male and female adolescents, those with a high level of perceived realism showed a correlated development of sexualized media consumption and permissive sexual attitudes.

Arulogun, Ogbu, and Dipeolu, (2016) carried out a study in Nigeria on the influence of internet exposure on the sexual behaviour of young persons in an urban district of Southwest Nigeria. This was motivated by the increasing exposure of young people to pornographic materials through the internet. A survey of 413 young persons was done

using a pretested self-administered questionnaire which included questions on internet exposure and its influence on behaviour. Data were analyzed using descriptive statistics, Chi-square test, and logistic regression. The mean age of the respondents was  $21.7 \pm 3.4$ years for males and  $20.9 \pm 3.2$  years for females. The study found that about 72% of the respondents had stumbled upon pornographic sites in the use of the internet. The preferred places where they engaged in these activities were the cybercafé. Post-exposure influence on behaviour included engagement in oral sex (48.3%), body tattoos (18.3%), having multiple sexual partners (11.6%), and homosexuality (5.0%). The study made some recommendations which included bringing cybercafé owners on board to cooperate in limiting access to internet sites that offer pornographic entertainment to young people. This study includes variables also under investigation in the current study. These findings will be useful in the discussions and interpretations of data that the current study will generate.

In a similar study, Edith and & Ahmad-Hadiza (2013) explored Attitude, sexual behaviour, and risk perception to sexually transmitted infections including HIV/AIDS among students of the University of Abuja, Nigeria. The study aimed to assess the attitude, sexual practices, and risk perception of STIs including HIV/AIDS among students of the University of Abuja by determining their level of utilization of available protective measures and the impact of their risk perception on their sexual behaviour. The study adopted a descriptive cross-sectional inquiry. The mean age of the sample respondents was 356. The study found that the participants showed an average/high level of knowledge of STIs (87.4%) and HIV/AIDS (91%). More men (35.1%) used condoms at their last sex than women (28%). More men had sexual partners (23.1%) than women

(14.3%). 2.3% perceived their risk to be high, 44.7% perceived their risks to be below and 41.6% perceived no risk at all. Of those who perceived low and no risk, only 28.7% and 10.1% use condoms regularly and occasionally respectively. The chi-square analyses showed that there were no significant relationships between knowledge of HIV/AIDS and condom use ( $\chi 2=15.5$ ); between gender and condom use ( $\chi 2=9.49$ ); and between gender and having multiple sex partners ( $\chi 2=9.49$ ). However, there was a significant relationship between the perception of the risk of contracting HIV/AIDS and condom use ( $\chi 2=21.02$ ) at P=.05. The study found a low condom use rate, irrespective of the reported high level when engaging in high-risk sex. The Nigerian study further cements the perception that youth behaviour is not necessarily the absence of knowledge, but deeper findings need to be discovered to explain the disconnect between engaging in risky sexual behaviour and not observing safety measures that shield one from STDs and unintended pregnancies. The current study will investigate risky sexual behaviour using a transformative Research design in which the qualitative question is embedded in a mainly quantitative study design. Moreover, because the contexts are different, the gap for research remains open.

In yet another study in Uganda, Neema, Moore and Kibombo (2007) investigated risky sexual behaviour in the face of increased HIV/AIDS threat reported that regardless of their current sexual behaviour, most female adolescents in Uganda feel at great risk of HIV infection. The findings also showed that adolescents from families that have experienced broken marriages were much more vulnerable to high-risk sexual behaviours than other categories of adolescents. These results further emphasized the need for a holistic approach in addressing the social, economic, and contextual factors that merge to create a scenario of hopelessness that operates dangerously on issues of sexual and

reproductive health. The variables of study in the Ugandan case are related to this study's variables thus providing good literature that will be useful in the discussion of this current study's discussions. Nevertheless, the primary perspectives against which risky sexual behaviour is being studied are different. The current study is concerned with risky sexual behaviour from the perspective of addressing gender parity in education.

Negeri (2014) carried out a study on the assessment of risky sexual behaviours and risk perception among youths in Western Ethiopia against the background of family and peer influences. The study applied a comparative cross-sectional design triangulated with a qualitative study. The study reported that over one-third of in-school and 41.4% of outof-school youths reported unprotected sex during the 12 months before the interview. More than one-third of in-school youths (37.1%) reported having two and more than twolifetime sexual partners compared to 32.6% of out-of-school youths. Out-of-school youths feel that they are at higher risk of getting HIV than in-school youths. The findings of the study showed that youths who had high family connectedness were less likely to commence sexual activity as compared to youth with weak family connections. It also found that having pressure from peers to have sex was significantly associated with having multiple sexual partners. The study found that a substantial proportion of out-ofschool youths engaged in risky sexual behaviours than in-school youths. This consequently affected their education participation and, in the end, lowered their overall educational outcomes. This happens because sexually active youth reallocate time they once devoted to academics to thinking about and having sex (Mohamed, 2015). Youth who have sex become preoccupied with the present and heavily discount future outcomes (Siu-ming et al., 2019). As a result, these youths are less likely than abstainers to complete their homework or projects, prepare for tests and exams, or to be interested in college.

Sex is also linked to emotional turmoil, depression, and the facilitation of friendships with academically disinterested peers (Balfe, Hackett, Masson & Phillips, 2019; Naiman, 2019). There is a positive association between teen abstinence and academic outcomes" and offers compelling evidence that sexual abstinence is likely to serve as a protective barrier that insulates the teenager from disruptive and negative influences and enables the teen to better focus on immediate academic performance and longer-term life goals (Barr et al., 2014).

### 2.5 Gender Norms and Educational Participation of Girls

Norms shape the beliefs, attitudes, and behaviours, and influence people's sense of what's acceptable and not acceptable within a community or society at large (McDonald & Crandall, 2015; Bicchieri, 2016). When norms are understood as a key factor that shapes the likelihood of sexual behaviour, one can see more clearly what needs to change and which strategies will be effective. The norms that increase the risk of sexual violence and harassment promote rigid gender norms that associate masculinity with control and femininity with compliance; abuse of power over others; aggression and violence; and the expectation that sexual violence should be treated as a private problem, not a public concern (Bicchieri, 2016).

A study by Aldawid (2010) investigated the factors that influence the attitude of girls to participate in secondary education in Wajir District, Kenya. The descriptive survey research design was used. This included the use of mixed methods. The study focused on all 5 girls' schools in Wajir District and included 280 girls, 28 class teachers, 5 guidance and counselling teachers, and 5 principals. The results showed that the illicit relationship between the girls and teachers, the economic situation of the families, and the lack of formal education among parents affect the girls' attitudes towards secondary education. The study concludes that the illicit relationship between teachers and girls reflects societal biases about the role of women in society and their participation in education. This study studied variables relate to the current study, therefore it offers the current study background for discussion, cross-examination of findings, and a deeper understanding of the existing association between sexual norms and the education participation of girls.

Many studies have revealed that adolescent girls experience a lot of hardships in their educational engagements. A large study carried out in Sweden by Kastbom et al. (2015) involving a sample of 3432 Swedish high school students in which the researchers sought to investigate the relationship between sexual debut before the age of 14 years and certain socio-demographics, sexual experience, health, the experience of child abuses and behaviour at age 18 found a strong positive correlation between the studied variables. As a result, the study concluded that early sexual debut was associated with problematic behaviours during late adolescence, and this vulnerability required attention from parents and healthcare professionals. Therefore, the question of the education participation of girls is a global issue since girls are affected in varying degrees in all cultures.

Skosana, Peu & Mogale, (2020) investigated disconnections and exclusions of parents in the prevention of teenage pregnancy. The study found that teenage pregnancy is associated with poor maternal outcomes, as well as limited school attendance, which may have future financial implications for the family. The study recommended that parents should be actively involved in communicating with their teenagers on sex education and that affordable and accessible youth-friendly services be provided. Parental interventions and poor educational participation of the girls are some of the variables relevant to the current study.

Further insight into this subject can be gained by reviewing the quantitative study carried out by Barasa (2014) in Eldoret Municipality, in which he investigated the influence of attitudes, perceived ability, and self-esteem on secondary school girls' conceptualization of Science Subjects (Physics, Biology, and Chemistry). The study reported a significant correlation between the independent variables and the dependent variable. In the analysis of KCSE performance in the three sciences monitored from 2006 to 2012, the trend showed that girls were consistently outperformed by boys in the three key science subjects. An important detail worth noting is that while the enrolment ratios of girls to boys in Chemistry and Biology were about the same (1:1), in Physics that ratio changes to 1:3 in favour of boys. This was supposedly due to the girl's perception and evaluation that Physics was a difficult subject for ladies, and was best left for men. However, the study did report that the girls' misgivings notwithstanding, the real big roadblock on their way was their poor attitudes, low perceived ability, and poor self-esteem concerning the three Science Subjects. The analysis of age, on the other hand, revealed that younger girls (14-16) had better attitudes towards the three Sciences than the older girls (17-19); thus, hinting at the likelihood of young girls expressing innocence as regards social norms that discourage girls to study sciences while the older girls confirming compliance with the prevailing social norms that regard Sciences as a man's domain. The study made

recommendations with emphasis on further studies that can give more knowledge on the under-achieving of girls in Sciences. The Barasa study (2014) is important to this study because of the close relationship between the variables studied and the variables in the current study.

In another study, Holm (2010) investigated students' gender relations in school over a period of 30 years. Using three inquiry surveys, data was taken from secondary schools in Sweden (1974, 1992, and 2005). The study compared how students experience the power relations between boys and girls, perceive the behaviour of girls and boys in a classroom environment and value various aspects of work and family in their future lives. The findings indicate that certain classroom behaviour is perceived by students as being highly gendered. Although girls took more active roles in the classroom, the study revealed that girls did not improve their status in the gender hierarchy. Instead, as Holm reported, there seemed to remain a general opinion that being male was more favourable than being female. In this study, girls took on such roles as arranging the classroom, being quiet and helping others, and to a larger degree, placing a lot more importance on a family and security in their future lives. Holm further observed that at school, the girls' social position weakened about that of the boys. The interesting finding is that even where girls succeeded in school to their male counterparts, their success was less valued by both their peers and the general society. Holm's concluded that girls are primarily judged based on their gender, and conceded that girls may never attain the same social status as boys.

Another study undertaken by Kessels, Heyder, Latsch, and Hannover (2014) explored how gender differences in academic engagement relate to students' gender identity. Kessel et al. (2014) focused on the boy's limited engagement at school and the underrepresentation of girls and women in subjects like science and Mathematics. The researchers proposed the Interests Identity Regulation Model (IIRM) is an effective tool to aid in understanding gender differences in educational outcomes. The main finding of the study is that: IIRM suggests that the perceived fit between students' gender identity and the gendered social meanings associated with different possible behaviours at school such as choosing a subject, investing effort, or not is relevant empirical for students' directing of their learning activities. The male stereotyping of Mathematics and Science implies a greater non-conformity between girls' gender identity and engagement in these domains. The perception that displaying effort and engagement at school is feminine leads to a non-conformity between boys' gender identity and academic engagement in general. In conclusion, the study noted that efforts to reduce gender disparities in educational outcomes that position students into gendered life-long pathways to qualifications can gain from an understanding of how academic choices are closely related to the gender identity of the students. This study's variables are related to the current study; hence it will offer useful background information for understanding the inherent gender-engineered disadvantages that undermine female participation in secondary education.

Haglund & Fehring (2010) carried out a study that examined the association of religiosity, sexual education, and parental factors with risky sexual behaviours among adolescents and young adults in the USA. Their sample of 3168 included young women and men ages 15-21 years. The data collected data related to the young people's views on the role of religion in their sexual moral decisions. The study revealed that those who

viewed religion as very important had frequent church attendance, and held religious sexual attitudes were 27-54% less likely to have had sex and had significantly fewer sex partners than peers. Participants whose formal and parental sexual education included abstinence and those from two-parent families were 15% less likely to have had sex and fewer partners. Consequently, the study concluded that religiosity, parental, and sexual education were associated with decreased risky sexual behaviours among adolescents. The variables of the study relating to sexual norms are relevant to the current study. In that respect, its findings are important to this study, especially as concerns risky sexual behaviour that may lead young women to drop out of school to become mothers. The current study is of the philosophical view that by and large, too many young girls are dropping out of school due to pregnancy-related issues. A finding that supports this view is significant. Nevertheless, to the extent that the data collected in the study may not be relevant to the Kenyan situation, the study creates a need for research in Kenya.

Chingtham and Guite (2017) investigated parental attitudes towards the education of girls in the Senapati District of Manipur, India. A descriptive survey was used which included the use of mixed methods in the collection and analysis of data. The sample included 100 parents: 50 from rural and 50 from urban. One of the key finds is the cultural lag of parents. Both rural and urban parents hold on to the view that girls are a helping hand in household chores. Girls are regarded as the best caregivers to their siblings. However, the study also showed some disparity between rural and urban parents. Rural parents preferred marriage over education whereas urban parents preferred girls attending school. The main conclusion is that the education level of the parents influences their attitudes towards girls' education. This study is relevant as it provides some insights into some of the factors hindering the education participation of girls in some cultures. The current study since it is being undertaken in the Kenya context will use different data that will provide a good base of knowledge for discussions and making of inferences as regards the finding. Regarding sexuality, sexual norms are often structured around gendered power (Knudson Martin, 2013).

In other instances, the social messages youth receive from those whose lives are linked to theirs, such as parents and peers, regarding the appropriateness of sexual activity, are likely to have a lasting impact on how they view themselves as sexual beings both in high school and later in college (Wong, 2012). Consequently, the behaviour of young people as they move from the high regulation of their natal home to the relatively unregulated environment such as a college dormitory is likely to be heavily influenced by those early messages. Youths also are influenced by their cumulative sexual experiences, the initiation of which for most is in mid to late high school (Carpenter & DeLamater, 2012). In addition, changes in normative expectations regarding sexual behaviour in college may also influence what young people perceive to be "correct" behaviour in their freshmen year (DeLamater, 2012). Finally, cultural messages such as the religious prohibition of sex or contraceptive use which often contribute to cultural and social norms may also help to shape young women's sexual strategies in college (DeLamater & Koepsel, 2015). Ninsiima et al., (2018) carried out a qualitative study of gender norms and sexuality of young adolescents in Uganda under a rather provoking title "Girls have more challenges; they need to be locked up". This study explores the social construction of gender norms from early childhood, and how it influences adolescents' agency. Contrary to the mainstream theory of agency, which focuses on the ability to make informed choices,

adolescents' agency appears constrained by context-specific obstacles. This study adopted qualitative research approaches involving 132 participants. Of these, 44 were indepth interviews and 11 were focus group discussions, parceled out into separate groups of adolescents (12–14 years). The title captures well some of the persistent behaviour attitudes towards girls. The study found that gender norms are established early in life, and have a very substantial impact on young adolescents. Accordingly, the study recommended that teachers and parents should be targeted about values of gender equality. This study is relevant because its variables connect well with the current study that is seeking to determine among others if sexual norms are associated with poor education participation of girls in secondary school. The interventions suggested in the Ugandan study will be useful to the current study's discussions and inferences. However, as with all studies carried out in Kenya, the data may not be relevant to the Homa Bay context. On that account, the current study is necessary. Also, in terms of methodological approach, the Ugandan study deployed a qualitative design- thus missing the value of quantitative data. This current study will deploy a majorly quantitative approach to determine any associations between sexual norms and the education participation of girls in secondary school.

## 2.6 Sexual Values and Educational Participation of Girls

Sexual values are a combination of personal and community beliefs and morals that act as a frame of reference for the girl to distinguish between acceptable sexual behaviour and unacceptable sexual behaviour (Knox, Cooper & Zusman, 2001). Sexual values have been cited in several types of research as significant in guiding sexual behaviour (Wetherill, Neal, & Fromme, 2010). Knox, Cooper, and Zusman (2001) assessed the strength of sexual values in guiding sexual behaviour among college students in the USA. Both men and women were asked to identify the values that guide their behaviour in sexual decision-making. Both women and men were more relativistic (denial of universal truths) than absolutist (acceptance of universal truths) or hedonistic (pleasure-seeking). However, men were six times more hedonistic than women. Other factors significantly associated with hedonism included being over 20, being uninvolved in a relationship, being open to living together, and feeling that divorce was justifiable. The study was designed to identify the social correlates of sexual values among a sample of university students. The data consisted of 620 never married undergraduates at a large southeastern university (USA) who voluntarily completed an anonymous questionnaire designed to assess one's sexual values and the social correlates of such values. The cited study has variables of relevance to this study. The seeking of correlates between sexual behaviour and values relates very closely to this current study. While the former used college university students, the current study will use younger students still in their midadolescence. Moreover, the context of the USA study is different culturally from the context of the current study. The socio-cultural factors informing the cited study contrast sharply with the socio-cultural factors of Homa Bay County which is by and large a typical rural and under-developed area.

And yet another study by Miller, Norton, Fan, and Christopherson (1998) executed a study on pubertal development, parental communication, and sexual values about adolescent sexual behaviours. The study sought to understand adolescent sexual behaviour because of its links to unplanned pregnancies and sexually transmitted diseases. This study analyzed biological and social antecedents of adolescent sexual intentions and behaviours, including age, pubertal development, quality of parent/adolescent communication, and adolescent sexual values. Analyses were based on longitudinal data collected in 1991, 1992, and 1993 from 473 families. Structural equation modelling was used to test direct and indirect effects among the time-ordered variables separately by gender. The study established that for both males and females, parent/adolescent communication quality was related positively to adolescent sexual abstinence values. The study further revealed that abstinence values had a strong negative effect on sexual intentions, and sexual intentions had a significant positive effect on sexual behaviours. Parent/adolescent communication quality was related directly to sexual intentions measured 1 year later among females only. This study again has dealt with variables relevant to the current study. It further cements the importance of parental guidance in the transmission of values, including sexual values. The methodological approach in which the same subjects were repeatedly observed contrasts sharply with the current study's methodological research design of transformative quantitative research design. The sample that will be used to generate data will only be involved once in the study. Also, as it is with other studies outside Kenya, the context is different and the timespan since the cited study was carried out is more than 20 years- thus creating the need to assess the major influences that have emerged with new technology, especially the internet which has opened up immense possibilities for young people to access information globally from the comfort of their phone.

Yet another relevant study was carried out by Ma et al. (2014). Ma et al. sought to find out if Latino cultural values were correlated with greater sexual abstinence for female adolescents. A sample of 226 Latino adolescents of ages 13–16 completed a survey on cultural and sexual variables. The findings indicated that higher levels of Latino cultural orientation were related to greater sexual self-efficacy and fewer sexual partners for female adolescents and greater condom use self-efficacy for both males and females. Greater endorsement of simpatia (belief in interpersonal relationship harmony) was associated with sexual abstinence and greater sexual self-efficacy for all adolescents, and with being older at sexual debut for females. Stronger endorsement of *respeto* (respect towards parents and other authority figures) was correlated with a lower intention to have sex during secondary school and greater condom use self-efficacy. Hence the study recommended that Latino cultural values may serve as protective factors against sexual risk behaviours among Latino youth. The Latino youth study gives the current study a background worth exploring and replicating. The current study will try to establish possible correlations between cultural values and responsible sexual behaviour using a majorly quantitative research design with a limited qualitative question to improve the reliability and validity of data collected through the quantitative design. The Latino study will offer a background for a rich discussion that may reveal similarities and differences between Latino youth and Homa Bay youth who are predominantly Luo by culture and language.

The effects of past sexual experiences may resemble those of other risk behaviours, viewed collectively as a 'problem behaviour syndrome' (Jessor et al., 2016). Engaging in past sexual experience is thought to mark 'transition proneness': early adoption of adult roles (Wesche, Lefkowitz & Vasilenko, 2017). Early sexual activity within a romantic relationship could increase expectations of pregnancy, cohabitation, marriage, and childbearing (Manning, Fink & Trivers, 2018), which will ultimately affect the thoughts

of female students about school attendance (Brown, Manning & Payne, 2017). Early sexual activity and other risk behaviours often accompany adolescent employment, a transitional role that might tempt an adolescent to forgo investment in education.

### 2.9 Summary Literature Review

First and foremost, a literature review has revealed that the variables under study are pertinent and of universal concern. Secondly, female adolescents' education participation is a matter of concern globally, especially in Sub-Saharan Africa. A literature review has also exposed that girls are disadvantaged in education due to a range of psycho-sexual and socio-cultural factors and that attention and deliberate strategies are necessary to remedy the situation. As regards the research gap, a literature review has revealed that so little research has been carried out locally on such a matter of global and local importance. In particular, sexual issues are shrouded in a lot of taboos and many a time these issues are not openly discussed with the concerned parties.

It is evident from the available publications that Homa Bay County has not focused much research on issues of adolescent sexuality, in particular, girls' sexual attitudes, gender norms and sexual values. Mitigating factors such as research knowledge, skills, lack of capacity to conduct research, lack of resources, lack of interest, and generally an overreliance on politicians as sources of information mean real research is often not made. A literature review has also shown a research gap in the methods of inquiry that have been used in other parts of the world. The question under review has been studied mostly through qualitative research designs. This approach limits the understanding of the problem through reliable and verifiable descriptive statistics and the accompanying inferences. These research gaps will be addressed by this study which will deploy the Concurrent Transformative Research Design that allows the problem to be assessed from both the qualitative and quantitative perspectives. The problem of gender disparity in secondary school needs to be understood from a broad perspective to provide effective and timely interventions that will bring the situation under control. Table 2.3 gives a summary of some of the research gaps identified from the literature review.

	Author(s)	<b>Research</b> Topic	Findings	Gaps
1	Singh, Both, and Philpott (2021)	"I tell them that sex is sweet at the right time.' A qualitative review of 'pleasure gaps and opportunities' in sexuality education programmes in Ghana and Kenya	The study found that in both countries (Kenya and Ghana) educators needed more support to speak out comfortably about sexuality, young people were not getting enough information and hence seeking information elsewhere – including turning to porn.	The study sampled only the views of teachers involved in dealing with guidance and counselling on issues of sexuality and sexual reproductive health. The current study collected data from both teachers in guidance and counselling and also the girls (students).
2	Ma, Malcolm, Diaz-Albertini, Klinoff, A. Leeder, Barrientos, and Kibler (2014).	Latino cultural values as protective factors against sexual risks among adolescents	The study found that Latino cultural values were correlated with greater sexual abstinence for female adolescents. Latino cultural values acted as protective factors against sexual risks among adolescents.	The location of the study is in Latin America while this one is in Kenya. The study used a survey research design while this current one used a mixed research design.
3	Skosana, Peu & Mogale, (2020)	Disconnections and exclusions of parents in the prevention of teenage pregnancy: A phenomenological approach	The study found that teenage pregnancy is associated with poor maternal outcomes, as well as limited school attendance.	The study deployed a qualitative descriptive phenomenological study and was carried out in South Africa. The sample size included only parents with children of both genders. The current study is in Kenya and the sample includes girls and teachers.
4	Ninsiima, A. B., Leye, E., Michielsen, K., Kemigisha, E., Nyakato, V. N., & Coene, G. (2018).	Girls Have More Challenges; They Need to Be Locked Up": A Qualitative Study of Gender Norms and the Sexuality of Young Adolescents in Uganda	The study found that gender norms are established early in life, and have a very substantial impact on young adolescents.	The locality is Uganda while the current study's locality is Kenya. The study used a qualitative research design while the current study used a mixed design. The sample size consisted of 12-14-year-olds while the current study used age ranges from 14-20

 Table 2.3: Research Gaps

Source: Literature Review of Current, 2023

# CHAPTER THREE RESEARCH METHODOLOGY

#### **3.1 Introduction**

A research methodology prescribes the type of research design and research methods that should be used. It is generally accepted that there are three research approaches or methodologies: qualitative, quantitative, and mixed methods (Creswell, 2014). This chapter furnishes information, plans, and procedures that will ensure that requisite data following the problem at hand is collected accurately and objectively. It also gives the techniques that are used to summarize and analyze the data to answer the research questions in this study. Concretely, this chapter outlines the research design, area of study, study population, sample size and sampling techniques, instruments for the study, piloting, data collection, data analysis, and ethical considerations guiding the study.

#### **3.2 Research Paradigm**

A research paradigm is a philosophy on which the research rationale is based. This study adopted the pragmatism research paradigm. Creswell (2014), Cecez-Kecmanovic and Kennan (2013) argue that paradigms help researchers to choose the problem of study, the research questions, and the theories to guide the study. For this research, a pragmatism paradigm was adopted for several considerations relevant to the study. Pragmatism recognizes that there are many ways of interpreting the world and that in undertaking research there is no single point of view that can give an exhaustive picture of a phenomenon since there may be multiple entities (Creswell & Creswell, 2018). This is an important observation because this study wanted to treat each respondent's data as a sincere outcome that represents his/her view in relation to the four latent variables investigated in this study. In particular, responses on sexual attitudes, gender norms, sexual values and education participation are variables that are likely to provoke a wide range of views which together help to gain a deeper understanding of the general perspective of the majority of the studied population. Beliefs about sexual attitudes, gender norms and sexual values can be very varied and personal on a wide-spectrum. Creswell and Creswell (2018) affirm that pragmatism has added advantage in that it does not prescribe rigid methods and procedures, a quality very much appreciated by this study. Rather, it gives freedom to the researcher to choose the procedures and techniques that can best solve the research problem. The duo further note that pragmatism allows for the use of several approaches, paradigms, assumptions, and methods to collect and analyze data- a quality very much exploited by this study, which deployed both qualitative and quantitative methods that concurrently generated data which upon triangulation provided a strong case for the findings of the study. The study anticipated that variables about sexual attitudes, gender norms, and sexual values are sensitive issues and, for different people one can expect different perceptions and feelings in their responses. Factors such as family background, religious beliefs, and cultural socialization engender a wide spectrum of beliefs and values, which in turn influence behaviour. Thus reality (or truth) is not likely to be an objective one, but different individuals may hold different truths as realities.

Consequently, this study agrees with the notion that a research paradigm affects every stage of the research from deciding on the research problem to analyzing and interpreting the data (Denzin and Lincoln 2005; Mertens, 2015). In that respect, Creswell and Cresswell (2018) clarifies that a research paradigm consists of ontology, epistemology, and research methodology. In the context of this study, Ontology answers the question

concerning reality: 'Does a single truth exist within the intended research of investigating the influence of sexual attitudes, gender norms and sexual values on the education participation of secondary school girls in Homa Bay County'? Epistemology, on the other hand, asks the question: 'How can we go about it to ascertain the claim that there is truth in this research study'? Research methodology comes in to outline the process of discovering the answer or the reality espoused in the research objectives. This includes the process of data collection and analysis. Research methodology focuses on the various processes and procedures followed to demonstrate that the research results are valid and reliable enough to address research objectives and questions, and ultimately disclose the reality that was concealed in the study. Figure 3.1 below summarizes these relationships.

