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

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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

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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Introduction

Teenage pregnancy remains a significant challenge globally, particularly in sub-Saharan Africa, where high adolescent fertility rates contribute to various socioeconomic and health concerns (UNESCO, 2021). In Kenya, teenage pregnancy is a major issue, with data from the Kenya Demographic and Health Survey (KDHS) indicating that approximately 18% of adolescent girls aged 15-19 years have either given birth or are pregnant with their first child (Kenya National Bureau of Statistics [KNBS], 2022). This situation is particularly prevalent in rural areas, where socio-economic factors, cultural beliefs, and limited access to reproductive health education exacerbate the problem (Njeru, 2024; Pezzulo, 2012). Nandi County, like many other regions in Kenya, is grappling with a rising teenage pregnancy crisis that poses a significant threat to the future of entire generation. The county comprises six sub-counties, each facing varying degrees of the challenge.

According to the Nandi County Educational Statistics Database Office (2021), Nandi North Sub-County recorded the highest teenage pregnancy rate between 2018 and 2021, standing at 25%. This was followed by Chesumei at 23%, Nandi Central and Nandi South at 14% each, Tindiret at 13%, and Nandi East with the lowest rate at 10%. In 2021 alone, a staggering 1,062 cases of teenage pregnancy were reported in Nandi North Sub-County, highlighting the urgent need for intervention. The high prevalence of teenage pregnancies in the region has farreaching consequences, particularly for girls' education. Many young girls are forced to drop out of school, limiting their future prospects and perpetuating cycles of poverty and inequality hence, all stakeholders must come together to tackle the crisis.

One of the strategies adopted to address teenage pregnancy is the incorporation of Life Skills Education (LSE)

in school curricula, aiming to equip learners with essential psychosocial competencies that enable them to make informed decisions and resist peer pressure (Shunza, 2014; Maithreyi, 2015). Life Skills Education includes a range of cognitive, social and emotional skills, such critical thinking, self-awareness. problem-solving and effective communication, which are vital in helping adolescents navigate complex social situations, including those related to sexual and reproductive health (Kirchhoff & Keller, 2021; Riad, 2023). Research has shown that LSE can significantly influence adolescents' behaviors by promoting selfesteem, decision-making skills, awareness of the consequences of risky sexual activities (Sayed et al., 2019). However, the effectiveness of LSE in addressing teenage pregnancy is largely dependent on teachers' perceptions, understanding, and implementation of the program in schools. Teachers serve as key facilitators of Life Skills Education, and their attitudes, preparedness, pedagogical approaches are key in shaping students' behavioral outcomes (Giannakaki. 2005). Despite the integration of LSE into the curriculum, teenage pregnancy rates remain high in several regions of Kenya, including Nandi North Sub-County, raising concerns about the effectiveness of its implementation. This study seeks to explore teachers' perceptions on the influence of life skills education on teenage pregnancy in public primary schools within Nandi North Sub-County.

Literature Review

Theoretical Review

Social Learning Theory (SLT) is a psychological theory developed by Albert Bandura in the 1960s that posits human behavior is learned through observation, imitation, and modeling (Bandura, 1977).

In contrast with traditional behavioral theories emphasizing reinforcement and punishment, SLT argues that individuals learn new behaviors by observing other people and replicating their actions. The theory integrates cognitive, behavioral, and environmental influences in assuming that learning occurs in a social context via processes of attention. retention. reproduction, and motivation (Bandura, 1986). One very significant component of SLT is observational learning, whereby new behaviors are acquired by observing others, especially role models such as parents, teachers, or peers (Ormrod, 2012).

Empirical research has shown that children and adolescents are significantly influenced by the immediate social environment. For instance, Akers and Jensen's (2006) research on adolescent deviant behavior found that exposure to delinquent peers significantly influenced the likelihood of criminal behavior, supporting the SLT assumption that behavior is developed through social interaction. Similarly, Zimmerman and Schunk's (2011) research emphasized that academic skills and social behaviors are acquired by students through observing teachers and peers, demonstrating the relevance of SLT in learning.

Reinforcement and motivation are also at the heart of SLT, whereby individuals will be more inclined to learn behaviors if they perceive positive rewards or reinforcement (Bandura, 1989). Vicarious reinforcement, where individuals learn through consequences obtained by others, has been extensively studied in psychology. For example, research by Muro and Jeffrey (2008) confirmed that children exposed to positive reinforcement in class were more likely to act pro socially, while those who saw negative consequences avoided undesired actions. This theory has been applied in interventions aimed at

reducing risk behaviors such as alcohol and drug use and teenage pregnancy through the reinforcement of positive models (Jessor, 2016).

Empirical applications of SLT to public health have also demonstrated its usefulness in behavior change interventions. A study of media campaigns of health communication interventions by Kincaid et al. (2013) found that those featuring role models with healthy behaviors influenced audience behavior attitudes significantly. Similarly, Bandura's (2004) "self-efficacy," a belief in the ability to perform a behavior, has found widespread use in promotion practice. For instance, a study by Luszczynska and Schwarzer (2015) confirmed that self-efficacy-based interventions effective were individuals encouraging to practice healthy eating and exercising.

In education, SLT has assisted in explaining students' learning behavior acquisition and moral development. Teachers are significant role models, and they affect students' learning behavior and academic achievement through direct instruction and observational learning (Santrock, 2021). Wentzel (2012), in a study on teacher-student relationships, reported that students who observed and internalized teachers' positive behavior exhibited greater academic motivation and social competence. Furthermore, Pajares (2002) reported that self-efficacy beliefs, which are developed through learning, significantly social students' academic achievement and career aspirations.

Despite its pervasive empirical support, SLT has been faulted, particularly for its emphasis on environmental determinants and undermining genetic and innate factors in behavior (Mischel, 2004). Individual differences, personality, and cognitive development also play a crucial role in determining behavior,

which SLT does not consider, argue critics (Eysenck & Keane, 2015). Nonetheless, SLT remains a fundamental theory in human behavior and learning explanation, widespread applications with education, psychology and public health.

Empirical Review

Prevalence. **Determinants** and Consequences of Teenage Pregnancy

Globally, in 2023 approximately 13% of adolescent girls and young women give birth before the age of 18 according to UNICEF (2024). In Africa, the prevalence of teenage pregnancy is significantly higher. Approximately one in every five adolescent girls experiences pregnancy before the age of 19, with the rate exceeding 25% in 24 countries. A systematic review reported an overall pooled prevalence of 30% among teenagers aged 13-19, with Western Africa exhibiting the highest prevalence at 33% (Eyeberu et al., 2022). The rates of teenage pregnancy in Tanzania are significantly high compared to other countries of the world. A United Nations report shows that 27% of girls aged 10-19 years were pregnant in 2020 (Heizomi et al., 2020). A World Bank (2020) also indicates that, on average, 5,500 pregnant girls drop out of school each year in Tanzania due to teenage pregnancy. Another report by the Centre for Reproductive Rights notes that more than 55,000 school girls have been expelled from school in Tanzania over the last decade for being pregnant. This report provides concrete evidence, as well as persuasive stories, of the numerous challenges that Tanzanian girls face in their search for education. According to CRR, in Tanzania, many young women are subjected to mandatory pregnancy testing in primary or high schools, either as part of official government policy or individual school practice. The rights of girls to

privacy and dignity are infringed when these tests are usually done without their permission (Kinabo & Eduful, 2021).

