

**TEACHERS' PERCEPTION OF SELECTED MITIGATION MEASURES ON
TEENAGE PREGNANCY IN PUBLIC PRIMARY SCHOOLS IN
NANDI NORTH SUB-COUNTY, KENYA**

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**A Thesis Submitted to the Graduate School in Partial Fulfilment of the Requirements
for the Master of Education Degree in Guidance and Counselling
of Egerton University**


EGERTON UNIVERSITY

NOVEMBER, 2025

DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented in this university or any other for the award of a degree.

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DEDICATION

I dedicate this thesis to my dear husband, Pastor Michael Yego and my children who prayed for me, encouraged me, and inspired me throughout this study.

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ABSTRACT

Teenage pregnancy continues to be a significant concern in Kenya and around the world. Mitigation measures have been adopted to curb this problem, including policies and programmes that governments establish to address teenage pregnancy. However, the effectiveness of such measures is a result of numerous forces, including teachers who deal directly with teenagers on a daily basis. Consequently, this study's goal was to look at instructors' perception of selected mitigation measures (digital sexual literacy, sexual abstinence programmes, life skills education and parental closeness) regarding teenage pregnancy in Nandi North Sub-County, Nandi County, Kenya's early childhood and primary schools. The target population was 1387 teachers, 172 assistance and direction for instructors from 172 public primary schools in Nandi North Sub-County. Krejcie and Morgan formula was used to sample 301 teachers from the target of 1387. A total of 24 guidance and counselling teachers were chosen from 172 representing 14% through the rule of thumb for data saturation. A total of 301 teachers were selected from the six education zones, namely Kabisaga (50), Sang'alo (53), Kabiyet (48), Kabyemit (52), Kurkung (46) and Chepterwai (51), using a proportionate stratified random sampling method. Counselors and qualified counsellors were chosen through proportionate methods of sampling that are stratified and random. A survey for educators and a timetable for guidance and counselling instructors were used for the purpose of gathering data. The reliability of research instruments was ascertained both in terms of appearance and substance. How dependable are the research instrument was determined through test and re-test technique? Information Management Software (SPSS Version 25.0) was used for descriptive statistical analysis of quantitative data. Qualitative data from Interviews with important informants were analysed using a thematic approach. The study found out that teachers had positive perceptions of selected mitigation measures on teenage the Nandi North Sub-County area's public elementary schools and parenthood in the following order: sexual abstinence programmes (mean=3.92, standard deviation=1.12), parental closeness (mean=3.84 Std. dev=1.24), life skills education (mean=3.80, Std. dev=1.24) and digital sexual literacy (mean=3.75, standard deviation=1.13) in that order. Thus, most instructors believed that chosen mitigation strategies reduce adolescent pregnancy in public elementary schools. Teachers should learn digital sexual literacy to help teens. Schools should incorporate sexual abstinence programs with comprehensive sex education, including life skills instruction in the school schedule, and foster strong adolescent-parent connections to reduce teen pregnancy.

TABLE OF CONTENTS

DECLARATION AND RECOMMENDATION	ii
COPYRIGHT	iii
DEDICATION	iv
ACKNOWLEDGEMENTS	v
ABSTRACT	vi
TABLE OF CONTENTS	vii
LIST OF FIGURES	x
LIST OF TABLES	xi
LIST OF ABBREVIATIONS AND ACRONYMS	xii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study	1
1.2 Statement of the Problem.....	8
1.3 Purpose of the Study	9
1.4 Objectives of the Study.....	9
1.5 Research Questions	9
1.6 Significance of the Study	9
1.7 Scope of the Study	10
1.8 Limitations of the Study.....	10
1.9 Assumptions of the Study	11
1.10 Operational Definition of Terms.....	11
CHAPTER TWO	13
LITERATURE REVIEW	13
2.1 Introduction.....	13
2.2 Concept of Teenage Pregnancy	13
2.2.1 Factors Contributing to Teenage Pregnancy.....	15
2.2.2 Consequences of Teenage pregnancy	16
2.3 Mitigation Measures for Teenage Pregnancy	18
2.3.1 Digital Sexual Literacy	18
2.3.2 Sexual Abstinence Programmes	22
2.3.3 Life Skills Education.....	24
2.3.4 Parental Closeness	29
2.4 Theoretical Framework.....	32

2.5 Conceptual Framework.....	35
CHAPTER THREE.....	36
RESEARCH METHODOLOGY	36
3.1 Introduction.....	36
3.2 Research Design.....	36
3.3 Location of Study.....	36
3.4 Population of Study.....	37
3.5 Sample Size and Sampling Procedures.....	37
3.6 Instrumentation	39
3.6.1 Questionnaire for Teachers	39
3.6.2 Interview Schedule for G&C Teachers.....	40
3.6.3 Validity of Research Instruments.....	40
3.6.4 Reliability of Research Instruments.....	40
3.7 Data Collection Procedures.....	41
3.8 Data Analysis	42
3.9 Ethical Considerations	42
CHAPTER FOUR.....	44
RESULTS AND DISCUSSIONS	44
4.1 Introduction.....	44
4.2 Response Rate.....	44
4.3 Demographic Information of Respondents.....	44
4.3.1 Age Bracket	45
4.3.2 Gender of Teachers	45
4.3.3 Education Level	46
4.3.4 Years of Teaching Experience	46
4.4 Teachers’ Perception of Digital Sexual Literacy on Teenage Pregnancy.....	47
4.5 Teachers’ Perceptions of Sexual Abstinence Programmes on Teenage Pregnancy	52
4.6 Teachers’ Perceptions of Life Skills Education on Teenage Pregnancy	58
4.7 Teachers’ Perception of Parental Closeness on Teenage Pregnancy.....	63
CHAPTER FIVE	68
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	68
5.1 Introduction.....	68
5.2 Summary of the Research Findings	68
5.2.1 Teachers’ Perception of Digital Sexual Literacy on Teenage Pregnancy.....	68

5.2.2 Teachers' Perception of Sexual Abstinence Programmes on Teenage Pregnancy...	68
5.2.3 Teachers' Perception of Life Skills Education on Teenage Pregnancy	69
5.2.4 Teachers' Perception of Parental Closeness on Teenage Pregnancy	69
5.3 Conclusions	70
5.4 Recommendations	71
5.5 Suggestion for Future Research	72
REFERENCES.....	73
APPENDICES	89
Appendix I: Questionnaire for Teachers	89
Appendix II: Interview Schedule for Guidance and Counselling Teachers	94
Appendix III: Nandi North Sub-County Map	96
Appendix IV: Sample Size Formulae Table	97
Appendix V: Request for Permit Letter	98
Appendix VI: Ethical Approval Letter	99
Appendix VII: Research Permit.....	101
Appendix VIII: County Director of Education Letter.....	102
Appendix IX: County Commissioner Letter.....	103
Appendix X: Journal Publication.....	104

LIST OF FIGURES

Figure 1: Teachers' perception of selected mitigation measures on teenage pregnancy35

LIST OF TABLES

Table 1: Status of teenage pregnancy in Nandi County	7
Table 2 Accessible population as per educational zones in Nandi North Sub-County	37
Table 3 Sample size for the study.....	39
Table 4 Reliability test.....	41
Table 5 Response rate.....	44
Table 6 Age brackets of respondents	45
Table 7 Gender of respondents	45
Table 8 Education level of teachers.....	46
Table 9 Working experience of the respondents	46
Table 10 Teachers' perception of digital sexual literacy on teenage pregnancy.....	48
Table 11 Teachers' perceptions of sexual abstinence programmes on teenage pregnancy....	53
Table 12 Teachers' perceptions of life skills education on teenage pregnancy	59
Table 13 Teachers' perception of parental closeness on teenage pregnancy	64

LIST OF ABBREVIATIONS AND ACRONYMS

AAP	Australian Associated Press
AGYW	Adolescent Girls and Young Women
ASRH	National Adolescent Sexual and Reproductive Health
CA	Communication Authority
CEC	County Executive Committee
CRR	Centre for Reproductive Rights
CSE	Comprehensive Sexuality Education
DCI	Directorate of Criminal Investigation
FP/RH	Family Planning and Reproductive Health
G&C	Guidance and Counselling
GHS	Ghana Demographic and Health Survey
HBM	Health Belief Model
HEU	HIV-Exposed Uninfected
HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
IPPF	International Planned Parenthood Federation
INTERPOL	International Criminal Police Commission
KCPE	Kenya Certificate of Primary Education
KEEA	Komenda-Edina-Eguafo-Abrem
LAC	Latin American and Caribbean
LMIC	Low Middle Income Countries
LSE	Life Skills Education
MLE	Media Literacy Education
NACOSTI	National Commission for Science, Technology and Innovations
NGO	Non-Governmental Organisation
OCSEA	Online Child Sexual Exploitation and Abuse
OHCHR	Office of the High Commissioner for Human Rights
OVC	Orphans or Vulnerable Children
PEPFAR	President's Emergency Plan for AIDS
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PSI	Population Services International
SDGs	Sustainable Development Goals
SPSS	Statistical Product and Service Solutions

SRH	Sexual and Reproductive Health
STI	Sexual Transmitted Infections
UNAIDS	Joint United Nation Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Emergency Funds
USA	United States of America
WHO	World Health Organisation

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

According to Asmamaw *et al.* (2023), adolescent pregnancy is characterized as the pregnancy of a female between the ages of 10 and 19. Pregnancy at a young age challenges the conventional wisdom that one should complete one's formal education, get gainful employment, build one's financial stability, and then have a family (Saleh, 2022). It also impacts negatively on one's personal life, such as health and emotional stability, as well as on one's social life (Asmamaw *et al.*, 2023). Teenagers are often in the rush to become adults; yet, they lack the life stability that comes from job security, owning a home, and financial and economic independence (Azzopardi *et al.*, 2019). Most of them are still pursuing their education, are reliant on their parents for custody of their children, and have a more difficult time breaking into the labour market. Teenagers pregnant women choose not to continue their education, which might hinder or postpone their ability to enter the labour force (Malesi *et al.*, 2021). Teenage pregnancy might potentially impact academia in the long run in ways that weren't anticipated (Psaki *et al.*, 2019). Owing to the fact that employment opportunities for pregnant teenagers are limited, particularly for those from low-income families (Tull, 2020), some teenagers choose to drop out of school in lieu of young work, and to prepare for childbearing (Musyimi *et al.*, 2020). Teens from low-income families in Latin American and Caribbean (LAC) nations who get pregnant tend to rise in social standing (WHO, 2024).

One in thirteen adolescent females gave birth before turning 18 in a global survey conducted by the UN Children's Emergency Fund in 2024. In South Asia, Latin America and Caribbean regions, 10.0% of teenage girls gave birth before attaining the age of 18 by 2023. The statistics point a grim picture of Sub-Saharan Africa where 25.0% of teenage girls gave birth before age 18 amounting to 11 million teenage girls. Sub Saharan Africa region produced the most births per 1,000 teenage females (10–14 years old) and the largest number of births per 1,000 teenage girls (15–19 years old). In contrast, North America, Central Asia, Eastern Europe and Western Europe recorded lowest teenage girls birth rate of between 0 births per 1000 for those aged 10-14 years and less than 15 births per 1000 for those aged between 15 – 19 years. The reduction in statistics in developed countries can be tied to interventions measures undertaken by individual member states to reduce pregnancy amongst teenage girls aged 10 – 19 years in the last 20 years (UNICEF, 2024).

In Africa, teenage pregnancy rate between 1990 and 2018 was 18.8% (Kassa *et al.* 2018). In sub-Saharan areas, where 44% of population below 15 years old, the rate of teenage pregnancy crosses 20% in some countries (Ngasa *et al.*, 2017). In rural Cameroon, for instance, teenage pregnancy rate between 2009 and 2016 was 20.4% (Agbor *et al.*, 2017). The adolescent pregnancy rate in Ethiopia, the second most populated nation in Africa, was 13% from 1950 to 2016 (Stovner *et al.*, 2018). There is a greater prevalence of teen pregnancies in sub-Saharan Africa and other developing nations compared to industrialized ones. According to the World Health Organization (2018), the rates of adolescent pregnancies in West and Central Africa are 28% and in Eastern and Southern Africa 25%. Among Ugandan teens, a greater percentage of pregnant women live in rural regions (27% vs. 25% in urban areas) than in urban areas (Ndugga *et al.*, 2023).

In sub-Saharan Africa, the highest rate of adolescent pregnancies of 105 per 1000 live births among girls aged 10-19 is the highest in the world (Skosana *et al.*, 2020). It has very contrasting rates of adolescent pregnancies in developed and underdeveloped countries. In Korea, the adolescent pregnancy rate is only 2.9 per 1000, but it can go to 143 per 1000 in sub-Saharan African countries (Skosana *et al.*, 2020). According to these figures, teenage pregnancies are a big problem in the sub-Saharan Africa that impacts both parents and teenagers.

Although this is pretty small compared to 28% in Sub-Saharan countries and West and central Africa, the alarming adolescent pregnancy rate of Uganda is 25%. In 2020, the government of Uganda implemented a few policies hoping to minimize the number of adolescent pregnancies. These were increasing sexual age to 18 to a law, a law prohibiting having sex with a girl of less than 18 years, free primary and secondary education to all children, and lastly National Adolescent Health Policy (Nabugoomu *et al.*, 2020). Yet, owing to lax enforcement and public ignorance, these rules do not seem to be having much of an impact. The Uganda National Adolescent Health Policy, which aims to prioritize the health, wellness, and equality of adolescents, seems to be failing in its mission when confronted with a society that discourages adolescent pregnancies (Agaba, 2021).

Prevention of teenage pregnancy is one of the targets under the United Nations Sustainable Development Goal (SDG) No. 3.7.2 on the adolescent birth rate (WHO, 2024). This has led to the implementation of several measures aimed at addressing the rising rates of teenage pregnancy. Some of the mitigation measures used to prevent and manage teenage pregnancy include abstinence, sex education, contraceptive use, parental teenager communication, life

skills education, provision of educational materials on sexual health in both digital and print forms, and guidance and counselling, among others (Miriti & Mutua, 2019; Mohamed *et al.*, 2023).

Teachers' perception regarding teenage pregnancy is how educators comprehend and interpret the occurrences of teenage pregnancy (Panda *et al.*, 2023). They include collecting opinions, ideas and views regarding teenage pregnancy, such as the causes, effects and the mitigation measures taken to mitigate the problem. Ndlovu (2019) states that perceptions are individual viewpoints that determine whether a specific intervention is considered positive or negative. The perception of the practicality and efficacy of the mitigating measures implemented to address adolescent pregnancy in schools is the focus of this research. According to research by McConnell-Smith (2015) from the US state of Mississippi, some parents and educators are hesitant to implement effective sexual health education programs in the classroom because they believe they will not get enough support. Similarly, a study conducted in India by Panda *et al.* (2023) found that understanding the views, experiences, perceptions, and practices related to teenage pregnancy is an area that has been relatively under-researched. It was therefore essential to explore teachers' perception regarding of selected mitigation measures adolescent pregnancies in the Kenyan public elementary schools located in Nandi North Sub-County.

As a result of teenage pregnancy incidents in schools, several measures have been proposed to address the problem including setting up sexual digital literacy programmes, parental closeness initiatives, life skills education and sexual abstinence programmes. In the current digital age, there has been proliferation of digital sexual literacy devices and programmes to address teenage pregnancy. Professionals have come to realize that information is essential, but that attempts to promote self-efficacy, modify norms, and develop skills are just as necessary (Brindis *et al.*, 2020). As a potential strategy to decrease or alleviate adolescent pregnancies, digital or internet usage, as well as reading print media, may induce behavioural changes. To promote healthy lifestyle choices among adolescents and discourage unwanted pregnancies, behaviour change communicators may launch online and print advertisements aimed at reaching this demographic (Sserwanja *et al.*, 2022).

Sewak *et al.* (2023) noted that there has been proliferation of these devices like interactive websites, text messaging, mobile applications online education programmes, social media pages, online games and multimedia sites which have been used to provide information on

teenage pregnancy. because the incidents of teenage pregnancy have been recorded in middle and low developing countries, mobile health tools, internet access, media exposure, social media, and internet-based educational strategies were determined to be effective digital literacy interventions in empowering teenagers (particularly girls) to access health services and information (Meherali *et al.*, 2021). Despite the immense role that they play towards addressing teenage pregnancy, Alhassan *et al.* (2025) research found out that teenagers in Sub-Saharan Africa, experience major challenges in getting accurate and comprehensive sexual information as the digital sexually literacy devices were out of reach to many learners in remote parts of the continent. Hemono *et al.* (2022) research from Rwanda discovered that most teenagers, parents and teachers reported inability to access digital sexual literacy applications.

Teenage females are more likely to get pregnant due to a combination of factors, including their lack of sexual and reproductive health education and physical immaturity (Amjad *et al.*, 2019). Efforts to tackle this issue have progressed from a primary emphasis on educational treatments to a more holistic and long-term strategy (Abdullai, 2021). Often stressing the harmful effects of pregnancy and STDs, sexual health education in schools sought to fill knowledge gaps, especially with regard to anatomy and puberty (Chavula *et al.*, 2022). One school of thought within these educational initiatives has long pushed for a moratorium on sexual activity until marriage, while another school of thought has long pushed for more all-encompassing strategies that teach people how to abstain from sexual activity and how to use contraception (UNESCO, 2025).

Thelma *et al.* (2024) found that among Zambian adolescents, sexual abstinence programs helped debunk sex myths and misunderstandings, encouraged positive attitudes, and opened lines of communication with adults in the school, parents, and other students. Maemeko *et al.* (2018) found that one cause leading to higher incidence of adolescent pregnancies in schools in Namibia was a lack of comprehensive sex education. Kamangu and Mbago (2024) found that adolescent sexual health outcomes such as unsafe abortions, STIs, and teen pregnancies are reduced when young people receive sexual abstinence instruction in schools in Tanzania. When asked about the availability of sexual abstinence programs in schools, the majority of Iringa area educators expressed support. In Kenya, Mocheche (2018) observed that education sector policies have largely promoted an abstinence only approach in addressing teenage pregnancy in schools. Therefore, teachers and students held positive perceptions towards the

role of abstinence programmes in an addressing teenage pregnancy in schools would be successful if it involved a multi-stakeholder and agency support.

Adopting good behaviours that equip teens to successfully handle the demands and obstacles of daily life is a key component of life skills education (Godana *et al.*, 2023). According to Keya (2023), the Ministry of Education has recognised for a long time that Life Skills Education is the solution to the problems of adolescent pregnancies in schools. A study by Njenga (2019) from Ruiru Sub-County found out that most teachers reported that teenagers people whose lives were profoundly affected by LSE when it came to making decisions about their sexual life. Musyoka, Cheloti and Kasivu (2024) research on teachers' perceptions on the correlation between adolescent pregnancies and life skills classes offered in Machakos County public high schools established a positive relationship. This meant that life skills education was critical in addressing teenage pregnancy in schools an issue that this study investigated with respect to teachers' perceptions from Nandi County, Kenya.

Addressing teenage pregnancy has been found to be effective when parents are involved in their teenagers sexual and reproductive health matters through maintenance of closeness to their children. Loto and Isuku (2016) cautioned that teens are more likely to engage in risky sexual behaviours, such as adolescent pregnancy, when their parents' parenting styles discourage them from talking about their feelings and thoughts openly. In Dire Dawa Ethiopia, Adem *et al.* (2025) discovered that teenage pregnancy was influenced parental closeness to their children. A qualitative study by Skosana *et al.* (2020) found out majority of parents felt that they should have open and honest conversations on sexuality education with their teens. Parents emphasized the feelings of care, wrath, frustration, exploitation, and helplessness in their children. The above information shows that establishing teachers' views with respect to parental closeness and teenage pregnancy is critical.

Teenagers make up around 24% of Kenya's population. The health and development goals of the nation are affected by the huge adolescent population. Teenagers (those between the ages of 10 and 19) account for about one in fourteen births (Riley, 2019). Pregnancy or motherhood affects one out of every five adolescent females. With 82 births per 1,000 live births in 2019, Kenya ranked third among countries with the highest adolescent pregnancy rates, according to data compiled by Global Childhood. Between July 2016 and June 2017, 378,397 teen pregnancies were documented in Kenya among females aged 10–19, according to the UN

Population Fund Report (2017). At the same time, more than 13,000 pregnant adolescent girls miss out on their education each year (Banke-Thomas *et al.*, 2017).