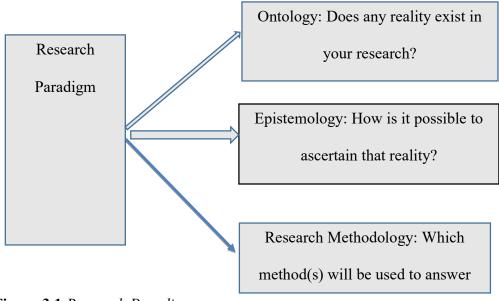


Figure 3.1 *Research Paradigm* Source: Carlstrom, 2020

### 3.3 Research Design

In general, a research design is a plan of inquiry within a qualitative, quantitative, and mixed methods approach that provides specific direction for procedures that will be used to provide answers to the research questions in the study (Mitchell & Jolley, 2012). Consequently, research designs are plans and procedures of research that encompass specific assumptions that disclose and describe methods of collecting data, analyzing, and interpreting it. In that regard, this study adopted Concurrent Transformative design- a predominantly quantitative design with a qualitative bit in order to comprehensively meet the research objectives. The study considered the collection of quantitative and qualitative data as something that would enrich it in terms of getting two independent streams of data that deal with the same reality being investigated. When data triangulating of the two types of data is carried out, a strong position about the results was established. The quantitative aspects in this study were dominant while qualitative ones were complementary.

Clough and Nutbrown (2012) indicate that mixed research methods are complementary to one another whereby the strengths of one method complements the weakness of the other method. In this study, the data were collected concurrently in one phase. Quantitative data was collected using questionnaires while qualitative data was generated using interview guides. In concrete terms, while the students (girls) gave quantitative data through filling and completing questionnaires, their principals, guidance/counselling teachers and area education directors complemented their output with helpful qualitative data. This scenario permitted the study to confirm, cross-validate and collaborate on the findings (Creswell & Creswell, 2018). The Concurrent Transformative research design therefore satisfied the study's aim of not only gaining insight into secondary school girls' sexual attitudes, gender norms and sexual values but also being able to provide motivation to school authorities to use the study's findings to address pertinent issues disclosed by study for the benefit of the education participation of their female students. Hence, the flexibility embedded in the research design allowed views from guidance and counselling teachers, principals and education directors of education to enrich the study from the wealth of their knowledge and experiences. The design allowed the researcher to collect the data from a large sample of secondary school girls, guidance and teachers, principals and area sub-county directors. Guidance and counselling teachers were purposively involved in the study because of their role of being at the fore front in dealing with cases of girls experiencing difficulties in adapting to sexual and cultural challenges associated with adolescence. Principals were involved for their role as major decision and policy implementers of all matters affecting their students.

Issues of sexual transgressions very often reach their desk for determination and final direction. Similarly, sub-county directors oversee schools and receive reports on all issues affecting the students including indiscipline reports and school drop-outs that may be precipitated on the part of girls by sexual transgressions or pregnancy. Therefore, the study gathered facts, knowledge, opinions and judgment from the right people who could easily relate to the issues canvased in the study.

# 3.4 Study Area

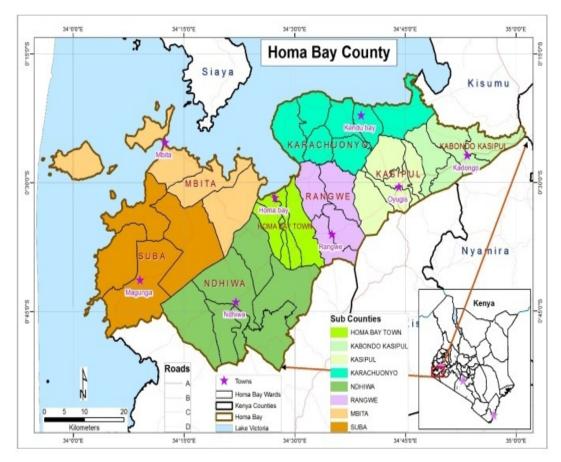
The study area is Homa Bay County. Bryman (2016) affirms in his book that social research takes place within the practical constraints of the real world. Some of the constraints mentioned by Bryman that apply to this study are funding limitations, time

and access to prospective respondents. Similarly, Punch (2014) also states that a research study must be anchored in an area that most typifies the problem that the study is addressing. Merging Bryman's statements and those of Punch, the study options were narrowed down to the areas within the Western Region of Kenya, comprising the counties of Trans Nzoia, Bungoma, Busia, Kakamega, Vihiga, Kisumu, Siaya, Homa Bay, Migori, Kisii and Nyamira. Moreover, these were the areas where the researcher came to a full appreciation of the susceptibility of girls' education participation, thus nurturing this concern into a research problem that this study has addressed. Based on data from the Kenya National Bureau of Statistics, as reported in the Kenya Demographic Health Surveys of 2014 and 2022, Homa Bay county was chosen as the most preferred study location within the Western Kenya Region counties on account of presenting comparatively higher teenage pregnancy rates (15-19 years) in relation to the other counties. According to the report of the National Council for Population and Development (2020), Homa Bay County presented a teenage pregnancy rate of 33% in 2019 which ranked it as the 2<sup>nd</sup> highest nationally. Similarly, Kenya National Bureau Standards as presented in KDHS (2022) reported that Homa Bay County presented a teenage pregnancy of 23% in 2020, making it the 2<sup>nd</sup> highest nationally among non-arid and semiarid counties and the 6<sup>th</sup> highest nationally.

Teenage pregnancy rates have been used in locating the study area because of its strong association with poor education participation of girls in the age bracket of 15 to 19 years (Tesfaye & Agenagnew, 2020). Girls who become pregnant are usually forced to skip school to take care of their babies and other related baby chores that go with it. During this period, learning in school does not stop, hence disadvantaging them when they

resume. Other studies have indicated that a substantial portion of girls who become pregnant do not resume their studies after giving birth (Pound et al., 2016; Danieli et al., 2018). That implies that for such girls, becoming pregnant in reality puts an end to their formal secondary school learning. Such absences have also been linked to the dismal performance of girls in national exams (Siu-ming et al., 2019; Balfe et al., 2019).

Homa Bay County lies between latitudes 0° 15' South and 0° 52' South and between longitudes 34° East and 35° East. The county covers an area of 4,267.1 KM<sup>2</sup> inclusive of the water surface which covers an area of 1,227 KM<sup>2</sup>. The county is located in South Western Kenya along with Lake Victoria where it borders Kisumu and Siaya counties to the North, Kisii and Nyamira counties to the East, Migori County to the South, and Lake Victoria and the Republic of Uganda to the West. Figure 3.2 shows the location of Homa Bay County in Kenya (Homa Bay County Integrated Development Plan, 2018).



**Figure 3.2:** *Map of the Study Area* **Source: Government of Kenya, 2013.** 

The county is subdivided into 8 administrative sub-counties, namely: Homa Bay Town, Ndhiwa, Suba, Rangwe, Rachwonyo North, Rachwonyo South, Rachwonyo East, and Mbita. The predominant inhabitants of Homa Bay County are Nilotic Luos whose language is Dholuo. Nevertheless, the County is also cosmopolitan owing to many people from other parts of the country who live and work there. The Luo is one of the largest ethnic groups in Kenya as per the 2019 Kenya Population and Housing Census (Kenya National Bureau of Statistics, 2020). Throughout the Nineteenth Century, the Luo migrated into the area they now occupy in Kenya. The Luo embrace a range of trades for socio-economic survival. They are farmers; they also rear cattle, sheep, and goats. Along

Lake Victoria, the Luos patronize the lake through fishing- fish is in high demand in the whole country.

The Luo culture is patriarchal and dominates women (Ngore, 2012). One good example of this domination is the way the levirate rite (inheriting of a widow) is done (Lutta, 2015). The male wing of the community appoints whosoever they want and the widow is culturally obliged to cooperate with him as her new husband. The practice was intended to mitigate the sad loss of the husband on the part of the widow and to provide stability and continuity for the bereaved family. However, with the advent of HIV/AIDS, the practice has come under heavy criticism as it acts as an ally of the HIV/AIDS spread (Lutta, 2015). This observation is important because the bigger part of the population of interest in this study is young Luo girls. The socialization they have received and the cultural norms that have been passed on to them may have a significant relationship with the sexual behaviours that contribute to unwanted pregnancies which in turn affect the girl child's educational participation.

# **3.5 Target Population**

The target population are girls in the secondary schools of Homa Bay County, estimated to be in the region of 60,000 (Homa Bay County Education Director, 2020). The target population is the total population about which information is sought and to which the findings of the study can be generalized (Creswell, 2014). Ideally, it is the population at risk from the study's standpoint, and for whom intervention is required to achieve the desired ends (Punch, 2014). Girls in secondary schools were preferred for this study because all of them are at least in the puberty stage, and are grappling to develop appropriate sexual attitudes, gender norms and sexual values (Grunspan et al., 2016).

Secondary school girls are in the sexually active but vulnerable phase of adolescence, where making wrong decisions can have serious repercussions on their education participation. The persistent influence of patriarchal systems of social organization within the Luos of Nyanza (Homa Bay County included) implies that issues that typically affect and undermine women's education such as customary early marriages, early pregnancy (in and out of marriage), heavier domestic and subsistence duties of females (especially in rural areas) generally combine to adversely affect the education participation of girls in secondary schools (Lutta, 2015; Rath & Wadhwa, 2017). Health problems associated with pregnancy, especially for adolescent girls, obviously have a negative effect, as do rising trends of sexual activity in the younger generations where these relationships preoccupy girls and divert their attention from their core business of learning. Kenya Demographic Health Survey 2014 report supports the view that sexual relationships, as well as premature pregnancy, have a negative impact on the education participation of girls.

# **3.6 Sample Population**

The sample population is the actual sampling frame from which the sample size was drawn randomly (Bryman, 2016). The sample population for this study was the 21135 secondary school girls in the sub-counties of Rachwonyo East, Rachwonyo South and Ndhiwa, comprising 21,315 girls enrolled in form I-III. These sub-counties were purposively selected based on the data obtained from the Homa Bay County Health Statistics Office (2020) and Homa Bay County Director's School Returns data office (2019) which indicated that these sub-counties had the highest incidences of teenage pregnancy that affected girls' education participation in the age bracket of 15-19 years.

According to Punch (2014), purposive sampling is a valid method of research especially where the participants are selected according to the needs of the study, which in this case is the need to sample girls that are most typical of that population that is at risk of getting their education affected or disrupted due to sexually-related causes. The unit of analysis was students, while interviews with School Principals, guidance and counselling teachers, and sub-county education directors provided evaluative data. Teenage pregnancy has been highlighted as one of the leading causes of girls dropping out of school or interrupting their studies to attend to pre-natal and post-natal issues (Homa Bay Director of Education, 2020).

#### **3.7 Sample Size Determination and Sampling Procedure**

The sampling procedures and determination of sample size are laid down in the following subsections:

# 3.7.1 Sample Size Determination

The sample size of this study is calculated using Solvin's formula (Israel, 1992). This formula was preferred on account of its ease of use and also was suitable for large sample sizes of more than three hundred participants (Israel, 1992). Further, the margin of error or the allowed probability of committing an error in selecting a small sample representative of the same population, in this case, is set at 5% or 0.05. The study sample was taken from the 3 Sub Counties of Ndhiwa, Rachwonyo East and Rachwonyo South.

Based on Solvin's formula, the sample size was arrived at as shown in the calculation below.

$$n = \frac{N}{1 + Ne^2}$$

Where:

N = sample size required

N = Target population

E = sampling error

Substituting, the relevant values into the formula

n = 21135/1 + 21135\*(0.05\*0.05)

n = 21135/(1+52.8375)

n = 21135/53.8375

n = 392.5702

n = 393 after rounding off to the nearest whole number.

# 3.7.2 Classification of Population into Clusters

The sample population was clustered along parameters of sub-county and school type. School type was classified according to pure girls schools and mixed schools. The population of girls in each cluster (sub-county and school type) was determined based on the sub-county school returns indicators obtained from the data office of the Homa Bay County Director of Education (2020). The determination of sample size was based on the principle of proportionate representation that ensured that the respective population strengths in each cluster are reflected in the sample. Table 3.1 presents the summary of this process.

Sub-County	School	No. of	Pop.	%	Sample Size	Schools to be
	Туре	Sch.				sampled per
						cluster
Ndhiwa	Mixed	39	4385	20.7	81	2
	Pure	7	2849	13.5	53	2
Rachwonyo N	Mixed	49	6210	29.4	116	2
	Pure	5	1887	8.9	35	2
Rachwonyo S	Mixed	31	4137	19.6	77	2
	Pure	4	1667	7.9	31	2
Totals		135	21135	100	393	12

 Table 3.1: Sample Size Distribution Matrix (Counties)

# 3.7.3 Proportionate Stratified Sampling

Within each sub-county, simple random sampling was applied to choose two schools from each cluster of pure girls' schools and mixed schools. Table 3.2 gives the summary of that process.

Sub County	School	Sample	Chosen	Classes	Respondents
	Туре	Quota	Schools	FI-F3	
Ndhiwa	Pure Girls	81	Pure 1	3	41
			Pure 2	3	40
	Mixed	53	Mixed 1	3	26
			Mixed 2	3	27
Rachwonyo E	Pure Girls	35	Pure 1	3	17
			Pure 2	3	18
	Mixed	116	Mixed 1	3	58
			Mixed 2	3	58
Rachwonyo S	Pure	31	Pure 1	3	16
			Pure 2	3	15
	Mixed	77	Mixed 1	3	38
			Mixed 2	3	39
Totals		393	12	36	393

 Table 3.2: Sample Size Distribution Matrix (Schools)

# **3.8 Data Collection Instruments**

The interview guide and questionnaires used in this study were developed by the researcher in close cooperation with the experts both from the Department of Educational Psychology, the School of Education at large and a literature review of similar studies (Luquis, Brelsford, & Rojas-Guyler, 2012; Hendrick, Hendrick, & Reich, 2006; USAID, 2011). The researcher also benefited from open discussions on the topic of teenage sexuality with Guidance and Counselling teachers as well as girls in the age bracket of 13-19. The study collected the required data using questionnaires, guided interviews and audio-recorders. Questionnaires were administered to female secondary school students while guided interviews were conducted for 12 school principals, 12 guidance and counselling teachers and three sub-county education directors. This process enabled the study to collect both quantitative and qualitative data for purposes of meeting the researching objectives.

#### **3.8.1 Questionnaires**

Questionnaires were administered on 393 female secondary school girls in the study sample area. The questionnaire had five parts. The first part enabled the study to capture the respondents' demographics, which included age, family situation/type, religious affiliations and any active engagement in receiving counselling services. Next four parts of the questionnaire enable the study to collect views of respondents on the dependent variable and on each of the three independent variables as presented below:

#### **Education Participation Scale**

This is the outcome variable in this study. Questions cover the key areas of education participation in terms of 'active participation in class, teacher evaluations, co-curricular

activities, and leadership roles. The respondents were required to indicate their level of agreement or disagreement on the psychometric scale of four possibilities: SD (Strongly Disagree- awarding a minimum of 1 score) to SA (Strongly Agree- awarding a maximum of 4 scores). For example, Q1 states, *I always attend all my lessons when I am in school'*, the maximum agreement SA, attracts a maximum of four and the maximum disagreement attracts a minimum of 1 score. Negative questions such as '*I never answer questions in class* will be scored in the reverse, that is, with SD (Strongly Disagree) scoring a maximum of 4 while strongly agreeing to score a minimum of 1.

#### Sexual Attitudes Scale

The Sexual Attitudes Scale was made in close reference to other sexual attitudes scales used elsewhere in similar researches (Hendrick, Hendrick & Reich, 2006); Luquis, Brels, & Rojas-Guyler, 2012; Kimberly, Werner-Wilson & Motes, 2014). The researcher incorporated in the scale the necessary adjustments to take note of the age of the respondents and their cultural uniqueness. The scale covers four main areas of sexual attitude, namely: permissiveness, birth control, communion, and instrumentality. A psychometric scale based on four possible responses is used. The responses range from Strongly Disagree (minimum of 1 score) to Strongly Agree (maximum of 4 scores). Again, as in the previous section, items phrased negatively will be scored in reverse as already demonstrated in the foregoing section.

# **Gender Norms Scale**

The gender norms scale in this study was developed in reference to the GEM (Gender-Equitable Men) scale (Pulerwitz & Barker, 2008; Shattuck et al., 2013). The gender norms scale was subjected to scrutiny and improvements through the input of scholars at both departmental and school defences. The scale contained a list of 15 items on which the respondents responded by ticking the appropriate box that best captured their opinion. The scale adopted the Likert scale format where respondents could choose their most appropriate response on the scale of Strongly Disagree (minimum 1 score) to Strongly Agree (maximum 4 scores). As in the other cases, negative statements were scored in the reverse.

#### **Sexual Values Scale**

There were 15 items for the respondents to respond to. The items covered the key areas of sexual values, namely: Abstinence, Safe relationships, permissiveness, and benefitsdriven sexual values. In the questionnaire, the respondents were invited to choose their most appropriate response on the scale of 'Least Important' (awarding 1 score) to Most Important (awarding 4 scores). For example, in one of the items, this statement is given, '*Abstaining from sex while still in school*'. If the respondent considered this to be the *least important*, she could score 1 mark. And if she considered it to be *most important*, then she could score 4. The least important in this means the respondent attaches yery little value to it, while the most important means the respondent attaches great importance to it.

#### **3.8.2 Interview Guide**

Guidance and counselling teachers were interviewed to gain complementary data on how the school guidance and counselling departments intervene in matters of sexuality issues that affect female students' education. Similarly, principals from schools that presented female respondents were interviewed on account of their overall responsibility and decision-making in the school, and more particularly because the principal bears final responsibility of all school policies, including policies related to issues treated in this study. Therefore, the study was enriched by their insight and view on how sexual attitudes, gender norms, and sexual values affect female students' educational participation. And finally, the three sub-county education directors (Ndhiwa, Rachwonyo North, and Rachwonyo South) were brought on board in this study on account of their responsibility for education in their areas of jurisdiction. The sub-county directors regularly receive data relating to students' performances as well as mutations which make them a privileged source of information concerning the variables of interest in this study.

#### 3.8.3 Audio-Recorders

The study made use of audio-recorder in order to safe-guard the integrity of all verbal information in such a manner that accurate statements can be extracted from them. It was agreed with the respondents that the information would be deleted once an accurate transcription has been made.

#### 3.8.4 Note Books

The study also made use of note books by writing down important statements for purposes of propping for further clarifications. As with audio-data, the study assured the respondents that once a clear record and transcription has been made, the notes will be destroyed. The researcher's quest to gain access to document files was not successful, as principals of the sampled schools considered them restricted information that they could not be released to outsiders.

#### **3.9 Quality Assurance of Research Instruments**

Prior to committing the research instruments to collect data, the study carried out vigorous tests to ascertain their validity and reliability. The following sections outline and explain this process.

#### **3.9.1 Piloting of the Research Instruments**

The pilot phase of the study was conducted in the month of July 2021 in one of the schools in Homa Bay County. The chosen school was excluded from further involvement in the study. The pilot phase of the study involved 40 girls randomly picked but fairly representative in terms of age and level of education (Forms I-III). The pilot school was picked because it was a medium-performing secondary school with the majority of the girls drawn from Homa Bay County, while about 10% were enrolled from outside the county- a feature that was not unique to it. This pilot school gave the researcher access to girls from two backgrounds of interest to the study, namely; day and boarding. The boarding facilities of the pilot school enabled girls from areas outside the county (or far) to study in the school while day school status allowed a larger majority of the girls to come from the immediate neighbourhood. The girls in the pilot school were in the opinion of the researcher a fair representative of the larger population (Homa Bay County) in terms of academic achievement, school type, demographics and socio-economic characteristics.

The researcher also piloted the semi-structured questions in an interview schedule with the principal of the pilot school, the Guidance and counselling teacher to gain confidence and learn interviewing skills for a smooth encounter in later interviews. The researcher took notes in the course of this process to learn from it and improve the instrument. On the whole, the objectives of the pilot study were fourfold (Punch, 2014):

- i. To test the different data collection instruments to remedy any malfunctions ahead of the actual study.
- ii. To develop instruments to measure the key variables of interest to the study (sexual attitudes, gender norms, sexual values and education participation)
- iii. To use the information learned from piloting to improve the instruments in terms of face validity, construct validity, criterion validity and content validity.
- iv. To gain an in-depth understanding of factors affecting girls' education participation with the aim of re-drafting the objectives of the study so that they were clearer and more researchable.

The preliminary objectives that had been developed based on the literature review were refined based on the information gained from the pilot study. For example, as a result of the pilot study, the researcher decided to drop the focus group sessions as it became clear that the students would not be available and schools could not guarantee the availability of their students in a research study for more than half an hour given their tight routines. Covid 19 pandemic had made school programmes rather squeezed on time.

# **3.9.2 Structural Equation Modelling**

Studying the influence of sexual attitudes, gender norms and sexual values on the education participation of secondary school girls in Homa Bay County presented the study with a set of variables that are not only likely related to one another, but also variables encompassing a complex relationship between them. In order to understand fully these relationships and their level of influence on the outcome variable, the study opted to adopt a structural equation modelling (SEM) because of its ability to estimate multiple and interrelated dependence relationships (Teo, Tsai & Yang, 2013), its ability to represent unobserved concepts in these relationships and correct the measurement errors in the estimation process and its ability to define the model to explain the entire set of relationships (Kumar and Upadhaya, 2017). The specified model in the study is already shown in Figure 1.3 in Chapter One. The SEM consists of two parts one the structural and the other measurement. The second part is observed and used to estimate the structural part. The estimates of structural models are observed indirectly. The measurement model gives empirical evidence, while the structural model provides a framework to support the hypothesis

#### **Assumptions of Structural Equation Modelling**

Structural equation modelling requires that multivariate normality, no systematic missing data, sufficiently large sample size, and correct model specification assumptions be satisfied to get precise inferences.

# Multivariate Normality

The study assumed that there is multivariate normality within the datasets. From the preliminary descriptive statistics, the skewness of the data was minimal and the data generally reveals normality. As a result, the final analysis process was based on the maximum likelihood estimation method (Kumar and Upadhaya, 2017). Thus, a linear relationship was drawn between endogenous and exogenous variables using a path diagram (measurement model) with arrows linking them (Structural Equation Modeling, 2023). The measurement model, therefore, ensured that the latent constructs caused the evaluated variables and that the error term is uncorrelated within the measured variables

(Kumar and Upadhaya, 2017). There are two sections of the SEM (the structure and the measurement). The latter is observed indirectly and is usually used for the estimation of the former (Korstanje, 2021). Furthermore, the measurement model produces empirical evidence, while the structural model formulated through a path analysis diagram is used to either validate or reject the hypothesis.

### No Systematic Missing Data

Generally, SEM assumes that each unit of analysis has complete data (Kumar & Kumar, 2015). This assumption was met because the researcher with the assistance of five enumerators properly checked all the questionnaires immediately after the respondents finished filling them to check if sections were missing or not answered accurately. All the datasets representing each manifest factor for each latent variable were responded to precisely and adequately. This was followed by cross-checking of data when coding was done on the computer to check for any missing information and correct them immediately. During the coding process, the researcher used two clerks to do double entry of the same data in two different computers to eliminate chances and then compared them. This ensured that errors or omissions were detected and eliminated before the actual analysis began.

# Sufficiently Large Sample Size

Despite sample size being a critical component of research methodology for structural equation models, there is no consensus in the literature on what is considered an appropriate sample (Kumar & Kumar, 2015). Evidence from studies shows that simple SEM could be tested even with smaller samples; however, normally a sample size of between 100 and 150 should be the minimum for running an SEM test. Some studies use

or consider samples of 200 to 400 as the best for SEM with variables having 10 to 15 factors (Kumar and Upadhaya, 2017). On the other hand, simulation studies indicate that provided there are no missing data and if the datasets are normally distributed, 150 samples should be reasonable for a simple CFA model. Multi-group modelling should have 100 cases/observations per category. This study used a sample of 393, which is sufficiently large enough to give accurate results.

#### Model Fit Indices

Confirmatory factor analysis (CFA) was used to test the adequacy and how well the data fit the hypothesized mode. Tests such as NFI, CFI, GFI, RAMSEA, and Chi-Square values were analyzed. The NFI, GFI and CFI values  $\geq$ .95 are considered good (Kumar and Upadhaya, 2017). For, the RMSEA value should be  $\leq$ .60, which is needed for the best fit (Kumar and Upadhaya, 2017). Results for NFI, GFI, CFI, and RAMSEA values were good for all the latent constructs and their manifest factors. Thus, the model was considered usable for the general population.

#### Mediation, moderation Variables

This study assumed that there exist mediation and moderation effects that directly or indirectly impact the relationship among the constructs and their manifest factors. That is the relationship between the independent latent variables and the dependent one was fully or partially defined or controlled by mediators such as government policy and the religion of the respondents (Kumar and Upadhaya, 2017). Therefore, they could affect the participants' responses, thereby increasing or decreasing the degree of relationship between independent and dependent variables.

#### 3.9.3 Validity

Validity is defined as the extent to which a concept is accurately measured in a quantitative study (Creswell & Creswell, 2018). In this study, two types of validity were considered in conformity with the requirements of structural equation modelling which was used in this study to analyze and interpret the quantitative data (Kumar & Kumar, 2015). The two validities explored were convergent validity and divergent validity (Kumar & Kumar, 2015).

Immediately after data was collected and coded, initial evaluations of the validity of the data were performed to ascertain the quality and accuracy they measure the constructs for the structural equation model (SEM). Validity is the precision of the outcome of the test and it provides accurate be interpreted (Jain & Chetty, 2021). Convergent validity was used to assess the correlation between responses of different factors of each construct. Furthermore, it reveals whether the manifest factors are associated with the latent construct being measured. Excellent outcomes are reflected when the factors have a strong correlation with their respective latent constructs (Hamid, 2017). Convergent validity was established by assessing the *average variance extracted (AVE)* as it explained the degree to which items are shared between constructs and the thresholds is AVE  $\geq$  0.50 respectively (Sujati, 2020; Ahmad, 2016). All the manifest factors for each latent construct had AVE > .5; the values as shown in Table 3.3 below surpassed the expected benchmark indicating a strong and plausible relationship.