In Kenya, over a period of three months in lockdown due to COVID-19, 152,000 teenage girls had been reported pregnant, a 40% increase in the country's monthly average. These numbers, from early July, are some of the earliest evidence linking the COVID-19 pandemic to unintended pregnancies (Wastnedge et al., 2021). One survey conducted by the Kenya Health Information System found that 3,964 girls under the age of 19 were pregnant in Machakos County alone (Oduor, 2020). Moreover, new data from the International Rescue Committee found that girls living in refugee camps have been particularly affected (Stark et al., 2018). Eight cases of teenage pregnancy were reported in June 2019 at Kakuma Refugee Camp in the northwest of Kenya (Cha, 2021). At Dadaab Refugee Camp, there was a 28% increase in reported teenage pregnancy during the April-June period, compared to the same period the previous year (Ng'ang'a, 2021).

Teenage pregnancy and consequences represent a major public health concern in many low-middle income countries of the world (Ghose & John, 2017). Maternal mortality is highest for teenage girls under 15 years; complications in pregnancy and childbirth are higher among teenage girls aged 10 to 19 years compared to young women aged between 20 and 24 years (Althabe et al., 2015; Ganchimeg et al., 2014c). 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 (Blanc, Winfrey & Ross, 2013). Teenage mothers have also been reported to be at a higher risk of contracting HIV than their non-parenting counterparts

(Toska et al., 2020). Globally, in 2018, UNAIDS reported that, over two million adolescents were living with HIV, and this is an almost 30% increase in the past decade (Rahyani, 2023). Moreover, teenage pregnancy has been associated with a three-fold HIV risk in the South African Eastern Cape (Christofides et al., 2014). In the sub-Saharan Africa, teenage pregnancy and motherhood occurs in the context of high rates of HIV. The region remains the centre of the HIV epidemic in the continent and is home to more than 20 million people living with HIV, which comprises 50% of the population of people living with HIV worldwide (Rahyani, 2023). Higher rates of psychological problems such as suicide and health challenges like malnutrition are common among teenage mothers (Mittendorfer Rutz & Wasserman, 2004; Tull, 2020c). Suicide is the most common cause of death among teenage girls (Blanc et al., 2013). 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 adolescents, with a predominant rate of 13.3%; also common in this cohort is psychiatric disturbances such as anxiety depression (Lacerda-Pinheiro et al., 2014). These effects are more prevalent among adolescent mothers who pregnant outside marriage (Musyimi et al., 2020b). Girls who become pregnant outside wedlock are subjected to depression in and out of schools. When a teenage learner becomes pregnant, she has to 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. 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.

Adolescent pregnancy also has negative social and economic effects on girls, their families and communities. Unmarried pregnant adolescents may face stigma or rejection from parents, kin and peers, which sometimes include threats of or actual violence. Similarly, girls who become pregnant before age 18 are more likely to experience violence within marriage or in their partnership. Concerning education, dropping out of school becomes a choice when a girl perceives pregnancy to be a better option in her circumstances than continuing education, or can be a direct cause of pregnancy or early marriage. School dropout is associated with sexual risk behaviours including multiple partnerships, older partner unprotected sex and transactional sex (Stroeken et al., 2012). An estimated 5% to 33% of girls aged 10 to 19 years who drop out of school in some countries do so because of early pregnancy or marriage (Franjić, 2018). Young mothers are also highly stigmatized by society because of social taboos around teenage pregnancy (Mallepalli, 2019).

Pregnancy is viewed as the girl's fault in many communities, whether planned, unplanned or as a result of abuse (Tull, 2020; Uromi, 2014). 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. Other countries subject girls to stiff penalties and punishments on being reported to have engaged in sex outside marriage (Håkansson et al., 2020). 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 (Håkansson *et al.*, 2020).

In Kenya, early and unwanted pregnancies among adolescent girls portend other cross-cutting problems to both their education and their sexual and reproductive health. 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 increased possibility of early marriage (World Health Organization, 2011). Teenage mothers are especially vulnerable to further risks exploitation due to poverty, lack of knowledge on contraception and a lack of independence concerning life choices. The national school health policy in Kenya states that school-age girls who become pregnant should be accepted to continue with their education for as long as possible and allowed to go back to school after giving birth. The implementation of this policy still faces some challenges. There is lack of interventions to pressurize demand for education among teenagers who have already dropped out of school or prevent unintended pregnancy among teenagers in school (Undie et al., 2015). Evidence shows that many adolescent mothers are limited to required forms of support or social assistance both during pregnancy and in raising their children in a world that is driven largely by economic interests and priorities. Teenage girls are mostly plagued by financial challenges, lack of support and high stigmatization in their communities and schools (Håkansson et al., 2020).

influence Peer another is significant factor contributing to teenage pregnancy, particularly African countries. Hormenu, Akutu, and Oklu (2017) found that in Ghana, 29% of pregnant teenagers admitted to engaging in sexual activity due to peer pressure. Many teenage girls are influenced by their peers to engage in sex as a way of maintaining friendships, gaining social status, or proving maturity. Alhassan (2015) further highlights that mobile facilitates phone usage easy communication among peers and romantic partners, providing unrestricted internet access to explicit content, which encourages early sexual debut. Santelli et al. (2010) also link teenage pregnancies to earlier sexual activity, influenced by peer pressure and unchecked parental supervision.

Poverty has been widely documented as a major driver of teenage pregnancy. In many low-income households, young girls engage in transactional sex as a means of financial survival. leading to unplanned pregnancies (Kaphagawani & Kalipeni, 2017). Economic hardships force some parents to neglect their children, increasing the likelihood of adolescents engaging in risky behaviors. In some cases, parents encourage early marriages as a means of securing financial support, further perpetuating teenage pregnancies (Santelli et al., 2010).

The media, both electronic and social, has played a crucial role in shaping teenagers' perceptions of sex and relationships. Exposure to sexualized content in music videos, films, and advertisements normalizes early sexual activity, making it more appealing to young people (Owens et al., 2012). Furthermore, social media platforms provide spaces for teenagers to engage in risky interactions that may result in unintended pregnancies. Kaphagawani

and Kalipeni (2017) found that the portrayal of teenage relationships in the media often lacks discussions on the consequences of early pregnancies, leading to uninformed decisions among

adolescents.