The overall objective of the ASRH Policy is to inform the Kenyan youth achieve their full potential as contributing members of society through an improved SRH status. The overall objective of the policy is to make the reproductive and sexual health and rights of adolescents a priority in health and development discourse. The article focuses in-depth on the current demographic, social, cultural and economic climate as it relates to adolescent sexual and reproductive health, and the impact that this climate has on their well-being and growth. The Policy lays out framework and essential elements of ASRH to help them be mainstreamed in all sectoral planning initiatives, which is a great way to supplement sector-specific programs and policies (Kwachi *et al.*, 2023).

Mitigating teenage pregnancy is not a simple matter and requires an in-depth method and ongoing effort. Kenya has realised the seriousness of this issue and has taken several steps to rectify it. One of the most important measures taken by the government of Kenya is the development of the National Adolescent Sexual and Reproductive Health Policy. Introduced in 2015, this policy aims to enhance access to comprehensive sexual education and youth-friendly health services to teenagers, especially those in marginalised communities (Manguro & Temmerman, 2022). Raising the age of consent for sexual relations is another major step that the Kenyan government takes. In 2020, a proposal was made to change the age of consent from 16 to 18 years old. The objective behind this move is to protect the teenagers from experiencing early sex and reduce the risk of teenage pregnancy (Kwachi *et al.*, 2023). Education and awareness programmes are a key part of addressing the issue of teenage pregnancy.

The government of Kenya, working in concert with NGOs, has carried out various initiatives to offer teenagers information concerning reproductive wellbeing and the significance of education (Manguro & Temmerman, 2022). The overarching goals of these programs are to help the youth become more self-assured, educated young people, and competent navigators of sexuality and relationships. A number of organizations, including IPPF and UNFPA, have been providing their financial support, technical knowledge and other resources to these initiatives (Langat *et al.*, 2024).

Community engagement is another crucial area in terms of tackling teenage pregnancy. Community-based organisations and local leaders have a major role to play in creating awareness and encouraging behaviour change in their communities (Wado *et al.*, 2019). They organise workshops and discussions and offer mentorship to teenagers (Kalisa, 2021). While these initiatives and actions are great steps towards mitigating teenage pregnancy in Kenya, challenges and gaps still exist. Socio-economic gaps, cultural practices, and poor implementation of policies continue to be a challenge in effectively addressing the issue (Okoli *et al.*, 2022; Mwangi, 2024). Ongoing monitoring, evaluation and collaboration between government agencies, NGOs and communities is needed to ensure the sustainability and impact of these efforts.

Nandi County has had one of the highest teenage pregnancy incidences compared to the neighbouring counties (Ndanyi, 2020). Statistics show that the teenage pregnancy rate in Nandi County was high between 2016 and 2022 with increase of 2,667 teenage pregnancies since 2016 for 4,422 to 7,089 in 2020. The neighbouring county of Uasin Gishu, on the other hand, recorded a decline of 1,861 cases in the same period; from 6,611 in 2016 to 4,750 in 2020. A similar trend was noted in Kisumu County where it has registered a decline from 12,853 teenage pregnancy cases in 2016 to 6,514 in 2020 (OHCHR, 2022). The situation got worse in August 2022 when the Nandi County Commissioner reported that some teenage girls from primary and secondary schools returned for the third term pregnant (Matoke, 2022). Further statistics showed that 7500 teenage girls between 15-19 years, became pregnant from 2021-2022. Table 1 presents the Statistics for teenage pregnancy incidents in Nandi County Sub-Counties.

Table 1

Status of teenage pregnancy in Nandi County

Sub-County	Cases of teenage pregnancies reported
Nandi North	1149
Aldai	1072
Tinderet	991
Chesumei	850
Nandi Hills	885
Nandi South	840
Total	5,787

Source: County Education Office (2022)

Statistics from Table 1 across various sub-counties in Nandi county show that Nandi North recorded highest cases of pregnant teenagers (1149) more than any of the other sub-counties. From the report, the actual number of teenage pregnancies in Nandi North could be higher, as many cases go unreported, particularly in remote areas where such matters are often resolved outside the formal legal system, such as in Nandi North Sub-County.

Different stakeholders have made efforts to mitigate teenage pregnancy in the county through various interventions. For instance, the Nandi County Government, in collaboration with a group of professionals known as *Irip Gaa* (a Nandi phrase meaning “take good care of the family”), has introduced mentorship programmes that provide mental, spiritual, and moral support to teenagers. In addition to supplying sanitary pads, the programme also sensitises teenagers on the importance of avoiding early pregnancies by practicing self-control, sexual abstinence and building their self-esteem to help them cope with peer pressure. Ultimately, these initiatives aim to empower teenagers to focus on achieving their goals, aspirations and making informed decisions. Therefore, the study investigated teachers’ perception of selected mitigation measures on teenage pregnancy in public primary schools in Nandi North Sub-County, Nandi County, Kenya.

1.2 Statement of the Problem

There has been a significant rise in teenage pregnancy in Nandi North Sub-County in recent years, particularly among teenage girls in primary schools. Data from the Nandi North Sub-County Education Office (2022) indicate that a total of 1,149 primary school teenagers became pregnant in 2021. While neighbouring sub-counties have experienced a decreased number of cases of teenage pregnancy, Nandi North Sub-County still has an increasing trend. Various intervention measures have been suggested in the literature on the challenge of teenage pregnancy e.g. guidance and counselling, self-awareness programmes. However, despite the introduction of these programmes in schools, the number of teenage pregnancies keeps on increasing in the public primary schools in Nandi North Sub-county. Many studies have been conducted on the causes, consequences, prevalence, impacts and intervention as regards teenage pregnancy in Kenya and other countries. However, few have focused on teachers’ perception of selected intervention measures on teenage pregnancy in schools. In light of this background, the current research examined the perception of selected mitigation measures namely, digital sexual literacy, sexual abstinence programmes, life skills education, and

parental closeness on teenage pregnancy in public primary schools in Nandi North Sub-County, Nandi County, Kenya.

1.3 Purpose of the Study

The purpose of this study was to investigate teachers' perception of selected mitigation measures (digital sexual literacy, sexual abstinence programmes, life skills education and parental closeness) on teenage pregnancy in public primary schools of Nandi North Sub-County, Nandi County.

1.4 Objectives of the Study

The study was guided by the following specific objectives:

- i. To determine teachers' perception of digital sexual literacy on teenage pregnancy in public primary schools in Nandi North Sub-County.
- ii. To establish teachers' perception of sexual abstinence programmes on teenage pregnancy in public primary schools in Nandi North Sub-County.
- iii. To analyse teachers' perception of life skills education on teenage pregnancy in public primary schools in Nandi North Sub-County.
- iv. To examine teachers' perception of parental closeness on teenage pregnancy in public primary schools in Nandi North Sub-County.

1.5 Research Questions

The study sought to answer the following research questions:

- i. What are teachers' perception of digital sexual literacy on teenage pregnancy in public primary schools in Nandi North Sub-County?
- ii. How do teachers perceive sexual abstinence programmes on teenage pregnancy in public primary schools in Nandi North Sub-County?
- iii. What are teachers' perception of life skills education on teenage pregnancy in public primary schools in Nandi North Sub-County?
- iv. How do teachers perceive parental closeness on teenage pregnancy in public primary schools in Nandi North Sub-County?

1.6 Significance of the Study

The information gathered from this study may be beneficial to school administration, teachers, parents, the Ministry of Education, teenagers and future researchers. Parents may utilise the findings and recommendations of this study to understand and help mitigate their children's

teenage challenges, especially regarding sexual behaviour and associated risks. Teachers may utilise the insights from research findings on the effectiveness of selected mitigation measures in addressing the issue of teenage pregnancy in their schools. The school administration may utilise the study findings in putting up comprehensive programmes aimed at creating more awareness on the dangers of teenage pregnancy for learners in schools. The Ministry of Education may draw insights from this study to improve curriculum delivery processes of intervention measures aimed at addressing teenage pregnancy in schools. The Ministry of Education may also use the findings to develop appropriate policies and regulations to guard, prevent and protect the wellbeing of teenagers in schools. Teenage learners will benefit from the study findings as programmes will be strengthened to enable them become aware, avoid and make right choices with respect to moral behaviours and abstain from sex while in schools. Future researchers and scholars stand to benefit from the study findings with respect to the views and opinion of teachers on the success of interventions measures aimed at addressing teenage pregnancy incidents in schools for comparative purposes and also as a source of literature on the Kenyan scene.

1.7 Scope of the Study

The study examined teachers' perception of selected mitigation measures on teenage pregnancy in schools. The independent variables were: digital sexual literacy, sexual abstinence programmes, life skills education and parental closeness while the dependent variable was teenage pregnancy. The study was conducted in sampled public primary schools in Nandi North Sub-County. The study respondents comprise of teachers and guidance and counselling teachers. The researchers used questionnaires to gather data for this investigation. All of the data was gathered in only three months.

1.8 Limitations of the Study

The following were study limitations:

- i. Because teenage pregnancy is a socially sensitive issue, some teachers were reluctant to provide complete information, fearing that it might portray their schools in a negative light. To address this, the researcher assured them that the information they provided would be used solely for academic purposes and that neither their names nor those of their schools would be disclosed in the thesis.

- ii. Some teachers did not respond to the questionnaires and interviews on time due to their busy schedules. This led to an extension of the data collection period until the required sample size was achieved.
- iii. Time was also a constraint during data collection, as some roads in Nandi North Sub-County were impassable during the rainy season. This extended the data collection period. The researcher used alternative means of transport, such as motorcycles, to access schools that could not be reached by vehicle.

1.9 Assumptions of the Study

The study assumed:

- i. That the data collected from the survey was complete, accurate, and given by the participants in an honest manner.
- ii. That there is a guidance and counselling teacher in every school sampled in the study.
- iii. That most teachers in public primary schools have experience on teenage pregnancy.

1.10 Operational Definition of Terms

The key study variables were operationally defined as follows:

Digital sexual literacy: Competence in the use of ICTs for gathering data, evaluating it creation, and dissemination; this competency requires both technical know-how and cognitive skills (Olamijuwon & Odimegwu, 2022). In this study, digital sexual literacy was used to refer to teenagers' knowledge of and avoidance of the risks associated with internet exposure that may lead them to engage in sexual intercourse and run the risk of teenage pregnancy before completing their education. Digital sexual literacy helps them to use the internet responsibly.

Guidance and Counselling teacher: they are teachers who advise and provide support to learners on personal, social and academic matters in schools (Njeru *et al.*, 2024). In this study, they involve teacher counsellors who provide required advise and support with respect to selected mitigation measures in addressing teenage pregnancy.

Life skills education: A set of skills that people need to be able to manage their lives well, including the ability to think critically and creatively, communicate clearly, form and maintain positive relationships, understand and work with the emotions and experiences of others, and make good decisions (Swaraj & Jayaraman, 2023). In this study, life skills were used to mean the strategies imparted in teenagers by teachers and parents to help them mitigate teenage pregnancy.

Measures: These are actions put in place to achieve given goals (Bundi, 2024). In this study they involve teachers' perceptions on the intervention measures used to address teenage pregnancy in schools.

Parental closeness: An affectionate bond with a specific and preferred caregiver that leads to positive life outcomes on the part of the child (Fang *et al.*, 2021). In this study, parental closeness was used to mean a parent's or caregiver's affectionate bond with their teenagers.

Selected mitigation measures: A reduction in the harmfulness, unpleasantness or bad effects of something (Phoobane, 2022). In this study, implied the four initiatives perceived by teachers to be essential in the reduction of occurrence or prevalence teenage pregnancy in primary schools.

Sexual abstinence programmes: refers to the practices of avoiding or engaging in sexual activities by learners (Saleh, 2022). In this study, it referred to the initiatives undertaken to inform and educate teenagers in schools on the importance of refraining from sexual activities while in schools.

Teacher: refers to a person who teaches in a school (Teacher Service Commission Act, 2012). In this study it refers to teachers teaching in Nandi North Sub-County public primary schools.

Teachers' perception: refers to teachers' understanding or views on selected measures on teenage pregnancy in schools (Ndugga *et al.*, 2023). It refers to guidance and counselling and teacher understanding or views on the selected mitigation measures on teenage pregnancy in Nandi North Sub-County public primary schools.

Teenage pregnancy: is the occurrence of pregnancy within the ages of 10 – 19 years (Eyeberu *et al.*, 2022). In this study, pregnancy was used to mean the period in which a primary school teenager gets pregnant.

Teenager: A young person aged between 10 and 19 years (Phoobane, 2022). In this study it was used to refer to a primary school pupil who is aged between 10-19 years.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Relevant literature regarding the subject of research is presented in this chapter. The study's aims inform the selection and organization of the literature. The literature on the topic of adolescent pregnancies is reviewed in the first part of the chapter. After then, there is literature on the causes of adolescent pregnancies and the effects of these pregnancies. Also included in this chapter is research on ways to reduce adolescent pregnancies, such as increased parental intimacy, life skills training, sexual abstinence programs, and digital sexual literacy. At the chapter's conclusion, the study's theoretical and conceptual framework is discussed.

2.2 Concept of Teenage Pregnancy

When a female and a male engage in sexual intercourse, pregnancy may occur. Teenage pregnancy is when a woman aged between 10 and 19 years conceives and subsequently carries a baby in her womb (WHO, 2024). Following the United Nations Population Fund (UNFPA) report, teenagers who get pregnant before attaining the age of 18 often contend with serious negative effects of teenage pregnancy (Manguro & Temmerman, 2022). Aside from the fact that teenage pregnancy infringes on many other rights of teenagers, it also processes other life-threatening results on them has a significant impact on the health of women and men, as well as countries' investment in development, including the upholding of the cycles of poverty in families (Olenja *et al.*, 2020).

At teenage stage, a teenage girl has not fully matured physiologically to become healthily pregnant and bear healthy children (Wado *et al.*, 2019). Therefore, teenagers who become pregnant are often at risk of serious complications associated with reproductive health. This is coupled with the fact that majority of teenagers who become pregnant come from poor families that cannot afford basic health care (WHO, 2014). There is a greater likelihood of deaths occurring for pregnant compared to women who become pregnant in their twenties in low- and middle-income nations, among females younger than fifteen (WHO, 2024). Education and income potential for teenage girls are affected by pregnancy as many are forced to drop out of school, which in turn prevents their future expectations and economic potential.

Teenage pregnancy has many negative effects on the affected girls, their children and a nation's progress. Health problems during pregnancy and delivery, unsafe abortions, and maternal death are some of the negative consequences that might result from this (Kaphagawani & Kalipeni,

2017). Gender inequality and girls' opportunities for economic advancement are also worsened. Gender parity in education is also affected as teenage girls who become pregnant are often forced to drop out of school (Laski, 2015; Middleman & Zimet, 2016).

In Ghana, teenage pregnancy is endemic and girls in rural areas in the Central, Brong Ahafo, and Volta regions had the greatest rates of pregnancy among Ghanaian youths (Tetteh *et al.*, 2022). This is according to the 2014 Ghana Demographic and Health Survey. A total of 7% of Central Region's adolescent population was holding one kid. One district that has a high rate of adolescent pregnancy in the Central Region is the municipality of Komenda-Edina-Eguafo-Abrem. Thirteen percent of the mothers in the Municipality were below the age of twenty-one in 2020 (Amoadu *et al.*, 2022).

When compared to other nations in the world, Tanzania's rate of adolescent pregnancy is an appalling figure. According to a UN survey from 2020 (Heizomi *et al.*, 2020), 27% of females aged between 10-19 were pregnant. Also, from a World Bank report in 2020, as a result of getting pregnant at a young age, 5,500 pregnant girls in Tanzania are forced to drop out of school each year. More than 55,000 pregnant girls were expelled from school in Tanzania in the last ten years according to another research by the Centre for Reproductive Rights (CRR) (Nkata *et al.*, 2021). There are many obstacles that Tanzanian girls face on the way to school and this paper provides proof of these obstacles through the form of facts and interesting tales. Tanzanian government policy or school practice mandates the testing of pregnant students in elementary and secondary schools, a practice that CRR reports affects a large number of young women. The rights of girls to privacy and dignity are infringed when these tests are usually done without their permission.

There was a 40% rise above the country's monthly average—152,000 adolescent females were pregnant during the three-month COVID-19 lockdown period in Kenya. According to Wastnedge *et al.* (2021), these figures from the beginning of July provide some of the first evidence that the COVID-19 pandemic is associated with unwanted pregnancies. In Machakos County alone, 3,964 pregnant females under the age of 19 were detected in a study by the Kenya Health Information System (Oduor, 2020). In addition, Stark *et al.* (2018) cite fresh data from the International Rescue Committee that shows how severely impacted refugee camp girls are. In June 2019, the Kakuma Refugee Camp in northwest Kenya recorded eight incidents of adolescent pregnancies (Cha, 2021). Teenage pregnancies in Dadaab Refugee Camp increased by 28% from April to June as compared to the same time in the year 2020 (Ng'ang'a, 2021).

Nandi County is not an exception concerning this problem of teenage pregnancy. On Sunday the 29th of November 2020, for instance, the Nandi County Deputy Governor announced, “More than 6,000 Nandi County girls fell pregnant. This number was double the pregnancy rate in the second half of the year 2019. The actual number could be higher, as only hospital births were recorded. Many teenage pregnancy and births were not reported in health facilities, and others may have ended in abortion. Most of these girls got pregnant after schools closed in March 2020. Nandi County, like the rest of Kenya, is facing a crisis of teen pregnancy that threatens an entire generation. Educational opportunities for girls are being curtailed because of teen pregnancies; hence, all stakeholders must come together to tackle the crisis” (Nandi County Governor’s Statistics Database Office, 2021). In Nandi North Sub-County, 1062 teenage pregnancy were reported in 2021 making topic for this study.

2.2.1 Factors Contributing to Teenage Pregnancy

There are several factors that have been documented in research to contribute towards rising incidents of teenage pregnancy. Current technological advancements facilitate access to a multiplicity of sexual content for young people, who constitute the majority of users of modern technologies. Pornographic content alone represents 4% of the world’s total websites and 14% of total web searches (Turvey *et al.*, 2024). In respect to gender, teenage boys are the prevalent consumers of pornography followed closely by teenage girls. Therefore, Droubay *et al.* (2021) opines that much needs to be done to address the effects of technology-facilitated sexual violence. There is also a need for appropriate legislation to curb the harmful effects of media on young people (Henry *et al.*, 2018). They established that only Victoria and South Australia had in place specific legislation pertaining to the management.

Further, Amoada *et al.* (2022) conducted a study in Ghana and found that over 29% of pregnant teenagers indicated that they felt pressured by their peers to engage in sexual activity to honour their friendship and belong with them. In most cases, a teenage girl’s decision to engage in sexual activity stems from peer pressure, most of which comes from individuals who do not fully comprehend the consequences of their actions. Others perceive sex as a way to demonstrate courage within the group or to appear confident, attractive, and socially outgoing; yet, the result of such experimentation in sex among most teenage girls concerns such as adolescent pregnancies, STDs, and rejection (Tetteh, *et al.*, 2022). Cell phone use facilitates simple contact between friends and lovers (Gyane *et al.*, 2025). It also facilitates their access to the internet, which they freely peruse for sexual material, which promotes an early sex debut.

Teenage pregnancies may be more common among those who are in love relationships or who have unrestricted sexual freedom at home.

Peer pressure has a significant role in adolescence (Gyan *et al.*, 2017). They discovered that peer pressure is the primary factor for youths to engage in risky sexual practices in a neighbourhood of Accra, Ghana. One of the factors that contributes to adolescent pregnancies is negative peer pressure. Low income also plays a role. Teenage pregnancies are more common among girls from low-income households than among girls from higher-income ones (Kyei-Arthur *et al.*, 2024). Researchers have also shown that adolescent moms had a higher poverty rate.

2.2.2 Consequences of Teenage pregnancy

According to Asmamaw *et al.* (2023), a lot of low-middle income nations throughout the globe are very worried about teen pregnancies and all that comes with them. According to UNICEF (2024), the rates of maternal death are greatest for teenage girls under the age of 15, and for teenage girls aged 10 to 19, the rates of pregnancy and delivery problems are greater than for young women aged 20 to 24. Pregnancy in teenage girls could lead to death since their bodies are still developing and are prone to complications during delivery. Globally, the rate of pregnancy related deaths in teenage mothers is 28% higher than older women (Azzopardi *et al.*, 2019).