Latent Construct	<b>Manifest Factors</b>	Average Variance Extracted
		(AVE)
Educación Participación	E1	0.620
	E2	0.593
	E3	0.772
	E4	0.513
	E5	0.567
	E6	0.814
	E7	0.525
	E8	0.509
	E9	0.798
	E10	0.566
	E11	0.823
	E12	0.795
	E13	0.527
	E14	0.874
	E15	0.535

 Table 3.3: Convergent validity for Education Participation

	<b>Table 3.4:</b>	Convergent	validity for	<sup>.</sup> Sexual	Attitude
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Latent Construct	<b>Manifest Factors</b>	Average Variance Extracted (AVE)
Sexual attitude	S1	0.523
	S2	0.531
	S3	0.540
	S4	0.501
	S5	0.823
	S6	0.902
	S7	0.672
	S8	0.580
	S9	0.769
	S10	0.505
	S11	0.661
	S12	0.521
	S13	0.860
	S14	0.612
	S15	0.570

Latent Construct	Manifest Factors	Average (AVE)	Variance	Extracted
Gender Norms	G1	0.511		
	G2	0.803		
	G3	0.600		
	G4	0.852		
	G5	0.843		
	G6	0.874		
	G7	0.812		
	G8	0.785		
	G9	0.573		
	G10	0.502		
	G11	0.561		
	G12	0.887		
	G13	0.517		
	G14	0.531		
	G15	0.728		

**Table 3.5:** Convergent validity for Gender Norms

Table 3.6: Conv	ergent validitv	tor	Sexual	Values
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Latent Construct	<b>Manifest Factors</b>	Average Variance Extracted (AVE)
Sexual Values	SV1	0.550
	SV2	0.791
	SV3	0.509
	SV4	0.545
	SV5	0.722
	SV6	0.508
	SV7	0.552
	SV8	0.802
	SV9	0.591
	SV10	0.544
	SV11	0.592
	SV12	0.621
	SV13	0.631
	SV14	0.504
	SV15	0.811

Discriminant/Divergent Validity

It tests the construction of latent variables by trying to show the distinction between one latent construct from the other. This was done by running a correlation test between the three independent variables (sexual attitudes, gender norms, and sexual values) (Jain &

Chetty, 2021). The correlation values between different variables were less than the square root of the AVE values for each set of associations. This demonstrated that divergent validity existed among the latent constructs (Sujati, 2020). The results of the tests are displayed in Table 3 7 below.

Latent Construct	$\sqrt{(AVE)}$	DV value
Sexual attitudes <>Gender norms	0.524	0.428
Sexual attitudes <i>S</i> exual values	0.538	0.417
Gender norms $\iff$ Sexual values	0.446	0.401

**Table 3.7:** Divergent validity between the three independent constructs

#### **3.9.4 Reliability of the Research Instrument**

The consistency of the measuring outcomes was tested to ascertain the likelihood of its reliability. This was done using the composite method to reveal how well factors underlying construct constructs behaved in structural equation modelling (Karakaya-Ozyer, 2018). This was conducted using confirmatory factor analysis (CFA). The estimation was based on the interpretation of the factor loading values for all the manifest factors for each latent construct (Lerdpornkulrat et al., 2017). A factor should have composite reliability (CR) value greater than 0.5 to be considered reliable and plausible (Tentama & Anindita, 2020). Therefore, all the manifest factors that had a reliability coefficient equal to or greater than 0.5, for each latent construct were deemed good. The CFA factor loading result for factors that met the threshold for each construct is displayed in Table 3.8 below.

Latent Construct	<b>Manifest Factors</b>	Factor Loadings > 0.5
Education participation	E3	0.79
	E6	0.67
	E9	0.77
	E11	0.65
	E12	0.65
	E14	0.66
	E15	0.63
Sexual attitudes	S5	0.58
	<b>S</b> 6	0.66
	S9	0.98
	S13	0.92
Gender norms	G2	0.78
	G4	0.81
	G5	0.63
	G6	0.74
	G7	0.72
	<b>G8</b>	0.61
	G12	0.75
	G15	0.52
Sexual values	SV2	0.61
	SV5	0.69
	SV8	0.66
	SV15	0.50

 Table 3.8: Reliability of the Research Instrument

#### 3.9.5 Trustworthiness of the Qualitative Data

This research had an overlapping qualitative approach due to the qualitative bit that was collected from guidance and counselling teachers, principals and sub-county education directors. Hence the need for assurance of the tools deployed to collect qualitative data. To provide a different set of criteria that can be used for ascertaining the quality, Lincoln & Guba (1985) as captured by Amankwa (2013) created a corresponding set of criteria for the trustworthiness of qualitative research, namely: credibility (vs. internal validity), transferability (vs. external validity), dependability (vs. reliability) and confirmability (vs. objectivity).

### Credibility

Credibility is the extent to which research outcomes are judged to be reasonable, accurate and believable. Credibility depends on the richness of the data and analysis and can be enhanced by triangulation (Gunawan, 2015), rather than relying on sample size aiming at representing a population. Experts generally point out four types of triangulations as introduced which can also be used in conjunction with each other: additive

- 1. Data triangulation using different sources of data, e.g., from existing research
- 2. Methodological triangulation using more than one method, e.g. mixed methods approach, however with a focus on qualitative methods
- Investigator triangulation using more than one researcher adds to the credibility of a study to mitigate the researcher's influence
- 4. Theoretical triangulation using more than one theory as a conceptual framework

In the present study, credibility was realized through the use of multiple sources of information for the verification of the data obtained. The first principal source was a literature review of related studies, seeking information from knowledgeable people such as principals of schools, teachers in schools and education directors of education in Homa Bay County. Additionally, the research also used a mixed-method research approach that created two independent streams of information on the same topic. This enriched and broadened the understanding of the variables in the study. Finally, the input of the supervisors and other experts from the department ensured that broad and accurate data was realized.

#### Dependability

Dependability is used to measure or demonstrate the consistency and reliability of the study results (Connelly, 2013). This involves tracking and refining the precise methods that were used for data collection, analysis and interpretation and providing adequate contextual information about each piece so that the study could theoretically be replicated by other researchers and generates consistent results (Amankwaa, 2016). In the current study, this quality was achieved through the proper selection of information-rich participants (Guidance & Counselling teachers, school principals and sub-county education directors). In addition, all the participants were properly prepared by giving them a short explanation of what the study was all about, and its potential benefits. Above all, they took part in the study willingly and were informed of the confidentiality clauses. Their views were taped to guarantee that their views will be transcribed accurately.

## Confirmability

This is the degree of neutrality in the research study's findings (Gunawan, 2015). In other words, this means that the findings are based on participants' responses and not any potential bias or personal motivations of the researcher. This involves making sure that researcher bias does not skew the interpretation of what the research participants said to fit a certain narrative (Connelly, 2013). To establish confirmability, qualitative researchers can provide an audit trail, which highlights every step of data analysis that was made to provide a rationale for the decisions made. In the current study, the researcher established confirmability by audio-taping the participants, then making summaries of their main points which he put back to them to check their accuracy and

whether they could endorse those summaries. The researcher was able to get concurrent agreement on the summaries he took away from the interviews. In addition, the researcher considered himself bound by the ethical conduct of carrying out research which does not permit researcher biases. These protocols ensured that the study's findings accurately portray participants' responses.

#### Transferability

This is how the qualitative researcher demonstrates that the research study's findings apply to other contexts (Amankwaa, 2016). In this case, "other contexts" can mean similar situations, similar populations, and similar phenomena (Connelly, 2013). Qualitative researchers can use thick descriptions to show that the research study's findings can apply to other contexts, circumstances, and situations. In the current study, transferability was enhanced by using a mixed research design and also by the selection of rich-source participants (principals of schools/Guidance and counselling teachers/Education directors of schools) and by carrying out the research in an area that was rich in the characteristics of interest to the study (Homa Bay County). Furthermore, the choice of the study area was guided by a literature review and engagements on the same with people in the know (Homa Bay County Health Records Officer and Homa Bay County Education Director).

# 3.10 Data Collection Procedures

Following the assurance that research instruments are valid, reliable and can gather the requisite data, and having been cleared by the directorate of post-graduate studies and MMUST Institutional and Ethics Review Committee (IERC), the researcher successfully

applied for a research license from the National Commission for Science, Technology and Innovation (NACOSTI)- NACOSTI/P/21/12782.

With the NASCOTI license in hand, the researcher notified the Homa Bay County Education Director and the three sub-county Education Directors in the study areas of Ndhiwa, Rachwonyo East and Rachwonyo South. The researcher carried out stratified random sampling a shown in Table 3.2 and Table 3.3. This procedure revealed 6 pure girls' secondary schools and six mixed secondary schools. Then the researcher made introductory visits to these schools and obtained verbal guarantees that he could conduct the said research in those schools. This was followed by official letters of request by the researcher. Through phone contacts specific dates were fixed for data collection. Upon visiting each school for data collection, the researcher sought permission from the class teachers, and from the student respondents.

In the administration of the instrument to collect raw data, the researcher observed consistently the prescribed protocols as the following lines demonstrate. The researcher introduced himself by summarizing to the respondents the purpose of the study and the need for them to take part in it willingly. He also reminded them of the need to give correct information so that it can be used to make correct conclusions. The participants were fully informed of their rights and duties in the study. For instance, they were informed of unbreachable confidentiality, i.e., no disclosure to any party of their information and secure digitalized storage of the data. Their participation was voluntary and they could withdraw from the study at any stage if they felt uncomfortable to continue.

The researcher also explained the purpose of the study to the student respondents and offered them to sign a consent form. The researcher administered the questionnaires himself except in a few cases when he had to delegate on account of the limitation of time. In a few cases where it was not possible to directly administer the questionnaires, the researcher identified with the help of the school principal a competent teacher who received instruction/training on how to administer the questionnaires in compliance with the ethical principles. Confidentiality, as well as anonymity, were upheld as no respondent was required to reveal her name on the questionnaire. The respondents were given enough time to fill out the questionnaires, and where clarifications were sought, prompt assistance was provided. Face-to-face interviews with principals and guidance and counselling teachers were conducted in a sober environment and guided by predetermined questions.

#### **3.11 Data Analysis Procedures**

Although this study is predominantly quantitative in approach, it has an embedded qualitative question. Based on this premise, the data collected will be analyzed using both the quantitative and qualitative analysis procedures to enable the researcher to give a coherent and unified answer to the study questions. The details are as given in the following sub-sections.

# 3.11.1 Quantitative Data Analysis

Quantitative data were checked for consistency before entering into SPSS version 26 for analysis. Sorting of quantitative data was done to eliminate incomplete and shoddy answered forms. Coding was done for individual forms to avoid double entry. Data entry into SPSS was done manually and after the entry, cleaning was done to eliminate missing data. The data entered was double-checked to ensure reliability and consistency. Analyzing and interpreting both qualitative and quantitative data was done involved a process of systematically organizing the materials collected, bringing meaning to them, and finding common themes that could be adopted for a wider discussion (Yin, 2017).

# **Confirmatory Factor Analysis**

This analysis was necessary because all the predictor variables were latent, and their predicted constructs needed to be confirmed as being able to explain their respective latent variables. Through CFA, factors that do not reveal much about each construct were be eliminated, while those which explained more about the constructs retained (Albright & Park, 2009).

Analysis of Moment Structure (AMOS) software version 26 was used during the analysis. Measurement model fit of data was checked with chi-square degree of freedom (DF), with Chi-square/df between 1 and 3 denoting model fit. Comparative fit index (CFI) indicating values greater than 0.950, is also used as well to indicate model fit (Bentler, 2007). Likewise, for Root Mean Residual, Root Mean Square Error of Approximation (RMSEA) a value less than 0.06 and Standard Root Mean Residual (SRMR) not greater than 0.090 were indicative of model fit (Albright & Park, 2009).

# **Structural Equation Modelling (SEM)**

Structural Equation Modelling (SEM) is valuable in inferential data analysis and hypothesis testing where the pattern of interrelationships among the study constructs are specified a priori and grounded in established theory (Raykov & Marcoulides, 2006). This study hypothesized multiple linear relationships between educational participation and the three latent independent variables (sexual attitudes, gender norms, and sexual values). Through SEM, hypotheses testing was done to validate or reject the existence of these relationships, in which case if there were no relationships, the null hypotheses were validated. The SEM enabled multiple regression equations to be derived between the variables.

The measurement model specifies the relationships among observed variables and latent variables and was expressed in the CFA (DiStefano & Hess, 2005). The structural model was used to test the relationship among latent variables (Hair, Black, Babin, & Anderson, 2006). This revealed the relationships that exist between constructs and each other and the theoretical model which specifies this relationship (In'nami & Koizumi, 2011). AMOS version 26 will be used for this analysis.

The model was checked for fit indices. Unknown parameters and associated errors were estimated. Also, unstandardized and standardized regressions were estimated. Parameter estimates such as standardized coefficient, significance (p-values) and t-value have been reported. The fit indices were checked against Chi-square (X2), SRMR, RMSEA, and CFI to determine how the data fit the model. Qualitative data (arising from interviews and open-ended items in questionnaires) was analyzed by the method of content analysis. The purpose of doing qualitative data analysis was to reduce the amount of text and organize responses to identify broad trends and themes in the data. Content analysis was used to create a structure that allowed the organization of open-ended information.

#### 3.11.2 Qualitative Data Analysis

Processing of the qualitative data began from the field. After each interview session, all relevant responses from the discussions were put together. The qualitative data was then

processed and analyzed through several steps: recording the interview using a tape recorder, data cleaning, transcribing the record, classification of various responses, identifying key responses for various themes, listing and tallying key responses by specific themes, identifying patterns emerging from key responses, studying the interrelationships between identified patterns and drawing inferences from the patterns and their inter-relationships. Classification of various responses was then carried out for individual sessions. Finally, information from the various respondents was summarized by themes and then elaborately discussed and interpreted in relation to the other findings in the quantitative part of the study.

#### **3.11.3 Data Analysis Matrix**

The following table gives an overview of how data triangulation was achieved. Triangulation is a technique that facilitates the validation of data through crossverification from two or more sources (Creswell & Creswell, 2018). This is necessary for this research to increase the credibility and validity of the research findings. Trustworthy data is important since the researcher relied on it to objectively answer the research questions.

Objective 1	<b>Research Questions</b>	Questions in the	Data analysis
		instrument of data	
		collection	
To determine the	What is the influence	(isolate the	SEM: CFA, Path
influence of	of sexual attitudes on	question)? e.g. Q1,	analysis, Model Fit
sexual attitudes	education participation	Q2,	indices
on education			
participation		Interview Q2	Thematic
Homa Bay			Analysis/Triangulation
Objective 2	Research Questions	Questions in the	Data analysis
		instrument of data	
		collection	
To evaluate the	What is the influence	(Isolate the	SEM: CFA, Path
influence of	of gender norms on	question).e.g. Q1,	analysis, Model Fit
gender norms on	education participation	q2,	indices
education			
participation		Interview Q2	Thematic
Homa Bay			Analysis/Triangulation
County			
Objective 3	Research Questions	Questions in the	
		instrument of data	
		collection	
To assess the	What is the influence	(Isolate the	SEM: CFA, Path
influence of	of sexual values on	question).e.g. Q1,	analysis, Model Fit
sexual values on	education participation	q2,	indices
education			
participation		Interview Q2	Thematic
Homa Bay			Analysis/Triangulation

# Table 3.9: Analysis Framework

#### **3.12 Ethical Considerations**

This study adhered to the ethical standards required in research as established by many research authorities Punch, 2014; Ary, Jacobs, Irvine & Walker, 2018). This study has reported obtaining permissions, confidentiality, benefits of the study, honesty/integrity, informed consent, and freedom to withdraw from the study as key prerequisites to assure the participants have confidence and interest to participate in the study. From the onset, the researcher set to ensure that the study is carried out in full compliance with the necessary laws, procedures, and guidelines. Important among these was the strict adherence to the established MMUST protocols of researching by its students. Next to that, the researcher applied for and obtained a research permit from the National Council for Science and Technology. Further, the researcher also applied successfully for permission from the respective school heads whose schools had been randomly picked to supply part of the sample of respondents. Finally, the researcher also used a consent form to obtain informed consent from all the respondents. The researcher refrained from coercing any participant to take part in the study. He dutifully informed all participants about their role in the study, and that the study had been permitted by the relevant authorities (NACOSTI). This will be done by allowing a moment for each participant to affirm their consent.

Given that this study explored the personal issues of girls related to their sexuality, the importance of confidentiality was a key requirement. The reliability and validity of the findings of the study depended a lot on this aspect (Punch, 2014). Hence the confidentiality and anonymity of participants was guaranteed by the researcher as a matter of priority. The participant was not required to disclose their names or anything

that could lead to identifying them. To enhance the freedom of students to participate and encourage them to be honest in their responses, the researcher undertook to assure the students' utmost confidentiality about the data collected whether on paper or audibly. Furthermore, the researcher assured the students that their data would not be used for any purposes other than the study in question. And after the study, the digital data will be stored with password protection while material data was to be destroyed by burning so that no one else may ever access them. Also, their institutions will remain anonymous.

The study placed a lot of premium on the virtues of honesty and integrity. To accomplish this, the researcher fully introduced himself and explained the purpose of the study. The researcher disclosed to the respondents that there were no monetary compensations for undertaking the study. This was judged by the researcher as important to enhance honesty and dependability. The participants were assured that there was no ill or malice on the part of the researcher to misuse their data or take advantage of them in any way.

To ease any tensions that might arise during the study, the respondents were assured that they had the freedom to terminate their participation in the study at any given stage of the study. And that their termination would not be considered negative or bad behaviour.

The researcher also informed the respondents about the benefits of the study in general and in particular the benefits of participating in the study as a respondent. The researcher informed them that their part in the study will yield data that will benefit the body of knowledge on the subject under study. The findings of the study will inspire new insight research assignments that will greatly improve current knowledge on the subject.

#### **CHAPTER FOUR**

#### PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS

This Chapter focuses on presenting results, discussing them and making decisions on the three hypotheses that guided the study. The discussion and interpretation are dealt with in relation to the literature review, quantitative data, qualitative data and personal insights of the researcher to explain and aid understanding of what the results communicate.

#### 4.1 Questionnaire Return Rate

A total of 393 questionnaires were administered to 246 students in six mixed secondary schools and 147 in six pure girls' secondary schools in the sub-counties of Rachwonyo East, Ndhiwa and Rachwonyo South. All the questionnaires were returned; however, upon scrutiny, only 315 were found to be fully answered and meet the criteria to be included in the research. In summary, a total of 78 students failed to complete the questionnaires as per the guidelines. Hence the return rate was 315 respondents representing a successful return rate of 80.2%. According to Kyriazos (2018), a return rate of above 80% is considered good enough and can be relied upon to carry forth the research.

#### 4.2 Demographic Information

Based on valid questionnaires (completed without any error), the researcher found that 83 respondents were aged between 14-15 years; 185 were aged between 16-17 years; 45 were aged between 18-19 years; and 2 were at least 20 and above. Additionally, 212 had both their parents alive; 48 said their fathers had died; 14 were without their mothers; 20 were total orphans; 15 had single parents; and 6 said their parents divorced/separated. 175 respondents were from monogamous families; 53 from polygamous, 31 from single

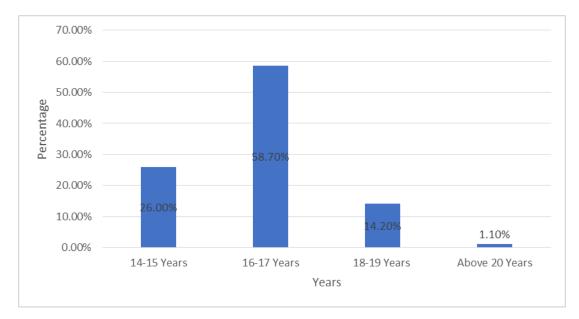
parents and 56 from extended families. In terms of seeking counselling, 139 sought the service from teachers; 50 from peers; 57 from religious leaders; and 69 said they got counselled by professional counsellors.

Demographics are important in research because they help to nail a study to a particular context, age group, or ethnic group; otherwise, the research risk appearing like it was assuming the respondents and the factors do not matter in research (Hammer, 2011). Similarly, demographics are important in aiding the reader to judge 'the fit to the group being measured', especially concerning the type of questions and other research instruments used (Connelly, 2013). In the context of this study, the demographics help the reader to understand that the study focused on secondary school girls the ages of 14-20 studying in Homa Bay County, predominantly inhabited by Luo people. The findings of the study will be limited to this context unless similar research in other contexts confirms the same findings. In other words, researchers cannot assume that no differences exist between groups until the underlying hypotheses have been proven.

## **4.2.1 Distribution of Respondents by Age**

The ages of the respondents were some of the important demographics of interest in this study. Age is important to evaluate the relevance of the measurement being made about the respondents. In the context of this study, capturing the age of the respondents was important to demonstrate the suitability of the measuring instrument to the respondents (Connely, 2013). Issues of sexual attitudes, gender norms and sexual values are sensitive and are governed by age-appropriate norms. One can only meaningfully dialogue about them with respondents able to relate to them. Girls in secondary schools are in that age bracket (14-20) where issues of sex affect them directly and frequently are discussed in

guidance and counselling sessions (DeCecco & Shively, 2014). Accordingly, the respondents were asked in the questionnaire to indicate their age based on their last birthday. The results are presented in Figure 4.1.

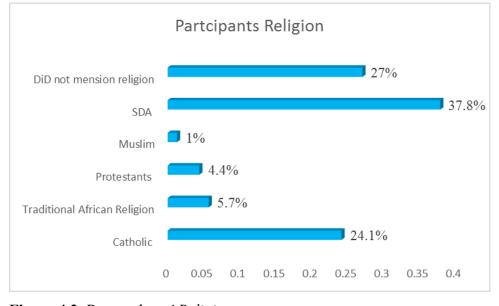


# Figure 4.1: Respondents' age range Source: Study Data 2022

The majority of the respondents (58.7%) were in the age group of 16-17 years. The second biggest majority were in the age bracket of 14-15 years. Respondents in the age group of 18-19 years took up 14.2%, while those aged above 20 years were represented by 1.1%. The age distribution agrees with similar studies and therefore the population of interest from the age point of view is normal (Ogolla & Ondia, 2019); Edith, 2014; Rath & Wadhwa, 2019).

# 4.2.2 Distribution of Respondents by Religion

The respondents were required to indicate their religious affiliation. Religion plays a role in issues of sexuality (Gonzalez et al., 2013). The majority of the respondents come from backgrounds marked by religious teaching and affiliations. Many religions have explicit instructions on acceptable sexual ethics, and therefore religiosity influences how girls handle sexual pressure. Figure 4.2 gives a summary of their responses.



# Figure 4.2: Respondents' *Religion* Source: *Study data 2022*

The biggest portion (37.8%) were SDA adherents, 27% did not indicate their religious affiliation, Catholics took up 24.1%, Traditionalists were 5.7% and Protestants took up 4.4%. Muslims were represented by 1%. As such, the respondents showed that they were multireligious embracing a range of faiths. Many religious faith groups give explicit religious instructions on matters of adolescent sexual behaviour. The strong showing by SDAs and Catholics can be accounted for by the fact that these faiths have been in the Homa Bay area for longer than a century. Those whose religion is unknown may be coming from families that are not strongly aligned to any faith, thus making it difficult for the children to have a clear religious identity.

# 4.2.3 Distribution of Respondents by Family Type

The respondents were also required to indicate the nature of the families they came from. Families are important because sexual abuse of adolescent girls has been linked to families with weak family bonds and single-headed families (Gonzale *et al.*, 2013). Figure 4.3 gives a summary of their responses.

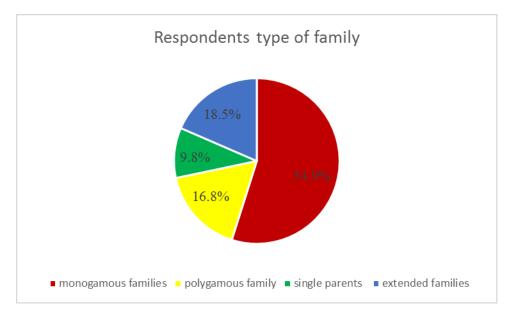


Figure 4.3: Respondents' type of family Source: Study Data 2022

The majority of the respondents (54.9%) came from monogamous families, followed by 18.5% who indicated that they came from extended families. Respondents from polygamous families took up 16.8% while single-parent families were represented by 9.8%. Family background is important as it often gives shape to the variables of interest in this study. Many families pronounce themselves clearly on issues of sexuality, gender and values. Some researchers have reported that girls from broken families or single-headed families tend to fall victim to early sexual debut and other allied inappropriate behaviours (Birchall *et al.*, 2018; Efevbera *et al.*, 2019). Therefore, the type of family is

important in nurturing acceptable sexual attitudes, gender norms and sexual values. Concerning the study, family background plays a role in the type of responses the girls give.

# 4.2.4 Distribution According to Whom Respondents Seek Counselling

The study questionnaire also required the respondents to indicate from whom they sought counselling most when in need. This was considered an important demographic in this study because schools and the Ministry of Education have invested in guidance and counselling as an important intervention to help girls keep their focus on their education, amidst sexual allurements and peer pressures that direct them towards engaging in premature sex (Barr et al., 2014). The girls' responses are summed up in Figure 4.4.

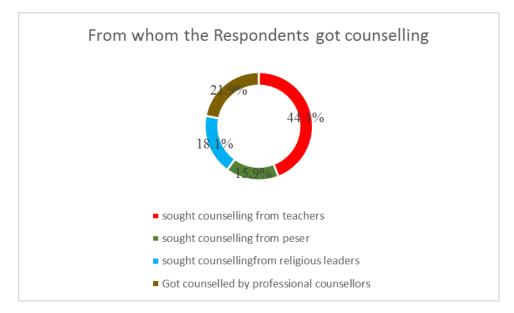


Figure 4.4: From whom Respondents got counselling Source: Study Data 2020

The majority of the respondents (44.1%) sought counselling from teachers, probably due to ease of access and expertise. The second biggest portion 21.9% sought counselling from professional counsellors, and 15.9% indicated that they preferred receiving

counselling services from their peers, perhaps due to easy access and availability. The final portion of 11.1% indicated their preference for religious leaders, perhaps due to the desire to get religiously aligned guidance. Guidance and counselling services are important in this study because the variables of interest to the study are often discussed in these encounters and pro-education attitudes and values impressed upon the girls. The responses of the girls are also influenced by the mentorship obtained from counselling sessions.

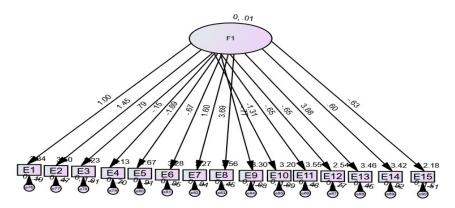
#### 4.3 Presentation of Quantitative Data Analyses and Findings

This section presents analyses and findings of the four latent variables in the study. The analyses will be presented in terms of path analysis diagrams and models.

