

Sex Education and Adoption of Healthy Lifestyle among Secondary School Students in Ogoja Education Zone of Cross River State, Nigeria

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Abstract- *This study investigated the predictive influence of sex education on the adoption of a healthy lifestyle among secondary school students in Ogoja Education Zone of Cross River State, Nigeria. Two research questions were raised and two hypotheses were formulated to guide the study. Anchored on the ex-post facto research design, the study involved 866 senior secondary students selected from a target population of 4,328 students across 82 public secondary schools using a multistage sampling technique. Data were collected using a researcher-developed instrument titled Sex Education and Adoption of Healthy Lifestyle among Students Questionnaire (SEAHLSQ), comprising 30 items on sex education and 12 items on healthy lifestyle adoption. The instrument was validated by experts and demonstrated high internal consistency with reliability coefficients ranging from 0.91 to 0.98. Findings revealed that sex education significantly predicted students' adoption of a healthy lifestyle. Specifically, students who had access to comprehensive information on sexual reproduction, abstinence, birth control, safe sex practices, and the implications of premarital sex exhibited healthier lifestyle choices, such as decent dressing, avoidance of promiscuous behaviour, and better management of their sexual health. The study also found that lack of structured sex education contributed to the prevalence of risky behaviours such as indecent dressing, sexual experimentation, and disregard for school norms. The study concluded that effective sex education is critical to promoting health-conscious behaviours among adolescents. It emphasized that*

proper handling of sex education topics enables students to internalize positive values, avoid risky behaviours, and make informed decisions about their sexual health. It was recommended that family life education be formally introduced into the school curriculum to empower teenagers with knowledge about the consequences of premarital sex and equip them with the skills necessary to adopt and sustain healthy lifestyles.

Indexed Terms- *Sex education, healthy lifestyle, secondary school students, adolescent behaviour.*

I. INTRODUCTION

Students' lifestyles in Nigerian secondary schools have increasingly raised concern due to their negative health and social implications. There is a growing prevalence of risky behaviours such as prostitution, sexual promiscuity, indecent dressing, and transactional sex among adolescents. These behaviours contribute to rising cases of HIV/AIDS, sexually transmitted infections, unwanted pregnancies, and abortion. Many students, particularly in Ogoja Education Zone of Cross River State, exhibit signs of unhealthy lifestyles, including frequent sexual activities with multiple partners, lack of proper grooming, and disregard for school norms. These tendencies not only hinder academic focus but also reflect a broader societal challenge tied to moral decay and poor guidance (Chuktu & Uzoigwe, 2019; Ekpenyong, Uzoigwe, Onabe, & Onwochei, 2020; Inah & Uzoigwe, 2024; Opuwari & Uzoigwe, 2025;

Sunday, Afia, Essien, Inyang, Peters, & Uzoigwe, 2025). A lifestyle encompasses the habits, values, and behaviour patterns that define an individual's way of living. Healthy lifestyles are rooted in positive values and moral conduct, but in many Nigerian schools, this ideal is compromised. Observations reveal that students often appear in school wearing provocative clothing, openly engage in seductive behaviour, and are more preoccupied with fashion, social media, and pornographic content than with academics. According to the United Nations (2020), such behavioural patterns are caused by factors like sexual addiction, poverty, child labour, peer pressure, lack of parental care, and poor sex education. The influence of these socio-economic and environmental factors makes it difficult for adolescents to make informed and responsible lifestyle choices (Adams & Uzoigwe, 2023; Ategwu, Kenn-Aklah, Fanan, & Uzoigwe, 2022; Inah, Ekpang, & Uzoigwe, 2024; Luke & Uzoigwe, 2022; Nnaji & Uzoigwe, 2021; Ogbeche & Uzoigwe, 2020; Sunday, Ifioke, Essien, & Blessed-Udo, 2025).