Additionally, compared to those who do not have children, teen moms are more likely to have HIV (Toska *et al.*, 2020). Worldwide, the number of teens living with HIV has increased by about 30% in the last decade, reaching over two million (UNAIDS, 2025). The risk of contracting HIV is three times higher in adolescent pregnancies in the Eastern Cape of South Africa (Groves *et al.*, 2022). High rates of HIV coexist with adolescent pregnancies and births in sub-Saharan Africa. Over half of the world's HIV-positive population more than 20 million people live in this area, making it the epicentre of the HIV pandemic on the continent (UNAIDS, 2025).

Higher rates of psychological problems such as suicide and health challenges like malnutrition are also common among teenage mothers (Tull, 2020). One out of every five deaths among teenage girls (Azzopardi *et al.*, 2019). Not much research has been done concerning suicide and dropping out of school particularly among pregnant teenage girls (Kapungu *et al.*, 2018). However, in Brazil suicidal behaviour is frequent among pregnant teenagers, with a

predominant rate of 13.3%; also common in this cohort is psychiatric disturbances such as anxiety and depression (Lacerda-Pinheiro *et al.*, 2014 in Musyimi, 2020). Girls who become pregnant outside wedlock are subjected to depression in and out of schools. When a teenage learner becomes pregnant, she must contend with the new thoughts and experiences about the consequences of the pregnancy and impending motherhood, which further exacerbate the negative psychological outcomes of pregnancy (Kalisa, 2021). The case is worse if, for example, the pregnancy is a result of rape or incest. Moreover, a teenage girl who becomes pregnant may lose her peers as she is forced to attend to her family subsequent obligations.

There are monetary and social costs to communities, families, and girls when they get pregnant at a young age (Wado *et al.*, 2019). Adolescents who get pregnant while unmarried may encounter hostile reactions from their family, friends, and community, including verbal and physical abuse. In a same vein, Tull (2020) found that domestic abuse is more common among females who fall pregnant before the age of 18. Regarding schooling, a girl may decide to drop out when she thinks being pregnant is better than completing her education, or she may drop out when she is forced into marriage or pregnant at a young age (Nshutiyukuri *et al.*, 2025). Pregnancy and marriage at a young age cause an estimated 5–33% of girls in some countries to drop out of school (UNICEF, 2024). Young mothers are also highly stigmatized by society because of social taboos around teenage pregnancy (Mallepalli, 2019).

According to cultural beliefs, pregnancy is often perceived as the girl's fault in many communities, regardless of whether it is planned, unplanned, or a result of abuse (Tull, 2020). To identify pregnant girls, some communities use invasive checks or tests that pose health risks on girls and cause stigma, feelings of body shame and low self-esteem (Nkata *et al.*, 2021). Other countries subject girls to stiff penalties and punishments on merely being reported to have engaged in sex outside marriage (Waddell, 2024). For instance, some communities in Morocco and Sudan have in place stringent morality regulations that allow them to charge adolescent girls harshly for adultery, indecency, or extra-marital sex. In such communities, teenage or premarital pregnancy invites even more wrath on the affected girl. Meanwhile, teenage girls who become pregnant face financial challenges that further complicate their ability to continue with formal education (Waddell, 2024).

In Kenya, early and unwanted pregnancies among adolescent girls portend other interconnected issues with their sexual and reproductive health and their schooling (Langat *et al.*, 2024). When a girl becomes pregnant in most Kenyan communities, it usually means the end of education

for her. When pregnant, the economic prospects of girls also diminish drastically as their educational achievement drop with increased possibility of early marriage (Olenja *et al.*, 2020). Because of their lack of maturity, education, and financial resources, adolescent moms face additional dangers and are more likely to be victims of exploitation (Muthima *et al.*, 2022). Pregnant girls in Kenya are encouraged to stay in school for as long as they can and even return after giving birth, according to the country's official policy on school health. Some obstacles remain in the way of this policy's implementation. Few programs exist to encourage adolescent mothers to continue their education or to help school-aged girls avoid unwanted births (Okoli *et al.*, 2022). In a society where money talks are king, many teenage moms are unable to get more than the bare minimum of help throughout their pregnancies and in the years thereafter. Financial difficulties, a lack of assistance, and high levels of stigmatization are the most common problems faced by teenage females in their communities and schools (Waddell, 2024).

2.3 Mitigation Measures for Teenage Pregnancy

Teen age is a period when pupils in schools require special attention and guidance, particularly in the modern era of rapid modernisation, globalisation, and technological advancement, which is characterised by information overload and changing family structures (Brindis *et al.*, 2020). Schools, parents, the government and non-governmental organisations have put in place various strategies to mitigate teenage pregnancy and enhance girl-child education in Kenya. For purposes of this study, digital sexual literacy, sexual abstinence programmes, life skills education and parental closeness was addressed.

2.3.1 Digital Sexual Literacy

A combination of cognitive and technical abilities, digital sexual literacy is the capacity to access, analyse, produce, and disseminate sexuality-related information via the use of ICTs (Olamijuwon, & Odimegwu, 2022). Digital sexual literacy with exposure to sexually explicit online content may help children to develop sexual literacy in different ways (Fileborn, 2016). In *Talk Soon. Talk Often*, Walsh (2012) is a book that provides guidance for parents who may be unsure of how to communicate to their children about sex. In this guide, Walsh, draws attention to the fact that although parents/caregivers may not broach such topics, children have already started learning certain important messages that will lay the foundation for their sexual development from contexts other than the family environment (Walsh, 2012). She identifies home, school life, screen time and online relationships as the four main contexts in which

children and young people develop early ideas about bodies, relationships, sexuality and gender. *Talk Soon. Talk Often* encourages open communication between children and parents.

Another important online resource for parents is the *It's Time We Talked*, a television and online programme that provides space for conversations about sensitive topics between parents and children. In this programme, it is noted that, often, young people say their parents, particularly their mothers, are their most trusted and used source of information regarding sexual matters. Similarly, schools have been mentioned as key players in ensuring children and young people use online content responsibly. In the United States, the *High-Wire Act* of 2011 is a cyber-safe legislation that regulates access to online sites by young people. It mandates schools with the duty to ensure students are safe in online sites. Schools are required to ensure that learners are made to understand and observe this law in the learning environment. They are required to take preventative steps to ensure that young people are better equipped to face the risks of exposure to online content (Kritzinger, 2017).

Hence, Scull *et al.* (2019) investigated the effectiveness of Media Aware, a media literacy education (MLE) program in North Carolina, USA, on improving adolescent sexual health outcomes in the short run. It was a randomised control trial investigation conducted in 9 schools (5 for intervention and 4 for control). They found out that the programme had a significant influence on teenage outcomes with respect to sexual health, engagement in sexual activity, confidence, optimism, openness to discussing sexual health, and reduced openness to dating. This was experimental research while the present study is descriptive in nature.

In Australia, the *Enhancing Online Safety for Children Act* of 2015 was implemented to help identify and address challenges concerning children and young people's digital undertakings. Part of its function was to establish the Office of the *e-Safety Commissioner*, an independent statutory office designed to provide digital safety learning for Australian children and young people, a complaint service for young Australians who experienced unwanted cyber aggression and eradicate illegal content using the Online Content Scheme. Only Victoria and South Australia have in place clear legislation on the management of the non-consensual discharging of intimate images. New South Wales Australian Associated Press (AAP) (2016), the Northern Territory (Quadara *et al.*, 2017) and Western Australia (Government of Western Australia, 2016) have announced plans to implement such legislation. Still experts believe that more should be done both within and beyond the law to curb the impact of technology-facilitated sexual aggression.

Around the world, there has been proliferation of digital sexual literacy devices and programmes to address teenage pregnancy. A study by Sewak *et al.* (2023) discovered that mobile phones and websites dominated the digital sexual literacy interventions with many of them providing cognitive services (awareness and attitudes concerning sexual matters) and behavioural outcomes (abstinence). Considering the study relied on secondary data, this study used primary data sources to establish teachers' views with respect how digital literacy resources communicate abstinence messages aimed at preventing teenage pregnancy in schools.

In Spain, Aguilar-Quesada *et al.* (2025) sought to answer the question on whether the use of digital health intervention was effective in prevention of risky sexual behaviours by teenagers in schools. The study collected secondary data from five databases with control trial researches. From the analysis of previous studies, it was observed that while digital interventions are effective in reducing teenagers' sexual risk behaviours, it is more challenging to achieve lasting behavioural change through digital interventions alone.

Result showed that digital sexuality interventions like social media exposure, internet-based educational strategies, access to the internet, media exposure, mobile health tools and mobile phones, were effective in empowering teenage girls access to health information resources and services. There are significant barriers to providing adolescents in Sub-Saharan Africa with complete and accurate information on sexual and reproductive health. By providing information that is engaging, simple to grasp, and personalized to individual requirements, digital technologies have the potential to improve relevant health outcomes and accessibility, according to research by Alhassan *et al.* (2025). This study sought to answer the recommendation of Meherali *et al.* (2021) for more research on the effects of digital sexual literacy information access on adolescent pregnancies by investigating instructors' perspectives on the matter.

Research has shown that self-care interventions may help remove societal obstacles to accessing knowledge on sexual and reproductive health. But there is a lack of data on how well teens, particularly those from low-income and rural areas of developing nations, can take care of themselves digitally. Hemono *et al.* (2022) summarized the results of a CyberRwanda pilot research, which is a digital self-care intervention programme. They established that CyberRwanda improve access to sexuality information by teenagers in Rwanda. The gap created from this study is that it focused on one programme while the present study looked at

perception of teachers on how various digital sexual literacy devices addressed teenage pregnancy in schools.

Kenya, like Australia, has taken a positive step in enhancing online safety. In 2020, Kenya's Communications Authority (CA) hosted several executives in the ICT space to explore the challenge associated with cyberbullying and general cybersecurity cases (Abuya, 2020). These same kids have access to internet resources that their parents don't have and that some educators don't even know about. Most of the time, kids are far more tech-savvy than adults are. As a result, parents are afraid to set limits that might really help keep their kids safe when they use the internet. Although Kenya is struggling to safeguard children from technological harm, there is still insufficient provision of protection to victims. Cybercrime, namely cyberbullying, pornography, lottery scams, and pseudo-attacks, is not adequately addressed under the Children's Act of 2001, which protects children from psychological and physical harm (Weru *et al.*, 2017).

Kenya is one of fourteen countries participating in the Disrupting Harm research project, which aims to safeguard children from online abuse and is supported by the Global Partnership to End Violence against Children (UNICEF, 2024). It is an initiative with the stated goal of producing credible data on child sexual abuse and exploitation that makes use of technological means. Kenyan children are victims of sexual exploitation and abuse while they are online, according to research that relies on evidence. The document suggests that the Kenyan government and its allies should take action by enhancing and expanding channels through which children can express problems, report incidents, and get assistance. It also suggests that the national children's helpline, "Childline Kenya," should receive public funding to ensure its long-term viability and enhance its capacity to offer children psychosocial support, particularly for matters related to OCSEA.

Through popular, successful programs, Disrupting Harm educates the public about online child sexual exploitation and abuse, including the role of technology. It encourages parents and other people to speak to kids about their lives on the internet and to break taboos that keep kids and adults from talking about sex or asking for assistance. Additionally, it teaches kids digital safety skills so they can steer clear of or handle risky situations on the internet. Age-appropriate sex education in schools must include instruction on OCSEA, according to the study. Additionally, it offers details on how kids may get support to securely manage online interactions and the

digital world, as well as acquire relevant knowledge on sex, personal boundaries, and hazards via technology (Brayboy *et al.*, 2018).

Nandi County, in collaboration with the Ministry of Health and Ministry of Education, has put in place programmes to enhance education and health for all people, including teenage girls (Nandi County Governor's Database office, 2022). However, it was unclear if these programmes integrate teachers' views on best practices for mitigating teenage pregnancy. As such, one of the objectives of this study was to investigate teachers' perception of selected mitigation measures specifically digital sexual literacy.

2.3.2 Sexual Abstinence Programmes

The prevalence of teenage pregnancy, sexually transmitted diseases (STIs), and HIV/AIDS has prompted a push to encourage sexual abstinence programs (Kantor *et al.*, 2020). This rise in encouragement of sexual abstinence has been precipitated by the recognition that commencement of sexual activity among teenagers is a major risk factor for negative reproductive health outcomes. Among these outcomes is giving birth at an early age, which portends other potentially adverse maternal and child health outcomes, aside from increased risks to STIs and HIV (Ramchandani *et al.*, 2018). Sexual abstinence is, therefore, always taken as the well-timed primary response to mitigation of teenage pregnancy and STIs (Yakubu *et al.*, 2019).

In Spain, Barriuso-Ortega *et al.* (2024) assessed effectiveness of school-based sexuality education programmes for teenagers using collecting data from 2000 to 2020 from various contexts. Results demonstrated that sexuality educational programmes were effective in increasing teenagers' knowledge towards abstinence. The gap created by this study is that it was longitudinal in nature, whereas the present study adopted a descriptive research design. The risk of unintended pregnancy, with the right combination of interventions, can be reduced through abstinence programmes. Research undertaken by Mohamed *et al.* (2023) conducted a systematic literature review on teenage pregnancy prevention with the aim of enabling evidence-based decision making in various countries across the world. They found out that abstinence, peer-led and skill-building programmes were generally effective in reducing teenage pregnancy rates. The gap emanating from this study is that it relied on data from reviewed secondary research studies, whereas the present study depends on primary data to determine whether abstinence programmes are effective in addressing teenage pregnancy.

Theoretical assumptions have been levelled against sexual abstinence models on several occasions. Therefore, using the Health Belief Model (HBM) as a framework, Yakubu *et al.* (2019) evaluated a program of educational interventions aimed at promoting sexual abstinence among adolescent females in Northern Ghana. Two groups of students participated in the cluster randomized controlled trial; one group got an educational intervention program, while the other group got nothing. Results showed that adolescent sexual abstinence and understanding of methods to avoid pregnancy were both greatly enhanced by an educational intervention based on HBM. The gap arising from Yakubu *et al.*'s study is that it employed an experimental design, whereas the present study sought to explore teachers' perception of how abstinence education programmes affect teenage pregnancy in their schools.

Thelma *et al.* (2024) investigated the impact of sexuality education on lowering adolescent pregnancy rates in Zambia, a country with alarmingly high rates of teen pregnancies. Principals, instructors, students, and members of the local community participated in the study at five different secondary schools in Lusaka. They proved that adolescent pregnancy rates might be drastically reduced with a sexuality abstinence program. Teens may benefit from these sexual abstinence programs because they encourage positive attitudes about sexuality, clear up common misunderstandings, and strengthen relationships among students, parents, and educators. This research differs from Thelma *et al.* (2024) in that it was carried out in elementary schools and its respondents were teachers and guidance and counselling instructors, while the former studied secondary schools.

Sexual abstinence programmes not only address teenage pregnancy but it reduces incidents of transmission and contracting of HIV/AIDs, STIs and other diseases. Research carried out in Tanzania by Kamangu and Mbago (2024) investigated stakeholders' beliefs and attitudes in the direction of implementing sexual abstinence education programs in Iringa Region's secondary schools. All parties involved felt strongly about sexual health education in schools, according to their findings as it prevented them from being involved in sexual activity. The departure from this study is that the study failed to establish how the attitudes of stakeholders towards abstinence programmes affected teenage pregnancy incidents an issue that this study addressed.

The government of Kenya has been in the forefront in promotion of sexual abstinence programmes in schools (Mochehe, 2018). Among urban youths aged 10–14, Kenya's first nationwide abstinence program Nimechill achieved a high rate of success. By altering social

mores, decreasing peer pressure, and presenting abstinence as a hip, intelligent, and responsible option, the media campaign aimed to postpone sexual debut among pre-urban and urban adolescents (Ndirangu *et al.*, 2022). Between September 2004 and April 2005, PSI/Kenya carried out the campaign with funding from PEPFAR via the USA Agency for International Development. Nimechill, which translates to “I have chilled” or “I am abstaining,” served as the campaign’s emblem, which featured a yellow hand forming a V-shaped or peace sign. Photos featuring politicians and other public figures with throngs of young people waving the “chill” sign attest to the phrase’s widespread appeal. Minibuses with chill logos abound, and they’re often brightly adorned with pictures of famous athletes and musicians from around the world. Higher exposure to the Nimechill campaign was associated with stronger abstinence intentions and self-confidence, according to the first major evaluation of the program. The main takeaway was that the campaign should be kept going, along with its evaluation and monitoring (UNAIDS, 2018).

In examining the success of sexual abstinence campaign in Kenyan schools, Mocheche (2018) determined regarding sexuality instruction in public high schools in Kabete Sub-County, both among students and instructors. It was found that both the teachers and students exhibited a positive attitude towards sexuality. The gap coming out of this investigation was failure to link the attitude towards sexuality abstinence campaigns and teenage pregnancy an issue that this study focused upon. Nandi County’s age-specific fertility rate for girls aged 10-19 (teenage birth rate) is 102 per 1000 girls, indicating that teenagers in the County engage in premarital sex, which may result in teenage pregnancy. Parents in Nandi County have been urged to ensure their children do not fall victim to early pregnancies that force many affected girls to drop out of school. The County Youth and Gender Director says the early pregnancies witnessed in schools had forced many affected girls out of school in the County. Parents were urged to follow up on their children’s whereabouts and discourage them from reckless sexual activities. It was further noted other risks from such activities including STIs. The Director also noted that teenage girls who become pregnant are often stigmatized when they return to school. Abstinence from sex is the most effective way to prevent unwanted pregnancies (Nandi County Uwezo Fund Database Office, 2021).

2.3.3 Life Skills Education

Governments and other institutions have devised and rolled out various programmes to sensitize and empower teenage girls with respect to reproductive or sexual health. Empowering

teenage girls through training and capacity building increases their social participation, decision-making power and transformative actions in relation to mitigating early pregnancy (Singla *et al.*, 2020). Sex education is one of the many strategies used to empower teenage girls (Bomester, 2021). Sex education interventions have been linked with better adolescent reproductive health outcomes and knowledge (Ivanova *et al.*, 2019). It enables teenagers to acquire significant knowledge and improved self-concept, which boost their decision-making in matters reproductive health (Denwigwe *et al.*, 2018).

Research has also shown that the rate of teenage pregnancy varies according to economic status. Girls from economically endowed homes have been found to be at a lower risk of pregnancy than those from less economically endowed backgrounds. In general, economic empowerment affects adolescent pregnancy rates in a number of ways, including, but not limited to, improved access to contraception, more control over one's own life, and better relationship structures (Holt *et al.*, 2020). The use of sex education and vocational training in an experiment in Uganda proved this to be the case. The results demonstrated a 32% rise in girls' economic engagement and a 26% decline in the likelihood of adolescent pregnancies (Atuhaire *et al.*, 2023).

Teens' sexual and reproductive health can benefit from life skills education by changing their habits for the better. Unique health and developmental needs exist for teenage girls. Furthermore, they face more severe obstacles, such as adolescent pregnancy, than males of the same age do. Worldwide, developing nations see an estimated 21 million pregnancies among girls aged 10–19 per year (Shibeshi *et al.*, 2024). According to the Kenya Demographic Health Survey 2022, fifteen percent of women between the ages of ten and nineteen give birth (KNBS, 2023). Based on the results of the survey, it seems that both boys and girls can benefit from including topics about pregnancy in life skills and sexuality education programs. This way, students of both sexes can learn that they are equal partners in making decisions about sexual health.

According to WHO (2024), teenagers who are not educated about sex are more likely to have an unwanted pregnancy than those educated. In a study in Latin America, Afreen *et al.* (2024) found evidence to show that there is a negative association between education and fertility, so that more educated girls and women tend to delay pregnancy compared to those not educated. In this study, teenage pregnancy was also associated with teenagers' beliefs concerning the prospects of success in education. Those girls who believed that education would not make any

difference in their future were more likely to opt for early motherhood or pregnancy (Braverman-Bronstein *et al.*, 2023). The girls argued that they would still have dropped out of school irrespective of whether they were pregnant or not. Clearly, pregnancy becomes an option where girls are not sensitized on the value of schooling.