# **4.3.1 Findings on the Education Participation Variable**

This study investigated the influence of sexual attitudes, gender norms and sexual values on the education participation of secondary school girls in Homa Bay County. Education participation was the output variable (dependent variable) suspected to be influenced by the other three independent variables. Since the education participation variable could not be measured directly, due to its latent nature (Punch, 2014), the study therefore identified from literature review 15 measurable factors that are believed to account for variability in the education participation component. The 15 factors were further improved by inputs given at department and school proposal defence panels. The respondents' preferences were scored using a Likert Scale whereby each statement offered options in terms of 'strongly disagree' (1 mark), 'disagree' (2 marks), agree' (3 marks) and 'strongly agree' (4 marks). Higher scores indicated higher levels of education participation, while lower scores indicated lower levels of involvement in education participation. To reduce potential 'response set bias', negatively worded items were included in the questionnaire, but they were scored in reverse (Brown, 2015).

After checking for completeness and adherence to the guidelines, the responses were coded, scored and entered into the SPSS version 24 for various tabulations. Following the research methodology formulated in chapter three, the study subjected the fifteen manifest factors to the confirmatory factor analysis test to identify those factors that were best suited to explaining the education participation variable (Brown, 2015). Path analysis was used to measure the level of relationship between the latent variable (education participation) and its defining measured variables (the 15 manifest factors of education participation). The results are presented in Figure 4.5.



**Fig. 4.5:** *Path diagram for educational participation factors* **Source:** *Study Data 2022* 

Path diagrams are accepted forms of representing the relationship between latent variables and their measured factors (constructs (Crossman, 2019).

Path diagrams are like flowcharts showing variables interconnected with lines that are used to indicate causal flow (Crossman, 2019). Every path has two variables represented by either rectangular boxes or ovals linked by either straight or curved arrows that show a

direct or linear relationship between the two variables. These manifest factors (E3, E6, E9, E11, E12, E14, and E15) had factor loadings > 0.5 and eigen values > 1. In terms of variability, it means E3, E6, E9, E11, E12, E14, and E15 explained 79%, 67%, 77%, 65%, 65%, 60% and 63% of the variation in education participation latent variable respectively. The other factors E1, E2, E4, E5, E7, E8, E10, and E13 were eliminated because their factor loadings were too low or erroneous and did not meet the criteria. The eight factors with a loading of over 0.5 allow for an SEM to be carried out since the minimum required per latent variable is three (Kline, 2014). The factors with a factor loading of more than 50% were taken on board in the subsequent structural equation modelling that was produced to account for the relationships between all four latent variables in the study (Creswell & Creswell, 2018).

#### Assessing the Model Fit for Education Participation Variable

In the tradition of structural equation modelling (SEM) and confirmatory factor analysis, model fit indices measure discrepancies between observed and model-implied correlation/covariance matrices. In general, model fit indices represent discrepancies between observed and model-implied data. Model fit describes the relationship between a response variable and one or more predictor variables (Dagnall et al., 2018). In the structural equation modelling (SEM) used for analysis in this research, model fit indices were brought on board to help the researcher measure the plausibility of the model the study is estimating.

#### **Chi-Square Test for Education Participation**

The Chi-square test relies on maximum likelihood to assess the overall goodness assuming that the hypothesized model is correctly specified. The null hypothesis is that the predicted model and observed data are equal. It examines whether the covariance matrix derived from the model represents the population covariance. The results of this test are presented in Table 4.1.

**Table 4.1:** Chi-Square test on education participation

Model	DF	CMID	Р
Default	90	184.791	0.000
Independent	15		.000

**Source:** *Study Data 2022* 

Therefore, the Chi-Square statistics for the education participation latent variable in relation to its manifest factors including (E3, E6, E9, E11, E12, E14, and E15), had  $X^2 =$  184.792, DF= 90, p-value = 0.000; meaning the null hypothesis is rejected; hence the predicted model and the observed data are not equal. Thus, the model incorporating educational participation and its manifest variables (E3, E6, E9, E11, E12, E14, and E15) is adequate or a good fit.

# The Root Mean Square Error of Approximation (RMSEA) for Education

## Participation.

Root mean square error was used to help verify the quality of predictions. The RMSEA is the standard deviation of the residuals (prediction errors). Residuals are a measure of how far from the regression line data points are from the line of best fit (Dagnall et al., 2018). In other words, it tells you how concentrated the data is around the line of best fit. Table 4.2 presents the results of education participation.

**Table 4.2:** RMSEA for Education Participation

Model	RMSEA
Default	0.038
Independent	0,063

Source: Study Data 2022

The parsimony-adjusted index values closer to zero represent a good fit. Ideally, it should be between 0.01 to 0.08; the p-value printed with it tests the hypothesis that RMSEA is less than or equal to .08 (a cut-off sometimes used for a good fit), and thus should be not significant (Dagnall et al., 2018). The results revealed a superior fit for the education participation and its manifest factors namely (E3, E6, E9, E11, E12, E14, and E15) with (RMSEA = 0.038).

## **Comparative Fit Index (CFI) for Education Participation**

The comparative fit index (CFI) analyzes the model fit by examining the discrepancy between the data and the hypothesized model while adjusting for the issues of sample size inherent in the chi-squared test of model fit, and the normed fit index. CFI values range from 0 to 1, with larger values indicating a better fit. A good fit should be > .90 (Dagnall et al., 2018). Table 4.3 presents the CFI results for education participation.

Table 4.3: CFI for education Participation

Model	RMSEA	
Default	0.0981	
Independent	.000	

**Source:** *Study Data 2022* 

Analysis results revealed a superior fit for the education participation and its manifest factors namely (E3, E6, E9, E11, E12, E14, and E15) with CFI = 0.981).

### **Squared Multiple Correlations (R-Squared) For Education Participation**

R squared in regression acts as an evaluation metric to evaluate the scatter of the data points around the fitted regression line. It recognizes the percentage of variation of the dependent variable. It shows how well the regression model fits the observed data Knowledge-Hut, 2020). In other words, R-squared is the proportion of variance in the dependent variable that can be explained by the independent variable. If the value of R - Squared is larger, there is a better chance of the regression model fitting the observations. The value of R-squared is between 0% and 100%. On the other hand, 0% corresponds to a model that does not explain the variability of the response data around its mean. On the other hand, 100% corresponds to a model that fully explains the variability of the response variable around its mean. Table 4.4 presents the results R-Squared for Education Participation in this study.

Factor	R- Squared
E3 < Education Participation	0.59
E6 < Education Participation	0.68
E9 < Education Participation	0.58
E11< Education Participation	0.63
E12 <education participation<="" td=""><td>0.68</td></education>	0.68
E14 <education participation<="" td=""><td>0.67</td></education>	0.67
E15 <education participation<="" td=""><td>0.54</td></education>	0.54

**Table 4.4:** R-Squared for Education Participation

Source: Study Data 2022

In the case of education participation, E3, E6, E9, E11, E12, E14, and E15 revealed that 59%, 68%, 58%, 63%, 68%, 67%, and 54% of their observed data respectively fitted multiple linear regression model. Therefore, a multiple linear regression model that

would surface from the confirmatory factor analysis involving education participation latent variable and its manifest factors would be as follows:

Education Participation =  $\beta$  + 3.235 (E3) + 3.276 (E6) + 3.302 (E9) + 3.549 (E11) + 2.540

$$(E12) + 3.419 (E14) + 2.184 (E15)$$

The regression model coefficients estimate for each manifest variable is shown in Table

4.5.

Factor	<b>Coefficient Estimates</b>	
E3	3.235	
E6	3,276	
E9	3.302	
E11	3.549	
E12	3.419	
E14	0.67	
E15	2.184	

**Table 4.5:** Coefficient Estimates for (Education Participation Factors)

Source: Study Data 2022

Each coefficient estimates the change in the mean response per unit increase in X (independent variable) when all other predictors are held constant. The foregoing data analyses confirm that the education participation variable is adequately explained in terms of seven factors, namely; E3, E6, and E9. E11, E12, E14 and E15. Therefore, the data fits into the conceptual model of the study.

# 4.3.2 Quantitative Data Analyses and Findings on the First Objective

The first objective of this study was to determine the influence of sexual attitudes on the education participation of secondary school girls in Homa Bay County. Sexual attitude was the first independent variable whose influence on the dependent variable (education participation) was investigated. The sexual attitude being a latent variable could not be

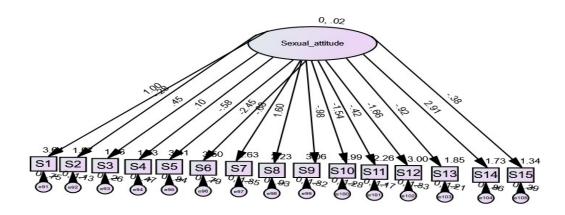
measured directly (Punch, 2014), necessitating the need to identify its manifest variables. From the literature review, and especially from similar studies 15 measurable factors that are believed to account for variability in the sexual attitude were identified (Hendrick & Hendrick, 2011; Kimberly, Werner-Wilson & Motes, 2014). The 15 factors were further improved by inputs given at departmental and school proposal defence panels. The respondents' preferences were scored using a Likert Scale whereby each statement offered options in terms of 'strongly disagree' (1 mark), 'disagree' (2 marks), agree' (3 marks) and 'strongly agree' (4 marks). Higher scores indicated a more liberal sexual attitude that is likely to engender behaviours that undermine a girl's education participation. On the other hand, lower scores indicated a more conservative sexual attitude that engenders behaviours that minimize risks to the girl's education participation. To reduce potential response-set bias, negatively worded items were included in the questionnaire, but these were scored in reverse (Brown, 2015).

After checking for completeness and adherence to the guidelines, the responses were coded, scored and entered into the SPSS version 24 for various tabulations. Under the research methodology formulated in chapter three, the study subjected the fifteen manifest factors to the confirmatory factor analysis test to identify those factors that were best suited to explaining the education participation variable (Brown, 2015).

#### 4.3.2.1 Sexual Attitudes Path Analysis

Path analysis was used to measure the level of relationship between the latent variable (education participation) and its defining measured variables (the 15 manifest factors of education participation). Path diagrams were used to represent the relationship between

the sexual attitude variable and a set of 15 manifest variables or factors. Path diagrams are like flowcharts showing variables interconnected with lines that are used to indicate causal flow (Crossman, 2019). Each path has two variables represented by either rectangular boxes or ovals linked by either straight or curved arrows that show a direct or linear relationship between the two variables. Figure 4.6 presents the results for the sexual attitude variable.



**Figure 4.6:** *Path diagram for Sexual attitude factors Source: Study Data 2022* 

These manifest factors (S5, S6, S9 and S13) had factor loadings > 0.5 and eigenvalues >. In terms of variability, it means S5, S6, S9, and S13 explained 58%, 66%, 98%, and 92% of the variation in sexual attitude latent variable respectively. The other factors S1, S2, S4, S3, S7, S8, S10, S11, S12, S14 and S15 were eliminated because their factor loadings were too low or erroneous and did not meet the criteria. The factors that explain sexual attitudes with a loading of more than 0.5 are shown in Table 4.6.

Factor	Agree	Disagree
	(%)	(%)
S5: I do not need to be committed to a person to have sex with	88.9	11.1
him		
S6: Birth control is part of responsible sex	67.5	32.5
S9: At its best, sex seems to be the merging of two persons	70.8	29.2
S13: The main purpose of sex is to enjoy oneself	67.6	32.4

 Table 4.6. Sexual Attitude Factors

Most of the girls (88.9%) responded in the affirmative to the question '*I do not need to be committed to a person to have sex with him*'. And 11.1% disagreed with the statement. The responses as per school type yielded 94.1% in pure schools endorsing the statement while a paltry 5.9% dissented. On the other hand, girls in mixed schools had an agreement rate of 79.5%, with 20.5% disagreeing with the statement. The data shows that the majority of the girls are inclined to have sex even with men with whom they have no reputable relationships. Rath and Wadhwa (2019) support this view on the increase in sexual activity among adolescents. While Prendergast *et al.* (2013) also claim in their study that many young people readily initiate sex once they hit the puberty (13-19) stage as they try to explore their sexual fantasies and romance. Despite the religious and cultural illegality surrounding teen sex, it nevertheless recognized as developmentally normative by a wider society. This view is agrees with Gevers et al. (2013).

The study of Dawson et al. (2019) offers some perspectives that help explain the increase in casual sex. The study highlights the media, especially the sexual media that amplifies sexual experiences in a captivating way. The study also highlights peer pressure or influences. These observations are collaborated by Pearson (2018) who stated that in the early stages of initiation into sex, many teens rely on their peers for guidance and evaluation of the whole encounter in the world of sex. Another aspect highlighted to explain increased sexual behaviour is the home backgrounds of many teens. Kibombo et al (2007) claim in their study that adolescents from broken marriages were much more vulnerable to high-risk sexual behaviours than other categories of adolescents. Ten per cent of the respondents in this study are from single-parent homes, which make them vulnerable to age-inappropriate sexual coitus. The protective shield offered by one parent is less than that offered by two parents. Two parents offer increased vigilance that reduces sexual opportunities for the girl-child. This finding calls for a good capture of each pupil's family background to establish such vulnerabilities so that appropriate guidance can be offered to them.

On the other hand, literature review revealed that poor performance and involvement in inappropriate sexual behaviour are significantly correlated (Sidze et al. (2017, Ogolla and Ondia, 2019). Similarly, Pound et al. (2016) claimed that engaging in sexual acts by teens negatively influences education attainment. This is because girls that are engaged in active sexual relationships are emotionally focused elsewhere rather than on their education. The emotional concerns and energies invested in romantic relationships mean that they have little time or even interest in their education. This outcome validates the conceptual framework of this study.

#### **4.3.2.2** Assessing the Model Fit for Sexual Attitude Variable

In the tradition of structural equation modelling (SEM) and confirmatory factor analysis, model fit indices measure discrepancies between observed and model-implied correlation/covariance matrices. In general, model fit indices represent discrepancies between observed and model-implied data. Model fit describes the relationship between a response variable and one or more predictor variables (Dagnall et al., 2018). In the structural equation modelling (SEM) used for analysis in this research, model fit indices were brought on board to help the researcher measure the plausibility of the model the study is estimating.

#### **Chi-Square Test**

The Chi-square test relies on maximum likelihood to assess the overall goodness assuming that the hypothesized model is correctly specified. The null hypothesis is that the predicted model and observed data are equal. It examines whether the covariance matrix derived from the model represents the population covariance. The Chi-Square statistic for the sexual attitude variable is presented in Table 4.6.

 Table 4.7: Chi-Square Test for Sexual Attitude

Model	DF	CMID	Р
Default	90	113.017	0.000
Independent	30		.000

Source: Study Data 2022

In this study's findings, SEM revealed that education participation and sexual attitude have a positive covariance of 0.063, meaning when one variable increases, the other also increases in the given proportionate measure. The Chi-Square statistics for the sexual attitude latent variable indication in relation to its manifest factors including (S5, S6, S9 and S13), had ( $X^2 = 113.017$ , DF= 90, p-value = 0.004); hence that the null hypothesis is rejected; and that the predicted model and the observed data are not equal. Thus, the model incorporating sexual attitude (S5, S6, S9 and S13) is adequate or a good fit.

## The Root Mean Square Error of Approximation (RMSEA)

Root mean square error was used to help verify the quality of predictions. The RMSEA is the standard deviation of the residuals (prediction errors). Residuals are a measure of how far from the regression line data points are from the line of best fit (Dagnall et al., 2018). In other words, it tells you how concentrated the data is around the line of best fit. The RMSEA results are presented in Table 4.7.

**Table 4.8:** RMSEA for Sexual Attitude

Model	RMSEA	
Default	0.029	
Independent	0.034	
Courses Study Data 2022		

Source: Study Data 2022

The results revealed a superior fit for the sexual attitude and its manifest factors namely (S5, S6, S9 and S13) with (RMSEA = 0.029).

# **Comparative Fit Index (CFI) Sexual Attitude**

The comparative fit index (CFI) analyzes the model fit by examining the discrepancy between the data and the hypothesized model while adjusting for the issues of sample size inherent in the chi-squared test of model fit, and the normed fit index. CFI values range from 0 to 1, with larger values indicating a better fit. A good fit should be > .90 (Dagnall et al., 2018). Table 4.8 presents the results of CFI for the sexual attitude variable.

Model	CFI	
Default	0.905	
Independent	.000	

 Table 4.9: CFI for Sexual Attitude

Source: Study Data 2022

Analysis results revealed a superior fit for the sexual attitude and its manifest factors namely (S5, S6, S9 and S13) with (CFI = 0.905).

#### **Squared Multiple Correlations (R-Squared)**

R squared in regression acts as an evaluation metric to evaluate the scatter of the data points around the fitted regression line. It recognizes the percentage of variation of the dependent variable. It shows how well the regression model fits the observed data Knowledge-Hut, 2020). In other words, R-squared is the proportion of variance in the dependent variable that can be explained by the independent variable. If the value of R - Squared is larger, there is a better chance of the regression model fitting the observations. The value of R-squared is between 0% and 100%.; while 0% corresponds to a model that does not explain the variability of the response data around its mean. On the other hand, 100% corresponds to a model that fully explains the variability of the response variable around its mean. The results of R-Squared are presented in Table 4.9.

Factor	R-Squared
S5 < Education Participation	0.538
S6 < Education Participation	0.637
S9 < Education Participation	0.565
S13 < Education Participation	0.615

 Table 4.10: R-Squared for Sexual Attitude

Source: Study data 2022

In the case of sexual attitude, S5, S6, S9, and S13 revealed that 54%, 64%, 57%, and 62%, of their observed data, respectively fitted multiple linear regression models.

Therefore, a multiple linear regression model that would surface from the confirmatory factor analysis involving the sexual attitude latent variable and its manifest factors would be:

Sexual Attitude =  $\beta$  + 3.406 (S5) + 3.502 (S6) + 3.063 (S9) + 1.854 (S13)

The regression model coefficients estimate for each manifest variable is presented in Table 4.10.

Factor	Coefficient Estimates
S5	3.406
S6	3.502
S9	3.063
S13	1.85

**Table 4.11:** Coefficient Estimates for (Sexual attitude factors)

#### Source: Study Data 2022

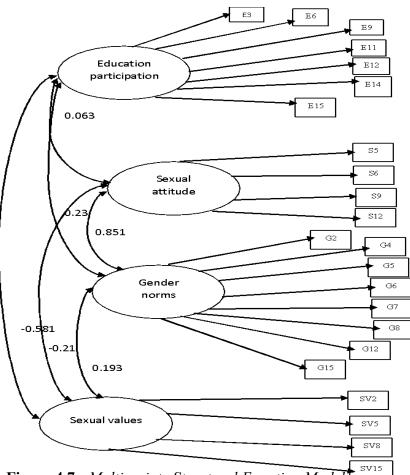
Each coefficient estimates the change in the mean response per unit increase in X when all other predictors are held constant.

#### 4.3.2.3 Hypothesis One Testing

The research objective of this study was to investigate the influence of sexual attitudes on the education participation of secondary school girls of Homa Bay County. Based on this objective, the study formulated a null hypothesis as follows:

Ho1: Sexual Attitudes do not influence the educational participation of girls in secondary schools of Homa Bay County.

Structural equation modelling (SEM) was used to estimate the underlying relationships between the latent constructs (variables) and their measured variables (factors). Structural equation models are "a melding of factor analysis and path analysis into one comprehensive statistical methodology (Investopedia, 2020). Figure 4.7 gives the relationships (SEM) using flow charts.



**Figure 4.7:** *Multivariate Structural Equation Model* 

Covariance's of latent variables				
Varia	bles	<b>Covariance's</b>	SMC	<i>p</i> -value
Education Participation	Sexual Attitude	0.063	0.67	<.001
Education Participation	Gender Norms	0.23	0.73	<.001
Education Participation	Sexual Values	-0.581	0.64	<.021
Sexual Attitude	Sexual Values	-0.21	0.52	<.031
Sexual Attitude	Gender Norms	0.85	0.28	>.34
Gender Norms	Sexual Values	0.193	0.34	>.23

Source: Research Data

In hypothesis 1, education participation has a positive relationship with sexual attitude, that is, a unit change in sexual attitudes corresponds to an influence of 0.063 in education participation. The effect of the independent variable on the dependent variable was found to be statistically significant at p-value < .001 against the stated alpha of 0.05. The squared multiple corrections (SMC) of 0.67 means the variation between them is 67% explained. Accordingly, the study was unable to uphold the null hypothesis since the sample data favoured the alternative hypothesis. Therefore, the study concluded that sexual attitudes influence the educational participation of secondary school girls in Homa Bay County.

## 4.3.3 Quantitative Data Analyses and Findings on the Second Objective

The second objective was to evaluate the influence of gender norms on the education participation of secondary school girls in Homa Bay County. Gender norms being a latent variable could not be measured directly (Punch, 2014), necessitating the need to identify its manifest variables. From the literature review, and especially from similar studies 15 measurable factors believed to account for variability in the gender norms variable were identified (Pulerwitz, & Barker, 2008; Shattuck et al., 2013). The 15 factors were further improved by inputs given at departmental and school proposal defence panels. The respondents' preferences were scored using a Likert Scale whereby each statement offered four response options in terms of 'strongly disagree' (1 mark), 'disagree' (2 marks), agree' (3 marks) and 'strongly agree' (4 marks). Higher scores indicated gender norms that are likely to engender behaviours that undermine a girl's education participation. On the other hand, lower scores indicated an acceptance of gender norms that engender behaviours that are likely to minimize risks to the education participation

of girls. To reduce potential response-set bias, negatively worded items were included in the questionnaire, but these were scored in reverse (Creswell & Creswell, 2018).

After checking for completeness and adherence to the guidelines, the responses were coded, scored and entered into the SPSS version 24 for various tabulations. By the research methodology formulated in chapter three, the study subjected the fifteen manifest factors to the confirmatory factor analysis test to identify those factors that were best suited to explaining the education participation variable (Brown, 2015). Factors that had a factor loading of over 0.5 were retained because they can account for variability in the latent variable (gender norms). Table 4.13 gives a summary of these factors and the corresponding responses of the respondents.

	<b>Table 4.13:</b>	Gender	Norms	Factors
--	--------------------	--------	-------	---------

	Agree	Disagree	
	(%)	(%)	
G2: Girls need boys more than boys need them	68.9	21.1	
G4: These days women say that they need more than one sexual partner to be happy	56.8	43.2	
G5: Whether to have sex or not, it is up to the man to decide.	79.7	20.3	
G6: Only a woman who has given birth is a real woman	67.6	32.4	
G7: You do not argue with your man about sex, you just give in	86.3	13.7	
G8: It is bad manners for a girl to reject sex from a man	72.7	27.3	
Women who carry condoms on them are looking for sex	70.8	29.2	

The majority of the respondents (68.9%) disagreed with the statement that 'Girls need boys more than the boys need them'. A minority of 31.9% did agree with the statement.

These results suggest that girls are willing to stand up side-by-side with boys in a mutually respectful relationship. On the statement 'whether to have sex or not, it is up to the man to decide', a majority of 72.7% of the girls objected, while a sizeable minority of 27.3% agreed with the statement. The variation in opinion may be due to family upbringing and other religious and cultural beliefs as Kibombo et al. (2007) justify in their study. Yet again, on the statement requiring an open discussion with a sexual partner about the dangers posed by having sex, a majority of 84.1% agree with the statement while a minority of 15.9% disagrees. These responses reveal a constant need for genderbased interventions that will protect and ensure the place of a girl in education is guaranteed. This need is acknowledged by Roudsari *et al.* (2013) who recommended support for vulnerable girls to enable them to remain in school.

On the question of 'Only *a woman who has given birth is a real woman*', a majority of 65% agreed while a sizable minority of 35% disagreed. These responses present a persistent patriarchal influence that defines a woman in terms of fertility (Lutta, 2015). On the statement, '*Changing diapers, giving a bath, and feeding kids is a Woman's job'*, a majority of 73.9% agreed with the statement while a sizeable minority of 26.1% disagreed. A fairly stable majority appears to go by the traditional perspectives that characteristically assign these duties to women. Despite this being a modern age, girls appear to be still under traditional influences that lack affirmation of gender equality.

On the statement that 'It is a woman's responsibility to avoid getting pregnant', 64.8% agreed with the statement, apparently recognizing personal responsibility. Or, it may also be influenced by societal attitudes that are more inclined to blame a woman for any sexual violations, while remaining silent on the same when committed by the male

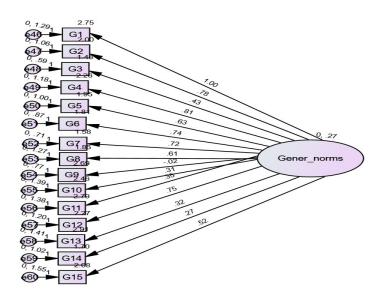
gender (Mwenje, 2015). A sizeable minority of 35.2% disagreed with the statement, hinting at the possibility of sharing the blame with the male actor in the pregnancy, and at the same time affirming shared responsibility for the sexual outcomes.

On the statement that 'whether to have sex or not, is up to the man to decide', 72.7% of the respondents agreed with the statement, while a respectable minority of 27.3% disagreed. The girls that endorse the statement may be under the influence of maleleaning gender norms that take pleasure in dominating decision-making on behalf of women. The disagreeing party of 27.7% appears to recognize the principle of shared responsibility for an act that has risks for both of them. The latter group of respondents by deferring their voice in sexual matters to the male gender may as well end up just encouraging the male gender to grow into a hedonistic mentality that is devoid of any responsibilities towards sexual outcomes. Furthermore, girls who consider pregnancy a personal responsibility diminish expectations for a shared responsibility to bring up the child. This attitude on the part of the girl ultimately lets off the boy- 'a partner-in-crime from assuming any serious responsibility for the pregnancy and taking up his rightful duties in the upbringing of the child. It is also evidence that many girls are ignorant of the Children's Act (2001) which spells out shared responsibility between parents for their children.

For growth in gender equality awareness, girls must see that they are treated equally to their opposite gender beginning early at home and transiting with the same gender equality at school (Ninsiima et al., 2015). These observations justify the advocacy by feminist studies in education to improve understanding of women's gendered selves as well as gendered experiences of schooling (Grossman, Jenkins & Richer, 2018). In the absence of good support, such the girl-child remains an easy target of early marriage. And these developments and arguments validate the conceptual framework proposed for this study.

#### 4.3.3.1 Gender Norms Path Analysis

Path diagrams were used to represent the relationship between the sexual attitude variable and a set of 15 manifest variables or factors. Path analysis revealed which of the possible relationships matter the most among the set of variables (the 15 manifest factors of gender norms), and which relationships did not matter much. The results are presented in Figure 4.8.



**Figure 4.8:** *Path diagram for Gender Norms factors* **Source: Study data 2022** 

Path diagrams were used to represent the relationship between gender norms variables and a set of 15 manifest variables or factors. Path diagrams are like flowcharts showing variables interconnected with lines that are used to indicate causal flow (Crossman, 2019). Every path has two variables represented by either rectangular boxes or ovals linked by either straight or curved arrows that show a direct or linear relationship between the two variables.