The family environment also plays a significant role in determining whether a teenager engages in early sexual activity. Lack of parental supervision, broken families, and absent parental figures contribute to teenage pregnancies. Alhassan (2015) observed that teenagers with little parental guidance are more likely to seek advice from peers, who may mislead them into engaging in risky behaviors. Strong parental involvement in a child's upbringing, including open discussions on sexuality and reproductive health, has been found to reduce teenage pregnancy rates (Santelli et al., 2010). In Kenya, teenage pregnancy remains a significant public health issue, driven by peer pressure, poverty, and lack of comprehensive sex education. influence is one of the primary forces behind teenage pregnancy in Kenya, with adolescents often engaging in sexual activity to fit in with their social circles. The lack of adequate parental guidance further exacerbates the problem, leaving teenagers vulnerable to misinformation and risky behaviors. Studies have also shown that poverty forces many young girls into transactional relationships with older men, increasing their risk of early pregnancies (National Council Population and Development, 2021).

Live Skills Education

Governments and other institutions have devised and rolled out various programs to sensitize 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 trans formative actions in relation to mitigating early pregnancy (Rahman, 2013). This empowerment comes through various frontiers, including education, economic, policy community support (Presler-Marshall & Jones, 2012). Sex education is one of the many strategies used to empower teenage girls (Presler-Marshall & Jones, 2012). 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). Life Skills Education (LSE) is an interactive process of teaching and learning which enables learners to acquire knowledge and to develop attitudes and skills which support the adoption of healthy behaviours (Waiganjo, 2018).

Research has also shown that the of teenage pregnancy varies rate 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. Therefore, economic interventions have been used to reduce the rates of teenage pregnancy in low-economic populations (Bandiera et al., 2012). In general, economic empowerment influences teenage pregnancy rates both directly and indirectly through, among other things, increased decision-making structure in relationships and access to contraceptives (Holt et al., 2020). This scenario was demonstrated in research in Uganda, which used vocational training and sex education. Results showed a 32% increase of girls' participation in economic activities as well as a 26% decrease in the risk of teenage pregnancy (Bandiera et al., 2012). Life skills education can influence youth behaviours in a way that improves

sexual reproductive health outcomes. Well-designed and implemented school-based HIV/STDs prevention programs can decrease sexual risk behaviours among school age youth, including delaying first sexual intercourse, reducing the number of sex partners, decreasing the number of times adolescents have unprotected sex (Mavedzenge, Luecke, & Ross, 2014).

Teenage girls have unique health and development needs. They also have to contend with challenges that are more detrimental to their lives compared to boys of the same age, including teenage pregnancies. According to the Kenya Demographic and Health Survey (KDHS, 2022), approximately 18% of adolescent girls aged 15-19 have begun childbearing. The Survey suggests that if pregnancy is blended into the wider subject of life skills or sexuality education both boys and girls will have an opportunity to recognize that both male and female learners have a role to play in decisions about healthy sexual relationships (Banke-Thomas et al., 2017). Young people must be able to think participate politically, critically, peaceful and healthy lives, create and pursue economic opportunities, navigate and use new technologies and process information in ways that translate into positive individual and societal development (Dupuy, 2018).

According to Crichton (2012), teenagers who are not educated about sex are more likely to have an unwanted pregnancy than those educated. In a study in Latin America, Domenech and Mora-Ninci (2012) 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. this study, In 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 (Näslund-Hadley & Binstock, 2010). 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. Life skills also incorporates elements of sex education. Comprehensive Sexuality Education (CSE) is necessary to ensure healthy sexual and reproductive lives for adolescents and it should also include accurate information on a range of ageappropriate topics, should be participatory, and should foster knowledge, attitudes, values and skills to enable adolescents to develop positive views of their sexuality (Vanwesenbeeck, 2020). At teenage, most girls have not fully comprehended the biological emotional processes associated with having sex. Much of the information they get is from friends and social media, which unreliable. Many of pregnancies arise in such scenarios where knowledge about the risks of unprotected sex is scanty or is based on unreliable information. Weiss and Schiele (2013) observe that long hours of mass media exposure play a significant role in influencing of teenagers' social behaviour, especially around sex and sexuality.

In 2013, the Kenya government signed a declaration in which it committed itself to scale up comprehensive rightsbased sexuality education beginning in primary school. Comprehensive Sexuality Education (CSE) is necessary to ensure healthy sexual and reproductive lives for adolescents. It should include accurate information on a range of age-appropriate topics, should be participatory, and should foster knowledge, attitudes, values and skills to enable adolescents to develop positive views of their sexuality (Vanwesenbeeck, 2020). Education-sector

policies have largely promoted sexuality education, with a heavy focus on abstinence. Life skills is a subject into which the widest range of topics are integrated. This subject is never tested hence, there is little incentive for students and teachers to give these topics high priority (Dupuy et al., 2018). Sexual Education (CSE) programs that focus on human rights, gender equality and empowerment, and encourage active engagement among participants have been shown to improve knowledge and self-confidence, positively attitudes and gender norms, strengthen decision-making and communication skills. and build self-efficacy (Vanwesenbeeck, 2020). Αt the International Conference on Population and Development (ICPD25) held in 2019, the Kenya government pledged to end teenage pregnancy by 2030. During the Conference, high-level intergovernmental committees were established to establish and enforce validated solutions. The rights of young girls to sexual education and the provision of sexual and reproductive health services, including contraception, are among the commitments made (World Health Organization, 2020).

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. He underscored the need for life skills and sex education to help girls make informed decisions about their sexuality. He reiterated that the government, through local administrators, education officers and security agents, was collecting evidence to have the men responsible for pregnancy prosecuted. teenage further added that all schools had been instructed to admit the affected girls and help them access health services and education while they continue with their studies (Nandi County Governor's Office

Database, 2021). According to a report by the Nandi County Executive Committee (CEC) 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 Commissioner 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. He urged administrators to provide weekly updates on the progress of admissions, adding that those who would not report would be penalised. The Commissioner went on to say that officers Directorate Criminal from of Investigations (DCI) were collecting statements from the children with a view to arresting the responsible male suspects to face defilement and rape charges. He 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 County Governor's (Nandi Database, 2021). In light of the above situation, the current study sought to identify teachers' perception on the influence of life skills education on

teenage pregnancy in public primary schools in Nandi North Sub-County.

Methodology

The study employed a descriptive research survey design, allowing the researcher to collect and summarize data from a sample of the population to understand their characteristics, opinions, or interactions. The study was conducted in Nandi North Sub-County, Nandi County, Kenya. This location was chosen due to its high prevalence of teenage pregnancies despite existing mitigation measures, making it a suitable area for investigating teachers' perspectives on the issue. The study targeted all teachers in Nandi County, with an accessible population of 1,387 teachers across six educational zones in Nandi North Sub-County. Additionally, 24 guidance and counseling teachers were included as key informants due to their direct involvement in advising students on sexual health issues. The sample size was determined using the Kreicie and Morgan (1970) formula, resulting in 301 respondents as indicated in table 1 below.