Imparting applicable life skills education programmes to teenagers' minds has become indispensable tool on teenage pregnancy in Bhutan. Research by Norbu and Gurung (2021) found out that life skills education programmes: awareness programme via teaching, discussion and role-play were effective with teenagers in bettering their understanding on issues regarding sexual activities, teenage pregnancy and STIs. Life skills also incorporate elements of sex education. At teenage, most girls have not fully comprehended the biological and emotional processes associated with having sex. Much of the information they get is from friends and social media, which is unreliable. Many of teenage pregnancy arise in such scenarios where knowledge about the risks of unprotected sex is scanty or is based on unreliable information. Gyane *et al.* (2025) observe that long hours of mass media exposure play a significant role in influencing of teenagers' social behaviour, especially around sex and sexuality.

Rojpaisarnkit (2022) quasi-experimental research studied the effect of life-skills programme in prevention of teenage pregnancy it was an experimental research. Research findings showed that experimental group had higher life-skills mean scores on cognitive domain (creative and critical thinking), affective domain (self-awareness and empathy), and psychomotor domain (decision making and problem solving) than of the comparison group. This means that life skills enabled teenagers to develop critical skills that resulted to prevention of teenage pregnancy. the study was quasi experimental while the present research was descriptive in nature.

Life skills education involves the ability by teenagers to adopt positive behaviours, which enable them to effectively deal with the demands and challenges of everyday life including teenage pregnancy. In Ethiopia, Godana *et al.* (2023) assessed the effectiveness of a school-based life skills education intervention programmes on teenagers sexual and reproductive health skills. They found out that implementation of a school-based life skills education intervention programme had a significant effect on sexual and reproductive health life skills development in pastoral communities. The research failed to link LSE with teenage pregnancy an area that this study centered upon.

In light of the difficulties that today's youth face, the Kenyan Ministry of Education has proposed implementing a Life Skills Education program (Keya, 2023). As a result, the Kenyan government pledged in a 2013 declaration to increase funding for primary-level sexuality education that is based on students' rights. Teens need CSE (Comprehensive Sexuality Education) if they are to lead healthy sexual and reproductive lives. In order for teenagers to cultivate positive perspectives on their sexuality, it should incorporate factual information on a variety of age-appropriate subjects, encourage participation, and teach them relevant skills, attitudes, and values (Njenga, 2019).

Policies in the education sector have primarily supported sexuality education, with an emphasis on non-consensual sexual behaviour. In the realm of life skills, the most diverse set of concepts is encompassed. Teachers and students alike have little reason to place a premium on this material because it is never tested (Hvalby *et al.*, 2024). Knowledge, self-confidence, attitudes, gender norms, communication, and decision-making abilities are all enhanced in CSE programs that promote gender equality, empowerment, and human rights via active participation (UNESCO, 2025). As part of its commitment to ending teen pregnancy by 2030, the Kenyan government made a pledge at the 2019 International Conference on Population and Development (ICPD25). At the Conference, high-level intergovernmental committees were formed to develop and implement solutions that had been validated. One of the pledges made was to ensure that all girls have access to reproductive health services, including contraception, as well as sexual education (World Health Organisation, 2020).

The use of Life Skills Education as a strategy to reduce adolescent pregnancies in Makadara Sub-County's public secondary schools was investigated by Shirao *et al.* (2020). According to the study's findings, teaching teens life skills in the classroom helped them make better decisions as adults. The overwhelming majority of respondents (87.9%) believed that LSE's implementation of strong abstinence messages to adolescents regarding sex education helped alleviate the concerning teen pregnancy statistics in the Sub-County. While Shirao *et al.* (2020) looked at adolescent pregnancy in urban secondary schools, this study differs in that it focuses on teachers' perspectives on the role of LSE in a rural primary school setting.

Further, as a way of addressing rising cases of teenage pregnancy in Kilifi County, schools in the area devised several mechanisms to address the problem. Therefore, Ng'ang'a (2021) examined the effectiveness of peer counselling, mentorship programmes, comprehensive sex education in preventing teenage pregnancy. The result indicated that through peer counselling,

teenagers were able to appreciate their weakness and strength which helped in preventing teenage pregnancy. Another study by Musyoka *et al.* (2024) from Machakos county assessed relationship between LSE and teenage pregnancy in public secondary schools. They found out that provision of LSE programme assisted in reducing incidents of teenage pregnancy in schools. The gap coming out of these research studies was that it was conducted in secondary schools set up while the present study was domiciled in primary schools.

In Emuhaya Sub-County, Keya (2023) examined teachers' perception of life skills education on moral behaviour of students in secondary schools. It was found out that teachers training did not influence teaching of LSE. Additionally, LSE courses have an influence on moral behaviour content; teacher attitude in LSE did not influence moral behaviour. The gap coming out of this study is that the dependent variable was moral behaviours while the present study concentrated on teenage pregnancy.

Towards the end of the year 2021, the Nandi County Commissioner announced that more than 9,000 schoolgirls in the County were pregnant, while others had already delivered. The commissioner emphasised the need for life skills and sex education to help girls make informed decisions about their sexuality. The local administrators, education officers and security agents were collecting evidence to have men responsible for teenage pregnancy prosecuted. All schools had been instructed to admit the affected girls and help them access health services and education while they continued with their studies (Nandi County Governor's Office Database, 2021).

According to a report by the Nandi County Executive Committee (CEC) member for Health, Nandi County recorded 6,060 pregnant schoolgirls as of June 15, 2020, while another 3,500 conceived between July and December the same year. The CEC continued to say that no student should be denied school admission for being pregnant. The CEC urged schools to accord special care to affected girls because of their condition. Administrators were required to provide weekly updates on the progress of admissions, adding that those who would not report would be penalised. Officers from DCI were collecting statements from the children with a view to arresting the responsible male suspects to face defilement and rape charges. The commissioner added that, under the Sexual Offences Act 2010, defilement and rape are treated extremely seriously because Kenya wants to protect the girl-child from sex pests (Nandi County Governor's Office Database, 2021). In light of the above situation, the current study sought to

identify teachers' perception of life skills education on teenage pregnancy in public primary schools in Nandi North Sub-County.

2.3.4 Parental Closeness

When it comes to sexual behaviour, parents can greatly impact their children's ability to avoid becoming pregnant by modelling healthy, responsible, and value-based choices (Skosana *et al.*, 2020). A teen girl's natural tendency is to watch and mimic her parents' or older siblings' actions. The younger child is more likely to mimic the good behaviours exhibited by adults in the immediate family. Shiateya (2016) asserts that adolescent sexuality and pregnancy are directly impacted by parental dysfunction or absence. Teenage pregnancies are less likely to occur when both parents are around to protect their daughters from sexual predators.

Girls in Nzambani Ward, Kitui County, who did not live with both parents were found to begin sexual activity at a younger age than girls whose parents lived together, according to a study by Muthoni and Mutua (2019). According to the respondents, dads play an important role in protecting their daughters from sexual predators, but mothers also play a role in shielding their daughters from abusive fathers. Muthoni and Mutua state that some parents put their children in the care of grandparents or other relatives, which leads to adolescent pregnancies.

Pregnancy rates among adolescent girls are higher in homes where there is only one parent present or where the father is not present (Castetter, 2020). In addition, sexual activity as a coping mechanism for domestic violence may be prevalent among adolescents who witness it on a regular basis. Children benefit greatly from parents who are authoritative, yet also warm, responsive, communicative, and positive (Li *et al.*, 2020). Research has shown that adolescents who have positive relationships with their parents are less likely to have sexual partners, use contraception more frequently, and postpone sexual activity until later in life (Ketting *et al.*, 2021). Teenage boys and girls look up to their parents as role models, and it is their responsibility to instruct and guide them in appropriate sexual behaviour. Preventing adolescent pregnancies requires early and contextualized teachings of sexuality and life skills (Castetter, 2020). Therefore, parents must frequently overcome cultural barriers that prevent them from having open conversations about sexuality with their teenagers in order to encourage open communication.

According to research by Maina *et al.* (2020), majority of young Kenyan girls get their sexuality, pregnancy, and sexual maturation information from their parents, their peers many

of whom are not well-informed and the media. They put themselves at risk for sexual and reproductive health issues, such as unintended pregnancies, because these important people do not give them accurate information. According to Maina *et al.* (2020), there are parents and adults who purposefully provide children with false or incomplete information in an effort to discourage them from having sexual relations.

Some parents even go to the extent of comparing men to animals with an attempt to instil the fear of men in their daughters. Ironically, this measure can do the contrary and encourage some teenage girls to try out relationships with boys and prove their parents wrong (Ndugga *et al.*, 2023). This curiosity exposes them to sexual relationships that often portend unwanted pregnancy. Additionally, teenage girls, afraid of being mocked and abandoned by peers, opt to initiate intimate relationships and give in to sex. On the other hand, boys' belief that engaging in sexual activity enhances their social status contributes to the rising incidence of teenage pregnancy (Maemeko *et al.*, 2018).

Poor parenting contributes 90% of teenage pregnancy (Castetter, 2020). Skosana *et al.* (2020) observes that parents are responsible for mitigating teenage pregnancy by using good parenting skills and parental knowledge. Chung *et al.* (2018) also underlines that parental closeness with children is a preventive factor for teen pregnancies. Challenges in parent-teen relationships may drift away teenagers and encourage them to seek pleasure, acceptance and relief in sexual activity. Usonwu *et al.* (2021) encourage parents to engage in healthy communication sex and sexuality with their teenagers. Nevertheless, these authors decry the fact that in most cases parents are too busy to make time for meaningful conversations with children. According to Munyai *et al.* (2023), some parents resist discussing sex issues and sexuality with their children, thus leaving this crucial responsibility to teachers and teens' peers. Besides, depending on parenting style, teenagers may not feel at ease talking to their parents about sex, especially where parents themselves avoid or overtly discourage such conversations.

In 2021, the Nandi County Children Services Coordinator attributed the surge in teenage pregnancy in the County to poor parenting. The coordinator cited the report by the Department of Health and Sanitation which showed that pregnancy cases increased from 3,000 to 7,500 between July 2019 and June 2020. The report stated that majority of parents were not properly knowledgeable on how to help with issues faced by teenage girls. Furthermore, a majority of parents shun talking to their offspring about sexual things, which leaves teenage girls to learn about sex from experimentation with their friends. The coordinator also underscored that

parental carelessness leaves some children vulnerable to sexual exploitation wherein teenage girls would be enticed into sexual relations with exploiting men by offering cheap gifts (Nandi County Children Service Coordinator's Office Database Office, 2021).

In response to the rise in teenage pregnancy in Nandi County, the Department of Children Services recruited 50 child protection volunteers who carried out regular visits to various places to track trends as well as sensitising girls on sex, sexuality and relationships. The County has also set up locational Area Advisory Councils chaired by chiefs which have monthly meetings to discuss the progress of interventions and develop remedial measures on pressing issues including teenage pregnancy. Additionally, some neglected girls receive a stipend of 2,000 Kenya shillings through the Orphans and Vulnerable Children Cash Transfer Programme to help them with their livelihoods and to prevent them from being likely to engage in transactional sex. The coordinator encouraged all members of the public to report cases of child abuse to the County authorities (Nandi County Children Service Coordinator's Office Database Office, 2021).

The Nandi County Children Service Coordinator further called on the public not to only blame the increase of teenage pregnancy on the Covid-19 pandemic and the subsequent school closures. It was emphasised that, even before the pandemic, alarming national figures on teenage pregnancy had been reported year annually through the media. According to the Coordinator, there are several factors that contribute to teenage pregnancy in Nandi County including low household incomes which lead some girls to engage in transactional sex to help family members. Addressing this challenge and the need for concerted efforts by all stakeholders while emphasizing the great responsibility of parents in nurturing teenagers through deliberateness of educating and open conversations on sexuality (Nandi County Children Service Coordinator's Database Office, 2021). In light of these perspectives, this study ascertained teachers' perception of parental closeness on teenage pregnancy in public primary schools in Nandi North Sub-County. While existing measures to address teenage pregnancy often focused on the perspective of teenage girls, there remained a research gap regarding similar studies that targeted teenage boys since the issue of teenage pregnancy is not for girls alone.

2.4 Theoretical Framework

The research was directed by the Social Learning Theory, which was formulated by psychologist Albert Bandura. A different psychologist by the name Albert Bandura developed the Social Learning Theory in the year 1971 (Bandura, 2024). This theory says that people learn from the observation of others in a process of modelling and imitation. This theory can be applied to a variety of strategies aimed at mitigating teenage pregnancy, which include digital sexual literacy, sexual abstinence programmes, life skills education and parental closeness. Social Learning Theory has proposed that teenagers can learn about responsible sexual behaviours from observations through imitation. Bandura also suggested that behaviour is also affected by reinforcement and punishment (Bandura, 2021). Highlighting the potential negative consequences of teenage pregnancy such as educational setbacks, financial constraints and health risks can act as a deterrent to risky sexual behaviour. On the other hand, the positive reinforcement of responsible behaviours, such as the use of contraception, and promoting open discussions about sexual health with partners, can promote safer sex practices.

Social Learning Theory explains how modelling or the act of demonstrating behaviours for others to imitate is a powerful tool in shaping behaviour. Digital platforms can offer modelling possibilities to encourage sexual literacy (Zechuan & Shuchang, 2025). Health professionals, educators or influencers advocating for safe sex, regular testing for STIs and consensual sex can have a positive influence on the behaviour of teenagers. With the internet becoming a central part of our lives, teenagers often turn to online sources to gather information that they find difficult to talk to their parents or teachers about such as sexual education (Nikkelen *et al.*, 2020) If digital platforms offer accurate, responsible and mature content teenagers are likely to observe and imitate responsible sexual behaviours. Watching a video describing the life history of an adult successful teenage girl that has achieved their education goals and has found employment can help inspire other teenage girls to value their education, which improves their sense of self-efficacy (Gyane *et al.*, 2025).

It is important to direct teenagers to verified health websites, apps, and digital platforms to get sexual education (Alhassan *et al.*, 2025). Sexual literacy must be holistic, addressing not only the biological aspects of sexual health, but also the emotional, social and ethical dimensions as well. While digital sexual literacy may be effective, it should not replace the role of adults and trained professionals. Parents, educators and health professionals should help teens to navigate the complex online space and help them interpret and understand the information they

encounter (Greyson *et al.*, 2023). If digital platforms are utilised properly, it can improve the sexual literacy of teenagers. Engaging quizzes about aspects of sexual health knowledge and tools like interactive apps designed to simulate the potential consequences of unprotected sex or to have their questions about a specific topic answered in an interactive way by experts on the Web all serve to provide valuable feedback and reinforcing mechanisms. The interactive nature of digital platforms can also include immediate feedback and reinforcement, which is also an important aspect of the Social Learning Theory. By understanding and utilizing the principles of Social Learning Theory, these platforms can help teenagers make responsible choices, and in this way, potentially mitigate the problem of teenage pregnancy.

Abstinence programmes often include some form of testimony, stories, or role playing where individuals model abstinence. These models can teach the teenagers through imitation that it is an accepted and reasonable option to abstain from sexual activities (Bomester, 2021). Prominent figures who succeeded in abstaining from sex until their own determined time (like marriage) can be good role models for teenagers. By showing teenagers the benefits of their choices (avoidance of unwanted pregnancies, STIs, and emotional complications), these individuals can contribute to a change in their behaviour by modelling it. While abstinence is the way to prevent teen pregnancy, it is also important to provide comprehensive sexual education. This is to ensure that teenagers make informed choices and know how to look out for themselves should they become sexually active.

Social Learning Theory can be used to explain the effectiveness of sexual abstinence programmes in helping to mitigate teenage pregnancy (Paton *et al.*, 2020). However, it's very important that these programmes are part of a comprehensive, respectful and understanding approach to sexual education. Social Learning Theory encompasses the concept of reinforcement and punishment to describe learned behaviours and how it is repeated. In relation to sexual abstinence programmes, positive reinforcement may be in the form of praise, recognition or rewards for abstinence. On the other hand, the possible negative consequences of having sex activities, such as teenage pregnancy or STIs, can serve as a type of punishment for avoiding such behaviours.

Life skills education often includes practical exercises or role play situations in which these skills are modelled. By watching such models, teenagers can learn how to deal with similar situations in their own lives. Role models can play a role in life skills education. Teachers, mentors, or even peers who display responsible behaviours can be good examples for teenagers

to follow (Kearney & Levine, 2020). A mentor who speaks about their own decision-making process in difficult situations can influence teenagers to think critically and make responsible decisions including sexual behaviours. Comprehensive sex education programmes can provide accurate information and model responsible behaviours that relate to sexual health (Miedema *et al.*, 2020). This includes teaching them important skills, such as decision-making, problem-solving, creative thinking, and communication, which can help them cope with difficult situations, including those involving sex (Dupuy *et al.*, 2018).

Through modelling and reinforcement, life skills education can empower teenagers to make responsible choices in relation to their sexual behaviour (Tasema *et al.*, 2020). The application of life skills in real life situations and the positive outcomes that are the result can be used as reinforcement in encouraging teenagers to repeat such behaviours. A teenager who uses their communication skills to have a conversation with their partner about sex (boundaries) and receives a positive response was more likely to use such skills in the future (Njenga, 2019). Teaching teenagers about the consequences of teenage pregnancy, as well as how to make informed decisions, and the importance of consent can have an impact on attitudes and expectations about sexual behaviour. Life skills education programmes should be sensitive to the cultural, social and personal factors which affect the sexual behaviour of a teenager. For life skills education to be effective, a conducive environment is important. This includes giving students supportive teachers, parents and peers who encourage the application of these skills.

Parental closeness is important in overcoming teenage pregnancy as per the Social Learning Theory. Parents are the main role models to their children. Teenagers look to their parents for behaviours, attitudes and strategies for dealing with a situation and this includes ideas about relationships, sex, family unity, and love. A parent who displays respect, open communication and responsible behaviours sets an example for his or her child to follow. Parents are models not only for direct sexual behaviours and attitudes but for broader skills in life such as decision making, emotional management and communication. These skills are critical in making responsible choices, including choices about sexual behaviour. Parents are usually the main role models for their children. Their attitudes towards sex, relationships and contraception along with their behaviour and way of communication can have huge impacts on their teenagers' sexual behaviour (Bandura, 2024).

A strong parent-child relationship, characterized by open communication and mutual respect, can foster responsible decision-making among teenagers (Usonwu *et al.*, 2021). Parents should

strive to create an environment that encourages open and honest dialogue about sexual health. Beyond discussions on sexual behaviour, parents ought to provide a supportive atmosphere that nurtures teenagers’ self-esteem, decision-making skills, and ability to set and maintain personal boundaries. Social Learning Theory offers a useful framework for understanding how interventions such as digital sexual literacy, sexual abstinence programmes, life skills education, and parental closeness may mitigate teenage pregnancy through mechanisms of observation, imitation, modelling, reinforcement, and punishment.

2.5 Conceptual Framework

The following conceptual framework lays the groundwork for the researcher and offers a way to logically organize the theoretical concepts to be investigated. Interactions between variables are illustrated by the framework. The framework provides the independent variables digital sexual literacy, sexual abstinence programmes, life skills education and parental closeness and dependent variable teenage pregnancy.

As shown in Figure 1, the researcher conceives that the independent variables digital sexual literacy, sexual abstinence programmes, life skills education and parental closeness affected the dependent variable teenage pregnancy. However, the effectiveness of these interventions is influenced by factors within the school and home environment. The purpose of this study was to investigate teachers’ perception of selected mitigation measures (digital sexual literacy, sexual abstinence programmes, life skills education and parental closeness) on teenage pregnancy in Nandi North Sub-County.