These manifest factors (G2, G4, G5, G6, G7, G8, G12 and G15) had factor loadings > 0.5 and eigenvalues > 1. In terms of variability, it means G2, G4, G5, G6, G7, G8, G12 and G15 explained 78%, 81%, 63%, 74%, 72%, 61%, 75% and 52% of variation gender norms latent variable respectively. The other factors G1, G3, G9, G10, G11, G13, and G14 were eliminated because their factor loadings were too low or erroneous and did not meet the criteria.

#### 4.3.3.2. Assessing the Model Fit for Gender Norms Variable

The term goodness-of-fit refers to a statistical test that determines how well sample data fits a distribution from a population with a normal distribution (Punch, 2014). Model fit measure reveals how well the regression line captures the underlying data (Creswell & Creswell, 2018). In other words, it measures how well the model predicts the observations.

## **Chi-Square Test**

The Chi-square test relies on maximum likelihood to assess the overall goodness assuming that the hypothesized model is correctly specified. The null hypothesis is that the predicted model and observed data are equal. It examines whether the covariance matrix derived from the model represents the population covariance. The results of this test are presented in Table 4.14.

Model	DF	CMID	Р
Default	90	188.164	.000
Independent	30		.000

 Table 4.14: Chi-Square test for Gender Norms

# Source: Study Data 2022

The Chi-Square statistics for the gender norms latent variable in relation to its manifest factors including (G2, G4, G5, G6, G7, G8, G12 and G15), had ( $X^2 = 188.164$ , DF= 135 - 45, p-value = 0.000); meaning that the null hypothesis is rejected; an indication that the predicted model and the observed data are not equal. Thus, model incorporating gender norms and (G2, G4, G5, G6, G7, G8, G12 and G15) is adequate or a good fit.

# The Root Mean Square Error of Approximation (RMSEA) for Gender Norms

Root mean square error was used to help verify the quality of predictions. The RMSEA is the standard deviation of the residuals (prediction errors). Residuals are a measure of how far from the regression line data points are from the line of best fit (Dagnall et al., 2018). In other words, it tells you how concentrated the data is around the line of best fit. Table 4.15 presents the results for gender norms.

<i>j</i>	
Model	RMSEA
Default	0.031
Independent	0.098
G G( 1 D ( 2022	

Table 4.15: RMSEA for Gender Norms

Source: Study Data 2022

The results revealed a superior fit for the gender norms and its manifest factors namely (G2, G4, G5, G6, G7, G8, G12 and G15) with (RMSEA = 0.031).

#### **Comparative Fit Index (CFI) for gender Norms**

The comparative fit index (CFI) analyzes the model fit by examining the discrepancy between the data and the hypothesized model while adjusting for the issues of sample size inherent in the chi-squared test of model fit, and the normed fit index. CFI values range from 0 to 1, with larger values indicating a better fit. A good fit should be > .90 (Dagnall et al., 2018). Table 4.16 presents the CFI results for gender norms.

 Table 4.16: CFI for Gender Norms

Model	CFI	
Default	0.910	
Independent	.000	

Source: Study data 2022

Analysis results revealed a superior fit for the sexual attitude and its manifest factors namely (G2, G4, G5, G6, G7, G8, G12 and G15) (CFI = 0.910, RFI = 0.973, and TLI = 0.964).

#### **Squared Multiple Correlations (R-Squared)**

R-Squared (R<sup>2</sup> or the coefficient of determination) is a statistical measure in a regression model that determines the proportion of variance in the dependent variable that can be explained by the independent variable. In other words, r-squared shows how well the data fit the regression model (the goodness of fit). R squared in regression acts as an evaluation metric to evaluate the scatter of the data points around the fitted regression line. It shows how well the regression model fits the observed data Knowledge Hut, 2020). The value of R-squared is between 0% and 100%; while 0% corresponds to a model that does not explain the variability of the response data around its mean. On the other hand, 100% corresponds to a model that fully explains the variability of the response variable around its mean. Table 4.17 presents the results R-Squared for gender norms in this study.

Factor	R- Squared
G2 < Gender norms	0.602
G4 < Gender norms	0.722
G5 < Gender norms	0.520
G6 < Gender norms	0.748
G7 < Gender norms	0.772
G8 < Gender norms	0.626
G12 < Gender norms	0.615
G15 < Gender norms	0.703

 Table 4.17: R-Squared for Gender Norms

# Source: Study Data 2022

In the case of gender norms, G2, G4, G5, G6, G7, G8, G12, and G15 revealed that 72%, 52%, 74%, 77%, 63%, 62%, and 70% of their observed data respectively fitted multiple linear regression model. Therefore, a multiple linear regression model that would surface from the confirmatory factor analysis involving gender norms latent variable and its manifest factors would be:

Gender Norms =  $\beta$  + 3.317 (G2) + 3.368 (G5) + 2.784 (G6) + 3.114 (G7) + 3.356 (G8) + 3.352 (G12) + 1.410 (G15)

The regression model coefficients estimate for each manifest variable is shown in Table 4.18.

Factor	Coefficient Estimates
G2	3.317
G4	3.368
G5	2.784
G6	3.114
G7	3.356
G8	3.352
G12	3.073
G15	1.410

 Table 4.18: Coefficient Estimates for Gender Norms

#### Source: *Study Data 2022*

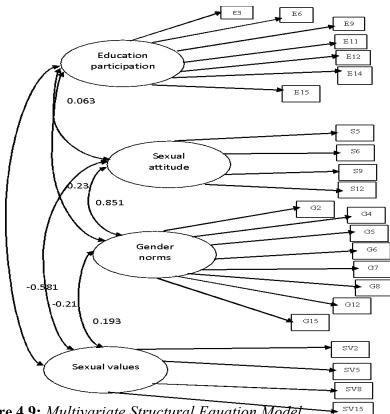
Each coefficient estimates the change in the mean response per unit increase in X when all other predictors are held constant.

#### 4.3.3.3 Hypothesis Two Testing

In this study, hypothesis two was formulated in the null form as follows:

H<sub>0</sub>2: Gender norms do not influence the educational participation of girls in secondary schools in Homa Bay County.

The study deployed structural equation modelling to expose the underlying relationships between the variables. Structural equation modelling (Figure 4.9) explains the relationships amongst latent variables (underlying factors that are not observed directly) and includes coefficients for endogenous variables. SEM is a melding of factor analysis and path analysis into one comprehensive statistical methodology (Investopedia, 2020). Education participation and gender norms have a positive covariance of 0.23. Meaning that favourable gender norms, improved girls' education participation and vice versa. Figure 4.9 and Table 4.22 give the relationships including the corresponding correlations between the predictor variable and the outcome variable.



**Figure 4.9:** *Multivariate Structural Equation Model* 

variance's	SMC	<i>p</i> -value
		-
0.063	0.67	<.001
0.23	0.73	<.001
-0.581	0.64	<.021
0.85	0.28	<.031 >.34 >.23
	0.23 -0.581 -0.21	0.230.73-0.5810.64-0.210.520.850.28

In hypothesis 2, education participation has a positive relationship with gender norms, that is a positive unit change in gender norms enhances girls' education participation by 0.23. With a stated alpha of 0.05, this association was found to be statistically significant since the p-value < .001. The squared multiple corrections of 0.73 mean the variation between them is 73% explained. Accordingly, the study was unable to uphold the null hypothesis since the sample data favoured the alternative hypothesis. Therefore, the study concluded that gender norms influence the educational participation of secondary school girls in Homa Bay County. Therefore, the alternative hypothesis, that gender norms influence the educational participation of Homa Bay County is validated.

### 4.3.4 Quantitative Data Analyses and Findings on the Third Objective

The third objective of this study was to assess the influence of sexual values on the education participation of in-school secondary girls in Homa Bay County. Essentially, sexual values are the standards of sexual behaviours, feelings, and thoughts that have been imparted to the girl, and which to a greater part serve as a form of reference to judge what is right sexually (Reyes et al., 2016). Depending on the background, there are likely to be variations in the understanding of this. However, concerning the study, all the school authorities affirmed sexual abstinence as the standard sexual behaviour for all girls. Sexual values being a latent variable could not be measured directly (Brown, 2015, 2014), necessitating the need to identify its manifest variables. From the literature review, and especially from similar studies 15 measurable factors are believed to account for variability in the sexual values variable (Deardorff, Tschann & Flores, 2008).). The 15 factors were further improved by inputs given at departmental and school proposal

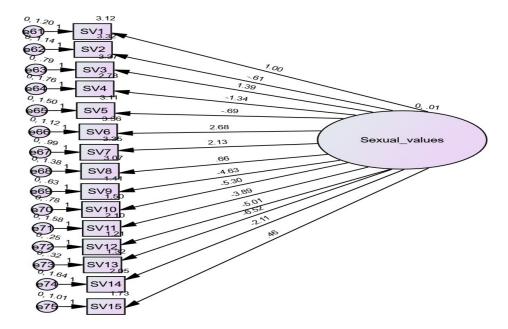
defense panels. The respondents' preferences were scored using a Likert Scale whereby each statement offered four response options in terms of 'strongly disagree' (1 mark), 'disagree' (2 marks), agree' (3 marks) and 'strongly agree' (4 marks). Higher scores indicated acceptance of sexual values that are likely to engender behaviours that undermine a girl's education participation. On the other hand, lower scores indicated an acceptance of sexual values that engender behaviours that are likely to minimize risks to the education participation of girls. To reduce potential response-set bias, negatively worded items were included in the questionnaire, but these were scored in reverse (Brown, 2015).

After checking for completeness and adherence to the guidelines, the responses were coded, scored and entered into the SPSS version 24 for various tabulations. Following the research methodology formulated in chapter three, the study subjected the fifteen manifest factors to the confirmatory factor analysis test to identify those factors that were best suited to explaining the sexual values variable (Brown, 2015). Factors that had a factor loading of over 0.5 were retained because according to Brown (2015), they can account for variability in the latent variable. Table 4.13 gives a summary of these factors and the corresponding responses of the respondents.

# 4.3.4.1 Sexual Values Path Analysis

This study carried out a structural equation modelling to uncover the complex underlying relationships between the variables of interest in this study. Path diagrams were used to represent the relationship between the sexual values variable and a set of 15 manifest variables or factors. Path diagrams are like flowcharts showing variables interconnected

with lines that are used to indicate causal flow (Crossman, 2019). Every path has two variables represented by either rectangular boxes or ovals linked by either straight or curved arrows that show a direct or linear relationship between the two variables.



The path analysis results are presented in Figure 4.10.

Figure 4.10: *Path Diagram for Sexual Values* Source: Study Data 2022

These manifest factors (SV2, SV5, SV8, and SV15) had factor loadings > 0.5 and eigenvalues > 1. In terms of variability, it means SV2, SV5, SV8, and SV15 explained 61%, 69%, 66%, and 46% of variation sexual values latent variable respectively. The other factors SV1, SV3, SV4, SV6, SV7, SV9, SV10, SV11, SV12, SV13, and SV14 were eliminated because their factor loadings were too low or erroneous and did not meet the criteria. Table 4.20 shows the mean responses per factor on the sexual values scale.

	Agree	Disagree
	(%)	(%)
SV2: Reducing sexual risk by delaying having a boyfriend.	74.6	25.4
while schooling		
SV5: Keeping sexual relationships limited to one equally.	70.5	29.5
trustworthy partner		
<b>SV8:</b> Insisting on safe sex (with a condom on)	70.5	29.5
SV15: Engaging in sex with a 'sponsor'	20.6.	79.4

 Table 4.20: Sexual Values Factors

On the statement 'Reducing sexual risk by delaying having a boyfriend while schooling', 74.6% of the respondents agree with the statement, while a sizeable minority of 25.4% disagree. This implies that the majority of the girls recognize the need to focus on their studies ahead of meeting emotional needs. The dissenting party which constitutes about a quarter of the respondents feel that they can handle both tasks; schooling and entertaining romantic relationships. The latter trend is challenged by a literature review on account of studies that claim that in-school girls that engage in romantic relationships are usually not able to maintain focus on their studies. (Sidze et al., 2017). On the question of engaging in sex with one's sponsor, 20.6% of the respondents agree while 79.4% disagree. These responses reveal that most of the girls have a moral compass about what is sexually right and what is sexually not acceptable. On the other hand, the respondents that agreed with the statement appear to exhibit behaviours that are contrary to societal expectations. Such behaviours in the context of the theoretical frame-work provided by problem behaviour theory are characterized as problem behaviour (Jessor, 2014). A more complete assessment of these responses will be done in the discussion section where both sources of data will be considered.

#### 4.3.4.2 Assessing the Mode Fit for Sexual Values Variable

#### **Chi-Square Test**

The Chi-square test relies on maximum likelihood to assess the overall goodness assuming that the hypothesized model is correctly specified. The null hypothesis is that the predicted model and observed data are equal. It examines whether the covariance matrix derived from the model represents the population covariance. The results for the Chi-Square for sexual values are presented in Table 4.21.

 Table 4.21: Chi-Square Test for Sexual Values

Model	DF	CMID	Р	
Default	90	108.423	0.000	
Independent	30		.000	

Source: Study data 2022

The Chi-Square statistics for the sexual values' latent variable in relation to its manifest factors including (SV2, VS5, SV8, and SV15), had ( $X^2 = 108.423$ , DF= 135 - 45, p-value = 0.000); meaning that the null hypothesis is rejected; an indication that the predicted model and the observed data are not equal. Thus, the model incorporating sexual values and (SV2, VS5, SV8, and SV15) is adequate or a good fit.

# The Root Mean Square Error of Approximation for Sexual Values

Root mean square error was used to help verify the quality of predictions. The RMSEA is the standard deviation of the residuals (prediction errors). Residuals are a measure of how far from the regression line data points are from the line of best fit (Dagnall et al., 2018). In other words, it tells you how concentrated the data is around the line of best fit. The results for RMSEA for sexual values are presented in Table 4.22.

 Table 4.22: RMSEA for Sexual Values

Model	RMSEA
Default	0.036
Independent	0.095

**Source:** *Study Data 2022* 

The results revealed a superior fit for the sexual values and its manifest factors namely

(SV2, VS5, SV8, and SV15) with (RMSEA = 0.036).

# **Comparative Fit Index (CFI) For Sexual Values**

The comparative fit index (CFI) analyzes the model fit by examining the discrepancy between the data and the hypothesized model while adjusting for the issues of sample size inherent in the chi-squared test of model fit, and the normed fit index (McNeish & Wolf, 2020). CFI values range from 0 to 1, with larger values indicating a better fit. A good fit should be > .90 (Dagnall et al., 2018). Table 4.26 presents the results of CFI for sexual values.

 Table 4.23:
 CFI for Sexual Values

Model	CFI
Default	0.913
Independent	.000

Source: Study Data 2022

Analysis results revealed a superior fit for the sexual attitude and its manifest factors namely (SV2, VS5, SV8, and SV15) (CFI = 0.913).

### **Squared Multiple Correlations (R-Squared) For Sexual Values**

R squared in regression acts as an evaluation metric to evaluate the scatter of the data points around the fitted regression line. It recognizes the percentage of variation of the dependent variable. It shows how well the regression model fits the observed data Knowledge-Hut, 2020). In other words, R-squared is the proportion of variance in the dependent variable that can be explained by the independent variable. If your value of R - Squared is larger, there is a better chance of the regression model fitting the observations. The value of R-squared is between 0% and 100%; while 0% corresponds to a model that does not explain the variability of the response data around its mean. On the other hand, 100% corresponds to a model that fully explains the variability of the response variable around its mean. Table 4.24 presents the results R-Squared for Sexual Values in this study.

<b>Coefficient Estimates</b>	
0.502	
0.582	
0.520	
0.586	
	0.502 0.582 0.520

**Table 4.24:** R-Squared Sor Sexual Values

**Source**: *Study data 2022* 

In the case of sexual values, SV2, SV5, SV8, and SV15 revealed that 50%, 58%, 72%, and 59% of their observed data respectively fitted multiple linear regression models. Therefore, a multiple linear regression model that would surface from the confirmatory factor analysis involving sexual values latent variable and its manifest factors would be:

Gender Norms =  $\beta$  + 3.317 (SV2) + 3.368 (SV5) + 2.784 (SV8) + 3.114 (SV15)

The regression model coefficients estimate for each manifest variable is shown in Table 4.25.

Factor	Coefficient Estimates
SV2	3.317
SV5	3.368
SV8	2.784
SV15	3.114

 Table 4.25: Coefficient Estimates for Sexual Values

Source: Study data 2022

Each coefficient estimates the change in the mean response per unit increase in X when all other predictors are held constant.

# 4.3.4.3 Hypothesis Three Testing

The third hypothesis for this study was formulated as follows:

H<sub>0</sub>3: Sexual Values do not influence the educational participation of girls in

secondary schools of Homa Bay County.

The study deployed structural equation modelling to expose the multiple relationships that exist between the variables. Structural equation models are a melding of factor analysis and path analysis into one comprehensive statistical methodology (Investopedia, 2020). Figure 4.11 and Table 4.26 presents the SEM results.

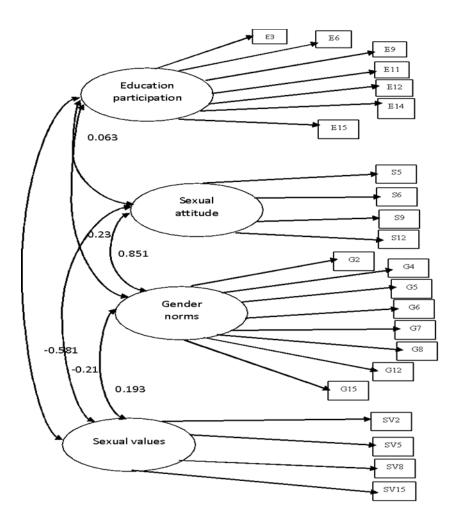


Figure 4.11: *Multivariate SEM* Source: *Study Data 2022* 

Covariance's of latent variables				
Variables		Covariance's	SMC	<i>p</i> -value
Education Participation	Sexual Attitude	0.063	0.67	<.001
Education Participation	Gender Norms	0.23	0.73	<.001
Education Participation	Sexual Values	-0.581	0.64	<.021
Sexual Attitude	Sexual Values	-0.21	0.52	<.031
Sexual Attitude	Gender Norms	0.85	0.28	>.34
Gender Norms	Sexual Values	0.193	0.34	>.23

In hypothesis 3, education participation has a negative relationship with sexual values, that is, a unit change in sexual values affects girls' education participation by -0.581 (opposite direction). This association was found to be statistically significant at p-value < .021. The squared multiple corrections of 0.64 mean the variation between them is 64% explained. The null hypothesis that sexual values do not influence the educational participation of girls in secondary schools of Homa Bay County is rejected. Therefore, the alternative hypothesis, that sexual values influence the education and sexual values have a negative covariance of -0.581. It appears to suggest that girls are motivated to study well when they feel they are in their sexual value system.

### 4.4 Presentation of Qualitative Data Analysis and Findings

Besides the quantitative data, the study also collected qualitative data using open-ended questions from 12 guidance and counselling teachers: 12 principals and three sub-county education directors. The guidance teachers together with the principals came from the schools that had been randomly chosen for purposes of generating quantitative data from the secondary school girls in the three sub-counties of Rachwonyo South, Rachwonyo East and Ndhiwa. Qualitative data was collected to provide evaluative data against the quantitative data collected from the girls. This input was considered necessary given the proximity of teachers/principals to the girls, and also in terms of dealing with issues related to the variables of interest to this study. Teachers and school heads are responsible for guiding girls during school sessions. In this section, the qualitative component of the study is presented thematically. The presentation will follow the order given by the research objectives.

#### 4.4.1 Qualitative Data Analyses and Findings on the First Objective

The first objective of this study was to investigate the influence of sexual attitudes on the education participation of secondary school girls in Homa Bay County. Besides quantitative data, the study also collected qualitative data covering the three objectives of the study. In this section, relevant data to the first objective is presented under three themes: 'Attitude Towards Casual Sex', 'Perception of Sex as a Conjugal Right' and 'Reproductive Health Concerns'.

### 4.4.1.1 Attitude towards Casual Sex

The inclination of girls to engage in casual sex was highlighted across the board by many guidance and counselling teachers and school principals. This was reported as a recurring issue that threatens the education participation of girls in secondary schools. Probing guidance and counselling teachers revealed several underlying reasons for rampant sexual promiscuity among secondary school girls. Several school principals and guidance and counselling teachers accused the media of glamorizing sexual activity. The teachers noted that the majority of the students have access to cell phones and computers, notwithstanding that these are forbidden while in school. The teachers noted that because of this access, the girls easily download and read whatever they want on the sexual domain. One teacher observed that

'Our young girls are accessing the internet on their parents' phones while others have secretly acquired mobile phones. On these gadgets, they watch video clips of a pornographic nature which in turn fuel their sexual appetites'

These observations were consistent with the findings of the study carried out by Dawson et al. (2019) who reported that the media often amplifies sexual activity in such a manner that adolescents who access it are made to think that engaging in sex is the 'in-thing'. The

teachers noted that their counselling activities together with parental guidance are no match to a powerful sexual and glamorous media. One of the common complaints among teachers interviewed was that the girls do not listen to their guidance exhortations. At least, their sexual behaviour confirms the teachers' suspicions. On that account, some teachers see their efforts as a failure given the desired goals. Many school principals believed that to counter powerful social media, they have put in place strict rules about students' access and use of cell phones. This policy involves sudden checks and inspections of lockers and dormitories. There is also checking at the school for all those entering the school. But, the principals also admit that there are many other ways the students deploy to beat the system.

Another factor identified as significant in fueling casual sex practices was identified by teachers as peer influence or peer pressure. One principal reported that peers who have initiated themselves into sexual coitus tend to share those experiences with those still fence-sitting. This narrative was supported by yet another teacher who reported that *'these kids learn a lot about sex from their peers who are sexually active'*. These assertions agree with Pearson (2018) who stated that in the early stages of initiation into sex, many teens rely on their peers for guidance and evaluation of the whole encounter in the world of sex. This is further reinforced by the fact that sexual guidance is considered by many parents and guardians as something risky, or in some cases a taboo, thus leaving the matter majorly to peers (Negeri, 2014). Moreover, the adults' sexual example may be wanting, thus contributing to reluctance and avoidance of the topic.

The parental upbringing was also brought on board by one sub-county education director to help explain the increase in sexual encounters among adolescents. He said that homes of single parents confer on such girls reduced vigilance and care thus affording the girls a lot of leeway, especially where such mothers are engaged in-come generating hustles. In such homes, girls have too much unmonitored time while their parents are away. This observation is validated by Ombuya, Yambo (2012) who in their highlighted poor parental outcomes as a significant barrier to the girl-child education. This finding calls for a good capture of each pupil's family background to establish such vulnerabilities so that appropriate guidance can be offered to them.

There is a widespread agreement among teachers, principals and sub-county education directors that involvement in sexual relationships by secondary school girls affects their academic performance negatively. Sexual engagements often bring about pregnancy incidences and sexually transmitted diseases, which work against the education participation of the girls in question. They argued that such girls do not have enough focus on their studies, and very often skip school. These assessments agree with several studies that have correlated poor performance with involvement in inappropriate sexual behaviours. Sidze et al. (2017, and Ogolla and Ondia (2019) support the view that girls who are engaged in sexual activity lack a balance between sexual interest and academic interest. The emotional concerns and energies invested in romantic relationships mean that they have little time or even interest in their education. The foregoing observations and discussions reveal that there is a widespread understanding that teenage involvement in sexual activities is common and this validates the conceptual framework adopted by the study.

### 4.4.1.2 Perception of Sex as a Conjugal Right

The tendency for girls to regard casual sex as a normal right was widely reported by many guidance and counselling teachers, school principals and sub-county education directors. In particular, one principal reported that whenever the school delays to declare half-term, the girls spring up to demand it on the pretext that they needed to go home to satisfy 'their legitimate conjugal rights'. This was a surprising feature to the study considering that these girls were not married, at least as per the principal's knowledge. The boldness with which such girls in the said school demanded half-term revealed a gap between the girls' aspirations and the principal's aspirations, especially considering that most girls' educational attainment is hampered by too much involvement in the pursuit of sexual fantasy. This perception of sex as a conjugal right agrees with Lindberg et al. (2016) who stated in their study that many teenage girls see sex as a necessity and a right. In both mixed and pure girls' schools, the teachers expressed concern about the girl's unsatisfactory sexual behaviour. These sentiments from teachers, principals and education directors are consistent with various study findings cited in this study's literature review. Rath and Wadhwa (2019) reported that sexual interest and sexual acts are on the increase among adolescents.

While Prendergast *et al.* (2013) further confirm that many young people readily initiate sex once they hit the puberty (13-19) stage as they try to explore their fantasies and romance. This implies that most of these young girls do not pay sufficient attention to the risks casual sex entails to their educational development. This behaviour is validated by Hardy et al. (2019) who acknowledged in their study that female sexuality is a powerful

tool that controls the emotions, thinking, behaviour, actions, activities as well as overall life of the girl child especially in secondary schools at the adolescent stage.

Several teachers reported that the majority of the girls see themselves as 'women' with all the characteristics of a mature woman. They are undecided as to whether they can still claim childhood status or simply accept that they have moved on and have since become women. Seeing themselves as women means that they deem themselves qualified to engage in sexual acts. In their fantasy world, they see sexual relationships as ideal fulfilments notwithstanding the risks of pregnancy and diseases. In that respect, a female principal of one of the sampled schools observed that

> 'These girls even do not fear male teachers. A teacher who treats them as young girls they see him as one belittling them. They want to be seen on the same level as madams, and that is the problem male teachers face when dealing with them.'

The teachers thought that the majority of the girls have already gained sexual experiences with men. They insinuated that the fascination to be seen as women rather than girls is anchored in the need for more freedom in the sexual world. The above observations are collaborated by the study of Kar et al. (2015) who reported that young adolescents are in a hurry to gain adult recognition status. They see adulthood as bestowing upon them advantages. Girls in this age bracket (15-19) feel that they are full women and can handle whatever a woman can handle, including sex. This account validated Gatwiri's (2019) observation that young adolescents are eager to try out adult behaviour including having sex.

One teacher reported an incident where a girl asked her guardian why she was so hard on her yet she also got involved in similar relationships at her age. Such boldness no wonder scares teachers and parents who feel insecure when faced with such candid questions from their juniors. One principal of a day school said:

'Many girls resist help in this matter as they feel it is their right to deal with it. Furthermore, they seem to argue that in the event things go against them, it is their cross to carry.'