Table 1: Sample size of Nandi North teachers and guidance and counselling teachers per zone

Educational zones	Schools			G/C Teachers		
Kabisaga	28	161	50	4		
Sang'alo	31	172	53	4		
Kabiyet	23	156	48	4		
Kabyemit	26	169	52	4		
Kurkung'	35	150	46	4		
Chepterwai	29	164	51	4		
Total	172	1387	301	24		

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

A combination of proportionate, purposive and simple random sampling techniques was used to select participants. Proportionate sampling ensured equal representation from each

educational zone, purposive sampling was used to select schools with experience of teenage pregnancy, and simple random sampling was used to pick respondents from each zone. Additionally, 24 guidance

and counseling teachers were purposively selected as key informants. Data were collected using researcher-administered questionnaires and interview schedules. Interviews with guidance and counseling teachers provided qualitative insights. The validity of the research instruments was established through expert reviews from Egerton University's Department of Psychology, Counseling, and Educational Foundation. A pilot study was conducted Nandi Central Sub-County, reliability was tested using Cronbach's Alpha, with all scales achieving reliability scores above 0.70, indicating strong internal consistency. Data collection involved administering questionnaires to teachers and conducting 30-minute interviews with guidance and counseling Quantitative teachers. data processed using SPSS (Version 23.0) and analyzed using descriptive statistics such frequencies and percentages. Relationship between teachers' perception on life skills education and teenage pregnancy cases was analyzed using correlation analysis. Data were presented in tables. Qualitative data from interviews were thematically analyzed and reported in narratives and direct quotations. Ethical approval was secured from Egerton University, and participants were informed about voluntary participation and confidentiality. Measures were taken to protect respondents' anonymity, including using code names and secure data storage methods.

Results and Discussions

Respondents Demographic Data

The demographic information of the respondents included their age, gender, education level, and years of teaching experience. The majority (44.1%) were aged between 26-35 years, followed by those aged 36-45 years (24.6%), and above 46 years (22.1%), while the least represented age group was 18-25 years (9.3%). In terms of gender, the majority of the respondents were female (61.2%), while males comprised 38.8%.

Regarding education levels, most respondents (34.2%) held a primary teacher's certificate, followed closely by those with a bachelor's degree (32.7%) and a diploma (29.5%), while only a small percentage (3.6%) had a master's degree or higher. Teaching experience varied, with 58.4% of respondents having less than 10 years of experience, while 20.3% had over 20 years of experience. This distribution indicates that the majority of teachers were relatively early in their careers, which may influence their perspectives on the study's subject matter.

Descriptive Statistics

The objective of the study was to identify teachers' perception of the influence of life skills education on teenage pregnancy in public primary schools in Nandi North Sub-County. The results were as presented in Table 2.

Table 2 shows that 221(78.6%) of the respondents agreed that Life skills education programs that teach communication skills can help teenagers make informed decisions about relationships. However, 53(18.9%) of the respondents disagreed that Life skills education programs that teach communication skills can help teenagers make informed decisions relationships. As per the survey results, the participants agreed in terms of mean and standard deviation that the Life skills that teach education programs communication skills can help teenagers make informed decisions about relationships (Mean, =3.83, Std. dev=1.23).

Table 2: Life skills education

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

Key: 1=Strongly Disagree, 2=Disagree, 3=Undecided/neutral, 4=Agree, 5=Strongly Agree Source: Field Data (2024)

Guidance and Counseling Teacher [8 and 9] responded that:

Life skills education is broadly defined as "education that one obtains in life

from real-life situations or experiences" (Guidance and Counseling Teacher 08, July 15, 2024).

Another teacher added that;

life skills help learners understand themselves and the physical changes they undergo, stating, "It is about the learner being taught to understand herself, the changes taking part in her body" (Guidance and Counseling Teacher 9, July 15, 2024).

216(76.9%) of the Further, respondents agreed with the statement that learning about goal setting and future planning in life skills classes can reduce the risk of teenage pregnancy. However, 48(19.3%) of the respondents disagreed that learning about goal setting and future planning in life skills classes can reduce the risk of teenage pregnancy. From mean and standard deviation, the respondents agreed that learning about goal setting and future planning in life skills classes can reduce the risk of teenage pregnancy (Mean, =3.76, Std. dev=1.23). The study findings concurred with Bandiera et al., (2012) research in Uganda, which used vocational training and sex education shows 32% increase of girls' participation in economic activities as well as a 26% decrease in the risk of teenage pregnancy.

During the interviews, Guidance and Counseling teacher responded that:

Several life skills were identified as crucial in helping students make healthy choices regarding sexual behaviour. These include "self-awareness, decision-making, assertiveness, and self-esteem" (Guidance and Counselling Teacher 2, July 5, 2024).

Reinforcing this view another teacher emphasized the importance of selfcontrol and respect, stating, "Selfcontrol, respect, honesty" are vital life skills'' (Guidance and Counselling Teacher 1, July 5, 2024).

Also, 216(76.8%) of the respondents agreed that life skills education that emphasizes assertiveness training can empower teenagers to say no to unwanted sexual pressure. However, 55(19.6%) of the respondents disagreed that life skills education that emphasizes assertiveness training can empower teenagers to say no to unwanted sexual pressure. Analysis on mean and standard deviation revealed that they agreed that life skills education that emphasizes assertiveness training can empower teenagers to say no to unwanted sexual pressure (Mean, =3.80, Std. dev=1.25). The study agreed with Rahman et al., (2013) empowering teenage girls through training and capacity building increases their social participation, decision-making power and trans formative actions in relation to mitigating early pregnancy.

However, 201(71.5%) of the respondents agreed that schools that integrate sexual health education within life skills programs can provide teenagers with accurate information to avoid unintended pregnancy. On contrary, 61(21.8%) of the participants disagreed that schools that integrate sexual health education within life skills programs can provide teenagers with accurate information to avoid unintended pregnancy. Further, the study results also showed, in terms of mean and standard deviation, respondents agreed that schools that integrate sexual health education within life skills programs can provide teenagers with accurate information to avoid unintended pregnancy (Mean=3.70, standard deviation=1.27).

The study concurred with Guidance and Counseling Teacher highlighted that:

Teachers supports that life skills education should be "integrated into all learning areas" (Guidance and Counseling Teacher 6, July 10, 2024). One teacher suggested that it should be "fixed into the curriculum, books, charts, and all learning resources" (Guidance and Counseling Teacher 10, July 12, 2024).