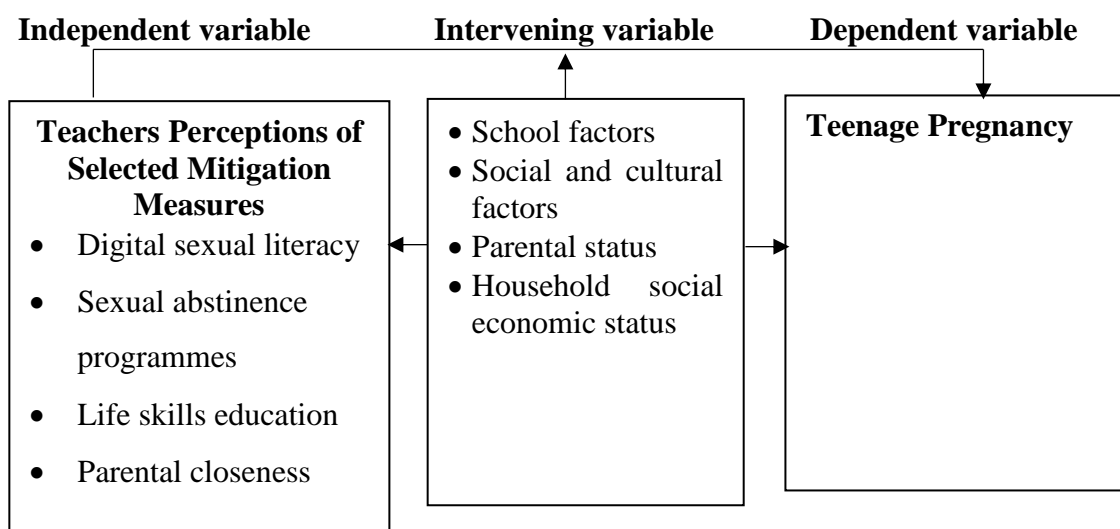


Figure 1: Teachers’ perception of selected mitigation measures on teenage pregnancy

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section details the study's methodology, including its design, setting, population of interest, sample size and sampling technique, tools, data collecting methods, and analytics.

3.2 Research Design

Using a descriptive research survey design, the study was conducted. This research strategy involves collecting and analysing data from a subset of the population in order to draw conclusions about its makeup, values, and dynamics (Morrison, 2022). Andrade (2021) notes that this research design offers a straightforward framework for studying the relationship between dependent and independent variables, taking into account any possible cause-and-effect relationships between them. Descriptive research allows the researcher to characterize the distribution of variables, to look for trends and patterns, and to discuss the relationship between variables. It provides an overview of the data, which is often presented in the form of summary statistics such as tables and graphs. In the current study this design was followed due to the high degree of representativeness to get the characteristics of respondents (Coe *et al.*, 2025).

3.3 Location of Study

The study was done in public primary schools in Nandi North Sub-County, Nandi County, Kenya. Nandi North Sub-County is located in the North of Nandi County and it covers the largest geographical area in the County. Appendix III shows a map of Nandi County showing Nandi North Sub-County which was the focus of this study. This study area was chosen because it has the highest incidence of teenage pregnancy cases than other sub-counties in Nandi County. Despite the introduction of various mitigating strategies to resolve the issues of teenage pregnancy, no previous studies had clearly targeted the perception of teachers on these strategies. Therefore, Nandi North Sub-County was identified as a suitable place for this research in order to establish teacher's perception of selected mitigation measures: digital sexual literacy, sexual abstinence programme, life skills education and parental closeness on teenage pregnancy.

3.4 Population of Study

The study involved all the teachers who teach elementary school in Nandi North Sub-County and who were working in the public sector. Over the course of six educational zones in the Sub-County, 1,387 classroom teachers and 172 school counsellors from 172 public elementary schools comprised the accessible population. Teachers were targeted to provide their views of selected intervention measures in addressing teenage pregnancy in schools. Guidance and counselling teachers were specifically included in the study due to their professional role in offering guidance and counselling services to teenagers, thereby providing expert insights on the effectiveness of the intervention measures. Table 2 presents the accessible population for the study, organized by educational zone in Nandi North Sub-County.

Table 2

Accessible population as per educational zones in Nandi North Sub-County

Educational zones	Schools	Teachers	G&C Teachers
Kabisaga	28	229	28
Sang'alo	31	245	31
Kabiyet	23	222	23
Kabyemit	26	241	26
Kurkung'	35	216	35
Chepterwai	29	234	29
Total	172	1387	172

Source: Nandi North Sub-County Educational Statistics Office Database (2021)

3.5 Sample Size and Sampling Procedures

Considering the large target population of teachers (1,387), a representative sample size was required to ensure the findings could be generalized. Further, the guidance and counselling (G&C) teachers' population of 172 was high and therefore 14% of the target was selected as the sample size based on the rule of thumb resulting to 24 G&C teachers. According to Subedi (2021), in qualitative research sample size of between 10 – 30 cases can be applied for data saturation.

According to the formula provided in Appendix VI, the sample size for the general teacher population was determined using the work of Krejcie and Morgan (1970). This computation indicated that 301 respondents would constitute an adequate sample from the available population of 1,387. The equation is presented as:

$$n = X^2 * N * P(1 - P) / ME^2 + (X^2 * P * 1 - P)$$

Where:

n=Sample size

X²=Chi Square for the specified confidence level at 1 degree of freedom=
(3.841) from tables

N=Population size

P=Population proportion (.50 in the table)

ME=Desired margin of error (expressed as a proportion=0.05)

$$= 3.841 \times 1387 \times 0.5(1-0.5) / 0.05 \times 0.05(1387-1) + 3.841 \times 0.5(1-0.5)$$

$$n = 301$$

Using the formula, a total of 301 teachers were selected as the sample size for the study. The sample size as per each category is presented in Table 3.

Once the sample size had been determined (301 teachers and 24 guidance and counselling (G&C) teachers) the sampling procedure was started. Poll takers were hand-picked using a combination of stratified random sampling with the use of purposive sampling. In the first phase, a proportionate stratified sampling was used for both categories of respondents. For the 301 teachers, the accessible population of 1,387 was divided into six educational zones in a first step. Selection of teachers was then made on the basis of the proportion of teachers in each zone in relation to the total population in the zone, rather than in relation to the schools in which they were located because the school was not the unit of study.

The demographic of teachers was stratified into six categories based on their respective school zones with the help of the proportionate stratified random sampling method for instance, Kabisaga, Sang'ali, Kabyet, Kabyemit, Kurkung' and Chepterwai. A sample was then randomly drawn from each stratum proportionally. We put together responses from across the strata to have a total of 301 educators for our study. For example, out of the total number of 229 educators in the Kabisaga zone, 50 were selected using the random lottery method. In this process, a total of 229 teacher's names or ID numbers were placed in a container and then were randomly selected from a pool of 50. As seen in Table 3, the process was repeated for the other five zones. To ensure that the sample of teachers was representative of the population of each division, the proportionate stratified random sampling method was used (Coe *et al.*, 2025). In order to minimize sampling error, there were some notable differences between strata that were

removed with the help of this method. When there was little variation within the strata, the method also increased the accuracy of the sample estimates.

For the guidance and counselling (G&C) teachers a proportionate sampling method was also applied. These teachers were recruited from the 172 public primary schools. For instance, in the Sang’alo Zone, four G&C teachers were selected by simple random sampling from among a total of 31 schools. Once the four schools were selected, the researcher visited them purposely in order to select the G&C teachers who would be part of the study. Table 3 shows the proportionate sample size of teachers and guidance and counselling teachers per zone in Nandi North Sub-County.

Table 3

Sample size for the study

Educational zones	Schools	Teachers (N)	Sample (s)	G&C Teachers
Kabisaga	28	229	50	4
Sang’alo	31	245	53	4
Kabiyet	23	222	48	3
Kabyemit	26	241	52	4
Kurkung’	35	216	47	5
Chepterwai	29	234	51	4
Total	172	1387	301	24

N-Target, S-Sample size

Source: Nandi North Sub-County Education Statistics Office Database (2021)

3.6 Instrumentation

A researcher-administered questionnaire and an interview schedule were the tools used by this study. Quantitative and qualitative information relevant to the goals of the research were collected using the following instruments.

3.6.1 Questionnaire for Teachers

Educators involved in the public elementary schools in Nandi North Sub-County filled out the surveys to amass numerical data. Designed to be used to gather a wide variety of answers, the questionnaire contained both open-ended and closed-ended questions in order to ensure it was in line with the aims of the study. The instrument was as illustrated in Appendix III and consisted of five sections (A-E). Section A collected demographic information of the respondents such as the age of the respondent, gender, highest level of education, and years of

teaching experience. Section B was concerned with teacher's perception of digital sexual literacy on teenage pregnancy. Section C aimed to gather information on the perception of teachers regarding sexual abstinence programmes related to teenage pregnancy. Section D examined the perception of teachers about the life skills education in teenage pregnancy. Finally, Section E discussed the perception of teachers on parental closeness on teenage pregnancy.

3.6.2 Interview Schedule for G&C Teachers

The purpose of the interview schedule was to collect qualitative data from the instructors of guidance and counselling (G&C). This instrument was aimed at collecting in-depth information on their perceptions of selected mitigation strategies on teenage pregnancy in schools. The interview schedule as presented in Appendix IV offered an avenue for the researcher to explore and obtain more in-depth information on the opinions, behaviours, experiences and views of the respondents. This method permitted a richer understanding of the subject matter to complement the quantitative data attained through questionnaires.

3.6.3 Validity of Research Instruments

The term "validity" is used to describe how closely the study's findings represent the phenomenon under study (Morrison, 2022). How effective is a measuring device in capturing the target variable is what this term refers to (Ahmed & Ishtiaq, 2021). The validity was established by using the methods of content and face validity. First of all, we tested whether the items of the research instruments were consistent with the aim of the study to determine face validity. Content validation was sought from Egerton University's Department of Psychology, Counselling, and Educational Foundations faculty members and instructors. We asked these professionals to review the questionnaire and the interview schedule and provide us with their thoughts on the validity of the questions. Prior to piloting and field administration, their expert feedback was used to improve and refine the instruments.

3.6.4 Reliability of Research Instruments

What determines the reliability of a measurement or a procedure is the degree at which its result can be repeated at regular intervals (Muasya & Mulwa, 2023). A reliability test was carried out on the questionnaire. Thirty educators or 10% of the entire sample can be used as the population for reliability testing, according to Mugenda and Mugenda (2019). The reliability of the research questionnaire was determined by means of the test-retest technique. Five public elementary schools in Nandi central sub-county, which is characterized with many traits that

are similar with Nandi north sub-county, were selected for the reliability test. The pilot programs also took advantage of these educational institutions. Thirty educators received the survey twice with a break of two weeks in between each survey. In order to establish the dependability, data were examined from both surveys. According to Creswell and Plano Clark (2023) the study could proceed with a reliability coefficient (r) of 0.70 or above. Results of the reliability analysis have been shown in Table 4.

Table 4

Reliability test

Variables	Cronbach's Alpha	N of Items
Digital sexual literacy	.870	8
Sexual abstinence programmes	.719	8
Life skills education	.975	8
Parental closeness	.972	8

Table 3 shows the reliability values for the various scales used in the study using the Cronbach's Alpha. The Digital Sexual Literacy scale, which is composed of 8 items, had a high reliability score of 0.870. The Sexual Abstinence Programmes scale, also with 8 items, had a reliability value of 0.719. The Life Skills Education scale had a near perfect reliability of 0.975 and the Parental Closeness scale a reliability value of 0.972. All four measures of Cronbach's Alpha were found to be above the benchmark (0.70) as suggested in Creswell and Plano Clark's (2023) article, indicating reliability for all instruments. Minor changes made to the instruments before administering in the field.

3.7 Data Collection Procedures

Data collection commenced after the instruments were tested for validity and reliability. The researcher started by getting an introductory letter from Egerton University's Director of Postgraduate Studies (Appendix V). With the help of this letter, the researcher was able to apply for and receive a research permit from NACOSTI (Appendix VI), the National Commission for Science, Technology and Innovation. Once the permit was obtained from NACOSTI then the next step was to get further authorization from the Nandi County Commissioner's office (Appendix IX) and the County Director of Education's office (Appendix VIII) to collect data from public primary schools (in Nandi North Sub-County).

The principals of the primary schools that were part of the sample gave their stamp of approval for data collection to start when the aforementioned organizations gave their stamp of approval. In order to ensure that everyone was on the same page and adhering to the rules, the researcher distributed the survey to the participants. Teachers received an introductory letter explaining the purpose of the study and the requirements to participate in it before the questionnaires were distributed to them. Every educator who volunteered to participate in the study provided their written permission prior to participating. Research procedure: the researcher employed drop and pick method for distribution of research questionnaire and it collected immediately. Interviews with teachers of guidance and counselling were scheduled at least one week ahead of time and held in the staff rooms. Each session lasted approximately 30 minutes, and the researcher recorded responses accurately through taking of notes. The whole data collection exercise was done in the course of three months.

3.8 Data Analysis

It was necessary to validate; code and tabulation of the quantitative data gathered from the surveys before these could be analysed using Statistical Package for the Social Sciences (IBM-SPSS Version 25.0). In order to facilitate the process of data description, interpretation, and generalization, this step was necessary in presenting the characteristics of the data clearly (Bell *et al.*, 2022). Teachers' views of digital sexual literacy, sexual abstinence program, life skills education, and parental closeness as possible strategies to reduce adolescent pregnancies was explored in this descriptive statistics study. 10 quantitative data from public primary schools in Nandi North Sub-County, Kenya. Tables were used to present the quantitative information data that was analysed. In order to reach the research goals, qualitative data obtained from the guidance and counselling teachers were organized and classified thematically. Narratives and carefully picked out quotations were then used to present the findings and highlight important points.

3.9 Ethical Considerations

Provided that teenage pregnancy is a sensitive topic, the study was undertaken with strict adherence to ethical research standards as expected by Egerton University research ethics guidelines. So, before data was collected, the Institutional Scientific and Ethics Review Committee at Egerton University gave their approval (Appendix VI). Second, everyone who took part in the study did so voluntarily. That is why we made sure everyone knew what we were trying to accomplish and that their participation was entirely voluntary. At any point

throughout the study, they were informed that they could stop participating without facing any repercussions. Finally, the researcher made sure that everyone involved in the study remained anonymous and confidential at all times. Respondents' names and other identifying information, such as their schools' names, were thus not requested in the survey. To protect participants' identities, the researcher coded each response. Respondents were further reassured that the data collected from the research instruments would be utilized exclusively for scholarly pursuits. Further, data security was also observed, with physical documents (questionnaires and interview schedules) kept in lockable cabinets and electronic files protected by passwords to prevent unauthorised access.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

Analysing the data, presenting the results, and discussing the findings are the main points of this chapter. The overarching goal of this research was to examine how primary school educators in Nandi North Sub-County, Nandi County, felt about a number of strategies aimed at reducing adolescent pregnancies, including sexual abstinence programs, life skills education, parental closeness, and digital sexual literacy. The findings were presented in tables.

4.2 Response Rate

The respondents were active personnel in public primary schools of Nandi North Sub-County, Nandi County. A total of 301 questionnaires were distributed to respondents. Table 5 shows the response rate.

Table 5

Response rate

Respondents	Number issued	Returned	Response Rate (%)
Teachers	301	281	93.4
G&C teachers	24	19	79.16
Total / average	325	300	92.31

There was a response rate of 93.4%, or 281 filled-out and returned surveys out of 301 sent out. A response rate of 79.6% was achieved when 19 out of 24 interviews with Guidance and Counselling (G&C) teachers were successfully carried out. The end result is a response rate of 92.31% on average. In terms of analysis, Mugenda and Mugenda (2019) state that a response rate of 60% is good, 70% is very good, and 50% is adequate. This study's response rates are significantly higher than the recommended threshold, guaranteeing that the data collected is reliable and representative.

4.3 Demographic Information of Respondents

The variables considered included teachers' level of education, years of working experience, gender, and age range.

4.3.1 Age Bracket

Table 6

Age brackets of respondents

Category	Frequency	Percent
18-25 Years	26	9.3
26-35 Years	124	44.1
36-45 Years	69	24.6
Above 46 Years	62	22.1
Total	281	100.0

The results show that 124 (44.1%) of the respondents were aged between 26–35 years, 69 (24.6%) were aged 36–45 years, 62 (22.1%) were aged 46 years and above, and 26 (9.3%) were aged below 25 years. The findings concur with Keya (2023) research from Emuhaya Sub-County that found out that most teachers teaching in schools were aged between 36 – 45 years. This implies that teachers from all age brackets participated in the study, providing diverse perspectives on of selected mitigation measures on teenage pregnancy in schools.

4.3.2 Gender of Teachers

Table 7

Gender of respondents

Gender	Frequency	Percent
Male	109	38.8
Female	172	61.2
Total	281	100.0

There were 172 female educators in Nandi North Sub-County’s public primary schools, while 109 male educators accounted for 38.8% of the total. Clearly, there are more female than male educators working in public primary schools. The research aligns with Bundi (2024) research in Narok county found out that 73.0% of teachers in primary schools were female. Hence, their perspectives will be particularly valuable in assessing the applicability of intervention strategies for addressing teenage pregnancy in schools.

4.3.3 Education Level

The researcher also assessed the education level of the respondents, with the results presented in Table 8.

Table 8

Education level of teachers

Education level	Frequency	Percent
Primary teachers' certificate	96	34.2
Diploma	83	29.5
Bachelors	92	32.7
Masters and above	10	3.6
Total	281	100.0

Result show that 96 (34.2%) of teachers had P1 certificate level of education, 83 (29.5%) had diploma, 92 (32.7%) had bachelors' degree and 10 (3.6%) had master's level of education. Therefore, all teachers have attained the minimum level of education required by the Teachers Service Commission (TSC) to teach in public primary schools. It is also noteworthy that many teachers have further advanced their education by pursuing undergraduate and postgraduate programmes in education.

4.3.4 Years of Teaching Experience

The researcher also sought to establish the number of years the respondents have worked as teachers. Table 9 presents the study results.

Table 9

Working experience of the respondents

Working experience	Frequency	Percent
Less than 5 years	82	29.2
5 - 9	82	29.2
10 - 14	43	15.3
15 -19	17	6.0
Above 20	57	20.3
Total	281	100.0

Findings in Table 9 revealed that 82 (29.2%) of the teachers had been teaching for less than 5 years, another 82 (29.2%) had been teaching for 5-10 years, 43 (15.3%) had been teaching for 10-14 years, 17 (6.0%) said they had been teaching for 15-19 years and the remaining 57 (20.3%) said they had been teaching in primary schools for more than 20 years. These results reveal that teachers had different levels of teaching experience, which would give a rich and diverse perspective on the issue under investigation.

4.4 Teachers' Perception of Digital Sexual Literacy on Teenage Pregnancy

The main purpose of the research was to find out the feeling that teachers in primary schools in Nandi North Sub-County felt towards the impact of student's digital sexual literacy towards adolescent pregnancies. Educators were provided with a 5-point Likert scale to indicate to what degree they agreed or disagreed with various claims. Tabulated in Table 10 are the results of this investigation.

Findings in Table 10 showed that a majority of teachers (205; 73.0%) agreed that teenagers have the ability to get accurate sexual health information on the Internet. The respondents agreed that teenager have the ability to access accurate sexual health information through the Internet (Mean=3.72, standard deviation=1.20). The results of the study agreed with Sewak *et al.* (2023) who established that the proliferation of digital sexual literacy devices and programmes in the mass media has increased in recent times. This makes it important that teachers and parents know about the content that children access online. Response from the interviews with the 24 Guidance and Counselling teachers revealed diverse perceptions relating to the digital sexual literacy. Most 18 guidance and counselling teachers described it as the use of online or digital platforms to get information on sexuality and reproductive health. For example, one stated:

“The concept of digital sexual literacy is a digital platform used to access information related to sexuality, which can help in preventing teenage pregnancy. The exposure to digital information prevents teenage pregnancy if they access information that helps deal with the consequences” (G&C Teacher 11, Personal communication, July 21, 2024).