The girls' interest in privacy in sexual matters agrees with the study findings of Aldawid (2010) who reported that adolescent girls who are engaged actively in sex with older working men saw their dealings as private matters that should be left to them. Some guidance and counselling teachers reported that they have over-heard their female students making remarks such as '*kupeana ama nisipeane, ni mambo yangu*' (to give or not to give, that is my business'). These girls also scare their peers who are reluctant to initiate sex with phrases like 'utakufa uiache' (you will die and leave it). In other words, if you do not use it (or enjoy it) it will be of no benefit to you once you are dead.

Several teachers repeatedly reported that girls who are engaged in sexual relationships also exhibit poor discipline. This observation is collaborated by the study of Kastborn *et al.* (2015). Kastborn and colleagues carried out a longitudinal study that reported that early sexual debut (ages 12-15) was correlated with problem behaviour later in life (ages 17-20). Girls who initiate sex early are at a higher risk of getting into conflict with the law or abusing drugs or dropping out of school. This study gives credence to both the teachers' concern and parents for the need for young girls to delay sexual activity till they are through with schooling. Many principals reported indiscipline as a covariation with inappropriate sexual relationships among girls. Early sexual debut disorients the girl's

values, and attitudes and throws her into a moral turmoil, one that lacks balance and focus on her studies and very often this has linkages to poor discipline. Scholars such as Siu-ming *et al.* (2019) concur with this position by stating that youth who have sex become preoccupied with the present and heavily discount future outcomes. Again, this position validates the conceptual framework that guided this study.

Despite the negative outcomes of sexual encounters among in-school girls, the majority of the teachers acknowledged that the society around them is increasingly accepting this behaviour as something typical of the age, a matter also stated by Skosana et al. (2020). Against this sexual up-surge, many teachers interviewed in this study appeared helpless as regards the best way to deal with these issues. Many teachers suggested the need for some penalties to be introduced on girls who offend the sexual code. However, there was no consensus on what kind of penalties. The matter remains pertinent and requires constant interventions to safeguard the educational interests of the girl child. It appears that schools must accept this phenomenon as a normative behaviour typical of the age. De Cecco and Shively (2014) affirm that initiation of romantic and sexual relationships during adolescence is largely normative and an integral part of adolescent identity development that calls for closer accompaniment and provision of appropriate aids. When engaging in sex by secondary school girls is seen as a human right, it makes it difficult for teachers to confront it in the interest of their studies. Many teachers expressed the view that sex comes with risks such as pregnancy which impact the affected girls negatively in terms of education outcomes. It is on this account that school principals are not giving up on their female students. This validates the need for further research to continue to propose effective ways of dealing with the problem. This study is one way

that seeks to contribute to a better conceptualization of the problem so that workable solutions can emerge for implementation in the interest of secondary school girls' education participation. This validates the conceptual framework postulated in this study.

### 4.4.1.3. Reproductive Health Concerns

Reproductive health concerns were identified as another theme of interest from the data. Reproductive health entails issues related to unwanted pregnancy, access to contraceptives and uncertainty around the side effects of prolonged use of contraceptives. The overall picture emerging from the responses of teachers and principals is that the majority of the girls are aware of the pitfalls of engaging in sex while still schooling. But as one principal put it,

'Many girls are engaging in sex without any protection. The parental assumption is that their girls are abstaining, yet they aren't. And we as teachers cannot propose anything without authority.'

There is a willingness to embrace a remedy that can lessen or eliminate the risks involved. However, many teachers declined to own any knowledge of the use of contraceptives by their girls. One of the education directors in the sub-county reported that the Ministry of Education does not propose the use of contraceptives for secondary school girls. That means any attempts to introduce safety in sexual relationships are left to the parents and guardians. The statement of the sub-county director stands in contrast to similar policies in the developed world. For example, Roundsari et al. (2013) reported in their study that while in developed countries, the methodology to increase safety in teenage sex includes a substantial promotion of the use of contraceptives, the practice in resource-poor countries like Kenya, the focus has been largely on promoting abstinence and virginity pledges that are often backed up by religious doctrines. Some teachers, understandably do not have much confidence in abstinence policies. Other stakeholders view contraceptives as equally problematic to implement and may easily be interpreted by immature youths as a license to sexual promiscuity.

School principals expressed some reservations about a blanket recommendation of using contraceptives for fear that their side effects for prolonged use are not fully understood, and also due to the erratic nature of teen sexual coitus. From the medical point of view, there are issues to be addressed. For cultural and religious reasons, parents will demand a say in whether this is appropriate for their girls or not. Therefore, it is not a matter in which common ground can be reached easily so that safety is exercised through universal promotion of contraceptive use (Roudsari *et al.*, 2013)

Furthermore, several principals reported that abstainers have other advantages over nonabstainers. One principal said that

'Abstainers are disciplined and focused on their academic work. They perform better than those who are making sexual deals with men'

For that reason, majority of the teachers discourage sex for their girls, even where it is safe with contraceptives because they are convinced that sexual acts are psychologically disruptive to the learning process. Many teachers instead support girls taking virginity pledges and abstinence until such a time that they have achieved their educational goals.

So, whichever way youth sexual safety is looked at, it is clear that the risks are real. Therefore, there is a need to strengthen behaviour that chooses safety over risk. In other words, youths should be made aware of possibilities that can help them reduce the risks of pregnancy and STDs. Many teachers and principals concede that to some degree teen sex has become rather typical of the adolescence stage. But promoting teen sex as normative raises more questions than can be answered. For that reason, there are debates around this perspective. For instance, what will become of the social menace this creates in terms of babies born without able parents to look after them? How will these young mothers navigate between school chores and motherhood chores? For them, and indeed for many principals, the education of girls goes beyond getting them into schools. It must also ensure that these girls finish the required levels of education and be able to compete meaningfully in the labour market. Therefore, juggling between school and taking care of babies does not satisfy the above argument. Early motherhood undermines the girls' educational goals and achievements. Therefore, in line with the theoretical framework of this study, age-inappropriate sexual behaviour among girls out to be determined along parameters of problem behaviour that elicits social control over it.

### 4.4.2 Qualitative Data Analyses and Findings on the Second Objective

The second objective of this study was to investigate the influence of gender norms on the education participation of secondary school girls in Homa Bay County. Besides quantitative data, the study also collected qualitative data covering the three objectives of the study. In this section, relevant qualitative data to the second objective is presented under three themes: 'Normalization of Teen Pregnancy', and 'Dominant Patriarchal Norms. The discussion and interpretation will be anchored around these two themes.

#### 4.4.2.1 Normalization of Pregnancy

The sheer number of in-school secondary school girls falling pregnant appears to have persuaded mainstream attitudes towards accepting it as typical of the age. The prevalence of pregnancies as shared by one teacher raises some questions about whether indeed girls are still afraid of pregnancy. One principal observed that:

> 'The girls are very protective of their colleagues who are either pregnant or are already mothers. They will overwhelm with the disapproval of any teacher who in their understanding tries to throw a jibe at those girls'.

Whether consciously or unconsciously, the girls appear to be very sensitive to any attempt to express a disapproving opinion regarding girls who are either pregnant or are already mothers. Commenting further on these girl-mother students, several principals expressed reservations about the government policy on pregnant girls. They noted that the government policy that allows pregnant girls to stay in school till they give birth promotes the normalization of pregnancy as a normal state of attending school. In their view, pregnant girls should be sent home early and then come back after delivery to repeat the classes they were in when they left. One principal observed that

"The school experiences many pregnancies in each academic year. The girls who get pregnant are allowed to continue attending school until such a time that they are due for delivery. This is in line with the Ministry of Education policy. After giving birth, they are allowed to come back to rejoin their classes.

One other principal added that he had observed incidences where the same girls become pregnant twice in the four-year KCSE cycle. In his view such cases create the impression that being pregnant, being a mother and schooling were just good companions. The problem seems to be more pronounced in some schools, especially in mixed schools. One principal of a mixed secondary school reported that

> Teenage pregnancy is common and affects up to 50% of girls by the time they reach form four. The girls are exposed to sexual predators between home and school. Boda Boda riders are also among these people who offer free rides in exchange for sex"

On the other hand, principals from pure girls boarding schools also reported the problem of girls getting pregnant in their institutions. However, some teachers in boarding schools also reported that the cases of girls' pregnancies are under-reported and underacknowledged for reasons of protecting the name of the school. They observed that public images are important to school principals and teachers. This position agrees with Sanjakdar et al. (2015) who reported that schools see sexual research as risky, or even dangerous and prefer to ignore it. They are not sure if the outcome will be favourable, or even bearable. Yet this does not by itself make the problem go away. In the course of data collection for this study, such experiences were met in some schools.

Many principals brought up scenarios where many day scholar girls do not get enough time to focus on their studies as most of them are kept busy with domestic chores. Girls appear to believe that it is normal that once they are home they must get involved in domestic chores to the detriment of their studies. Many teachers pointed out this trend as being responsible for them posting poor grades in KCSE. This trend is validated by gender-based researchers (Ninsiima et al., 2015). On that account, many principals have put in place affordable temporary accommodations to help remedy the situation. This was noted by the study as laudable and should be replicated in other mixed-day schools that are facing similar challenges.

In another observation, one school principal reported that some men with daughters in school have been glad to use pregnancy as a means to marry them off to escape the costs that go with continued education. It is these types of behaviour on the part of parents that precipitate a worrying picture of girls' education. Some families see girls as a source of wealth that can be earned easily through dowry payments upon marriage. Yet other families see girls as a source of cheap labour on the farm for agricultural produce. This scenario is validated by Leung *et al.* (2019; Wood et al., 2017) who identified some of the cultural practices that encourage early marriages. These included child slavery, early marriages, child trafficking, prostitution, poverty, and multiple household duties for girls as some of the contributing factors.

In the interest of the educational success of girls, school administrators ought to be vigilant in their tasks of empowering the girls to remain pregnant-free so that they can maximize the benefits of their secondary schooling. Similarly, the government may have to review this policy so that girls who get pregnant while in school can be allowed to have an organized compensatory programme so that their lost academic time is recovered in full to give them a good opportunity to attain better grades in the national exams. This approach is validated by Danieli et al. (2018) who observed that female education goes beyond mere finishing of school. There must be additional support to ensure that the girls also attain commendable academic outcomes.

Pregnancy was cited by principals as a major factor in early withdrawals from school, a point also attested by some teachers in this study. In many schools, especially mixed schools, pregnancy has emerged as a major cause of adolescent school girls' leaving school for good. The health implications of teenage pregnancy raise other concerns such as safe delivery concerns and the accompanying risks in terms of maternal deaths and termination of schooling. This is validated by some scholars including Wood et al. (2017); Ahmed and Bett (2018), and Zander, Montag, Wetzel and Bertel (2020) who reported in their studies that pregnancy is a major factor that drives girls out of school.

This worry was indeed confirmed by principals. They noted that a significant proportion of girls who get pregnant drop out of school altogether as juggling between school and baby care becomes untenable.

On the other hand, some principals noted that pregnancy issues are not all wrapped in the girls' hands. In many situations, pregnancy occurs in the context of human rights violations such as child marriage, coerced sex, or rape. In such scenarios, girls are helpless, and cannot therefore bear responsibility. Furthermore, the lack of access to reproductive healthcare services for adolescent girls coupled with the absence of affordable contraceptive commodities means contraceptive use among unmarried adolescents is generally low, a fact reported by Leung *et al.* (2019) and Mwenje, (2015).

The apparent normalization of pregnancy comes at a cost to the girl-child education because pregnancy introduces so many other anti-education factors such as prenatal costs, post-natal costs, baby care needs and increased work for the girl-mother. The result is poor academic outcomes that confine the girl-mother to a cycle of poverty. This scenario validates the conceptual framework adopted in this study.

# 4.4.2.2 Influence of Patriarchal Norms

Patriarchal norms were highlighted by some teachers as a factor that is still influencing women's behaviour, including school-going girls' social and educational behaviour. For example, teachers in mixed secondary schools noted that girls do not voluntarily volunteer to answer questions in class. They must be clearly targeted to participate. The idea behind their passivity is that since the men are there, it is their task to respond on their behalf. But in a learning context, each student must acquire knowledge individually since examinations will also be personal. But some teachers explained this reluctance in terms of the exaggerated apportioning of blame on the female gender. Girls are afraid of shame in case their answers are wrong. The boys mock them. In general, rigid gender norms founded on patriarchal norms associate masculinity with control and being right while at the same time associating femininity with insufficiency and weakness (Bicchieri, 2016).

Parents, especially in rural settings were reported by some principals as not valuing the education of their daughters as they do with that of their sons. Some parents constantly make remarks that indicate the girl is in school to expose herself to a future husband. One teacher observed that some parents very often tell their daughters that

'If the school has defeated you, why don't you find a man to marry? Other parents go as far as making arrangements for their girls to get married so that they get dowry.'

This assertion agrees with Birchall et al. (2018) and Efevbera (2019) who in their studies emphasize the role of parents/guardians in the education of girls. Lack of support and valuing of the girls' education inevitably leads to low outputs and early marriages. Another teacher observed that a significant number of the girls have shifted their economic fortunes to prospective husbands and boyfriends.

'These girls think that what matters most is succeeding in getting a wealthy man to marry them or befriend them. They hardly see that school offers them the opportunity to make a difference by themselves, instead, they waste their time on beautifying their looks'

The teachers observed that it is challenging to help such girls believe in their efforts. These observations when seen against the traditional background where men are seen as providers, the girls' outlook is not abnormal. They are founded on the traditional ethos of the patriarchal society whose influence is still evident. This orientation is validated by Muyaka (2018) who reported in his study a similar behaviour. Hakura et al. (2016) rightly expose that inequality in education accounts for long-term inequalities in income gaps between men and women. Girls who are deprived of their educational opportunities end up suffering for an entire life due to diminished opportunities. With increasing modernity, the traditional expectation that men shall provide is increasingly diminishing. Gender experts state that girls who are brought up strongly in line with traditional patriarchal norms tend to cede power to men, and are likely to suffer from abuse, even sexually. In predominantly patriarchal communities, a woman who questions a man is branded as being undisciplined (Lutta, 2015).

Another feature that came up in the interviews with the teachers and principals was the aspect where girls almost un-consciously blame themselves in the event of becoming pregnant. The patriarchal society teaches women that pregnancy is their responsibility. This teaching is at odds with the other patriarchal norm that justifies that it is a man who should initiate a sexual encounter. This attitude on the part of the girl ultimately lets off the boy- clearly 'a partner-in-crime from assuming any serious responsibility for the pregnancy and taking up his rightful duties in the upbringing of the child. Concerning their education, becoming a mother is a great disrupter. The child-care chores undermine their studies. It is also clear that many girls are ignorant of the Children's Act (2001) that criminalizes underage sex and apportions equal responsibility for the child's upbringing.

Health concerns were also raised by teachers as some of the girls getting pregnant are rather too young to make it. This concern is fairly well-rooted. Scholars have shown that secondary school girls who have been pregnant are twice as likely to report poor health than those with no history of pregnancy (Efevbera, Bhabha, Farmer & Fink, 2019). Others who cannot handle it choose to carry out an abortion which risks the lives of the girls. This concern has been noted by the KDHS report of 2014 which said that there are increasing indications of significant levels of illegal abortions, particularly in the urban areas, and other related health risks for young women. Consequently, normalizing pregnancy comes with significant costs to the female students who fall victim to it. Both academic and health risks are real. In the academic domain, the girl is likely to register diminished educational outcomes. In the health domain, the risk of dying while giving birth is significant. Cumulatively, these undermine the girls' education participation. This validates the conceptual framework of the study.

### 4.4.3 Qualitative Data Analyses and Findings on the Third Objective

The third objective of this study was to assess the influence of sexual values on the education participation of secondary school girls in Homa Bay County. Qualitative data on this objective was collected through interview guides that were administered to 12 school principals, 12 guidance and counselling teachers, and 3 sub-county directors. School principals, guidance and counselling and sub-county directors of education acknowledged that promotion and adherence to age-appropriate sexual values are important in attaining the overall objectives of learning. In this section, relevant data and findings on the third objective are presented under two themes: 'Sexual Abstinence as the School Sexual Norm' and 'The Challenge of Sponyo Culture'.

### 4.4.3.1 Sexual Abstinence

The normal school sexual policy is abstinence for all students, including boys. This policy according to teachers favours a conducive learning process. Moreover, the teachers are aware of the negative side effects of school girls getting involved in sexual acts. The sexual romance was seen by the majority of the school principals as hurting the girls' interest in education to the point that they down-grade their educational undertaking. It also affects their discipline as their focus is shifted to cultivating intimate relationships. This concern agrees with that of Balfe et al. (2019) and Naiman (2019) who reported in their studies that routine engagement in sex by adolescents is linked to emotional turmoil, depression, and the facilitation of friendships with academically disinterested peers. One principal of a mixed secondary school expressed frustration at the difficulties encountered in guiding girls to suspend interest in sexual relationships for the sake of their studies. He reported thus,

'These girls do not want us to know what is really in their hearts. And they are not keen on the school guidance on proper sexual behaviour. In truth, they only agree with us partially, but when you observe what they do, it is completely the opposite.'

From the foregoing statements, it is evident that achieving sexual sobriety among secondary school girls is a challenging issue for teachers. Yet, any serious attempt to resolve it and offer affected girls an avenue of navigating safely in the interest of their education will have to be pursued nevertheless, since it is the only reasonable way that guarantees meaningful educational outcomes. Some teachers also expressed the frustration that many young girls do not listen to them in the guidance and counselling they offer. One teacher expressed thus

'Our girls when they go home get involved in 'disco matangas' and forget all that we have taught them.'

Knowledge alone is not sufficient for girls to navigate safely the pitfalls of adolescent sex. Several teachers in the guidance and counselling departments observed that girls are good at knowing what is correct, but they are poor at carrying it out. This experience by teachers is validated by Lubis et al. (2022) who stated in their study that youths tend to be resistant to mainstream values because they see them as not meant for them. For many youths, to be youth means to be different, it means one has to operate on different values, and very often also a different language. They see themselves as a distinct sub-group within the larger population with their behaviours and values.

School Principals also expressed concern regarding peer pressure on the issue of getting a boyfriend at the secondary school level. Having a boyfriend, in their view is the starting point of getting diverted on the path to academic focus. They noted that this is driven by peer influence and exaggerated fantasy stories about sex. For many girls, it was reported by teachers that it is some kind of validation of attractive womanhood. One teacher said that

'These girls share a lot about their boyfriends, and what they receive from them. Girls without boyfriends are made to feel inferior. And they are very protective of such relationships that sometimes fights break out with those suspected to be encroaching on what is perceived as their man'

In consideration of these scenarios, the abstinence policy that is supported by the Ministry of Education seems to be an ideal that appears to many girls like 'a bird in the

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air'. This position agrees with the research findings of Negeri (2014) who found out that many in-school youths are ready and willing to engage in sex, even risky sex without any contraceptives.

On account of the increasing involvement of girls in sex, some teachers openly cast doubt on the policy of sexual abstinence, calling for its review. The increasing number of girls attending classes after delivery raises questions regarding the policy. The abstinence policy is supported by research as the most productive route for students, including boys. Barr et al. (2014) found in their study that there is a positive association between sexual abstinence and academic outcomes. They observed that abstinence is likely to serve as a protective shield that insulates the girls from disruptive and negative influences associated with sex and enables the girls to focus on immediate academic chores.

Girls who submit to sex may not benefit from contraceptives since they are neither provided nor promoted in schools. In that respect, they remain at the mercy of the male partner, who may choose to make use of a condom or not. In practical ways, it may not be within the girls' power to make any decisions at the point of sex. In the end, the girl remains at risk of pregnancy. Commenting on the viability and widespread use of contraceptives, the school principals as well as guidance and counselling teachers reported that it is not within their power to initiate contraceptives for students since the ministry policy is abstinence. That is a matter that is left to the parents and guardians to deal with it. Given that sex among adolescents takes place in unplanned ways, it may be practically challenging for girls in such relationships to insist on the use of condoms or any other contraceptives. Many teachers expressed disappointment in seeing many girls' education getting ruined and eventually emerging from school with poor grades when in reality they were capable of wonderful grades. This concern by teachers is validated by Sanches et al. (2012) who reported in their study that youths are opposed to conventional values and goals and generally tend to get into problems with either the law or otherwise. Non-responsive behaviour to good guidance is often associated with problem behaviour, a relevant theory in this study. The theory is instrumental in helping understand adolescent deviant behaviour. Therefore, much as adolescent sex is increasingly seen as normative, research keeps on revealing other side effects that cannot be ignored in the interest of the girl's education. Solutions must therefore be pursued and realized. Therefore, underlying factors (enablers) need to be identified and rectified to make compliance with ageappropriate sexual behaviour easier to adopt for young adolescents in the interest of their educational development. The issues so raised validate the study's conceptual framework.

### 4.4.3.2 Sponyos

In the girls' language, a sponsor is referred to as *a sponyo*. These are generally male sponsors who provide girls with extra shopping and other goodies besides their parents. These men may even be as old as the girl's father. The common denominator is that they provide the girls with extra support that makes their lives more comfortable in school. To some degree, girls with sponsors consider themselves lucky. These *sponyos* were highlighted by the principals and teachers as 'the enemy of education' for the unethical influence they impose on the girl child's secondary schooling. According to some principals, the *Sponyos* may be meeting a real need in the girl's education, while in more rampant cases, it may be just a desire for luxury on the girl's part. It was also reported by

some teachers that some sponsor relationships begin with a good intention to help the girl, but with time they metamorphosize into sexual relationships as the girl grows up into a mature woman.

School principals also acknowledged that poverty is one of the excuses for justifying the need for sponsors. Some teachers, however, noted that, in many instances, relationships start as a Good Samaritan type but end up in abuse of the girl and even leading to pregnancy. Girls with limited experience remain vulnerable to people who arrive wearing a mask of a sponsor but the reality beneath the mask is a sexual predator. The teachers noted that the issue of sponsors is good when it is carried out through institutions as opposed to individuals. They mentioned Equity Bank and Kenya Commercial Bank as examples of sincere sponsors.

The girls themselves are eager to get sponyos. One principal even went as far as alluding to the fact that some girls recruit *sponsors* for those girls that are shy to enter relationships or do not know how to get one.

> 'these girls go into those partnerships fully aware that they will trade with their bodies for all the favours they receive from their sponsors. A number of them go further by linking other girls to prospective *sponyos'*

The position of teachers on this matter is validated by Birchall et al. (2018) and Mwenje (2015) who reported that material gains are at play in the majority of relationships between adolescent girls and much older sexual partners. The fact that strangers who are unknown to the family of the girl can support the girl's education is likely to be something with a hidden undesirable motive. In the end, the sponsor relationships rather than enhancing the girl's educational participation hamper it by creating unnecessary

diversions. The covert nature of these relationships makes them difficult to unravel for school principals. Girls in the relationships are equally not willing to volunteer information that can help expose the perpetrators.

# 4.5 Discussions of the Findings of the Study

This study set out to address the problem of susceptible education participation of secondary school girls in Homa Bay County from the perspective of sexual attitudes, gender norms and sexual values. The outcomes of this research provide insight into the plausible association between the independent variables and the dependent variable. Nevertheless, these findings should be interpreted subject to the stated limitations in Section 1.9 of Chapter One. This discussion section is subdivided into three sub-sections as per the research objectives. In each sub-section, the discussion followed a predictable pattern as follows: summary of key findings as per the research objective, interpretation of the findings in relation to the literature review, implications of the study findings, acknowledgements of some limitations (generalizability & reliability) and recommendations for practical solutions and further research in the interest of consolidating the study's findings (McCombes, 2023).

### 4.5.1 Discussions on the Findings of Research Objective One

The first objective of the study was to determine the influence of sexual attitudes on the education participation of secondary school girls in Homa Bay County. Under this subsection shall be discussed the findings reported already in sections 4.3.2 and 4.4.1 in chapter four of this study. Three hundred and ninety-three female secondary school students completed the questionnaire relating to the study's objectives. Similarly, twelve principals of secondary schools while twelve guidance and counselling teachers and three

sub-county education directors of education took part in a guided interview schedule to provide complementary and evaluative data for the study.

#### 4.5.1.1 Sexual Attitude

The data analysis yielded sufficient ground to satisfy the first objective of the study. The study found that the sexual attitudes of the majority of the girls in Homa Bay County are prone to sexual gratification. The data suggests that this inclination is founded largely on the assumption that sex is a kind of 'conjugal right' that girls feel most obliged to satisfy, even in situations where they are dealing with strangers. This finding runs counter to the school authorities' expectations. This cadre assumes sexual innocence is the norm, and that in-school girls are expected to spend their time focused on their studies and co-curricular school activities. The school authorities' expectations are in line with the policies of the Ministry of Education that outlaw sexual activities amongst secondary school students. These expectations are in line with what Leung et al. (2019) describe as sexual innocence in the adolescents' sub-group. The data demonstrates a disconnect between what the Ministry of Education together school authorities assume and what is widely happening on the ground.

Concurrently, the study's empirical and qualitative data demonstrate that girls are fairly active sexually, and are exposing themselves to sexual risks in terms of pregnancy and sexually transmitted diseases. This finding validates Ogolla and Ondia's (2019) claim that increased sexual interest often leads to sexual coitus which increases the risks of pregnancy and infection of STDs among adolescent girls. Involvement in romance activities precipitates a division of attention with regard to education participation

activities. The study's data however also showed a positive concern among girls in terms of maintaining a healthy reproductive status. This concern, however, was contradicted by the widespread sexual promiscuity that was captured in other parts of the data. Of interest also for further discussion is the perception of sex as a conjugal right and the role of peers in promoting common sexual ideas. Generally, the study's data demonstrate a relationship between the independent variable and the dependent variable as predicted in the conceptual framework.

Contrary to the hypothesized statement that 'Sexual Attitudes have no Influence on the Education Participation of Secondary School Girls in Homa Bay County', data analysis and findings of the study suggest the contrary. In hypothesis 1, education participation was found to have a statistically significant positive relationship with sexual attitude (p-value < .001) against the stated alpha of 0.05. The study's findings agree with Sidze et al. (2017) and with Siu-Ming et al. (2019) who reported in their studies that youths who are heavily involved in sexual relationships tend to discount future educational outcomes in favour of present sexual fantasies. This is further supported by Pound et al. (2016) who claim in their study that teenagers in sexual relationships develop disinterest in their studies and are more motivated on working towards their esteemed romantic relationships.