Sex education plays a critical role in shaping students' health and behaviour. Unfortunately, inadequate or stigmatized instruction on sexual health in schools contributes significantly to students' unhealthy lifestyles. Lack of proper education on reproductive health, safe sex, birth control, and abstinence leads to risky sexual behaviours, including unprotected sex and substance use during intercourse. Moreover, the failure to provide accurate information about contraception and abstinence exacerbates the rate of STIs, unplanned pregnancies, and emotional instability. Without effective and comprehensive sex education, students are left vulnerable to misinformation and poor decisions that can undermine their physical, emotional, and academic well-being. Consequently, this study aims to explore how sex education can predict and promote a healthy lifestyle among students (Mbon & Uzoigwe, 2023; Ojobe, Uzoigwe, & Bassey, 2024; Onya, Uzoigwe, Ovat, Abane, & Osa, 2024; Onya & Uzoigwe, 2023; Onya, Uzoigwe, Akeke, Ovat, Uguma, & Ekpo, 2023; Paul, Uzoigwe, & Sunday, 2024; Sunday, Umoren, Inyang, Afia, & Akpan, 2025; Uzoigwe, Zakka, & Anuforo, 2023).

II. STATEMENT OF THE PROBLEM

Students' mode of indecent dressing, seductive behaviour and promiscuous practices in Ogoja Education Zone of Cross River State over the past ten years has become a major source of concern to the public. The researcher has observed that most students do dress indecently to school. They put on short skirts and other kinds of bohemian fashions that expose their body. It seems that some are indicating the habit of having multiple sexual partners, seeking for more casual sex, always fantasizing for sex, being eager to hook up easily, looking for sexually skilled partners, and falling in love easily with lustful attitude to mention but a few.

The prevalence of unhealthy lifestyle among students has become a serious social problem to stakeholders in Nigeria, the government and society in general. However, students' unhealthy lifestyle has been confirmed to be the main source of sexually transmitted diseases such as syphilis, gonorrhea, the dreaded Human Immunodeficiency Virus (HIV). Many of these diseases are incurable and may lead to death or permanent health disorder. Students' unhealthy lifestyle has also resulted in gender-based violence, unwanted pregnancies, abortion, inability to graduate from school, failure in examinations, absenteeism, sexual harassments, school dropout and others.

Some researchers have observed that examination failures, involvement in examination malpractice, repeating of classes, skipping of class assignment/group work, poor concentration, irregular attendance to classes, missing examinations, dropout of school, and other attendant academic problems are some of the negative impacts of unhealthy lifestyle among students. Many female students with prostitution inclination have become victims of ritual murders, violent rape, and other physical injuries (Uche and Oyeridan, 2018). While the blame is on parental and teachers' failure to educate the teens on sexuality, it is not clear yet if sex education is the brain behind students' unhealthy lifestyle. Therefore, the key research question addressed in this study is how and to what extent does sex education influence adoption of healthy lifestyle among students in Ogoja Education Zone of Cross River State, Nigeria?

III. THEORETICAL FRAMEWORK

This study is anchored on two foundational psychological theories—Cognitive Development Theory by Jean Piaget (1950) and Social Learning Theory by Albert Bandura (1961)—which provide insight into how students acquire knowledge and behaviors related to sexuality and lifestyle choices. Piaget identified four stages—sensorimotor, preoperational, concrete operational, and formal operational—that mark the evolution of thinking abilities from birth through adolescence. The theory implies that introducing sex education early, tailored to children's developmental stage, can empower young people to make informed, healthy, and responsible decisions about sexuality and relationships, gradually supporting their sexual development and well-being.

Social Learning Theory, formulated by Albert Bandura in 1961, posits that behaviors are learned through observation, imitation, and reinforcement within a social context rather than being innate. Bandura's experiments demonstrated that people acquire new behaviors by watching models in their environment, and these behaviors are influenced by the rewards or punishments observed. Cognitive processes mediate whether an observed behavior is adopted, and learning does not always lead to behavior change. This theory highlights the importance of social environment in shaping student behaviors, including potentially unhealthy lifestyle choices, such as imitating peers' dressing styles, social interactions, or risky behaviors seen in school settings.