Table 10

Teachers' perception of digital sexual literacy on teenage pregnancy

Statement		SD	D	N	A	SA	Mean	St.Dv
Teenagers have the ability to access accurate sexual health information online	F %	16 5.7	48 17.1	12 4.3	128 45.6	77 27.4	3.72	1.20
Having digital sexual literacy skills positively impacts teenage pregnancy prevention	F %	18 6.4	28 10.0	15 5.3	151 53.7	69 24.6	3.80	1.11
Online resources play a significant role in educating teenagers about safe sexual practices	F %	17 6.0	47 16.7	9 3.2	149 53.0	59 21.0	3.66	1.16
Learners are comfortable discussing digital sexual health resources with their peers online	F %	16 5.7	52 18.5	12 4.3	137 48.8	64 22.8	3.64	1.18
Learners find information online regarding sexual health and pregnancy prevention	F %	15 5.3	40 14.2	12 4.3	153 54.4	61 21.7	3.73	1.11
Learners actively seek out digital platforms for information on sexual health and pregnancy prevention	F %	15 5.3	42 14.9	30 10.7	144 51.2	50 17.8	3.61	1.10
Digital sexual literacy is essential in reducing the rates of teenage pregnancy	F %	18 6.4	36 12.8	21 7.5	138 49.1	68 24.2	3.72	1.15
Improving digital sexual literacy can empower teenagers to make informed decisions about their sexual health.	F %	9 3.2	18 6.4	16 5.7	130 46.3	108 38.4	4.10	0.99
Composite scores							3.75	1.13

Key: SD-strongly disagree, D - disagree, UD - undecided, A - agree and SA - strongly agree

Secondly, the majority of respondents, 220 (78.3%), agreed that having digital sexual literacy skills positively impacts the prevention of teenage pregnancy. The descriptive statistics

(Mean=3.80, standard deviation=1.11) suggest that most teachers tended to agree to the statement that having digital sexual literacy skills positively impacts teenage pregnancy prevention. During the interviews, fourteen G&C teachers highlighted the role of digital platforms in shaping adolescents' understanding of sexuality. For instance, one teacher stated that,

“Media informs them of the consequences of teenage pregnancy,” (G&C Teacher 11, personal communication, July 10, 2024).

Nonetheless, others (10) warned that without adequate supervision, exposure to inappropriate content may lead to imitation of negative behaviours. As one guidance and counselling teacher noted,

“For the vices, they will tend to emulate them and hence become pregnant” (G&C Teacher 17, personal communication, July 10, 2024),

Therefore, it was agreed among the teachers and guidance and counselling personnel that digital sexual literacy is critical in addressing teenage pregnancy, but they emphasised that its implementation should be accompanied by careful oversight and guidance in order to mitigate possible negative effects. This finding is supported by Widman *et al.* (2020) who established the fact that digital sexual literacy tools offer better flexibility in meeting various learning needs and have advantages over face-to-face interactions.

The study findings showed that most teachers i.e. 208 (74.0%) were of the opinion that online resources have considerable role to play in educating teenagers about safe practices in sexual intercourse. The mean and standard deviation (Mean = 3.66, SD = 1.16) results corroborated the fact that most of the respondents agreed with the importance of online resources in promoting safe sexual practices among teenagers. During interview, fifteen guidance and counselling teachers had agreed with the proposition that resources played an essential role in the education of teenagers. One Guidance and Counselling Teacher [9] perceived this point as:

“I believe that digital sexual literacy can be a preventive tool against teenage pregnancy if teenagers are guided on how to get the right information” (G&C Teacher 9, personal communication, July 12, 2024).

This indicates that teachers perceive online resources as playing a significant role in providing teenagers with information on sexual health and strategies to avoid engaging in risky sexual behaviour.

Results further showed that 201 (71.6%) of teachers agreed that learners are comfortable discussing digital sexual health resources with their peers online. This suggest that many teenagers in their schools may be willing to openly discuss sexual matters with peers via online platforms. During interview, eighteen Guidance and Counselling Teachers expressed varied responses with respect to this issue. One of them commented that:

“The effectiveness of digital sexual literacy in preventing teenage pregnancy depends largely on the content accessed and the guidance provided.” One teacher observed, “It is effective because they access positive information” (G&C Teacher 10, personal communication, July 21, 2024).

However, other six G&C teachers expressed cautioning that digital devices were not present in their schools and therefore they cannot provide their responses on usefulness in addressing teenage pregnancy. one of the them noted that:

“Not effective because of lack of accessibility to digital devices” (G&C Teacher 10, personal communication, July 22, 2024),

This suggests that teacher counsellors believed unsupervised access to digital sexual health resources could undermine their effectiveness. Nevertheless, the findings indicate that digital sexual literacy is considered effective when teenagers access accurate information on sexuality, as this provides opportunities for meaningful engagement and discussion with peers online. These outcomes align with Scull *et al.* (2019) who found that, through informal social learning, peers serve as valuable resources offering support and sharing similar experiences. Consequently, health actors have sought to formalise peer education in public policy and practice, particularly in relation to youth sexual health.

The study also showed that 204 (76.1%) of the respondents agreed that learners use the Internet to look for information regarding sexual health and preventing pregnancy. These findings are akin to the findings of Sewak et al (2023) who observed that the advent of new technologies have significantly increased the access to sex health information by teenagers online, especially the dangers of teenage pregnancy during their school years. Further, the study showed that 194 (69.0%) of the respondents agreed that learners actively seek out digital platforms for information on sexual health and pregnancy prevention. These findings are similar to the study by Alhassan *et al.* (2025) that found significant opportunities for providing access to sexual health and teenage pregnancy information to many of the youth in sub-Saharan African countries through digital media.

On their part during interview, sixteen teachers of guidance and counselling supported the role that digital media played in shaping the sexual behaviour of teenagers. One guidance and counselling teacher stated that:

Digital media plays a powerful role in shaping teenagers' sexual behaviour. It is seen as both a positive and negative influence. For instance, one teacher said, "It influences positively in that they can learn the good things about sexuality that can prevent teenage pregnancy" (G&C Teacher 18, personal communication, July 12, 2024).

However, there were eight guidance and counselling teachers shared their concerns about the exposure of digital sexual tools in sharing explicit content leading to some teenagers engaging in the act as part of experimentation. One participant noted that:

"When they watch programmes that are associated with vices like pornography, they tend to put them in practice" (G&C Teacher 10, personal communication, July 13, 2024).

Results further revealed that most 206 (73.3%) of respondents agreed that digital sexual literacy is essential in reducing the rates of teenage pregnancy. This means that digital sexual literacy is essential in reducing the rates of teenage pregnancy. In support of the study findings, Huang *et al.* (2022) established that application of digital health strategies for teenagers was effective in curbing incidents of teenage pregnancy in schools. Therefore, digital sexual literacy devices provide information to enable teenagers understand issues related dangers of teenage pregnancy.

Finally, study result show that majority 238(84.7%) of respondents agreed with the statement of improving digital sexual literacy can empower teenagers to make informed decisions about their sexual health. Result shows that most teacher agreed that improvement of digital sexual literacy can empower teenagers to make informed decisions about their sexual health (Mean = 4.10, standard deviation = 0.99). Similarly, the majority (19) of guidance and counselling teachers in the study agreed with this opinion and their comments in the interviews have shown that teenagers are empowered to make rational decisions based on the information they access and consume from digital platforms. This finding is in line with Ramchandani *et al.* (2018) which have established that digital sexual literacy resources have helped teenagers learn and clarify their doubts about the risk of teenage pregnancy without the fear of stigma. In Spain, Aguilar-Quesada *et al.* (2025) found digital media resources that have sexual education content

allow learners to choose information according to their needs, therefore allowing them to make an informed decision.

In summary, based on the descriptive statistics, most of the teachers (74.9%) have positive perceptions about digital sexual literacy on teenage pregnancy in schools (Mean = 4.75 with standard deviation of 1.13). However, the relatively high standard deviation indicates that there are still some teachers who have a reservation on the effectiveness of digital sexual literacy devices and content on teenage pregnancy. Furthermore, thirteen guidance and counselling teachers said that implementation of this mitigation strategy in their schools has encountered serious challenges both within and beyond their control. These challenges comprise of limited resources and cultural barriers, which make it difficult to effectively integrate the use of digital sexual literacy education. One of the teachers of guidance and counselling observed that:

“Lack of electricity, knowledge of operating the devices for both teachers and teenage girls,” and the scarcity of digital devices (G&C Teacher 23, personal communication, July 23, 2024).

Another G&C teacher mentioned that cultural resistance also presents significant challenges. For example, one teacher noted,

“Culture is a challenge; some people don’t want information on sexuality to reach their children” (G&C Teacher 3, personal communication, July 21, 2024).

4.5 Teachers’ Perceptions of Sexual Abstinence Programmes on Teenage Pregnancy

Finding out how primary school educators in Nandi North Sub-County felt about sexual abstinence programs and their impact on adolescent pregnancies was the study’s secondary aim. This was accomplished by having educators rate the usefulness and efficacy of sexual abstinence programs in reducing the prevalence of teen pregnancies in their respective classrooms. In what follows, we offer and discuss the results. The findings are detailed in Table 11.

Table 11

Teachers' perceptions of sexual abstinence programmes on teenage pregnancy

Statement		SD	D	N	A	SA	Mean	St.Dv
Sexual abstinence programmes are the most effective way to prevent teenage pregnancy	F %	19 6.8	29 10.3	11 3.9	120 42.7	102 36.3	3.91	1.19
Abstinence-only programmes leave teenagers unprepared for situations where they might choose to have sex	F %	11 3.9	36 12.8	10 3.6	142 50.5	82 29.2	3.88	1.09
Sexual abstinence programmes can be beneficial in delaying sexual activity but are not a realistic solution for all teenagers	F %	13 4.6	29 10.3	9 3.2	148 52.7	82 29.2	3.91	1.07
I believe sexual abstinence programmes should be combined with comprehensive sex education, including information on contraception	F %	11 3.9	15 5.3	14 5.0	134 47.7	107 38.1	4.11	0.99
Open communication about sex between teenagers and parents can be more effective in preventing teenage pregnancy than abstinence programmes	F %	15 5.3	18 6.4	11 3.9	123 43.8	114 40.6	4.08	1.09
Schools that offer abstinence-only programmes should also be required to provide access to confidential reproductive health services	F %	19 6.8	26 9.3	13 4.6	140 49.8	83 29.5	3.86	1.14
Teenagers who participate in abstinence-only programmes are less likely to engage in risky sexual behaviours.	F %	22 7.8	31 11.0	19 6.8	132 47.0	77 27.4	3.75	1.20
The effectiveness of sexual abstinence programmes in reducing teenage pregnancy needs further research	F %	22 7.8	24 8.5	16 5.7	131 46.6	88 31.3	3.85	1.18
Composite statistics							3.92	1.12

Findings in Table 11 indicate that a majority of teachers, 222 (79.0%), agreed that sexual abstinence programmes are the most effective way to prevent teenage pregnancy. These results align with the findings of Mohamed *et al.* (2023), who established that abstinence programmes are among the primary prevention strategies for teenage pregnancy in many Sub-Saharan African countries. Beyond preventing teenage pregnancy, abstinence programmes also contribute to reducing the risk of sexually transmitted infections (STIs) among teenagers, including males, by discouraging early sexual engagement. When trying to establish how these abstinence programmes were implemented in schools, the study enquired from Guidance and Counselling Teachers where many (15) reported that these programmes were in existence in their schools. One of the G&C teacher noted that:

Sexual abstinence programmes are not widely implemented as stand-alone initiatives but are often “integrated in Guidance and Counselling” (G&C Teacher 7, personal communication, July 11, 2024).

Despite the generally positive perception of sexual abstinence programmes, qualitative responses revealed a significant gap in their implementation. Nine G&C teachers responded that sexual abstinence programmes were not implemented in their schools. This indicates that, although G&C teachers recognise the value of abstinence programmes on teenage pregnancy, some schools in Nandi North Sub-County have yet to implement them. The lack of specific programmes underscores the difficulties of implementing positive perceptions in real practice, which may affect the efficiency of abstinence in the context of mitigation.

Secondly, results showed that most teachers 224 (79.7%) agreed that abstinence-only programmes leave teenage people unprepared for situations where they might want to engage in sexual activity. The result suggests that while abstinence-only programmes may have an impact on reducing teenage pregnancy, it may not provide teenagers with adequate skills or knowledge to make informed decisions in case they choose to become sexually active. These findings are supported by Crocker *et al.* (2019), who concluded that by increasing sexual abstinence initiatives; there were reductions in sexual encounters as well as rates of HIV/Aids and teenage pregnancy, and sexually transmitted infections but may not fully prepare teenagers for real-life scenarios where abstinence is not maintained. Thirdly, results showed that the majority of teachers, 230 (81.9%) agreed that sexual abstinence programmes can be useful in delaying sexual activity but are not a realistic solution for all teenagers. The descriptive results suggest that teachers generally agree that abstinence programmes are effective in putting off

sexual activity among learners but it might not suit the need of every teenager. This finding is in line with Kamangu and Mbago (2024), who found that school-based sexual abstinence programmes in Tanzania led to a decrease in risky sexual behaviours among teenagers while they are in school, but this effect faded out when they leave school. Therefore, the general perception of teachers was that sexual abstinence programmes were effective, especially if they were taught thoroughly. During the interviews 19 out of 24 Guidance and Counselling Teachers agreed that sexual abstinence programmes was useful in delaying sexual activity by teenagers in schools. One of the G&C teacher that supported the statement commented that:

“It is very effective because if they learn the consequences of not abstaining” (G&C Teacher 8, personal communication, July 22, 2024).

Another noted that:

“abstinence is a very effective way because if a teenage girl learns abstaining, only she might not engage in sexual intercourse which may lead to pregnancy” (G&C Teacher 12, personal communication, July 18, 2024).

However, some five G&C teachers acknowledged that sexual abstinence programmes cannot completely address teenage pregnancy in schools. One of the G&C teachers observed that:

these programmes can reduce to some extent but may not completely prevent teenage pregnancy” (G&C Teacher 16, personal communication, July 19, 2024).

Fourthly, the findings revealed that a majority of teachers, 241 (85.8%), agreed that sexual abstinence programmes should be combined with comprehensive sex education, including information on contraception. The descriptive results indicate strong teacher support for integrating comprehensive sex education into abstinence programmes. In agreement to this finding, Thelma *et al.* (2024) research in Zambia found out that most teachers perceived a blended approach to be more effective in equipping teenagers with the knowledge and skills to make informed choices regarding their sexual and reproductive health. During the interviews, the G&C expressed diverse views regarding the integration of abstinence programmes and comprehensive sex education (CSE) in addressing teenage pregnancy. a total of 20 One Guidance and Counselling (G&C) teacher emphasised the value of abstinence with one stating that,

“Abstinence is the most effective approach because a teenage does not use devices like condoms, pills, which may affect the health of a teenage” (G&C Teacher 3, personal communication, July 08, 2024).

In contrast, four G&C teachers supported the adoption of comprehensive sex education, arguing that it offers a broader and more realistic approach to adolescent sexual health. As one respondent noted,

“comprehensive outdo abstinence” (G&C Teacher 7, personal communication, July 10, 2024).

The opposing views suggest that although some G&C teachers consider abstinence-only education the safe approach to take, others G&C teachers felt that incorporating abstinence into a wider sex education approach offers the best approach for preventing teenage pregnancy in schools. The findings are consistent with the argument of Bomester (2021), which stated that abstinence programmes should include CSE models when they are implemented. Such a combined approach that incorporates both abstinence and contraception education was more effective in providing teenagers with the knowledge and skills needed to prevent teenage pregnancy.

Fifthly, results showed that 237 (84.4%) of the respondents agreed that open communication about sex between teenagers and their parents can be more effective in preventing teenage pregnancy rather than abstinence programmes. The results indicate that open communication about sex between teenagers and their parents could be more effective in the prevention of teenage pregnancy than abstinence programmes alone (Mean = 4.08, standard deviation = 1.09). This view is supported by Mwangi (2019) who found out that parental communication on matters concerning sex reduces incidences of teenage pregnancies significantly. This is because the parents are able to monitor the behaviour and character of their teenagers and provide warnings and discouragement to engage in sexual activities before becoming an adult. Such ongoing guidance is often not an easy task in schools because of congested syllabus and little time for such activities.

A majority 223 (71.3%) of teachers agreed that schools that offer abstinence-only programmes should also be obliged to provide access to confidential reproductive health services. The results show that there is a consensus that the institutions providing abstinence-only programmes should also make available access to confidential reproductive health services.

This stance is supported by policy briefs by the Nandi County Government Office which encourage schools to admit pregnant teenagers and provide sexual reproductive health services and education to enable them to continue with their studies.

Findings revealed that 209 (74.4%) of teachers agreed that teenagers who take part in abstinence-only programmes are less likely to indulge in risky sexual behaviours. This means that most of the teachers perceived abstinence-only programmes as effective in reducing risky sexual behaviours among teenagers (Mean = 3.75, standard deviation = 1.20). These findings are supported by the research conducted by Mochehe (2018) in Kabete Sub-County that established that both teachers and students had positive attitudes towards abstinence programmes as they recognized their effectiveness in reducing incidences of risky sexual encounters among teenagers both within and outside the school environment.

Lastly, research findings also indicated that most 219 (77.9%) teachers agreed that the effectiveness of sexual abstinence programmes in reducing pregnancy among teenagers needed further research. The findings reveal a high level of consensus among teachers about the need to examine ways of improving sexual abstinence programmes in order to improve their impact. These findings are in line with those of Greene *et al.* (2024) who emphasised the need to further research in order to expand and refine existing sexual abstinence programmes to ensure their effectiveness in addressing the needs of teenagers from diverse demographics and with varying abilities.

In general, composite data shows that most teachers (78.4%, mean=3.92, standard deviation=1.12) held positive perceptions of abstinence programmes towards addressing teenage pregnancy in public primary schools in Nandi North Sub-County. Higher standard deviation on more than 1 suggests that there are still a small number of teachers who believe that abstinence programmes are not effective in addressing teenage pregnancy. When asked why some mitigation measures have not been effective in addressing teenage pregnancy, several Guidance and Counselling (G&C) teachers identified cultural and environmental challenges as major hindrances to implementing sexual abstinence programmes. One G&C teacher highlighted the influence of the surrounding environment, noting that,

“environmental influence” where students may be taught abstinence at school but “outside school, they may be influenced to follow other behaviours” (G&C Teacher 2, personal communication, July 12, 2024).

Cultural taboos surrounding discussions on sexuality were also cited as significant barriers. As one G&C teacher observed,

“Culturally talking about sex is unacceptable” (G&C Teacher 6, personal communication, July 12, 2024).

In addition, another teacher mentioned that peer pressure and the prioritisation of academic programmes over sexual education limit the success of abstinence-based interventions, stating that:

“peer pressure” and the prioritisation of academic programmes over sexual education are cited as obstacles to effective implementation (G&C Teacher 19, personal communication, July 14, 2024).

The outcomes show that effectiveness of abstinence programmes is undermined by broader social influences, cultural restrictions, and institutional priorities which often neglect sexual education provision to teenagers in schools.

4.6 Teachers’ Perceptions of Life Skills Education on Teenage Pregnancy

The study’s third aim was to examine how primary school educators in Nandi North Sub-County felt about the impact of adolescent pregnancy prevention programs that included life skills instruction. The purpose of this survey was to gather feedback from educators on the claims made about the effectiveness of life skills education in reducing teen pregnancies in their classrooms. Table 12 displays the results. Findings from Table 13 shows that 221 (78.6%) of respondents agreed that life skills education programmes that teach communication skills can help teenagers make informed decisions about relationships. The findings align with Rojpaisarnkit (2022), who established that life skills education programmes incorporating interpersonal relationship skills and effective communication are essential in preventing teenage pregnancy. Thus, the inclusion of communication skills in life skills education programmes enables learners to make informed and responsible decisions about the relationships they engage in.

The study results show that a majority of respondents, 216 (76.9%), agreed that learning about goal setting and future planning in life skills classes can reduce the risk of teenage pregnancy. it is deduced that most teachers supported the view that incorporating goal setting and future planning in life skills education can help reduce the risk of teenage pregnancy. in agreement to the study findings, Keya (2023) established that equipping learners with the ability to set

personal goals and plan for the future fosters responsible decision-making that can deter early sexual engagement and unintended pregnancies.