Several factors from the data and literature review have emerged that help to explain sexual attitudes that are inclined towards sexual coitus. The study's data (qualitative and quantitative) identified the sexual media as one of the big influencers of sexual attitudes that are prone to sexual consummation among adolescents. This fact is supported by Baams et al. (2015) who in their study identified sexual glamorous media as one of the factors that promote and shapes sexual attitudes that lead to sexual promiscuity among adolescents. According to Baams et al., the sexual media promotes permissive sexual attitudes that are appealing to young adolescents' sexual appetites. Adolescents easily connect with sexual media on the internet on the gadgets of computers and phones, but also through magazines dedicated to such content. Guidance and counselling teachers noted the influence of the glamorous media overshadows guidance and counselling interventions that are provided by schools. Schools have erected guidance and counselling departments to provide counter information to erroneous popular seductive ideas propagated by the sexual media. Indeed, the study's data support the role of guidance and counselling departments in disputing false sexual images that are spread by the glamorous media. However, the widespread acknowledgement of sexual promiscuity amongst in-school secondary school girls suggests that guidance and counselling interventions are not holding. Roudsari et al. (2013) give a more plausible account for the increase in sexual promiscuity amongst in-school secondary school girls. In their study, they claim that much of the research on teen sexuality is focused on preventing pregnancy and transmission of STDs and not on empowering girls to stand up to it. The disadvantage of this kind of research is that it ends up narrowing research to merely finding solutions that are merely focused on safe sex.

Proponents of safe sex among teens are often wielding the contraceptive card in their hands. Emphasis on contraceptives is in itself a doubtful solution given that teen sexual behaviour is erratic, often unplanned and informal as Negeri (2014) points out in her study. On this account, there are no guarantees that at the point of sex access to a

contraceptive is possible. And where it is possible, there are no assurances that there is a positive attitude towards the use of contraceptives. Research on teen attitudes towards the use of contraceptives has reported a conflicting resolve. And even where the use of contraceptives is initiated, there are still risks in terms of consistent use of the contraceptives (Nash et al. (2019). Given the complexity of teen sexuality, further research is necessary before plausible solutions can be presented. Hence, there is a need for further research on a local level to estimate the implications of a policy that promotes the use of contraceptives amongst its student population. Important questions to be answered include the attitude of adolescents towards condom use and other contraceptives. Equally important to be discussed are the health vulnerabilities of using contraceptives for a prolonged period.

The study data further suggest that peer pressure contributes to common sexual ideas and behaviours. Girls who have initiated sexual relationships tend to share their experiences with inexperienced girls in such a manner that makes it appealing for others not yet initiated to begin. In this way, common sexual ideas amongst sub-groups of adolescents are spread. This assessment agrees with other studies, notably those carried out by Kar, Choudhury and Singh (2015). The closeness and solidarity of girls created by a school environment, especially by boarding schools is a powerful opportunity that gives numerous opportunities to pass on ideas of a sexual nature. In boarding schools, the girls spend far too much time together, hence sharing sexual images and innuendos. The concerned school authorities observed that it is difficult to control peer-to-peer sharing of sexual information. This trend reflects the desire by girls to gain peer acceptance and recognition. This acceptance brings satisfaction and a sense of feeling supported by ones'

peers. This view is also collaborated by Kreager et al. (2016) who found the need for acceptance amongst ones' peers to be a powerful influencer of peer behaviour, including sexual behaviour.

The study data revealed that a sizeable number of girls' regard sex as a conjugal right, even though they are unmarried. The assumption that sex is a conjugal right becomes the basis for justifying engaging in it casually and even encouraging other girls to do the same. This view is agreeing with Gatwiri's (2019) assertion that adolescents see their sexual coitus as the equivalent of adult sexual encounters that are largely exercised within marriage. By branding their sexual coitus as a conjugal right, the girls are attempting to justify premature sexual engagements by conferring on them language that legitimizes it. It is an attempt to legitimize what lacks legitimacy and the backing of relevant laws (Children Act, 2001 & Sexual Offenses Act, 2006). Furthermore, drawing parallels between sex within marriage and sex outside marriage as practiced by adolescent girls exposes some dissimilarity that the girls are unwilling to disclose. Within marriage, sex is free as it forms part of the covenantal relationships. But sex between secondary school girls and their male counterparts as reported by teachers and school principals is not free. This behaviour by adolescents when seen against the problem behaviour theory can be correctly labelled as unconventional, thus meriting a social response against it. Moreover, instigating factors need to be identified and incorporated into the guidance and counselling services that are provided in the school.

Another view, for many girls, engaging in sex may be compared to killing two birds with one stone, because it brings a desired convergence of financial gains and the satisfaction of intimacy needs.

In general, there is a lack of unanimity regarding adolescent sexual behaviour. One set of scholars sees adolescent sexual behaviour as normative while another set sees it as a transgression that elicits societal disapproval. The former's views are more aligned with the assertions of Prendergast et al. (2019) while the latter's views agree with Obare and Birungi (2013). Prendergast et al. subscribe to the view that adolescent sex is normative, and should be acknowledged as such and protected from negative effects even if it requires the authorization of the use of contraceptives. Obare and Birungi on the other hand represent a more traditional view that is more concerned with the risks that are involved in adolescent sexual encounters. In their view, adolescent sexual behaviour constitutes problems in the social, health and academic domains. Allowing sex amongst adolescents to flourish freely leads to a social menace, that is unsustainable and harmful to the adolescents themselves and their families. Most of the discussions on adolescent sex behaviour are likely to align with one of these two orientations. However, since adolescent sexual behaviour takes place within a particular cultural milieu, it means settling disputes on the proper way forward must take note of the socio-cultural context in which the behaviour is taking place. Within Homa Bay County, the majority of the learners are presumed to be of Luo origin since the county is predominantly inhabited by the Luos. Luo cultural practices consider adolescent sexual behaviour as transgressions and inappropriate (Lutta, 2015). This orientation is validated in many other African tribes (Ngore, 2012). School heads, guidance and counseling teachers as well as sub-county

education directors affirmed that the school's sexual policies advance sexual abstinence and the adoption of virginity pledges.

These results support the existing theory of social exchange. In the context of this study, girls' sexual attitudes are nurtured by the thoughts of benefits that sexual gratification brings forth. Furthermore, the study has exposed conjugal rights as an added justification by adolescents who engage in sexual coitus. Accordingly, these results should be considered when schools are making interventions in the area of promoting the sexual sobriety of secondary school girls. This study stands out uniquely because while most of the local research has largely focused on preventing pregnancy (Mwenje, 2015), and examining the impact of comprehensive sex education as an antidote to sexual promiscuity (Obare & Birungi 2013), the current study focused on gaining insight the underlying latent factors that influence sexual behaviours that increase risks (pregnancy and STDs) to the girls' education participation. The study findings that sexual attitudes of secondary school girls in Homa Bay County are prone to sexual gratification is explained by problem behaviour theory that advances the notion that behaviour is the balance between risk factors and protective factors, that is, the stronger of the two manifests its corresponding behaviour (Jessor (2014). Risk factors can be peer influence, home background, marijuana or alcohol abuse. Protective factors can include religiosity, good family background, high self-esteem and the like.

Based on the study's finding that the sexual attitudes of the majority of secondary school girls in Homa Bay County are susceptible to sexual gratification, the study recommends that school authorities promote the formation of sexual sobriety peer teams (SSPT) that

meet regularly to unpack the potential risks and costs of premature sex. These teams can be under the patronage of a suitable female or male teacher to provide indirect supervision. The group membership can range from about ten to fifteen. The meeting frequency can be adjusted to the school programmes but should take place a couple of times in each academic semester.

The generalizability of the research findings is impacted by sample bias given that it was taken from one county that is predominantly inhabited by people from one ethnic group. Generalizing these findings beyond that ethnic community is a matter that is subject to further studies in a different ethnic population. Therefore, further research is needed to establish the generalizability of these findings beyond Homa Bay County.

# 4.5.2 Discussions on the Findings of Research Objective Two

The second objective of the study was to assess the influence of gender norms on the education participation of secondary school girls in Homa Bay County. The discussions are based on the findings reported in sub-sections 4.3.2 and 4.4.1 in chapter four of this study. The data was collected from 393 female students, twelve secondary principals, twelve guidance and counselling teachers and three sub-county education directors of education. Sample participants were obtained through procedures presented in sections 3.7.2 and 3.7.3 in chapter three. The female students generated quantitative data while interviews with teachers, school heads and sub-county directors generated qualitative data. In the following discussion, the two sources of data are integrated to guide the discussion to satisfy the second objective of the study as stated above.

#### 4.5.2.1 Patriarchal Norms

The data analysis yielded sufficient ground to satisfy the second objective of the study. The study found that the gender norms of the majority of secondary school girls in Homa Bay County are disposed to un-questioning submissiveness to men and over-involvement in domestic chores at home. The data established this disposition is enforced by patriarchal norms that identify being female with unquestioning submissiveness (sexually as well) to men and carrying out a variety of domestic chores including caring for siblings and cooking.

The study data supported the view that gender roles that are underpinned by long-held patriarchal beliefs undermine the girl's educational interests. This finding agrees with Kessel et al. (2014) who reported in their study that girls suffer from gender-engineered disadvantages that undermine female education advancement.

The finding agrees with several other studies, particularly the studies carried out by Ninsiima et al. (2018), Chingtham and Guite (2017) and MacDonald and Bicchieri (2016). The findings demonstrate that gendered norms confer disadvantages on the girl child at the level of decision-making regarding key issues such as indulging in sex, participation in class activities, who should do domestic chores, and ultimately by proposing images of womanhood that make her subordinate to men. In the context of education participation and schooling in general, this finding means that girls are more likely to spend more time sorting out domestic chores and taking care of younger siblings at the expense of their education. It also implies that girls may find it difficult to object to sexual advances from men since a good woman is one who is submissive to men. No

wonder 86.5% of the girl respondents agreed with the statement that 'you do not argue with your man about sex, you just give in'.

The data further suggest that complying with patriarchal norms wins the girl a positive affirmation as a good woman/girl. It is confounding that the data supports the view that parents are at the forefront of entrenching patriarchal norms on the girl-child. Girls who resist such influences are branded as undisciplined and receive threats insinuating that they would not be worthy of any man to marry them. This view agrees with Bicchieri (2016) who reported that threats are often enlisted to protect and entrench rigid gender norms that deny girls the exercise of their freedom of choice. The findings are further validated by Aldawid who reported that parents in Wajir County were part of the cartel that undermined girls' educational development by conspiring to give off their girls in marriage rather than support their education. The fact that these findings find a wider concurrence with other research only fortifies the view that gendered norms have a wide application for many women globally.

Further analysis of the data suggests that patriarchal influences when fully allowed to flourish undermine the educational participation of girls leading to poor educational outcomes, a fact also acknowledged by Kashu (2014). The data support the view that patriarchal influences are more particularly pronounced in mixed rural schools, where modern values and ideas are less appreciated. This finding is validated by Chingtham and Guite (2017) who underlined in their study that rural parents are less supportive of girls' education and more supportive of early marriage. A plausible explanation of this may be due to some parents desiring to either escape the financial responsibilities of educating girls, or simply angling towards getting bride price or improve the family's economic fortunes.

Regarding decision-making about sex, 72.7% of the girls agreed with the statement that 'It is bad manners for a girl to reject sex from a man'. A further 86.3% of the same respondents agreed with the statement that 'you do not argue with your man about sex, you just give in'. These responses entrench the view that girls under the influence of patriarchal norms defer important decisions to men on issues that they eventually bear the greatest responsibility for. Hence, this finding gives credence to Ngore (2012) and Lutta (2015) who advanced the view that Luo women are dependent on men in key decisions that affect them, including marriage and re-marrying (levirate rites). Levirate rites are performed by elderly Luo men to give a widowed woman another man to continue the father figure in the home. The choice of such a man does not require the input of the widowed lady. Yet such a man can still reproduce more children for the widow. The reluctance by girls to put a fight on issues of sex demonstrates the power of patriarchal norms over the social life of women in general in Homa Bay County. It is confounding that while the girl-child is being socialized to submit to men, the boy-child is encouraged to be potent, assertive and dominant (Lutta, 2015). This approach leads to young men developing hedonistic and predatory behaviours while reducing the lives of vulnerable girls to a social menace as claimed by Obare and Birungi (2013).

Therefore, contrary to the null hypothesis of this study which hypothesized that gender norms do not influence the education participation of secondary school girls in Homa Bay County, the study's findings demonstrate a contrary opinion. In hypothesis 2,

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education participation was found to have a statistically significant positive association with the gender norms variable (p-value < .001) against the stated alpha of 0.05. Consequently, the study vacates the null hypothesis and adopts the alternative hypothesis as a more plausible explanation of the study's findings. Based on this finding, gender norms influence the education participation of secondary school girls in Homa Bay County. But this finding runs counter to teachers'/school authorities' expectations which promote gender equality and treats all students equally. The apparent failure of schools to achieve gender equality can be plausibly explained by the study of Ninsiima et al. (2019) which reported that gender norms are assimilated early in life, and influencing them or changing them must begin early at the family level. In the context of this study, girls at the secondary level have already entrenched gender norms that are difficult to change.

The gravity of sexual submissiveness is most demonstrated by the data that suggests that in some schools up to 50% of girls in a given class become pregnant by the end of the four-year cycle. The data further suggests this is not something that embarrasses the girls at all. On the contrary, girls who are not yet pregnant show a lot of solidarity with those who are either pregnant or already mothers. This solidarity acts as a shield against teachers who might be inclined to throw a jibe towards pregnant girls or towards those that are already mothers. The girls' position that shields pregnant peers appears to contradict Sidze' et al. (2019) claim that such girls suffer negative social judgements. Nevertheless, as much as teenage pregnancy is increasingly acceptable, teachers and school principals continue to discourage the practice since it is associated with poor academic outcomes. The teachers' view validates Ansong and Alhassan (2016) whose study affirmed pregnancy affects girls' educational outcomes negatively. Poor academic outcomes tend to limit the girls' professional choices, thus disposing them to trades that are economically less rewarding.

It must be further observed that sexual permissiveness cannot only be explained in terms of gender norms, or for that matter in terms of negative patriarchal norms. The data equally demonstrates that sexual permissiveness is also enhanced by comfort-searching attitudes, especially financial comfort. Teachers in the study reported satisfactorily about this factor. The poverty factor may be at play, but also mere pleasure-seeking attitudes cannot be denied. All factors considered, it is the contention of this paper that girls stand to benefit more sustainably through the education path as opposed to the sexual path where premature sex dominates. In that respect, studies such as those undertaken by Danieli et al. (2018), and MacNaughton and Koutsioumpas (2017) have correctly argued that the education of girls goes beyond getting them schools, it must also ensure that they complete school with good grades and enroll in a competitive course that guarantees them good economic outcomes. Several other scholars confirm this fact (Siu-ming et al., 2019), and therefore girls who downgrade their schooling opportunities to access goodies through sexual exchange are in the opinion of this study laying a foundation of a life-long dependence on men which undermines their dignity.

The study data further supports other plausible explanations for the submissive behaviour of girls towards men in this study. The return to school policy (Ministry of Education, 1994) was cited by several teachers as inclined natal towards admitting that traditional values of sexual abstinence are not effective. Although the policy meant well in terms of addressing the problem of girls who had become victims of pregnancy, its subsequent requirement that such girls attend school till the very of the pre-natal period gives such girls opportunities to increasingly present being pregnant and schooling is easily reconcilable. Some teachers feel that the return-to-school policy discourages sexual sobriety values. Further research may be required to test these agitations of teachers. That notwithstanding, the majority of research studies have already demonstrated that pregnancy and being a mother are correlated with poor educational outcomes (Ogolla & Ondia, 2019; Sidze et al. 2017 & Grunspan et al., 2016). Validated by these research findings, this paper contends that guidance and counselling interventions route for sexual sobriety as the proper and conducive environment under which young secondary school girls can flourish academically and socially.

Generally, the study's data demonstrate a relationship between the independent variable and the dependent variable as predicted in the conceptual framework. Based on the above discussions, it is evident that besides patriarchal norms' influence, there are other factors such as allurements of money that promote sexual permissiveness. Furthermore, the data demonstrate that sexual submissiveness is not only culturally determined but is enhanced also by the girls' interest to climb the social hierarchy quickly through submissive behaviours. This understanding agrees with Holm (2010) and Skona et al. (2020). Accordingly, these results should be considered when schools are making interventions that seek to promote gender equality. These findings also support the existing theory of problem behaviour theory which explains behaviour in terms of instigating factors, namely protective and risk factors. Guidance and counselling services should explore and promote protective factors while raising their voice against unconventional behaviour. The discussion so far validates the study's conceptual framework. This study stands out uniquely because while most of the research has tended to lean on exploring socio-economic factors that undermine girls' education participation (Obare & Birungi, 2013; Kar et al., 2015), or simply exploring how gender-based differences disadvantage girls' education participation (Roudsari, 2013; Birchall et al., 2018; Efevbera et al., 2019). The current study sought to understand susceptibilities that accompany girls' education participation from the perspective of the underlying psychological factors that influence gendered behaviour. The relevant psychological factors considered in the study are elements of the girls' personality that limit or enhance the likelihood of the girl becoming an accomplice in gender norms that are harmful to her education participation interests. The problem behaviour theory was adopted to be able to predict proneness to socially unconventional behaviours that are typical of the adolescent In the context of this study, unconventional behaviours can be appropriately age. profiled as problem behaviour and accordingly given the required social disapproval by teachers and other education stakeholders. And behaviours that are judged to be desirable can be profiled for praise/approval so that the rest of the school can be invited to copy.

Based on the study's finding that girls in Homa Bay County showed a strong identification with domestic chores and general submissiveness to men, the study recommends that school authorities use parental gatherings to create awareness of the need to focus girls during their schooling phase on their career development as opposed to prematurely initiating themselves into sexual partners and mothers. The findings of this study will be intervened by the limited prior research that denied the study theoretical foundations that would have improved its research methodology. Prior studies on the research could have helped the study frame the research questions perhaps differently to

fill some of the gaps that could have been noticed. On that account, the study recommends that similar research be carried out in another county with a different ethnic composition for purposes of comparison and generalizability of the study.

# 4.5.3 Discussions on the Findings of Research Objective Three

The third objective of the study assessed the influence of sexual values on the education participation of secondary school girls in Homa Bay County. It is a widespread practice for schools to include in their statements of mission, vision and motto aspects of their values. It is an indication that values are an important component of educational institutions, and fostering good values is properly a requirement that validates any academic achievements. In this sub-section, the discussion will focus on the findings both from the quantitative and qualitative sources to reconcile them through data triangulation.

Under this sub-section shall be discussed the findings reported already in sections 4.3.2 and 4.4.1 in chapter four of this study. The data was generated by three hundred and ninety-three female secondary school students who completed the questionnaire relating to the study's objectives. Similarly, twelve principals of schools, twelve guidance and counselling teachers and three sub-county education directors of education took part in a guided interview schedule to provide complementary and evaluative data for the study.

#### 4.5.3.1 Sexual Abstinence Values

The data analysis yielded sufficient ground to satisfy the third objective of the study. The study found that there is widespread eroded confidence in abstinence values by both girls and teachers in Homa Bay County. This finding is founded on the assumption that the majority of girls are incapable of holding to abstinence values till they finish secondary schooling. This belief is enhanced by the widespread sexual transgressions by the girls that were reported by teachers. Some school authorities reported pregnancy ratios of up to 50% of the girls in a four-year cycle. The study also found that there is widespread approval of the sponyo culture amongst girls, a practice that comes with sexually binding agreements between the male *sponyo* and the female student. The male sponyo, as he is called, supports the girl in various ways financially and the girl in return agrees to engage in sexual relationships with him. This finding goes counter to the Ministry of Education policies that prescribe abstinence values, the laws of Kenya that criminalize underage sex (Children's Act, 2001 & Sexual Offenses Act, 2006), and the expectations of school heads and boards. Nevertheless, the finding agrees with several other similar studies, namely; Prendergast et al. (2019), Gatwiri (2019), and Kar et al. (2015). The disconnect between the envisioned sexual values and the actual sexual behaviour seems to present a policy dilemma for school authorities and teachers involved in the guidance and counselling of female students.

Contrary to the hypothesized statement that 'Sexual Values have no Influence on the Education Participation of Secondary School Girls in Homa Bay County', data analysis and findings of the study suggest the contrary. With regard to this study's findings, sexual values of secondary school girls in Homa County undermine the girls' education participation. Girls with little believe in sexual abstinence values easily become compromised by engaging in sex which increases the risk of pregnancy and other sexual diseases. Pregnancy is a big factor in female school withdrawal and attainment of poor educational outcomes (Mwenje, 2015). Further collaboration of this finding with literature reviews reveals contradicting positions by scholars. Proponents in support of

the finding argue that abstinence-only policies have shown little success in taming sexual permissiveness among adolescents. Sidze et al. (2017) advance the view that proposing abstinence-only policies is akin to choosing risk over safety. In their view girls and adolescents in general should be given a wider spectrum of choices including appropriate contraceptives. Panchard et al. (2019) back the argument by proposing the establishment of comprehensive sexuality education as an antidote to the sexually permissive culture that is representative of today's adolescents. Choosing safety over risk implies proposing contraceptives for secondary school girls. Yet, this is a topic already engulfed in ethical and religious controversies (Wangila & Sifuna, 2013). Doubts have been expressed about the plausibility of entrusting secondary school students with contraceptives. Given that youths often engage in unplanned sex, how confident can one be that at the point of sex, they can access the contraceptive?

On the other hand, some studies advocate for abstinence policies and virginity pledges. This school of thought base their argument on the known facts that premature sex produces guilty feelings and low self-esteem among students (Ogolla & Ondia, 2019). Moreover, sexual permissiveness also increases pregnancy risks. School management bodies that uphold sexual abstinence values do so with the understanding that it will enhance performance and increase the quality of educational outcomes. This position is well articulated by Grunspan et al. (2016) who reported in their study that sexual abstainers are more focused, have high self-esteem and are more successful in their education. This is because abstainers are wholly focused on their educational tasks and are not emotionally disrupted or anxious. Sexually active girls continually bear the risk of pregnancy and infection by STDs. They spend their time worrying if their last sexual

encounter resulted in a pregnancy. Abstainers do not have such concerns since they already know that they have not undertaken any risk. In principle, abstainers are insulated from disruptive and negative influences that would otherwise preoccupy them instead of their studies. This fact agrees with the finding of Barr et al. (2014).

Other interventions on the side resolving the issues of sexual permissiveness among adolescents have agitated for a more rational and coherent comprehensive sexuality education syllabus. The issue at stake is the content for comprehensive sexuality education. Cultural and religious concerns have erected barriers on the road to establishing a national comprehensive sexuality curriculum (KDHS, 2014). There are fears that these may be hijacked by agents of Western civilization to impose values contrary to what local stakeholders want. Again, further debates on these statements were considered by the study to fall outside its scope. However, as a matter of interest, the study recommends further research to establish the plausibility of the establishment of a comprehensive sex education programme that commands widespread acceptance.

The study data shows that Homa Bay County has a majority of the schools leaning toward religious/Christian values. The implication of this in the context of this study is that religious-based sexual values can be incorporated into the local guidance and counselling programmes of the schools. This suggestion agrees with Haglund and Fehring (2010) who found in their study that religiosity improves attitudes towards sex. The study reported that youths who go to church frequently were less likely to engage in premature sex, and tend to have fewer sex partners. This resonates well with the current study whose data suggests that many schools in Homa Bay County have a religious

affiliation to one or other church. Given that religious doctrines firmly advocate for sexual abstinence values, most of the students enrolled in these schools can benefit from religious doctrines on sex. Further support for this approach is given by Ma et al. (2014) who reported in their study that Latino sex values correlated with greater sexual abstinence for Latino female adolescents. Latino values insist on an acceptable description of a true Latino woman as chaste, virtuous and submissive. Based on the discussions so far considered, the study recommends that cultural and religious sexual values be promoted in schools as one way of transmitting and promoting sexual sobriety amongst secondary school girls.

In the context of this study, sexual adolescent behaviours that go counter to societal expectations can be explained by the second theory of this paper, namely; problem behaviour theory. That means sexual permissiveness can be profiled for societal and school disapproval as unwanted and age-inappropriate behaviour. In the context of problem behaviour theory, family factors that instigate sexual permissiveness will be explained as risk factors while factors that reduce sexual permissiveness will be explained as protective factors (Jessor and Jessor, 1977 as cited in Jessor 2001). Risk factors include exposure to the sexual internet (pornography) and other environments that increase sexual risk. Protective factors functioning families, religious instruction and attending church services. Within Homa Bay County, the majority of the learners are presumed to be of Luo origin since the county is predominantly inhabited by the Luos. Luo cultural practices consider adolescent sexual behaviour as transgressions and inappropriate (Lutta, 2015). Therefore, Luo's cultural values can be enlisted in the instruction of girls in the pre-adolescent and adolescent phases. Failure to assist young

girls to adopt responsible sexual values can be seen as a missed opportunity in terms of improving and maximizing their educational outcomes. The discussions so validate the study's conceptual framework.

Accordingly, these results should be considered when schools are making interventions in the area of promoting sexual sobriety amongst school-going adolescents. This study stands out uniquely because while most of the local research studies have largely focused on exposing the problems associated with premature sexual behaviours among adolescents (Ogolla & Ondia, 2019; Aldawid, 2010; Rath & Wadhwa, 2017; Mwenje, 2015), little research has been devoted to exposing studying the role of values in influencing sexual behaviour amongst adolescents. Many institutions consider sexual research as risky and, in some cases, even seen as dangerous. This was experienced by this study where some schools were hesitant to grant permission for the study to administer the data collection instruments.

In conclusion, based on the study's finding that the majority of secondary school girls of Homa Bay County have eroded confidence in sexual abstinence policies and values, the study recommends that school authorities consider using both cultural and religious teaching to increase their female students' confidence and acceptance of sexual abstinence values. The findings of these studies will be impacted by methodological limitation of the study for failing to include interrogative data from the girls which could have given more depth to understanding the issues articulated in this study. Accordingly, the study recommends that future researchers can consider a similar study with a design that allows the harvesting of interrogative data from the girls.

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### 4.6. Conclusion

The results of this study revealed that education participation was positively correlated with sexual attitudes and gender norms of the girls in secondary schools in Homa Bay County. On the other hand, education participation was negatively correlated with students' sexual values. Revealing that sexual attitude, sexual values and gender norms played a big role in influencing the students' levels of participation in education. Therefore, the findings of this study are well anchored on these inferences calculated by SEM using the study's quantitative data. The qualitative findings of the study deepened appreciation of quantitative findings. This study has broadened knowledge on variables of interest when considering the improvement of the education participation of secondary school girls in Homa Bay County.