In relation to the study, both theories underscore the importance of educating students about sexuality and healthy behaviors while recognizing that they are influenced by their cognitive development and social surroundings. Cognitive Development Theory suggests sex education should be age-appropriate and ongoing to build knowledge and skills for healthy decision-making. Social Learning Theory emphasizes how students mimic observed behaviors and how school environments can either reinforce positive conduct or inadvertently encourage harmful habits. School administrators and educators can apply these theories to design effective interventions to promote healthy lifestyles and correct negative behaviors among students.

IV. EMPIRICAL LITERATURE REVIEW

Sexual reproduction education and healthy lifestyle among students

Students are always faced with important decisions about relationships, sexuality, and sexual behavior during the period of their growth and development. The decisions they make can impact their health and well-being for the rest of their lives. Wambuka and Eleuther (2021) found that 28.8% of adolescents in secondary schools in Morogoro Municipality, Tanzania, were sexually active and engaged in risky behaviours, including early sexual debut (as early as ages 10–15), multiple sexual partners, non-use of condoms, and involvement with significantly older partners. The study also revealed that adolescents had only average awareness of sexual and reproductive health (SRH), though higher awareness levels were associated with reduced engagement in risky sexual behaviour. Silva (2019), in a meta-analysis of 12 controlled studies, reported that school-based sex education programs had a very small overall effect on promoting abstinent behaviour. However, parental involvement and the proportion of female participants were significantly associated with increased abstinence, suggesting that family engagement and gender-sensitive approaches may enhance program outcomes.

Khadigeh and Farangis (2019) reviewed literature on sex education and women's health empowerment. They concluded that sex education positively influenced women's sexual autonomy, increased knowledge on HIV/AIDS and contraceptive use, reduced incidences of unprotected sex, STIs, unplanned pregnancies, and abortions. Programs that adopted an abstinence-plus model were found to be particularly effective in promoting both health knowledge and behavioural change. The authors emphasized the necessity of culturally sensitive sex education integrated into school curricula. Leung and Sheek (2020) highlighted global inconsistencies in sexuality education, noting that many programs were outdated or culturally irrelevant. They reviewed sexuality education in English- and Chinese-speaking regions and concluded that despite global commitments, comprehensive and contextually relevant education was often lacking, thus

undermining adolescent reproductive health initiatives.

Hussein, Xiao, and Samuel (2018) found through their literature review that innovative teaching methods like game-based learning (GBL) and gamification significantly enhanced adolescent sexual health literacy. These methods improved engagement, motivation, confidence, and critical thinking. However, such innovative strategies were largely implemented in developed countries, with limited application in African settings. Adeokun, Ricketts, Ajuwon, and Ladipo (2019) surveyed adolescents in Northern Nigeria and discovered low levels of reproductive health knowledge. Only 9% were sexually active, and fewer than half had received any sexuality education. Most adolescents expressed a desire for formal sexuality education, indicating a substantial unmet educational need.

Odo et al. (2018) found that while sexual and reproductive health services (SRHS) were geographically accessible to adolescents in Enugu State, Nigeria, financial barriers limited their use. Moreover, these services were not specifically tailored for adolescents. Access to SRHS was significantly influenced by factors such as age, education, and income, pointing to the need for adolescent-specific clinics and targeted interventions.

James (2012) emphasized the critical role of sexuality education in addressing reproductive health challenges facing Nigerian adolescents, including early marriage, STDs, and maternal mortality. The study argued that lack of information and limited access to services resulted in higher reproductive health risks. It advocated for the integration of sexuality education into national policies as a means to empower adolescents and safeguard their rights.

Alloysius (2020) revealed that risky sexual behaviours among adolescent undergraduates in Nigeria were influenced by the quality of sex education received during early adolescence. Adolescents without early parental guidance on sexuality—particularly those raised in religious or rural contexts—were more likely to engage in unprotected sex and maintain multiple partners. This underscores the importance of timely and adequate sex education within the home. Finally,

Mbachu (2020) conducted a survey in Southeast Nigeria and reported findings similar to earlier studies, emphasizing that adolescents' access to and understanding of sexual and reproductive health services remain limited, particularly in rural areas. This further supports the need for inclusive, community-based approaches to SRH education and service delivery. Collectively, the findings across these studies highlight the critical need for comprehensive, culturally sensitive, and age-appropriate sexual and reproductive health education. Effective programs are shown to reduce risky behaviours, enhance knowledge, promote autonomy, and improve health outcomes among adolescents, especially when supported by parental involvement, innovative pedagogy, and accessible services.