On top of the above findings, other findings indicated 220(78.3%) of the participants agreed that if teenagers feel comfortable discussing relationships and sexuality openly in life skills classes, it can lead to more responsible decision-making. However, 53(18.9%) of the respondents disagreed that if teenagers comfortable discussing relationships and sexuality openly in life skills classes, it can lead to more responsible decision-making. Further, the study findings also indicated, in terms of mean and standard deviation the respondents agreed that if teenagers feel comfortable discussing relationships and sexuality openly in life skills classes, it can lead to more responsible decisionmaking (Mean=3.88, standard deviation=1.26). Waiganjo (2018) agree with these findings stating that, Life Skills Education (LSE) is an interactive process of teaching and learning which enables learners to acquire knowledge and to develop attitudes and skills which support the adoption of healthy behaviours.

However, 216(76.9%) of the respondents agreed that they believe life skills education programs can help teenagers develop healthy coping mechanisms to deal with stress, reducing the likelihood of risky sexual behavior and 51(18.2%) disagreed that the they believe life skills education programs can help teenagers develop healthy mechanisms to deal with stress, reducing the likelihood of risky sexual behavior. The study results showed in terms of mean and standard deviations that they

disagreed that they believe life skills education programs can help teenagers develop healthy coping mechanisms to deal with stress, reducing the likelihood of sexual behavior (mean=3.78, standard deviation=1.21). These findings are consistent with the study done by Wilkins et al., (2022) indicating that, welldesigned and implemented school-based HIV/STDs prevention programs decrease sexual risk behaviours among school age youth, including delaying first sexual intercourse, reducing the number of sex partners, decreasing the number of times teenages have unprotected sex.

Also, 217(77.2%) of the respondents agreed with the statement that in our opinion, life skills classes that teach critical thinking skills can equip teenagers to evaluate potential consequences of their actions, including teenage pregnancy. However, 54(19.2%) of the respondents disagreed with the statement that that in our opinion, life skills classes that teach critical thinking skills can equip teenagers to evaluate potential consequences of their actions, including teenage pregnancy. Further, the study findings showed in terms of means and standard deviation that the respondents agreed with the statement that in our opinion, life skills classes that teach critical thinking skills can equip teenagers to evaluate potential consequences of their actions, including teenage pregnancy (Mean=3.83, Std. dev=1.25). The study by Dupuy (2018) noted that, young people must be able to think critically, participate politically, live peaceful and healthy lives, create and pursue economic opportunities, navigate and use new technologies and process information in ways that translate into positive individual and societal development. Further, 219(77.9%) of the respondents agreed with the statement that they believe that comprehensive life skills education programs can be a

valuable tool in reducing teenage pregnancy rates. However, 55(19.6%) of the respondents disagreed with the statement that thev believe that comprehensive skills education life programs can be a valuable tool in reducing teenage pregnancy rates. Further the study findings showed in terms of means and standard deviation shows that the respondents agreed with the statement that they believe that comprehensive life skills education programs can be a valuable tool in reducing teenage pregnancy (Mean=3.81, Std. dev=1.24). The study concurred with (Vanwesenbeeck, 2020) that, Comprehensive Sexuality Education (CSE) is necessary to ensure healthy sexual and reproductive lives for teenagers and it should also include accurate information on a range of age-appropriate topics, should be participatory, and should foster knowledge, attitudes, values and skills to enable teenagers to develop positive views of their sexuality.

During the interviews, Guidance and Counseling Teacher [21] responded that:

We have identified several resources
necessary for the effective

implementation of life skills education, including "digital devices, resource persons, training the personnel, books, life experience" (Personal communication, July 24, 2024).

Correlation Between Teachers' Perception of Life Skills Education and Teenage Pregnancy Prevalence

Table 2 presents the correlation examining the relationship between teachers' perception of the effectiveness of life skills education and the reported prevalence of teenage The Pearson correlation pregnancy. coefficient (r) indicates the strength and direction of this relationship, with values ranging from -1 to 1. A negative correlation coefficient suggests an inverse relationship, meaning that as teachers perceive life skills education to be more effective, the incidence of teenage pregnancy decreases. Additionally, the pvalue determines statistical significance, with values below 0.05 indicating that the observed correlation is unlikely to have occurred by chance.

Table 2: Correlation between teachers' perception of life skills education and teenage pregnancy cases

Variables	Mean (M)	Standard Deviation (SD)	Pearson Correlation (r)	p- value
Teachers' Perception of Life Skills Education	3.85	0.92	-0.79	0.001
Teenage Pregnancy Cases	3.20	1.45		

Source: Field Data (2024)

According to the findings indicated in Table 2, Pearson correlation coefficient (r=-0.79) indicates that there is a strong negative relationship between the teachers' perception towards life skills education and teenage pregnancy incidence. The p-value (p = 0.001) is less than 0.05, indicating that the correlation is

statistically significant. This means that with improved teachers' perception towards life skills education, the teenage pregnancy cases within schools decrease. The findings of this study align with those of Musyoka, Cheloti and Kasivu (2024) who conducted in Machakos County and revealed a significant positive relationship between life skills education and the

reduction of teenage pregnancies, suggesting that effective implementation of such programs can substantially decrease teenage pregnancy rates. However, challenges persist; for instance, research in Emuhaya Sub County by Keya (2023) highlighted that teachers felt early not pregnancies were adequately addressed in life skills education, indicating need for curriculum а enhancement to tackle this effectively. Regionally, similar patterns emerge. In South Africa, a study conducted by Ndlovu (2019) revealed that teachers observed that life skills education, particularly when it includes comprehensive discussions on sexual health is key in minimizing teenage pregnancies. However, studies have also some teachers that judgmental attitudes towards teenagers' sexuality, which can hinder effectiveness of these programs. Comprehensive sex education, such as life skills, has been associated with delayed sexual initiation and reduced teenage pregnancy rates (Norbu & Gurung, 2021; Mayabi, 2015; Shirao, Momanyi & Anyona, 2020). Nevertheless, the success of these programs heavily depends on teachers' perceptions and their willingness to engage openly with students on these topics.

Conclusion

The study aimed to examine teachers' perceptions of the influence of life skills education on teenage pregnancy in public primary schools in Nandi North Sub-County. Findings revealed that most respondents agreed that life education, particularly communication skills, goal setting, and assertiveness training, helps teenagers make informed decisions and resist unwanted sexual pressure. Teachers also supported integrating sexual health education within life skills programs to provide accurate

information on preventing unintended pregnancies. Additionally, discussions in life skills classes were seen as key to responsible decision-making, while critical thinking skills helped students assess the consequences of their actions. In summary, teachers viewed comprehensive life skills education as an effective tool in reducing teenage pregnancy rates. The study also found a strong negative correlation between teachers' perception of life skills education and teenage pregnancies, indicating that improved life education contributes to lower pregnancy rates in schools.

Recommendation

The study recommends that schools should prioritize the expansion of life skills education, with an emphasis communication, goal setting, assertiveness, and critical thinking. These programs should be designed to help students navigate the complexities of relationships and sexual health, thereby reducing the risk of teenage pregnancy. Life skills education should be continuously updated to address emerging challenges faced by teenagers.