#### **CHAPTER FIVE**

## SUMMARY, CONCLUSION AND RECOMMENDATION

## 5.1 Summary of the Findings

The summary of findings is presented from the perspective of the research objectives as follows:

#### 5.2 The Influence of Sexual Attitudes on Education Participation

The first objective of this study was to determine the influence of sexual attitudes on the education participation of secondary school girls in Homa Bay County. Accordingly, the null hypothesis of the study was framed as follows: 'Sexual attitudes do not influence the education participation of secondary school girls in Homa County'. The study deployed a Concurrent Transformative Research design, i.e., mainly quantitative with an imbedded qualitative bit to answer the research questions. The quantitative data was collected from 393 secondary girls who filled out questionnaires, while qualitative data was obtained through guided interviews with twelve secondary school guidance/counselling teachers and twelve principals from the participating schools of secondary schools and three subcounty education directors. The participants in the study were identified and chosen using the procedures enumerated in section 3.7 of Chapter Three of this study. Sexual attitudes were treated as an independent variable while education participation was treated as a dependent variable. The study took place in the sub-counties of Rachwonyo South, Rachwonyo East and Ndhiwa. SEM was used to summarize the co-variations among the latent variables.

The study found that the sexual attitudes of the majority of secondary school girls in Homa Bay County are prone to sexual gratification. The data further established that this proneness is enforced by peer pressure influences, glamorous media (print & electronic), poor parental upbringing, erroneous understandings of sex as a conjugal right, and other allurements in various forms including financial benefits. In the context of problem behaviour theory, negative peer pressure, glamorous sexual media and poor parental outcomes incubate risk factors that instigate problem behaviour, which in this context may involve premature sexual coitus that may lead to more setbacks on the road of education participation for the girl-child. Consequently, these findings predict diminished educational participation and the attainment of poor academic outcomes. Heightened sexual attitudes increase risks of premature pregnancy, a factor cited by many studies as an obstacle to education participation of adolescent girls. Interventions through guidance and counselling departments in schools appear unable to placate the problem. Similarly, access to contraceptives is frustrated by the lack of policy and the potential ethical and religious debates. Therefore, efforts to improve the education participation of secondary school girls in the County must take note of these findings.

## 5.3 The Influence of Gender Norms on Education Participation

The second objective of this study was to assess the influence of gender norms on the education participation of secondary school girls in Homa Bay County. The null hypothesis was stated as follows: '*Gender norms do not influence the education participation of secondary school girls in Homa County*'. The study deployed a mixed research methodology to answer the research questions. The quantitative data was collected from 393 secondary school girls through questionnaires, while qualitative data

was obtained through guided interviews from twelve secondary school guidance and counselling teachers, twelve principals of secondary schools and three sub-county education directors. The participants in the study were identified and chosen using the procedures enumerated in section 3.7 of Chapter Three of this study. Gender norms were treated as an independent variable while education participation was treated as a dependent variable. The study took place in the sub-counties of Rachwonyo South, Rachwonyo East and Ndhiwa of Homa Bay County.

The study found that the gender norms of the majority of secondary school girls in Homa Bay County are disposed to un-questioning submissiveness to men and over-involvement in domestic chores at home. The study found that this orientation is enforced by patriarchal norms that identify being female with unquestioning submissiveness (sexually as well) to men and carrying out a variety of domestic chores including caring for siblings and cooking, while being male is identified with potency and manipulation.

The study data supports the view that gender roles that are underpinned by long-held patriarchal beliefs undermine girls' educational interests. But as if the 'end justifies the means, the girl's family upbringing begins early in shaping her into wifely roles. The study further noted that being pregnant or having a child at home while still schooling is largely seen as normal. This normalization contributes to more girls getting involved in premature sexual behaviours that ultimately lead to pregnancy. Yet, this study and other similar studies have demonstrated that pregnancy is associated positively with poor educational outcomes. Similarly, pregnancy was linked to the majority of premature school withdrawals by the girls. In the context of problem behaviour theory, patriarchal norms incubate risk factors that instigate problem behaviour in terms of over-valuing

compliance with cultural norms over and above a robust commitment to education participation. A critical review of this unquestioning compliance is necessary to restore balance in the life of a secondary school girl for better educational outcomes. Future interventions to improve the education experience of these girls should consider this study's findings.

#### 5.4 The Influence of Sexual Values on Education Participation

The third objective of this study was to determine the evaluation of sexual values on the education participation of secondary school girls in Homa Bay County. Accordingly, the null hypothesis was framed as follows: '*Sexual values do not influence the education participation of secondary school girls in Homa County*'. The study deployed a mixed research methodology to answer the research questions. The data was collected from 393 secondary girls, twelve secondary school guidance and counselling teachers, twelve principals of secondary schools and three sub-county education directors. The girls filled out a questionnaire that generated quantitative data while the other staff generated qualitative data through guided interviews. The participants in the study were obtained using the procedures enumerated in section 3.7 of chapter three of this study. In the study, sexual values were treated as an independent variable while education participation was treated as a dependent variable. The study sample was limited to the three sub-counties of Rachwonyo South, Rachwonyo East and Ndhiwa.

The study found that the majority of secondary school girls in Homa Bay County have eroded confidence in abstinence sexual values. This finding is confounding given that the ministry of education, supported by relevant laws prescribes sexual abstinence as the norm for school-going girls. The study data also revealed that teachers as well share in the eroded confidence in sexual abstinence values. This apparent lack of confidence in sexual abstinence values is informed by the widespread sexual transgressions that many a time result in pregnancy. On the pregnancy factor, some schools reported an upward index of 50% in a four-year cycle. The general permissive sexual culture was cited as the cause for the dim view of sexual abstinence policies. In particular, peer pressure, sponsor culture (men supporting girls in exchange for sex), erroneous understanding of sex as a conjugal right, a glamorous sexual media and widespread poverty were some of the cited factors contributing to the sexually permissive culture amongst secondary school girls in Homa bay County. The study data, however, supported the view that the loss of confidence in abstinence sexual values was synonymous with down-grading quality education participation for secondary school girls in Homa Bay County. This view was founded on the study's findings (collaborated by findings by similar studies) that sexual involvement by secondary school girls is associated positively with poor educational outcomes. In the context of problem behaviour theory, sexual promiscuity by secondary school girls is seen as a problem behaviour given that it goes against societal approval of expected behaviour in that age group of school-going girls. Any interventions to improve the education experience of these girls should consider the findings of this study.

### **5.5** Conclusion

Based on the study findings, the following conclusions were made about the influence of sexual attitudes, gender norms and sexual values on the education participation of girls in Homa Bay County.

#### 5.5.1 The Influence of Sexual Attitudes on the Education Participation

The study found a significant correlation between sexual attitudes among secondary school girls in Homa Bay County and education participation. In particular, the study found that the sexual attitudes of secondary school girls are prone to sexual gratification. This proneness to sexual coitus as per the study's data and supported by similar studies undermines the girls' education participation, thus leading to poor educational outcomes. Similarly, the study found that peer pressure spreads common sexual ideas thus making interventions more difficult. The study further found that access to contraceptives as a remedy to premature pregnancy and STDs was limited due to a lack of policy and religious/ethical issues that have yet to be resolved. It is the contention of this study that remedial action needs to be taken to bring more soberness in the girls' sexual attitudes in order to improve the girls' educational participation. The study proposes the establishment of peer-based sexual sobriety teams at school level to help counter erroneous sexual ideas that are peddled in schools, which in the end engender behaviours that put at risk the educational goals of many secondary school girls.

### 5.5.2 The Influence of Gender Norms on Education Participation

The study found that the majority of secondary school girls in Homa Bay County are disposed to un-questioning submissiveness to men and over-involvement in domestic chores. The study identified patriarchal beliefs as the key enforcers of these norms that extend their influence on the school. The study further established that these gender norms under patriarchal influence undermined the girls' educational participation through diminished decision-making and increased risks of sexual abuse and pregnancy. Pregnancy was associated with school withdrawal and termination of schooling for adolescent girls. The study concluded that gender norms are significantly correlated with the education participation of secondary school girls in Homa Bay County in a manner that undermines the girls' educational participation.

# 5.5.3 The Influence of Sexual Values on the Education Participation

Finally, regarding the influence of sexual values on the education participation of secondary school girls in Homa Bay County, the study found that the majority of the girls (as well as teachers) have eroded confidence in abstinence sexual values. This lack of confidence was informed by the widespread permissive sexual culture and the popularity of the sponyo culture amongst secondary school girls. The sponyo culture entails girls having sexually binding relationships with men for extra financial support. The lack of trust and confidence in abstinence sexual values promotes permissive sexual behaviours that puts the girls' educational participation at risk through unwanted pregnancies and other diversions emerging from romantic sexual lifestyles. Studies as well as data from this study have established that sexual romance among adolescents is positively associated with poor education participation and poor academic outcomes. Accordingly, the study concluded that sexual values are significantly correlated with the education participation of secondary school girls in Homa Bay County in a manner that undermines the girls' education participation. Future interventions to improve the education experience of these girls should take note of this study's findings.

# 5.6. Recommendations of the Study

i. Based on the study's finding that sexual attitudes of the majority of secondary school girls in Homa Bay County are susceptible to sexual gratification, the study recommends that school authorities promote the formation of sexual sobriety peer teams (SSPT) that

meet regularly to unpack the potential risks and costs of premature sex on the educational participation of secondary school girls.

- ii. Based on the study's finding that secondary school girls in Homa Bay County showed a strong identification with domestic roles and general submissiveness to men, the study recommends that school authorities use parental gatherings to create awareness of the need to focus their girls on future career development as opposed to prematurely initiating themselves into sexual partners and mothers which undermines their education participation.
- iii. Based on the study's finding that the majority of secondary school girls in Homa Bay County have eroded confidence in abstinence sexual values, the study recommends that school authorities in Homa Bay County leverage their religious and cultural affiliations to incorporate into their guidance and counselling programmes relevant cultural and religious teaching to improve the girls' focus on education participation.

# 5.7. Suggestions for Further Research

- i. A similar study should be carried out in another county in Kenya to compare the findings.
- A similar study should be carried out in Homa Bay County on the boy-child to see similarities and differences in relation to the current study.
- iii. A study should be carried out to establish the effectiveness of family and religious values in taming early sexual debut.

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#### **APPENDICES**

#### **APPENDIX 1: LETTER TO PRINCIPALS OF CHOSEN SCHOOLS**

To The Principal,

Dear Sir/Madam

# **RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN YOUR SCHOOL**

My name is Bro. Andrea Sifuna, I am a psychology student at Masinde Muliro University. I wish to conduct research for my doctoral thesis on the influence of sexual attitudes, gender norms and sexual values on the education participation of female secondary school students in Homa Bay County. The study will provide the necessary knowledge to school administrators and other stakeholders in providing guidance to girls at risk of misusing their sexual and reproductive rights to the detriment of their educational and career goals. The study is under the supervision of Prof. Kenneth Otieno and Dr James Ouda, faculty members of Masinde Muliro University.

I am hereby seeking your consent to administer questionnaires to some 30 randomly selected female students in forms one, two and three for purposes of generating data that will be useful in answering my research questions. I have attached the NACOSTI research permit, the letter of approval from the University Faculty of Education and the consent letter from Masinde Muliro Institutional Ethics and Review Committee.

Upon completion of the study, I will be more than willing to share with your school, under the guidance and Counselling Programme the major findings of this study. If you require any further information, please do not hesitate to contact me on mobile no 0722-952 972 or by email address: <a href="mailto:a.sifuna1961@gmail.com">a.sifuna1961@gmail.com</a>

Thank you for your time and consideration in this matter. Yours sincerely,

Bro. Andrea Sifuna Barasa

Masinde Muliro University Cell no. 0722-952 972

#### **APPENDIX II: QUESTIONNAIRE FOR STUDENTS**

# Section I: Introductory Letter

Dear Participant,

My name is Andrea Sifuna. I am a PhD student at Masinde Muliro University of Science and Technology carrying out research as a requirement for my academic accomplishments. Through random sampling, I have identified your school as a possible source of respondents for my research. Accordingly, I am requesting your permission to allow me to administer the enclosed questionnaire to about 40 students randomly selected from forms one, two and three (girls only.

My study is about 'The influence of Sexual Attitudes, Gender Norms and Sexual Values on the Education Participation of girls in Homa Bay County'. Homa Bay County is chosen as my study location on account of the relatively high prevalence of teenage pregnancy in relation to other counties in the country. I am carrying out this research in full compliance with the ethical requirements governing this type of research and with the approval of I have identified you as a respondent who is knowledgeable about the issues relating to this study. If you have no objection to participating in this study, then I humbly ask you to fill in this questionnaire as honestly as you can. Your response to the items in the questionnaire used in data collection will be kept confidential and will not be used for any other purpose except this study. For that reason, be free to give correct responses. Your participation is voluntary, and you are free to withdraw from this study at any point you deem fit. Do not, therefore, write your name anywhere in the questionnaire. The study will be of help in advancing knowledge about risky sexual behaviour for all the concerned stakeholders.

## **APPENDIX III: INFORMED CONSENT FORM**

**Title of Research**: Influence of Sexual Attitudes, Gender Norms and Sexual Values on the Education Participation of Secondary School Girls in Homa Bay County

Principle Researcher: Andrew Sifuna Barasa, Box 40222 Oyugis. Cell No 0722-952972

Research Supervisors: Dr Kenneth Otieno, cell phone no. 0729-753489 Dr James Bill Ouda, cell phone no. 0722-882026

Institutional Contact: Masinde Muliro University of Science and Technology, Educational Psychology Department P.O. Box 190-50100 # Kakamega Webuye Highway, Kakamega, Kenya Phone numbers: +254 (0) 702597360, +254 (0) 702597361

#### Introduction and Purpose of the Study

This study is necessitated by the researcher's findings of a significant number of secondary school girls dropping out of school due to pregnancies, early marriages, and engagements in twilight activities in urban social centres. Recognizing that secondary education is an important investment against poverty and a life-long dependency on others, this study will provide the much-needed knowledge that can be beneficial to educators/policymakers/parents and the girls themselves as far as their responsibility in these matters is concerned.

#### Your Role in the Research

Your participation in this study entails giving correct responses to statements in the questionnaires so that such information can be relied upon to make correct and valid statements about the objectives of this study. In brief, you will be required to respond to the following questionnaires:

Persona information without giving any names (8 items taking about two minutes) Sexual Attitudes questionnaire (15 items, taking about 7 minutes) Gender Norms questionnaire (15 items, taking about 7 minutes)

Sexual Norms questionnaire (15 items, taking about 7 minutes)

#### Subject Participation

We expect that 390 secondary school girls will enrol in this study. Since this study is about young female secondary school adolescents, you already have the desired characteristics for this study. For instance, you already have sexual attitudes, experienced gender norms, and have developed some sexual values. These are important experiences for this study. You can give correct responses based on your experience with the statements in the questionnaire.

#### **Potential Risks and Discomforts**

Responding to some statements in these questionnaires may bring some discomfort to your feelings. This is quite natural because issues relating to sexuality in some cultures are taboo to be addressed even on an individual level. Nevertheless, no real harm will be experienced since you are assured of remaining unknown and your data will only be used for this research, and afterwards, it will be safely stored or discarded.

#### **Potential Benefits**

Girls who participate in this study may gain a better understanding of their sexual attitudes, norms, and sexual values. It may also promote their awareness and responsibility as regards the exercise of their sexuality and reproductive rights. Participation will also help them clarify their own educational goals and define the context in which they will like to achieve them and the level they would like to attain.

## Confidentiality

All information taken from the study will be coded to protect each person's identity. No names or other identifying information will be used when discussing or reporting data. No names will be allowed on the questionnaires. The researcher will safely keep all files and data collected in a secured locked cabinet in his office. Once the data has been fully analyzed it will be destroyed. Your responses are completely anonymous. No personal identifying information will be collected.

#### Authorization

By signing this form, you authorize the use and disclosure of the information collected in this research (not the source): 'I authorize the use of my responses, any observations, and findings found during this study for education, publication, and/or presentation'.

#### Compensation

There is no monetary compensation for your participation in this study. However, the researcher will be more than willing to share important findings of this study with your school if invited through your Principal. The findings of this study will be generalized to a wider population of girls in your context. If there is an opportunity to share the findings, the researcher will also be happy to take on your questions related to the study.

#### **Voluntary Participation and Authorization**

Your participation in this study is fully voluntary. If you decide not to participate, that will not affect our relationship with you.

## Withdrawal from the Study and/or Withdrawal of Authorization.

Even when you have decided to participate in this study, you may withdraw your participation at any time without penalty. You are taking part in this study freely. If you leave before completing, you are not committing any crime.

I voluntarily agree to participate in this research program (tick the appropriate box)

Yes	
No	

I understand that I will be given a copy of this signed Consent Form.

Name of Participant (print):	_Signature:	Date:
Name of Witness (print):	_Signature:	Date:
Person Obtaining Consent:	_Signature:	Date:

Note: You will receive a copy of the signed consent, and the researcher will retain the original.

## **QUESTIONNIARE FOR STUDENTS**

#### **Section II: Personal Demographics**

**1. Age**: Between 14-15 years: []; between 16-17 years []Between 18-19 years [] **Type of School**: Girls Only[]; Mixed[]

- 2. Denomination: Catholic [ ] Traditional African Religion [ ] Protestant [ ] Muslim [ ] Other [ ]
- 3. Type of family: Monogamous [ ] Polygamous [ ]
- **5. How often do you seek counselling?** Never [ ] Once a year [ ] Monthly [ ] Termly [ ] Weekly [ ]
- 8. From whom do you seek counselling? Teachers [ ]; peers [ ];

Religious leaders [ ] Professional counsellors [ ]

## Section III: Education Participation Questionnaire

Please indicate the extent to which you agree with each of the following statements relating to educational participation

## SD= Strongly Disagree, D=Disagree, A=Agree, SA=Strongly Agree

i) Please indicate your position on each statement by ticking under the right column

	Educational participate	SD	D	A	SA
E1	I always attend all my lessons when I am in school				
E2	I enjoy group work during learning sessions				
E3	I submit regularly my homework for marking				
E4	I often obtain good grades on class tests				
E5	I never answer questions in class				
E6	I do corrections where I fail to get it right				
E7	My Class Teacher Report Card evaluations are generally positive				
E8	I have always been promoted to the next class of at least one school club (e.g., Debating, YCS, etc.)				
E9	I am an active member in at least one school club (e.g., YCS, CU, Debating, History Club, etc.)				
E10	I am also active in at least one school sport/game (e.g., soccer, Long-Jump, High Jump, netball, etc.,_)				
E11	I have represented my school/class/dormitory in some sport activity/game				
E12	I have taken active roles in cheering my school/dorm/class team when they compete				
E13	I have been given some temporary responsibility by prefects/teachers in cleaning work and others				
E14	I have held (or still hold) leadership roles in my class/dormitory/games/club				
E15	I do not mind serving my fellow students in any capacity or office that may be given to me.				

# Section IV: Sexual Attitudes Questionnaire

Please specify by ticking the box that holds the most agreeable response for you to the statement given.

## SD= Strongly Disagree, D=Disagree, A=Agree, SA=Strongly Agree

ii) Please indicate your position on each statement by ticking under the right column

	Sexual Attitudes	SD	D	A	SA
S1	I would turn down a sex opportunity if I suspect it				1
	would not be safe				
S2	School life would have fewer problems if girls were				
	allowed to have sex more freely				
S3	I would like to have sex with many partners				
S4	Unplanned sex is sometimes very enjoyable				
S5	I do not need to be committed to a person to have				
	sex with him				
S6	A girl should share responsibility with her man to				
	avoid pregnancy				
S7	Birth control is part of responsible sex				
<b>S</b> 8	A sexual experience between two people deeply in				
	love is the ultimate human encounter				
S9	At its best, sex seems to be the merging of two				
	persons				
S10	Sex is not an important part of life				
S11	Sex is usually, an intensive almost overwhelming				
	experience				
S12	The main purpose of sex is to enjoy oneself				
S13	Sex is primarily the taking of pleasure from another				
	person				
S14	Sex is primarily physical				
S15	Sex is primarily a bodily function, like eating				

# Section V: Gender Norms' Questionnaire

Please indicate the extent to which you agree with each of the following statements relating to gender norms.

# SD= Strongly Disagree, D=Disagree, A= agree, SA=Strongly Agree

i) Please indicate your preferred position on each statement by ticking under the right column:

	Gender Norms	SD	D	A	SA
G1	To get virgin girls nowadays, it is impossible				
G2	Girls need boys more than boys need them				
G3	You do not talk about sex, you just do it				
G4	It is a man's responsibility to decide when to have sex with his girl				
G5	These days women say that they need more than one sexual partner to be happy.				
G6	Having open discussions with my sexual partner about the dangers posed by having sex				
G7	Only a woman who has given birth is a real woman				
G8	Changing diapers, giving a bath, and feeding kids is a woman's job				
G9	It is not right to involve boys in household work such as cooking, fetching water, and taking care of babies				
G10	I do not mind engaging in household duties such as fetching firewood, water and cooking while schooling.				
G11	Even in modern times, a woman's role is to take care of her home and family				
G12	It is a girl's mistake if she becomes pregnant				
G13	It is bad manners for a woman to ask her man to use a condom				
G14	If you do not give in to men, you might lack someone to marry you				
G15	You do not argue with your man about sex, you just give in				

#### Section VI: Sexual Values Questionnaire

Please indicate the extent to which you agree with each of the following statements.

**1= least Agreement** and **4= the complete Agreement** with the statement. So, the movement from Left to Right indicates your increasing agreement with the statement made in the row. Please indicate your preference for each statement by ticking the box that best represents your preferred position on the statement.

	Sexual values	1	2	4	5
SV1	Abstaining from sex while still schooling				
SV2	Reducing sexual risk by delaying having a				
	boyfriend while still schooling				
SV3	Seeking regular counselling whenever sexual				
	pressures are high				
SV4	Maintaining transparent relationships with				
	members of the opposite sex				
SV5	Keeping sexual relationships limited to one				
	equally trustworthy partner				
SV6	Following the guidance of my parents/guardians				
	in sex matters				
SV7	Open discussion with my sexual partner about				
	the dangers posed by having sex				
SV8	Insisting on safe sex (with a condom on)				
SV9	Engaging in sex often				
SV10	Enjoying sex is a dream I cannot wait till				
	marriage				
SV11	I do not mind engaging in sex with someone that				
	has other sexual partners				
SV12	Sex is a must for me, even with a stranger				
SV13	Engaging in sex for money				
SV14	Having a 'sponsor' for additional support				
SV15	Engaging in sex with a 'sponsor'				

Least Agreement Most Agreement

# APPENDIX IV: INTERVIEW GUIDE FOR GUIDANCE AND COUNSELING TEACHERS

1. Comment on the prevalent by which female students seek your services on issues of sexuality or sexual relationships.

.....

2. Comment on how sexuality-related issues affect your students' education participation

.....

3. What factors are put into consideration when looking at the gender norms of the students?

4. What is your opinion on students' sexual experiences in the past? Do you have cases of students confidently confiding in you about such past experiences?

.....

5. How do you assist students maintain focus on their education not-withstanding their turbulent adolescence?

.....

#### **APPENDIX V: INTERVIEW GUIDE FOR PRINCIPALS**

- 1. Comment on the prevalent by which female students in your school drop out of school either permanently or temporarily due to sexually related issues.
- 2. Comment on how the issues of sexuality affect the educational involvement of the students.

.....

3. In your opinion, how do students express their sexual identity while in school? Can you explain more about how students understand issues to do with sexual identities?

4. What factors are put into consideration when looking at the sexual norms of the students?

5. In general, how does the school deal with sexual-linked cases involving students?

.....

#### **APPENDIX VI: INTERVIEW GUIDE FOR EDUCATION DIRECTORS**

- 1. Comment on the prevalent by which female students in your County/Sub-County drop out of school either permanently or temporarily due to sexually related issues.
- 2. Comment on how the issues of sexuality affect the educational involvement of female students in your area of jurisdiction.

.....

3. How often do issues of sexual transgressions involving teachers and female students in your County/Sub-County get reported to your office? And how do you deal with them?.....

.....

- 4. What are some of the measures you have put in place to ensure that female students are protected from predatory sexual behaviour?.....
- 5. Are students' sexual relationships a serious threat in this area?
- 6. Comment on how your office or the Ministry of Education supports schools to engage with students so that they can deal with their sexual feelings associated with their age responsively.
- 7. Comment on how effective the policy of re-admitting students after terminating school due to sexually related issues such as pregnancy. What help does the ministry offer them to deal with such an interruption for those who make it back?

## APPENDIX VII: MAP OF HOMA BAY COUNTY



Source: Homa Bay County

S NO.	School Name/Type	Sub-County
1	SCH1 MIXED	Rachwonyo East
2	SCH2 Mixed	Rachwonyo East
3	SCH3 PURE	Rachwonyo East
4	SCH4 PURE	Rachwonyo East
5	SCH5 MIXED	Rachwonyo South
6	SCH6 MIXED	Rachwonyo South
7	SCH7 PURE	Rachwonyo South
8	SCH8 PURE	Rachwonyo South
9	SCH9 MIXED	Ndhiwa
10	SCH 10 MIXED	Ndhiwa
11	SCH 11 PURE	Ndhiwa
12	SCH 12 PURE	Ndhiwa

## **APPENDIX VIII: LIST OF SAMPLED SCHOOLS**

#### **APPENDIX IX: INSTITUTIONAL AND ETHICS REVIEW COMMITTEE**



sMASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY

Tel: 056-3 1375 Fax: 056-30153 E-mail: <u>ierc(a<sup>i</sup> mmust.ac.ke</u> Website: <u>.mmust.ac.ke</u> P. O. Box 190, 50100. Kakamega, KENYA

Institutional Ethics and Review Committee (IERC)

REF: MMU/COR: 403012 Vol 5 (01)

Date: October 08<sup>th</sup>, 2021

To: Andrew Sifuna

Dear Sir/Madam,

RE: INFLUENCE OF SEXUAL ATTITUDES, GENDER NORMS AND SEXUAL VALUES ON THE EDUCATION PARTICIPATION OF SECONDARY SCHOOL GIRLS IN HOMA BAY COUNTY.

This is to inform you that Masinde Muliro University of Science and Technology Institutional Ethics and Review Committee (MMUST-IERC) has reviewed and approved your above research proposal. Your application approval number is MMUST/IERC/014/2021. The approval period is 08<sup>11</sup> October, 2021 **[/8**<sup>th</sup> October, 2022.

This approval is subject to compliance with the following requirements;

- Only approved documents including informed consents, study instruments, MTA will be used.
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by MMUST-IERC.

iil. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to MMUST-IERC within 72 hours of notification iv. Any changes, anticipated or otherwise that may increase the risks or affected saféty or welfare of study participants and others or affect the integrity of the research must be reported to MMUST-IERC within

72 hours

MClearance for export of biological specimens must be obtained from relevant institutions.

- vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to MMUSTIERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <u>littps:, tresearch-portal.nacosti.eo.ke</u> and also obtain other clearances needed.

Yo rs Since

#### Dr. Gordon Nguka (PhD)

Chairman, Institutional Ethics Review Committee

Copy to:

- The Secretary, National Bio-Ethics Committee
- Vice Chancellor / DVC (PR&I)
- ٠

# **APPENDIX X: RESEARCH PERMIT**

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