Safe sex education and healthy lifestyle among students

Safe sex is a practice of sexual activity using methods or devices to reduce the risk of transmitting or acquiring sexually transmitted infections, especially HIV. Safe sex is also sometimes referred to as safer sex or protected sex to indicate that some safe sex practices do not completely eliminate STI risks. Safe sex is having sexual contact while protecting oneself and a sexual partner against sexually transmissible infections (STIs) and unplanned pregnancy. Sexual contact that doesn't involve the exchange of semen, vaginal fluids or blood between partners is considered to be safe sex.

A synthesis of findings from various authors provides important insights into the effects, perceptions, and evaluations of safe sex education across different countries and populations. Rai and Dayas (2020) conducted a systematic review of sexuality education (SE) programme evaluations in low- and lower-middle-income countries. They analyzed 20 studies evaluating 15 interventions across 10 countries and found that randomized controlled trials were the most common design, followed by quasi-experimental and mixed-methods approaches. Most studies focused on behavioral and public health outcomes such as condom use, delay of sexual debut, and number of sexual partners. However, few studies adhered closely to recommended evaluation frameworks, indicating a need for more comprehensive assessments that include program development and implementation quality.

Matos and Diniz (2012) explored the impact of safe sex education on Portuguese university students. Their findings showed that students who received such education reported engaging in fewer risky sexual behaviors, including fewer casual sexual partners and less sex associated with alcohol and drugs. These students also had fewer sexually transmitted infections (STIs), unwanted pregnancies, and abortions. The study confirmed a strong positive relationship between school-based sex education and increased knowledge, motivation, and protective sexual behavior. Maimunah (2019) examined adolescents' perspectives on safe sex education in Indonesia, where the topic is still considered taboo. Adolescents viewed sex education as essential and emphasized its importance in avoiding promiscuity, understanding the consequences of unprotected sex, and learning self-protection strategies. The study highlighted a pressing need for both parents and teachers to provide accurate and comprehensive sexual health education.

Kumar and Goyal (2019) investigated the knowledge, attitudes, and perceptions of adolescents in Ambala District, India. Their cross-sectional study revealed overwhelming support for sex education, with 93.5% of adolescents in favor of including it in school curricula. Most adolescents believed that sex education could prevent HIV/AIDS and preferred to receive it from healthcare professionals and teachers rather than parents. The study also revealed significant gaps in reproductive and sexual health knowledge among the participants.

In Vietnam, Nduyen (2020) studied the relationship between education and sexual behavior among youths across five provinces. Despite high awareness levels, risky sexual behaviors were common. Only 48.1% of participants reported condom use during their last sexual encounter. The study also found that urban youths and those who used substances were less likely to use condoms and more likely to experience unintended pregnancies. These findings underscored the need for educational programs addressing substance use, multiple sexual partners, and unprotected sex. Douglas (2020) reviewed various school-related factors influencing sexual risk-taking among students. His analysis found that students more engaged with school and aspiring to higher education engaged in less risky sexual behavior. Moreover,

students in impoverished and disorganized schools faced a higher risk of pregnancy. Programs that improved school attachment reduced sexual risk, even without explicitly addressing sexual health. Importantly, comprehensive sex and HIV education programs did not increase sexual activity; instead, many decreased it while enhancing condom and contraceptive use.

Craig (2019) evaluated the impact of the Safer Sex Intervention (SSI) program in reducing unprotected sex and unintended pregnancies. Findings from three replications showed a small but positive effect: program participants were slightly less likely to have unprotected sex and report pregnancies compared to non-participants. Though some results lacked statistical significance, the study showed improved knowledge and intentions among adolescents, suggesting that SSI has potential for long-term positive outcomes.