References

Akers, R. L., & Jennings, W. G. (2015). Social learning theory. *The handbook of criminological theory*, 230-240. Transaction Publishers. https://doi.org/10.1002/9781118512449
https://doi.org/10.1002/978118512449

Althabe, F., Moore, J. L., Gibbons, L., Berrueta, M., Goudar, S. S., Chomba, E., Derman, R. J., Patel, A., Saleem, S., & Pasha, O. (2015). Adverse maternal and perinatal outcomes in adolescent pregnancies: The Global Network's Maternal Newborn Health Registry study. Reproductive Health, 12(2), 1-9. Retrieved from https://doi.org/10.1186/1742-4755-12-S2-S8

Bandiera, O., Buehren, N., Burgess, R., Goldstein, M., Gulesci, S., Rasul, I., & Sulaiman, M. (2012). *Empowering Adolescent Girls*. Retrieved from

https://openknowledge.worldbank.org/b itstream/handle/10986/25529/755660W POEmpow00Box374337B00PUBLIC0.pdf? sequence=1&isAllowed=y

- Bandiera, O., Buehren, N., Burgess, R., Goldstein, M., Gulesci, S., Rasul, I., & Sulaiman, M. (2012). *Empowering Adolescent Girls*. Retrieved from https://openknowledge.worldbank.org/bitstream/handle/10986/25529/755660WP0Empow00Box374337B00PUBLIC0.pdf?seguence=1&isAllowed=y
- Bandura, A. (1977). Social Learning Theory.
 Prentice-Hall.
 https://www.asecib.ase.ro/mps/Bandura
 SocialLearningTheory.pdf
- Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. Prentice-Hall.

 https://books.google.co.ke/books?hl=en
 &lr=&id=PdY9o3l5vpYC&oi=fnd&pg=PA9
 4&dq=Bandura,+A.+(1986).+Social+Foun
 dations+of+Thought+and+Action:+A+Social+Cognitive+Theory.+Prentice-Hall.&ots=uHfVrUXibL&sig=DgZbRNihgW
 Zhi5L4HvU42oaYxKI&redir esc=y
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist,* 44(9), 1175–1184. https://psycnet.apa.org/doi/10.1037/00 03-066X.44.9.1175
- Bandura, A. (2004). Health promotion by social cognitive means. *Health Education & Behavior, 31*(2), 143-164. https://journals.sagepub.com/doi/abs/10.1177/1090198104263660
- Banke-Thomas, A., Banke-Thomas, O., Kivuvani, M., & Ameh, C. A. (2017). Maternal health services utilisation by Kenyan adolescent mothers: Analysis of the demographic health survey 2014. Sexual & Reproductive Healthcare, 12, 37-46. Retrieved from https://doi.org/10.1016/j.srhc.2017.02.0
- Blanc, A, Winfrey, W., & Ross, J. (2013). New findings for maternal mortality age patterns: Aggregated results for 38 countries. PloS One, 8(4), e59864.

 Retrieved from https://doi.org/10.1371/journal.pone.00 59864
- Cha, J. (2021). School Persistence and Dropout
 Amidst Displacement: The Experiences of
 Children and Youth in Kakuma Refugee
 Camp. Teachers College, Columbia
 University.
 https://www.proquest.com/openview/7

<u>a95603ae59532abc44a6e3ff0c5c116/1?</u> pq-origsite=gscholar&cbl=18750&diss=y

- Crichton, J., Ibisomi, L., & Gyimah, S. O. (2012).

 Mother–daughter communication about sexual maturation, abstinence and unintended pregnancy: Experiences from an informal settlement in Nairobi, Kenya.

 Journal of Adolescence, 35(1), 21-30.

 Retrieved from https://doi.org/10.1016/j.adolescence.2
 011.06.008
- Denwigwe, C., Okpechi, P., Asuquo, P., & Eze, A. (2018). Family Influences on Substance Abuse Tendency among Secondary School Students in Yakurr Local Government Area of Cross River State, Nigeria. *Journal of pharmaceutical research international*, 23(2), 1-6. Retrieved from https://doi.org/10.9734/JPRI/2018/42708/
- Domenech, E., & Mora-Ninci, C. (2012). World Bank discourse and policy on education and cultural diversity for Latin America. In Global neoliberalism and education and its consequences (pp. 171-190). Routledge.

 https://www.taylorfrancis.com/chapters/edit/10.4324/978020389185813/world-bank-discourse-policy-education-cultural-diversity-latin-
- Dupuy, K., Bezu, S., Knudsen, A., Halvorsen, S., Kwauk, C., Braga, A., & Kim, H. (2018). Life Skills in Non-Formal Contexts for Adolescent Girls in Developing Countries. CMI Report Number 5. Center for Universal Education at the Brookings Institution.

mora-ninci

america-eduardo-domenech-carlos-

https://eric.ed.gov/?id=ED586329

- Eyeberu, A., Getachew, T., Sertsu, A., Sisay, M., Baye, Y., Debella, A., & Alemu, A. (2022). Teenage pregnancy and its predictors in Africa: a systematic review and meta-analysis. *International Journal of Health Sciences*, 16(6), 47. https://pmc.ncbi.nlm.nih.gov/articles/Pmc9682880/
- Eysenck, M. W., & Keane, M. T. (2015). Cognitive Psychology: A Student's Handbook (7th ed.). Psychology Press. https://www.taylorfrancis.com/books/mono/10.4324/9781351058513/cognitive-psychology-mark-keane-michael-eysenck
- Ghose, S., & John, L. B. (2017). Adolescent pregnancy: an overview. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*, 6(10), 4197-

4203.

https://www.researchgate.net/profile/Seetesh-

Ghose/publication/320006421 Adolesce nt pregnancy an overview/links/59d9e 6c8aca272e6096bc20e/Adolescentpregnancy-an-overview.pdf