Table 12

Teachers' perceptions of life skills education on teenage pregnancy

Statement		SD	D	N	A	SA	Mean	St.Dv
Life skills education programmes that teach communication skills can help teenagers make informed decisions about relationships	F %	25 8.9	28 10.0	7 2.5	131 46.6	90 32.0	3.83	1.23
Learning about goal setting and future planning in life skills classes can reduce the risk of teenage pregnancy	F %	25 8.9	32 11.4	8 2.8	136 48.4	80 28.5	3.76	1.23
Life skills education that emphasizes assertiveness training can empower teenagers to say no to unwanted sexual pressure.	F %	26 9.3	29 10.3	10 3.6	126 44.8	90 32.0	3.80	1.25
Schools that integrate sexual health education within life skills programmes can provide teenagers with accurate information to avoid unintended pregnancy	F %	26 9.3	35 12.5	19 6.8	118 42.0	83 29.5	3.70	1.26
If teenagers feel comfortable discussing relationships and sexuality openly in life skills classes, it can lead to more responsible decision-making	F %	25 8.9	28 10.0	8 2.8	116 41.3	104 37.0	3.87	1.26
I believe life skills education programmes can help teenagers develop healthy coping mechanisms to deal with stress, reducing the likelihood of risky sexual behaviour	F %	25 8.9	26 9.3	14 5.0	136 48.4	80 28.5	3.78	1.21
In my opinion, life skills classes that teach critical thinking skills can equip teenagers to evaluate potential consequences of their actions, including teenage pregnancy	F %	25 8.9	29 10.3	10 3.6	122 43.4	95 33.8	3.83	1.25
I believe that comprehensive life skills education programmes can be a valuable tool in reducing teenage pregnancy rates.	F %	25 8.9	30 10.7	7 2.5	129 45.9	90 32.0	3.81	1.24
Composite statistics							3.8	1.24

Key: SD-strongly disagree, D - disagree, UD - undecided, A - agree and SA - strongly agree

In support of teachers' responses, all G&C teachers interviewed agreed that life skills education can help teenagers plan for their future and avoid engaging in risky sexual behaviour. One G&C teacher shared the importance of a number of life skills lessons in encouraging healthy decision-making among students, including

“Several life skills lessons as crucial in helping students make healthy choices regarding sexual behaviour. They include “self-awareness, decision-making, assertiveness, and self-esteem” (G&C Teacher 1, personal communication, July 5, 2024).

Similarly, another G&C teacher stressed the importance of moral values and personal discipline in influencing the behaviour of students, saying that:

For instance, “self-control, respect, honesty” are important life skills (G&C Teacher 2, personal communication, July 5, 2024).

From the above findings it can be concluded that development of life skills namely self-awareness, respect and self-control is seen to be essential in empowering adolescents to make responsible choices and to prevent early sexual involvement. Norbu and Gurung (2021) noted that by equipping teenagers with the ability to set personal goals and plan for their future, life skills education empowers them to make informed and responsible decisions in relation to relationships and sexual behaviour and this reduces the chances of early pregnancies.

Thirdly, the results from the study showed that the majority 216 (76.8%) of the respondents agreed that life skills education which emphasises on assertiveness training can empower teenagers to resist unwanted sexual pressure. The result implies that assertiveness training gives teenagers the confidence and skills to refuse sexual advances and this reduces the likelihood of engaging in risky sexual behaviour and allows them to focus on their education. This finding agrees with Shirao *et al.*, (2022) who reported in Makadara Sub-County that life skills education improves the ability of teenagers to make informed life decisions such as the ability to say no to a sexual advances.

The results show that most of respondents, 201 (71.5%) agreed that schools offering sexual health education as part of life skills programmes can provide teenagers with proper information to prevent unwanted pregnancy. The result implies that the inclusion of sexual health education in life skills programmes is perceived to be an effective strategy of providing

teenagers with knowledge and skills that can help them make informed choices that will lower the risk of unintended pregnancies. Interview results showed that G&C teachers greatly supported the introduction of life skills education into all areas of learning in schools. Several (seven) G&C teachers highlighted the need to infuse life skills content in the curriculum in order to provide holistic student development. As noted by G&C Teachers 4, there was a strong consensus that life skills education should be,

integrated into all areas of learning” (G&C Teachers 4, personal communication, July 10, 2024).

One G&C teacher further commented on the need that life skills education should be. One example of this is

“fixed into the curriculum, books, charts, and all learning resources” (G&C Teacher 5, personal communication, July 12, 2024).

Similarly, so did another G&C teacher who commented that,

“Due to this, a specific curriculum should be developed by the Kenya Institute of Curriculum Development and there should be a dedicated time in the school timetable allocated for teaching the life skills” (G&C Teacher 6, personal communication, July 10, 2024).

The views from teachers in G&C collectively point to shared belief from teachers that the systematic integration of life skills education into the CBE curriculum can enhance the ability of students to make informed decisions and resist risky behaviours that contribute to teenage pregnancy. Shirao *et al.* (2020) research emphasised on the perceived importance of integrating life skills training with the provision of comprehensive sexual health information to empower teenagers to make informed decisions regarding their sexual and reproductive health in Makadara Sub-County.

Fifthly, findings showed that most of the respondents, 220 (78.3%) agreed that if teenagers are comfortable talking about relationships and sexuality openly in life skills education (LSE) classes, it can lead to more responsible decision-making. The results that LSE sessions provide a safe environment for teenagers to be open about things that are troubling them. This openness may lead to responsible decision-making about sexuality during the teenage years, which would help reduce the risk of teenage pregnancy. These findings are consistent with Crocker

et al. (2019) which found that having a comfortable and interactive space for teenagers to exchange perspectives about sexuality facilitated by peer educators increased engagement of young people during LSE sessions.

Results also showed that most of the respondents who were represented by 216 (76.9%) agreed with the fact that life skills education (LSE) programmes could be helpful to teenagers to develop healthy mechanisms of coping with stress in order to reduce the probability of engaging in risky sexual behaviour. This shows a high perception of the significant role that LSE programmes play in equipping teenagers with the skills to manage stress, a key factor contributing to risky sexual behaviour.

Further, study findings show that most 217 (77.2%) respondents agreed that life skills education classes that teach critical thinking skills has the capacity to equip teenagers in evaluating potential consequences of their actions, including teenage pregnancy. This shows that majority of teachers perceive the life skills classes teaching critical thinking skills as capable of equipping the teenagers to be able to evaluate the potential consequences of their actions including the risk of teenage pregnancy (Mean = 3.83, Standard Deviation = 1.25). Supporting this finding, Rojpaisarnkit (2022) established that the development of the cognitive domain, creative and critical thinking skills in particular, developed during the LSE lessons was essential in preventing teenage pregnancy in schools. Similarly, Dupuy *et al.* (2018) emphasised that teenagers need to engage in critical thinking in order to lead healthy lives and avoid situations that may expose teenagers to pregnancy, sexually transmitted infection (STIs) or HIV /AIDs.

Lastly, results reveal that majority of the respondents 219 (77.9%) agreed that comprehensive life skills education programmes could be a valuable tool in reduction of teenage pregnancy rates. Supporting this outcome, there was a significant relationship between comprehensive life skills education programmes and the reduction of teenage pregnancy in public secondary schools in Machakos County (Musyoka *et al.*, 2024). Therefore, comprehensive life skills education programmes can be regarded as an effective tool in dealing with and decreasing teenage pregnancy rates.

Composite statistics show that most teachers (75.9%) held positive perceptions of life skills education programmes on teenage pregnancy in public primary schools in Nandi North Sub-County (Mean = 3.80, Standard Deviation = 1.24). During interviews with G&C teachers, all

(24) participants agreed that Life Skills Education (LSE) plays a critical role in reducing teenage pregnancy in schools within Nandi North Sub-County. One G&C responded that:

it can prevent teenage pregnancy by “equipping students with life skills” that help them make informed decisions (G&C Teacher 5, personal communication, July 10, 2024).

Similarly, another G&C Teacher emphasised the importance of self-awareness, noting that,

“It is about the learner being taught to understand herself, the changes taking part in her body” (G&C Teacher 9, personal communication, July 15, 2024).

It is therefore concluded that most teachers held positive perceptions of life skills education (LSE) on teenage pregnancy in schools by emphasising on its role in promoting self-awareness, informed decision-making, and responsible behaviour among teenagers. To ensure the effective implementation of Life Skills Education, G&C teachers identified several key resources as essential for the successful delivery of the programme. One of them remarked that:

“digital devices, resource persons, training the personnel, books, life experience” (&C Teacher 13, personal communication, July 24, 2024).

In addition, other G&C teachers emphasised the importance of curriculum design, adequate instructional materials such as books and charts, and regular training for teachers in enhancing their capacity to effectively impart life skills education to teenagers in addressing teenage pregnancy.

4.7 Teachers’ Perception of Parental Closeness on Teenage Pregnancy

The fourth objective of the study was to examine teachers’ perception of parental closeness on teenage pregnancy in public primary schools in Nandi North Sub-County. To achieve this, teachers were asked to indicate their level of agreement or disagreement regarding the contribution of various parental closeness factors on addressing teenage pregnancy incidents in their schools. The results of analysis are provided in Table 13. Findings from Table 13 show that the majority of respondents, 224 (79.8%), agreed that parental closeness reduces the likelihood of teenage pregnancy. The results imply that strong parental closeness significantly reduces incidents of teenage pregnancy. This finding aligns with Mwangi (2019), who established that a close relationship between parents and their teenagers is effective in preventing teenage pregnancy.

Table 13

Teachers' perception of parental closeness on teenage pregnancy

Statement		SD	D	N	A	SA	Mean	St.Dv
Parental closeness reduces the likelihood of teenage pregnancy	F %	23 8.2	31 11.0	3 1.1	130 46.3	94 33.5	3.86	1.23
Teenagers with close relationships with their parents are less likely to engage in risky sexual behaviour	F %	24 8.5	38 13.5	7 2.5	129 45.9	83 29.5	3.74	1.25
Parental monitoring and communication about sexuality can prevent teenage pregnancy	F %	23 8.2	32 11.4	5 1.8	133 47.3	88 31.3	3.82	1.22
Teenagers with strong parental support are less likely to experience early pregnancy	F %	23 8.2	43 15.3	10 3.6	104 37.0	101 35.9	3.77	1.30
Parental involvement in teenager's life can reduce the risk of teenage pregnancy	F %	23 8.2	26 9.3	6 2.1	126 44.8	100 35.6	3.90	1.22
Open and honest communication between parents and teenagers can prevent teenage pregnancy	F %	22 7.8	30 10.7	11 3.9	110 39.1	108 38.4	3.90	1.25
Parental closeness can help teenagers make informed decisions about their sexual health	F %	22 7.8	27 9.6	8 2.8	131 46.6	93 33.1	3.88	1.20
Strong family relationships can protect teenagers from the negative consequences of teenage pregnancy	F %	22 7.8	33 11.7	6 2.1	123 43.8	97 34.5	3.85	1.23
Composite scores							3.84	1.24

Key: SD-strongly disagree, D - disagree, UD - undecided, A - agree and SA - strongly agree

Study findings show that most respondents, 211 (75.4%), agreed that teenagers with close relationships with their parents are less likely to engage in risky sexual behaviour compared to those with strained relationships. Descriptive statistics affirms that strong parental - teenager relationships can reduce the likelihood of teenagers engaging in risky sexual behaviour. During the interviews, Guidance and Counselling (G&C) teachers highlighted parental closeness as a

critical factor in reducing teenage pregnancy rates in Nandi North Sub-County. One G&C teacher observed that,

“when parents are close to their teenage girls, the rate of teenage pregnancy reduces because they can share information and challenges without fear” (G&C Teacher 13, July 16, 2024).

Similarly, another G&C teacher emphasised the importance of parental guidance and modelling, noting that,

“positive side” where “parents are free to talk about sex, taken to church hence are role models” (G&C Teacher 14, personal communication, July 17, 2024).

The above findings reinforce the significance of close parental teenage relationship as it allows opportunities for open up discussion on sexuality issues, thus reducing the incidence of teenage pregnancy. This view is supported by Ndugga *et al.* (2023) whose study conducted in Busia and Tororo in Eastern Uganda found that participants recognised the critical role of parents in communicating sexual and reproductive health (SRH) matters. However, the study also showed that, in practice, very few parents actively engaged their teenagers in such discussions.

Thirdly, it was revealed that majority 221 (78.6%) of respondents agreed that parental monitoring and communication about sexuality can prevent teenage pregnancy. Most teachers perceive that teenage pregnancy is prevented when parents monitor and communicate with their children on occasional basis. These findings concur with the study by Skosana *et al.* (2020) which established that most parents agreed they should be actively involved in communicating with their teenagers on matters of sex education as a way of preventing teenage pregnancy. Therefore, parental interventions that promote effective communication and support active parental monitoring are a critical component of strategies designed to prevent teenage pregnancy.

Fourthly, findings of the study revealed that most 205 (62.9%) respondents agreed that teenagers with strong parental support are less likely to experience early pregnancy. Mean values showed that most teachers agreed (Mean = 3.77, standard deviation = 1.30) that teenagers with strong parental support are less likely to experience early pregnancy. This finding is supported by Maemeko *et al.* (2018) research in Namibia revealed that a lack of parental support, care, and supervision contributed significantly to teenage pregnancy in schools. When parents are supportive, they maintain closer relationships with their teenagers,

provide guidance, and instil values that encourage focus on education and discourage engagement in risky sexual behaviours.

Fifthly, majority 226 (80.4%) of respondents agreed that parental involvement in teenager's life can reduce the risk of teenage pregnancy. This means that most teachers held the common view (Mean=3.90, standard deviation=1.22) on the life of their teenager would reduce the risk of teenage pregnancy occurrence. In agreement to the study results, Adem *et al.* (2025) research from Dire Dawa Ethiopia found out that high parental involvement is associated with lower levels of risky sexual behaviours during their teenage years.

Further findings show that most 218 (77.5%) of respondents agreed that open and honest communication between parents and teenagers can prevent teenage pregnancy. This finding aligns with Thelma *et al.* (2024), whose research in Zambia revealed that fostering communication between parents and teenagers helped young people develop respectful and consensual relationships, thereby contributing to the prevention of teenage pregnancy. Open and honest parental teenager communication is therefore imperative as it allows teenagers to discuss issues related to sexuality and issues of pregnancy, provide a supportive platform for informed decision-making.

Moreover, the study findings added that majority 224 (79.7%) of the respondents agreed that parental closeness can help teenagers to make informed decision regarding their sexual health. It is seen therefore that parental closeness can help teenagers to make informed decisions regarding their sexual health. In support of this finding, Loto and Isuku (2016) research from Ibadan Nigeria found out that parenting style which does not give room for openness on the part of the teenager them prone to sexual experimentation which on the long run has grave consequences like teenage pregnancy. Therefore, parental closeness is critical in enabling teenagers making rational decisions.

Finally, the findings revealed that majority of respondents, 220 (78.3%), agreed that strong family relationships can protect teenagers from the negative consequences of teenage pregnancy. This finding is supported by Ndugga *et al.* (2023) their research in Uganda showed that when parents had a strong and positive relationship with their teenagers, they are more approachable, and this can open up communication about sexuality issues, thereby reducing the incidences of teenage pregnancy. During the interviews, most of the G&C teachers emphasized on the positive impact of parental closeness during mentoring of their teenagers

with regards to preventing teenage pregnancy. One of the guidance and counselling teacher commented that,

“Parents are role models to their children in a positive way” (G&C Teacher 20, personal communication, July 28, 2024).

Another G&C teacher emphasized the larger importance of such engagement, claiming that, ..

“positive parental involvement is very important in helping the teenagers through their developmental years” (G&C Teacher, personal communication, July 27, 2024).

The result implies that active and positive parental mentorship is perceived by teachers as a key strategy in reducing the incidence of teenage pregnancy among teenagers. In general, composite statistics show that most teachers (76.8%) perceived parental closeness (Mean = 3.84, Std. dev = 1.24) as playing a significant role on teenage pregnancy in public primary schools in Nandi North Sub-County. This finding is supported by Njeru *et al.* (2024) research in Tharaka Nithi County which revealed a strong positive and significant influence of parental involvement on teenage pregnancy among secondary school students. This implied that a lack of closeness in the parental teenager relationship could result to increase the likelihood of teenage pregnancy incidents.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study findings, conclusion and recommendations.

5.2 Summary of the Research Findings

The study sought to determine the summary of key major findings of the study. The summary was categorised in terms of specific objectives.

5.2.1 Teachers' Perception of Digital Sexual Literacy on Teenage Pregnancy

The first study objective was to determine teachers' perception on digital sexual literacy on teenage pregnancy of public primary schools in Nandi North Sub-County. Findings revealed that most teachers perceived that most teenagers in schools had access to accurate sexual health information on the Internet, either from home or school. Teachers also indicated that digital sexual literacy skills programmes had a positive impact on the mitigation of teenage pregnancy in their schools. It was further found that online resources to some degree had a significant role in teaching teenagers about safe sexual practices. Most teachers believed online to be the comfortable place where teenagers can talk about digital sexual health resources with their pit. They noted that digital sexual literacy tools made it easy for the learners to access information about sexual health and pregnancy prevention. Overall, 74.9% of teachers had positive perception of digital sexual literacy on teenage pregnancy in public primary schools in Nandi North Sub-County.

5.2.2 Teachers' Perception of Sexual Abstinence Programmes on Teenage Pregnancy

The second objective of the study was to establish the perception of teachers about the sexual abstinence programmes on teenage pregnancy in public primary schools in Nandi North Sub-County. The study found that sexual abstinence programmes had been seen as the most effective way of preventing teenage pregnancy according to teachers. Teachers felt that such programmes would help postpone sexual activity among teenagers, until completing their secondary education. Most teachers also felt that bringing in comprehensive sex education including information on contraception would also improve the effectiveness of abstinence programmes. Furthermore, both teachers and guidance and counselling teachers said that provision of reproductive health services, alongside abstinence programmes, would make such

programmes more successful. In general, 78.4% of teachers had a positive perception about sexual abstinence programmes on teenage pregnancy incidences in the schools in Nandi North Sub-County.

5.2.3 Teachers' Perception of Life Skills Education on Teenage Pregnancy

The third objective of study investigated the perception of the teachers on life skills education on teenage pregnancy in public primary schools in Nandi North Sub-County. The research showed that life skills education (LSE) programmes that teach communication skills helped teenagers to make informed decisions about their relationships, and thus, acted as a deterrent to engage in sexual activities. Teachers perceived that LSE was effective in enhancing the ability of learners to say no to sexual pressure in schools. The results further showed that life skills education improved the critical thinking, communication, assertiveness and courage of teenagers to respond effectively to matters relating to sexuality. Teachers also felt that LSE programmes could also help teenagers to develop healthy coping mechanisms to handle stress, which would decrease the chances of engaging in risky sexual behaviour. Overall, the majority of the teachers (75.9%) had positive perceptions (Mean = 3.80, Std. dev = 1.24) of skills education on teenage pregnancy in schools.

5.2.4 Teachers' Perception of Parental Closeness on Teenage Pregnancy

The fourth objective of looked at teachers' perception of parental closeness on teenage pregnancy in public primary schools in Nandi North Sub-County All the respondents agreed that parental closeness decreases chances of teenage pregnancy. Parental closeness was found to be an important factor as it involved continuous monitoring, communication, supervision and guidance of teenagers regarding sexuality. Guidance and counselling teachers highlighted the fact that when parents have a close relationship with their children, teenagers are more likely to openly discuss their problems so they can deal with critical issues related to sexuality and the dangers of teenage pregnancy. The study further showed that stronger parental support and involvement encourages a significant reduction in the likelihood of teenage pregnancy. Overall, most teachers (76.8%) had positive perceptions about parental closeness on the issue of teenage pregnancy in schools. This is because strong family relationships can protect teenagers to the negative consequences of teenage pregnancy.

5.3 Conclusions

The study concludes that most of the teachers (74.9%) had positive perceptions regarding digital sexual literacy programmes on teenage pregnancy in the public primary schools in Nandi North Sub-County. When teenagers have access to accurate and appropriate sexual health information on the Internet, their knowledge and skills on the matters of sexuality are enhanced. This gives them the power to resist peer pressure and make informed decisions about their sexual behaviour. Therefore, it is deduced that digital sexual literacy is a vital component on teenage pregnancy incidents in public schools.

Secondly, the study found that most teachers (78.4%) had positive perceptions on sexual abstinence programmes on teenage pregnancy in Nandi North Sub-County. These programmes were perceived to be empowering teenagers to courageously refuse sexual advances from their peers and others and enable them to focus on their studies. Teachers further perceived that the effectiveness of abstinence programmes was increased when combined with comprehensive sex education that includes information on contraception. In addition, open communication between teenagers and their parents regarding sexual issues was considered to be a more effective approach to teenage pregnancy prevention than relying on abstinence programmes alone.

Thirdly, most teachers (75.9%) perceived that provision of life skills education that focused on communication, goal setting, assertiveness training and critical thinking, played a significant role in lowering the risk of teenage pregnancy in schools. They added that such programmes were empowering teenagers to make responsible choices in relation to their sexual health by giving them the necessary skills to assess the consequences of their own actions.