Mwinga (2012) focused on teenagers in Botswana, revealing that many adolescents engaged in unsafe sex due to factors such as self-satisfaction and lack of condom availability. The study called for the development of targeted strategies by policymakers to curb unsafe sexual practices and mitigate their consequences. Brithany (2020) analyzed the relationship between belief in condom effectiveness and sexual behavior among adolescents in the Philippines, El Salvador, and Peru. She found that adolescents who believed condoms were 100% effective were significantly more likely to engage in sexual activity. However, there was no link between this belief and condom use during initial sexual encounters. The findings suggested that such beliefs might inadvertently encourage early sexual initiation, emphasizing the need for balanced, evidence-based sex education.

Nunu (2020) examined the integration of health systems to promote safe sex among adolescents in Zimbabwe. The study found that current programs often overlooked the role of integrated health systems (IHSs) and modern health systems (MHSs), which limited their effectiveness. The research recommended greater focus on utilizing MHSs to reduce STI transmission and improve adolescent sexual health outcomes. Lastly, UNAIDS (2020)

reviewed the global evidence on HIV/AIDS and sexual health education. Among 53 evaluated interventions, most showed no increase in sexual activity due to education, and many reported positive effects such as delayed sexual initiation, fewer sexual partners, and reduced pregnancy and STI rates. Only a few studies reported increases in sexual behavior. The review concluded that fears about sex education promoting promiscuity are largely unfounded, though methodological weaknesses in some studies call for cautious interpretation.

V. PURPOSE OF THE STUDY

The main purpose of the study was to examine sex education as a predictor of adoption of healthy lifestyle among students in public secondary schools in Ogoja Education Zone of Cross River State, Nigeria. Specifically, the study sought to determine whether:

1. Sexual reproduction education predicts adoption of healthy lifestyle among students
2. Safe sex education predicts adoption of healthy lifestyle among students

Research questions

The following research questions were raised to guide the study:

1. To what extent does sexual reproduction education predict adoption of healthy lifestyle among students?
2. To what extent does safe sex education predict adoption of healthy lifestyle among students?

Statement of hypotheses

The following null hypotheses were formulated to direct the study.

1. Sexual reproduction education does not significantly predict adoption of healthy lifestyle among students.
2. Safe sex education does not significantly predict adoption of healthy lifestyle among students.

VI. METHODOLOGY

The study adopted an ex-post facto research design, considered appropriate for examining sex education as a predictor of the adoption of healthy lifestyles among students in public secondary schools in Ogoja

Education Zone of Cross River State, Nigeria. This design was suitable because the researcher had no control over the independent variable, which had already occurred and was not manipulable. The target population comprised 4,328 senior secondary school students across 82 public secondary schools in the zone. Using a multistage sampling technique, 60% of the Local Government Areas (Bekwarra, Ogoja, and Yala) were randomly selected, and from these, 20% of schools were chosen. At the school level, 20% of students were selected using the hat-and-draw method, resulting in a final sample of 866 students. Data were collected using a researcher-developed questionnaire titled *Sex Education and Adoption of Healthy Lifestyle among Students Questionnaire (SEAHLSQ)*, comprising two sections. Section A included 30 items measuring sex education variables on a four-point Likert scale (Strongly Agree to Strongly Disagree), while Section B had 12 items assessing healthy lifestyle adoption (Very Adequate to Very Inadequate). The instrument was validated by three experts from the University of Calabar, with adjustments made for clarity and relevance. A pilot test conducted with 50 students from Calabar Education Zone established reliability using the split-half method, yielding coefficients ranging from 0.91 to 0.98, indicating high internal consistency. Data collection involved on-site administration of the questionnaire by the researcher and trained assistants, with 800 fully completed copies retrieved for analysis. Responses were scored and coded, with reverse scoring applied to negatively worded items, and the data were prepared and analyzed using appropriate statistical tools to determine the predictive influence of sex education on students' health behavior.

Research question one

What is the extent of adoption of healthy lifestyle among students in Ogoja Education Zone of Cross River State?

To answer this question, mean and standard deviation was applied and the results presented in Table 1.