- Giannakaki, M. S. (2005). Using mixed-methods to examine teachers' attitudes to educational change: The case of the skills for life strategy for improving adult literacy and numeracy skills in England. Educational Research and Evaluation, 11(4), 323-348. https://doi.org/10.1080/1380361050011 0687
- Håkansson, M., Super, S., Oguttu, M., & Makenzius, M. (2020). Social judgments on abortion and contraceptive use: A mixed methods study among secondary school teachers and student peer-counsellors in western Kenya. *BMC Public Health*, 20(1), 1-13. Retrieved from https://doi.org/10.1186/s12889-020-08578-9
- Heizomi, H., Allahverdipour, H., Jafarabadi, M. A., Bhalla, D., & Nadrian, H. (2020). Effects of a mental health promotion intervention on mental health of Iranian female adolescents: A school-based study. *Child and Adolescent Psychiatry and Mental Health*, 14(1), 1-10. Retrieved from https://doi.org/10.1186/s13034-020-00342-6
- Holt, K., Reed, R., Crear-Perry, J., Scott, C., Wulf, S., & Dehlendorf, C. (2020). Beyond sameday long-acting reversible contraceptive access: A person-centered framework for advancing high-quality, equitable contraceptive care. American Journal of Obstetrics and Gynecology, 222(4), S878-e1. Retrieved from https://doi.org/10.1016/j.ajog.2019.11.1
- Hormenu, T., Akutu, P. K., & Oklu, S. (2017). Factors influencing teenage pregnancy in Komenda, Edina, Eguafo Abirem Municipality: Factors influencing teenage pregnancy in Komenda, Edina, Eguafo Abirem Municipality. Ghana Journal of Health, Physical Education, Recreation, Sports and Dance (GJOHPERSD), 10(1), 1-17.
 - https://doi.org/10.47963/gjohpersd.v10i 1.541
- Jessor, R. (2016). Problem Behavior Theory and Adolescent Health: The Collected Works of Richard Jessor. Springer.

https://link.springer.com/book/10.1007/ 978-3-319-51349-2

- Kapungu, C., Petroni, S., Allen, N. B., Brumana, L., Collins, P. Y., De Silva, M., Dua, T., Haj-Ahmad, J., Leichner, A., & Patton, G. (2018). Gendered influences on adolescent mental health in low-income and middle-income countries: Recommendations from an expert convening. *The Lancet Child & Adolescent Health*, 2(2), 85-86. Retrieved from https://doi.org/10.1016/S2352-4642(17)30152-9
- Kenya National Bureau of Statistics (KNBS). (2022).

 Kenya Demographic and Health Survey
 2022. KNBS.
- Keya, R. S. (2023). Teachers' perceptions on the influence of life skills education on moral behavior of students in secondary schools in Emuhaya sub county, Kenya (Doctoral dissertation, Maseno University).
- Kinabo, U., & Eduful, J. (2021). Discrimination in education against pregnant girls in Tanzania. (Masters Thesis Diaconia University of Applied Science). https://www.theseus.fi/handle/10024/5
- Kincaid, D. L., Yun, S. H., Piotrow, P. T., & Yaser, S. (2013). Health communication programs in developing countries. *Journal of Health Communication*, 18(1), 120-135.
- Kirchhoff, E., & Keller, R. (2021, June). Age-specific life skills education in school: A systematic review. In *Frontiers in Education* (Vol. 6, p. 660878). Frontiers Media SA. https://doi.org/10.3389/feduc.2021.660 878
- Lacerda-Pinheiro, S. F., Junior, R. F. F. P., de Lima, M. A. P., da Silva, C. G. L., dos Santos, M. do S. V., Júnior, A. G. T., de Oliveira, P. N. L., Ribeiro, K. D. B., Rolim-Neto, M. L., & Bianco, B. A. V. (2014). Are there depression and anxiety genetic markers and mutations? A systematic review. *Journal of Affective Disorders, 168*, 387-398. Retrieved from https://doi.org/10.1016/j.jad.2014.07.01
- Luszczynska, A., & Schwarzer, R. (2015). Social cognitive theory. In M. Conner & P. Norman (Eds.), *Predicting and Changing Health Behavior* (pp. 127-169). Open University Press.
- Maithreyi, R. (2015). Reconceptualising life skills education. *A critical analysis of ideas around 'childhood', 'risks' and 'success*. http://eprints.nias.res.in/1066/
- Mallepalli, A. (2019). Stigma, violence, and pregnancy: Exploring treatment of

women with opioid use disorder (Doctoral dissertation). University of Pittsburgh. http://d-scholarship.pitt.edu/36526/

Mavedzenge, S. N., Luecke, E., & Ross, D. A. (2014).

Effective approaches for programming to reduce adolescent vulnerability to HIV infection, HIV risk, and HIV-related morbidity and mortality: a systematic review of systematic reviews. JAIDS Journal of Acquired Immune Deficiency Syndromes, 66, S154-S169.

https://journals.lww.com/jaids/fulltext/2014/07011/Effective Approaches for Programming to Reduce.3.aspx

Mayabi, M. J. (2015). Influence Of School-Based Life
Skills Education Programme On
Students's exual Behaviour In Secondary
Schools In Nairobi And Busia Counties
Kenya (Doctoral dissertation, Kabarak
University).

http://library.kabarak.ac.ke:8080/handle/123456789/241

McRae, K. D. (2011). Examining Sexual Media
Exposure and Adolescent Sexual Health
Outcomes: A Qualitative Research
Integration. University of Illinois at
Chicago, Health Sciences Center.
https://www.proquest.com/openview/ccdc417c62b0288f4a125787914e2762/1?
pq-origsite=gscholar&cbl=18750

Mischel, W. (2004). Toward an integrative science of the person. *Annual Review of Psychology*, 55, 1-22.

Mittendorfer Rutz, E., & Wasserman, D. (2004).

Trends in adolescent suicide mortality in the WHO European Region. *European Child & Adolescent Psychiatry*, *13*(5), 321-331. Retreived from https://doi.org/10.1007/s00787-004-0406-y

Muro, M., & Jeffrey, M. (2008). The effects of reinforcement on behavior in elementary school children. *Journal of Applied Psychology*, *93*(3), 567-578.

Musyimi, C. W., Mutiso, V. N., Nyamai, D. N., Ebuenyi, I., & Ndetei, D. M. (2020b). Suicidal behavior risks during adolescent pregnancy in a low-resource setting: A qualitative study. *PLoS One*, *15*(7), e0236269. Retrieved from https://doi.org/10.1371/journal.pone.02

Musyoka, J. M., Cheloti, S. K., & Kasivu, G. M. (2024). Life skills education; investigating its relationship with teenage pregnancy in public secondary schools in Kenya. *International Journal of Research and Innovation in Social Science*, 8(5), 1647-1659.

https://econpapers.repec.org/article/bcp journl/v 3a8 3ay 3a2024 3ai 3a5 3ap 3a1647-1659.htm

Näslund-Hadley, E., & Binstock, G. (2010). The miseducation of Latin American girls: Poor schooling makes pregnancy a rational choice. Inter-American Development Bank, Education Division. Retrieved from https://www.researchgate.net/publication/254422766 The Miseducation of Latin American Girls Poor Schooling Makes Pregnancy a Rational Choice

Ndlovu, T. S. (2019). Perceptions of Educators
Towards Teenage Pregnancy in Selected
Schools in UMkhanyakude District:
Implications for Action (Doctoral
dissertation, University of KwaZulu-Natal,
Westville).

https://core.ac.uk/download/pdf/37338 8333.pdf

Ng'ang'a, T. K. (2021). Impact of COVID-19

Measures on Kenya's Education Sector
(Working Paper - COVID-19_011). African
Economic Research Consortium, Nairobi.
Retrieved from
http://publication.aercafricalibrary.org/handle/123456789/2883

Njeru, J. M. (2024). Selected Socio-Cultural Influence On Teenage Pregnancy Among Secondary School Students In Tharaka Nithi County, Kenya (Doctoral dissertation).