Fourthly, the study established that vast majority of the teachers (76.8%) perceived parental closeness as an essential factor in curbing pregnancy among teenagers. Strong family ties and parental involvement in the lives of teenagers and open conversations about sexual health were found to be crucial in helping teenagers make responsible choices. Teachers believed that parental closeness is a very important factor for reducing the possibility of teenage pregnancy and protecting teenagers from the negative consequences of such pregnancy.

5.4 Recommendations

Following the study findings, the following recommendations are made for policy and practical action by different stakeholders:

- i. Primary schools should incorporate comprehensive digital sexual literacy programmes into their normal activities. Teachers should be trained in the ways to work effectively with digital resources. This would allow them to instruct learners on how to access safe digital information on sexual literacy. The Ministry of Education should consider developing age-appropriate digital sexual literacy content for different age groups of learners: primary schools, junior secondary schools and senior secondary schools to ensure relevance and effectiveness.
- ii. To enhance abstinence programmes in schools, the study suggests that age-appropriate comprehensive sexuality education should be provided to teenagers so that they can have the necessary knowledge to make informed decisions about their sexuality. Schools should team up with health personnel, religious organisations, and community-based organisations to organise forums and initiatives that will encourage abstinence and healthy decision making among teenagers.
- iii. There is the need to incorporate a comprehensive life skill education programme into the school timetable to ensure that various parts of sexuality education are well catered for teenagers in schools. These programmes should be designed to equip the students with the skills to navigate the complexities of relationships and sexual health, in order to reduce the risk of teenage pregnancy. It is further recommended that the content of life skills education be regularly updated so as to take care of some emerging challenges faced by teenagers.
- iv. There is a need to have schools and communities work together to promote better relationships between parents and their children. Programmes that promote open and honest communication about sexual health between parents and teenagers should be created and encouraged. Additionally, parents should be given resources and guidance on how to talk effectively with their teenagers about sexual health and related topics and ensure that the conversation is age appropriate, respectful, and informative.

5.5 Suggestion for Future Research

Based on the result of this study a number of suggestions for further research are made as follows:

- i. A quasi-experimental study needs to be conducted to find out the influence of implementation of selected mitigation measures on teenage pregnancy
- ii. Research on parental - school collaboration initiatives on teenage pregnancy need to be undertaken.
- iii. Future research needs to be conducted involving teenagers to get their views with regard to the benefits of selected mitigation measures towards their understanding of sexuality and teenage pregnancy in schools.
- iv. Finally, a comparative study of different regions could offer valuable insights on the interplay between cultural, social, and economic factors and educational programmes to influence teenage pregnancy rates, offering a more complex understanding of this important issue.

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APPENDICES

Appendix I: Questionnaire for Teachers

Dear Respondent

Hi, I'm Milcah C. Kimeto, and I'm a master's student at Egerton University studying the effects of various interventions on adolescent pregnancies. These interventions include life skills education, parental closeness, digital sexual literacy, and sexual abstinence programs. A participant in this study is someone like you. Please answer the questions below to the best of your ability. We assure you that we will use the information you provide only for this study and will treat it with the highest confidentiality.

Section A: Demographic Characteristics

Instructions: Your personal information is the subject of the following inquiries. Please mark the correct answer with a checkmark (✓) in the corresponding space for each item. Pick out a single response per question. Please answer each question completely and truthfully; we ask that you not to skip any.

Kindly refrain from writing your name.

1. What is your age range?
18-25years [] 26-35years [] Above 46 years []
2. What is your gender?
Male [] Female []
3. What is your highest level of professional education attained?
Primary teachers certificate [] Diploma []
Bachelor's Degree [] Masters and above []
4. For how long have you worked as a teacher?
Less than 5 years [] 5-9 years [] 10-14 year []
15-19 years [] above 20 years []

Section B: Digital Sexual Literacy on Teenage Pregnancy

Instructions: This section of the questionnaire have statements that describe opinions on the digital sexual literacy on teenage pregnancy in public primary schools. For each of the statements given, please choose your level of agreement. Please do not skip any of the questions and be as accurate and as truthful as possible for each item please, kindly tick (✓) in a box with the choice that best describes your response using the following key.

KEY: SD = Strongly Disagree, D=Disagree, UD=Undecided, A=Agree and SA=Strongly Agree

Statement	SD	D	UD	A	SA
Pupils have the ability to access accurate sexual health information online					
Having digital sexual literacy skills positively impacts teenage pregnancy prevention					
Online resources play a significant role in educating teenagers about safe sexual practices					
Learners are comfortable discussing digital sexual health resources with their peers online					
Learners find information online regarding sexual health and pregnancy prevention					
Learners actively seek out digital platforms for information on sexual health and pregnancy prevention					
Digital sexual literacy is essential in reducing the rates of teenage pregnancy					
Improving digital sexual literacy can empower teenagers to make informed decisions about their sexual health.					

Are there any additional comments or insights you would like to share regarding digital sexual literacy and teenage pregnancy prevention in public primary schools? -----

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.....

Section C: Sexual Abstinence Programmes on Teenage Pregnancy

This section of the questionnaire has statements that describe opinions of Sexual Abstinence Programmes on teenage pregnancy in public primary schools like yours. For each of the statements given, please choose your level of agreement. Please do not skip any of the questions and be as accurate and as truthful as possible for each item please, kindly tick (√) in a box with the choice that best describes your response using the following key.

KEY: SD = Strongly Disagree D= Disagree UD= Undecided A=Agree SA= Strongly Agree

Statement	SD	D	UD	A	SA
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1. Sexual abstinence programmes are the most effective way to prevent teenage pregnancy.					
2. Abstinence-only programmes leave teenagers unprepared for situations where they might choose to have sex.					
3. Sexual abstinence programmes can be beneficial in delaying sexual activity but are not a realistic solution for all teenagers.					
4. I believe sexual abstinence programmes should be combined with comprehensive sex education, including information on contraception.					
5. Open communication about sex between teenagers and parents can be more effective in preventing teenage pregnancy than abstinence programmes.					
6. Schools that offer abstinence-only programmes should also be required to provide access to confidential reproductive health services.					
7. Teenagers who participate in abstinence-only programmes are less likely to engage in risky sexual behaviours.					
8. The effectiveness of sexual abstinence programmes in reducing teenage pregnancy needs further research.					
9. Abstinence-only programmes leave teenagers unprepared for situations where they might choose to have sex.					

Are there any additional comments or insights you would like to share regarding sexual abstinence programmes and teenage pregnancy prevention in public primary schools?

.....

.....

.....

Section D: Life Skills Education on Teenage Pregnancy

How strongly would you agree or disagree with the following statements on use of life skill education as a mitigation towards reduction of teenage pregnancy in your school?

KEY: SD = Strongly Disagree D= Disagree UD= Undecided A=Agree SA= Strongly Agree

Statement	SD	D	UD	A	SA
1. Life skills education programmes that teach communication skills can help teenagers make informed decisions about relationships.					
2. Learning about goal setting and future planning in life skills classes can reduce the risk of teenage pregnancy.					
3. Life skills education that emphasizes assertiveness training can empower teenagers to say no to unwanted sexual pressure.					
4. Schools that integrate sexual health education within life skills programmes can provide teenagers with accurate information to avoid unintended pregnancy.					
5. If teenagers feel comfortable discussing relationships and sexuality openly in life skills classes, it can lead to more responsible decision-making.					
6. I believe life skills education programmes can help teenagers develop healthy coping mechanisms to deal with stress, reducing the likelihood of risky sexual behaviour.					
7. In my opinion, life skills classes that teach critical thinking skills can equip teenagers to evaluate potential consequences of their actions, including teenage pregnancy.					
8. I believe that comprehensive life skills education programmes can be a valuable tool in reducing teenage pregnancy rates.					

Section E: Parental Closeness on Teenage Pregnancy

How strongly would you agree or disagree with the following statements on mitigation or reduction of teenage pregnancy?

KEY: SD = Strongly Disagree D= Disagree UD= Undecided A=Agree SA= Strongly Agree

Statement	SD	D	UD	A	SA
Parental closeness reduces the likelihood of teenage pregnancy					
Teenagers with close relationships with their parents are less likely to engage in risky sexual behaviour					
Parental monitoring and communication about sexuality can prevent teenage pregnancy					
Teenagers with strong parental support are less likely to experience early pregnancy					
Parental involvement in teenager’s life can reduce the risk of teenage pregnancy					
Open and honest communication between parents and teenagers can prevent teenage pregnancy					
Parental closeness can help teenagers make informed decisions about their sexual health					
Strong family relationships can protect teenagers from the negative consequences of teenage pregnancy					

Are there any additional comments or insights you would like to share regarding parental closeness and contribution to teenage pregnancy prevention in public primary schools?

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.....

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Appendix II: Interview Schedule for Guidance and Counselling Teachers

Introduction: Thank you for participating in this interview. The purpose of this interview is to explore your perceptions regarding teachers' perception on selected mitigation measures on teenage pregnancy in public primary schools. We will be discussing four key measures: digital sexual literacy, sexual abstinence programmes, life skills education, and parental closeness. Your insights will provide valuable information for understanding the effectiveness of these measures in preventing teenage pregnancy.

Participant Information:

- Name.....
- Years of counselling Experience

Section 1: Digital Sexual Literacy

1. Can you describe your understanding of digital sexual literacy and its relevance to preventing teenage pregnancy in public primary schools?
2. In your opinion, how effective is digital sexual literacy education in reducing the risk of teenage pregnancy among students?
3. What are the main challenges you school encounter when implementing digital sexual literacy education in your school?
4. How do you perceive of digital media in influencing teenage pregnancy among students?

Section 2: Sexual Abstinence Programmes

5. Have sexual abstinence programmes been implemented in your school? If so, can you describe the programme(s) used?
6. What is your perception of the effectiveness of sexual abstinence programmes in preventing teenage pregnancy?
7. How do sexual abstinence programmes compare to other approaches, such as comprehensive sex education, on teenage pregnancy?
8. What are some of the challenges associated with implementing sexual abstinence programmes in public primary schools?

Section 3: Life Skills Education

9. How do you define life skills education, and how does it contribute to preventing teenage pregnancy?
10. In your experience, what life skills are most beneficial for students in terms of making healthy choices regarding sexual behaviour?

11. How can life skills education be integrated into the curriculum to effectively address the issue of teenage pregnancy?
12. What support or resources do teachers need to implement life skills education effectively?

Section 4: Parental Closeness

13. From your perspective, how does parental closeness affects teenage pregnancy rates among students?
14. What specific behaviours or actions do you associate with parental closeness that may help prevent teenage pregnancy?
15. How can schools support and promote parental involvement in preventing teenage pregnancy?
16. Are there any challenges or barriers to fostering parental closeness in the context of preventing teenage pregnancy?

Conclusion:

17. Based on our discussion, what do you believe are the most effective mitigation measures for preventing teenage pregnancy in public primary schools?
18. Are there any additional insights or comments you would like to share regarding these mitigation measures on teenage pregnancy?

Closing: Thank you for your time and valuable insights. Your input will contribute to our understanding of effective strategies for preventing teenage pregnancy in public primary schools.

Appendix III: Nandi North Sub-County Map



Nandi County is composed of six sub-counties and among them is Nandi North Sub-County, which is the location of the research study as shown in Appendix III above.

Appendix IV: Sample Size Formulae Table

Table 4: Determining Sample Size from a given Population

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

Appendix V: Request for Permit Letter

EGERTON
Tel./Pilot: 254-51-2217620
254-51-2217877
254-51-2217631
Dir.line/Fax: 254-51-2217847
Cell Phone:



UNIVERSITY
P.O. Box 536 - 20115
Egerton, Njoro, Kenya
Email: bpgs@egerton.ac.ke
www.egerton.ac.ke

OFFICE OF THE DIRECTOR GRADUATE SCHOOL

EM16/00011/11

19th March, 2024

Ref:.....

Date:.....

The Director General
National Commission for Science Technology and Innovation,
P. O. Box 30623-00100
NAIROBI.

Dear Sir,

**RE: REQUEST FOR RESEARCH PERMIT – MS. MILCAH CHEROP
KIMETO REG. NO. EM16/00011/11**

This is to introduce and confirm to you that the above named student is in the Department of Psychology, Counseling & Educational Foundations, Faculty of Education and Community Studies, Egerton University.

She is a bona-fide registered M.Ed student in this University. Her research topic is "Teachers' Perception of the Influence of Selected Mitigation Measures on Teenage Pregnancy in Public Primary Schools in Nandi North Sub-County, Kenya."

She is at the stage of collecting field data. Please issue her with a research permit to enable her undertake the studies.

Your kind assistance to her will be highly appreciated.

Yours faithfully,

Prof. George M. Ogendi,
DIRECTOR, DIRECTORATE OF POSTGRADUATE STUDIES

GMO:sk



Transforming Lives Through Quality Education

Appendix VI: Ethical Approval Letter

EGERTON

TEL: (051) 2217808

FAX: 051-2217942



UNIVERSITY

P. O. BOX 536

EGERTON

**EGERTON UNIVERSITY INSTITUTIONAL SCIENTIFIC AND ETHICS REVIEW
COMMITTEE**

EU/RE/DIR/009

Approval No. EUISERC/APP/338/2024

5th June 2024

Milcah Cherop Kimeto
Egerton University
P. O. Box 166,
Kabiyet
TEL: 0720422159
Email: cheropkimetto@gmail.com

Dear Milcah,

**RE: ETHICAL APPROVAL: TEACHERS' PERCEPTION OF THE INFLUENCE OF
SELECTED MITIGATION MEASURES ON TEENAGE PREGNANCY IN PUBLIC
PRIMARY SCHOOLS IN NANDI NORTH SUB-COUNTY, KENYA**

This is to inform you that the *Egerton University Institutional Scientific and Ethics Review Committee* has reviewed and approved your above research proposal. Your application approval number is *EUISERC/APP/338/2024*. The approval period is *5th June 2024 – 6th June 2025*

This approval is subject to compliance with the following requirements;

- i. 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 *Egerton University Institutional Scientific and Ethics Review Committee*.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to *Egerton University Institutional Scientific and Ethics Review Committee* within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to *Egerton University Institutional Scientific and Ethics Review Committee* within 72 hours.
- v. Clearance for Material Transfer of biological specimens must be obtained from relevant institutions.

"Transforming Lives through Quality Education"

- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to *Egerton University Institutional Scientific and Ethics Review Committee*.

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

Yours sincerely,



Prof. Raphael M. Ngure

**CHAIRMAN, EGERTON UNIVERSITY INSTITUTIONAL SCIENTIFIC AND ETHICS
REVIEW CTTEE**

RMN/BK/



Appendix VII: Research Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 647105	Date of Issue: 04/July/2024
RESEARCH LICENSE	
	
<p>This is to Certify that Ms. MILCAH CHEROP KIMETO of Egerton University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nandi on the topic: TEACHERS' PERCEPTION OF THE EXTENT OF THE INFLUENCE OF SELECTED MITIGATION MEASURES ON TEENAGE PREGNANCY IN PUBLIC PRIMARY SCHOOLS OF NANDI NORTH SUB COUNTY, KENYA for the period ending : 04/July/2025.</p>	
License No: SACOSTI/P/24/37149	
647105 Applicant Identification Number	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code 
<p>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</p>	
See overleaf for conditions	

Appendix VIII: County Director of Education Letter



**MINISTRY OF EDUCATION
STATE DEPARTMENT FOR BASIC EDUCATION**

Email: cdenandicounty@yahoo.com
Telephone: 0773044624
When replying please quote

County Director of Education
NANDI COUNTY,
P. O. Box 36-30300,
KAPSABET.

Ref: NDI/CDE/RESEARCH/I/VOL.111/136

Date: 11th July, 2024

Ms. Milcah Cherop Kimeto
Egerton University
P.O Box 536
EGERTON.

RE: RESEARCH AUTHORISATION.

Reference is made to the National Commission for Science, Technology and Innovation's letter Ref: No. NACOSTI/P/24/37149 dated 4th July, 2024.

The above named person has been granted permission by the County Director of Education to carry out research on *"Teachers' Perception of the extent of the influence of selected mitigation measures on Teenage Pregnancy in Public Primary Schools of Nandi North Sub County, Nandi County, Kenya"* for the period ending 4th July, 2025.

Kindly provide her all necessary support she requires.


Mathew Sum

For: County Director of Education,
NANDI COUNTY.

For: County Director
of Education
NANDI COUNTY

Appendix IX: County Commissioner Letter

**OFFICE OF THE PRESIDENT
MINISTRY OF INTERIOR AND NATIONAL ADMINISTRATION**

Tel: 053 5252621, 5252003, Kapsabet
Fax No. 053 – 5252503
E-mail:
nandicountycommissioner@gmail.com
When replying, please quote



County Commissioner's Office,
Nandi County
P.O. Box 30,
KAPSABET.

Ref: No. NC.EDU. 4/3 VOL.III(92)

11th July, 2024

Milcah Cherop Kimeto
Egerton University,
P.O. Box 536.
EGERTON.

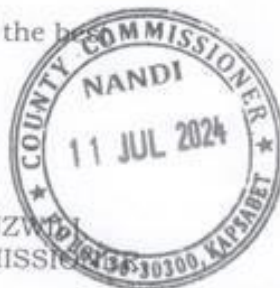
RE: RESEARCH AUTHORIZATION

This is in reference to letter No. NACOSTI/P/24/37149 dated 4th July, 2024 from the Director General, National Commission for Science, Technology and Innovation on the above subject matter.

You are hereby authorized to conduct research on **“Teachers’ perception of the extent of the influence of selected mitigation measures on teenage pregnancy in Public Primary Schools in Nandi North Sub County”** for the period ending 4th July, 2025.

Wishing you all the best

P.P. [Signature]
CAROLINE M. NZWIGI
COUNTY COMMISSIONER
NANDI.



Appendix X: Journal Publication



Journal of Research in Education and
Technology
3(2)

Received: May 8, 2025

Accepted: June 10, 2025

Published: June 18, 2025

Teachers' Perception on the Influence of Life Skills Education on Teenage Pregnancy in Public Primary Schools in Nandi North Sub-County

Kimeto Cherop Milcah, Njonge Teresia and Maritim Ezra

Department of Psychology, Counselling and Educational Foundations, Egerton University, P.O. Box 536 -20115, Egerton, Njoro, Kenya

Abstract

Teenage pregnancy remains a pressing concern in Kenya, particularly in rural areas such as Nandi North Sub-County, where socio-cultural and economic factors contribute to high incidences among school-going adolescents. Life Skills Education (LSE) has been identified as a key intervention in equipping young learners with decision-making, communication and assertiveness skills necessary for making informed choices regarding their reproductive health. However, the effectiveness of LSE in addressing teenage pregnancy largely depends on teachers' perceptions and their role in its implementation. This study explores teachers' perceptions on the influence of LSE on teenage pregnancy in public primary schools. The study, guided by Social Learning Theory, employed a descriptive research design. It targeted 1,387 teachers across six zones in Nandi North Sub-County, with a sample of 301 respondents determined using Krejcie and Morgan's (1970) table. Data was collected through structured questionnaires and interviews and analyzed using both descriptive and inferential statistical methods. The findings revealed a strong positive perception of LSE among teachers, with 78.6% agreeing that teaching communication skills helps students make informed relationship decisions, while 76.9% believed that goal-setting and future planning in LSE reduce teenage pregnancy risks. Additionally, 77.2% indicated that assertiveness training empowers students to resist sexual pressure. The Pearson correlation analysis ($r = -0.79$, $p = 0.001$) demonstrated a statistically significant negative relationship between teachers' positive perception of LSE and teenage pregnancy prevalence, indicating that improved implementation of LSE correlates with lower teenage pregnancy rates. The study also concludes that life skills education, particularly those programs focusing on communication, goal setting, assertiveness training and critical thinking, plays a significant role in reducing the risk of teenage pregnancy. The study recommends strengthening teacher training in LSE with an emphasis on communication, goal setting, assertiveness and critical thinking. These programs should be designed to

Original Article

16

3(2), 2025

Kimeto et al.

help students navigate the complexities of relationships and sexual health, thereby reducing the risk of teenage pregnancy.

Keywords: Life skills education, teenage pregnancy, teachers' perception, public primary schools, Nandi North Sub-County, Kenya

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