Norbu, L., & Gurung, N. (2021). Action Research
Addressing the Implementation of Life
Skills Education on Adolescent
Reproductive Sexual Health (Teenage
Pregnancy, Sexual Activities, STIs,
HIV/AIDs) for the Positive Behavioural
Outcome. Asian J Biology, 7-27.
https://www.researchgate.net/profile/Lhawang-Norbu-

2/publication/355700353 Reviewers 1
Maninder Singh Setia Mahatma Gand
hi Mission Institute of Health Sciences
/links/617a555d0be8ec17a93bb157/Revi
ewers-1-Maninder-Singh-SetiaMahatma-Gandhi-Mission-Institute-ofHealth-Sciences.pdf

Ormrod, J. E. (2012). *Human Learning* (6th ed.). Pearson.

Owens, M., Stevenson, J., Hadwin, J. A., & Norgate, R. (2012). Anxiety and depression in academic performance: An exploration of the mediating factors of worry and working memory. *School Psychology International*, *33*(4), 433-449. Retrieved from

https://doi.org/10.1177/0143034311427 433

Pajares, F. (2002). Gender and perceived selfefficacy in self-regulated learning. *Theory into Practice*, 41(2), 116-125.

- Pezzulo, C. (2012). Reproduction and maternal health care among young women in Kenya: geographic and socio-economic determinants. (Doctoral Dissertation, University of Bologna) https://amsdottorato.unibo.it/id/eprint/5039/
- Presler-Marshall, E., & Jones, N. (2012).

 Empowering girls to prevent early pregnancy. Oversees Development Institute. Retrieved from https://www.files.ethz.ch/isn/150791/7724.pdf
- Rahman, A., Surkan, P. J., Cayetano, C. E., Rwagatare, P., & Dickson, K. E. (2013). Grand challenges: Integrating maternal mental health into maternal and child health programmes. *PLoS Medicine*, 10(5), e1001442. Retrieved from https://doi.org/10.1371/journal.pmed.10 01442
- Rahyani, N. K. Y. (2023). HIV/AIDS problems and policies in adolescent population. In *Integrated science of global epidemics* (pp. 545-561). Cham: Springer International Publishing.
- Riad, S. S. (2023). Challenges of Implementing Life
 Skills-based Education at Secondary Level
 in Bangladesh (Doctoral dissertation, ©
 University of Dhaka).
 http://reposit.library.du.ac.bd:8080/xml
 ui/handle/123456789/2375
- Santrock, J. W. (2021). Educational Psychology (7th ed.). McGraw-Hill.
- Sayed, H. A., Elwahab, E. L., Rasmia, A. E., Sattar, A., Ahmed, F. M., & Hedya, F. M. (2019). The effect of life skills intervention on social self-efficacy for prevention of drug abuse among young adolescent students at Benha City. American Journal of Nursing Science, 8(5), 263-273. https://www.bu.edu.eg/portal/uploads/Nursing/Psychiatric%20Nursing/1858/publications/Faten%20Mohamed%20Ahmed fifth.pdf
- Shirao, B., Momanyi, M., & Anyona, J. (2020). Implementation of Life Skills Education towards Curbing Teenage Pregnancy in Public Secondary Schools in Makadara Sub County Nairobi, Kenya. *Journal of Popular Education in Africa*. 4(10), 92 111
- Shunza, F. I. (2014). School based factors influencing implementation of life skills Education curriculum in public primary schools in Dagoretti district, Nairobi County

(Doctoral dissertation). https://erepository.uonbi.ac.ke/handle/1 1295/74039

- Stark, L., Asghar, K., Seff, I., Cislaghi, B., Yu, G., Gessesse, T. T., Eoomkham, J., Baysa, A. A., & Falb, K. (2018). How gender-and violence-related norms affect self-esteem among adolescent refugee girls living in Ethiopia. Global Mental Health, 5. Retrieved from https://doi:10.1017/gmh.2017.28
- Toska, E., Laurenzi, C. A., Roberts, K. J., Cluver, L., & Sherr, L. (2020). Adolescent mothers affected by HIV and their children: A scoping review of evidence and experiences from sub-Saharan Africa. *Global Public Health*, *15*(11), 1655-1673. Retrieved from https://doi.org/10.1080/17441692.2020.1775867
- Tull, K. (2020). Consequences for adolescents when they become pregnant, and become mothers. K4D Helpdesk Report 882.

 Brighton, UK: Institute of Development Studies. Retrieved from https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/15727
- Undie, C.-C., MacKenzie, I., Birungi, H., Barongo, S., Ahindukha, D., & Omondi, C. (2015). Education sector response to early and unintended pregnancy: A policy dialogue in Homa Bay County, Kenya. STEP UP Meeting Report. Nairobi: Population Council. Retrieved from https://knowledgecommons.popcouncil.org/cgi/viewcontent.cgi?article=1254&c ontext=departments sbsr-rh
- UNESCO. (2021). Comprehensive Sexuality
 Education and Adolescent Well-being in
 Africa. UNESCO Publishing.
- UNICEF (2024). Early childbearing. https://data.unicef.org/topic/child-health/adolescent-health/
- Vanwesenbeeck, I. (2020). Comprehensive sexuality education. In Oxford Research Encyclopedia of Global Public Health.
 Oxford, UK: Oxford University Press.
- Waiganjo, M. M., & Waiganjo, M. M. (2018).

 Relevance of life skills Education in preparing Kenyan Youth for National Development. Journal of African Studies in Educational Management and Leadership Vol: 10, 85-103. [Retrieved from.
- Wastnedge, E. A., Reynolds, R. M., Van Boeckel, S. R., Stock, S. J., Denison, F. C., Maybin, J. A., & Critchley, H. O. (2021). Pregnancy and COVID-19. *Physiological Reviews*, 101(1), 303-318. Retrieved from

3(2), 2025

https://doi.org/10.1152%2Fphysrev.000 03.2022

Weiss, T., & Schiele, S. (2013). Virtual worlds in competitive contexts: Analyzing eSports consumer needs. *Electronic Markets, 23*(4), 307-316. Retrieved from https://doi.org/10.1007/s12525-013-0127-5

Wentzel, K. R. (2012). Social influences on school adjustment: Commentary. *Educational Psychologist*, 47(1), 16-22.

Kimeto et al.

World Bank (2020). Tanzania Secondary Education
Quality Improvement Program (SEQUIP).
The World Bank. Retrieved from
https://projects.worldbank.org/en/projects-operations/project-detail/P170480

Zimmerman, B. J., & Schunk, D. H. (2011). Self-Regulated Learning and Academic Achievement: Theoretical Perspectives. Routledge.