Table 1: A summary of mean and standard deviation score on the extent of adoption of healthy lifestyle among students in public secondary schools in Ogoja Education Zone

S/N	Variables	N	Mean	S.D	Remarks
1	Indecent dressing	800	2.54	0.22	Agreed
2	Seductive behaviour	800	2.61	0.12	Agreed
3	Sexual promiscuity	800	2.73	0.13	Agreed
4	Overall students' lifestyle	800	3.85	0.34	Agreed
	Grand mean		2.50		Agreed

Source: Fieldwork, 2025

Table 1 shows the summary of mean and standard deviation score on the extent of adoption of healthy lifestyle among students in public secondary schools in Ogoja Education Zone. The variables were compared on a modified 4-point scale, making the highest response score on each item to be 4 and the least response score to be 1. However, the cut-off

mean, 2.50 was obtained as the average score of the highest and least score on each of the items. Indecent dressing was accepted on a mean score of 2.54 while seductive behaviour was accepted on a mean score of 2.61 with sexual promiscuity on a mean score of 2.73 and the overall lifestyle on a mean score of 3.85. This result indicates that the listed items were perceived by the respondents to be the extent to which they had adopted their lifestyle in Ogoja Education Zone. This is because the grand mean was seen to be 2.70, which is the greater than the cut-off mean score of 2.50. This indicated acceptance that the items individually indicated the extent of adoption of healthy lifestyle among students at different weights, which is based on the mean score of each item. This implies that the higher the mean score, the more the item is perceived as a predictive item within the context of this study. Therefore, it can be said that the extent of adoption of healthy lifestyle among students in Ogoja Education Zone of Cross River State is very low.

Research question two

To what extent does sexual reproduction education predict adoption of healthy lifestyle among students? To answer this research question, mean and standard deviation was applied and the results are presented in Table 2.

Table 2: Mean and Standard deviation of the responses on the prediction of sexual reproduction education on the adoption of healthy lifestyle among students in Ogoja Education Zone

S/N	Items description on sexual reproduction education	N	Mean	S.D	Decision
1	I know that the best time for a woman to get pregnant is at the most fertile point in her menstrual cycle	800	1.57	2.02	Agreed
2	I am not aware that fertile window includes five days prior to ovulation and the day of ovulation.	800	4.64	1.79	Agreed
3	I know that having sex on two days before ovulation will give a woman the greatest odds of conceiving	800	5.25	2.17	Agreed
4	I am taught that mature eggs make their way down the fallopian tube into the uterus	800	1.46	2.48	Agreed

5	I have no idea that having sex with the opposite sex would result to a pregnancy	800	7.03	2.69	Agreed
6	I am aware that a sperm fertilizes an egg to form a foetus in the womb	800	1.17	2.20	Agreed
	Total	800	5.45	2.41	Agreed
	Grand mean		2.50		Agreed
	Source: Fieldwork, 2021				

Table 2 shows the mean scores and standard deviations of the responses to the prediction of sexual reproduction education on the adoption of healthy lifestyle among students in Ogoja Education Zone of Cross River State. The items to sexual reproduction education were compared on a modified 4-point scale, making the highest response score on each item to be 4 and the least response score to be 1. However, the cut-off mean, 2.50 was obtained as the average score of the highest and least score on each of the items. It could be observed that the following six items enlisted, obtained mean that is either equal to or above the cut-off mean. The respondents who did not accept that they know that the best time for a woman to get pregnant is at the most fertile point in her menstrual cycle had the mean score of (1.57 ± 2.02) , those who were not aware that fertile window includes five days prior to ovulation and the day of ovulation had a mean score of (4.64 ± 1.79) . It was also observed that those students who know that having sex on two days before ovulation will give a woman the greatest odds of conceiving had a mean score of (5.25 ± 2.17) while those who were taught that mature eggs make their way down the fallopian tube into the uterus had a mean score of (1.46 ± 6.48) . Also, those respondents who had no idea that having sex with the opposite sex would result to a pregnancy had a mean score of (7.03 ± 2.69) . Meanwhile those who are not aware that a sperm fertilizes an egg to form a foetus in the womb had a mean score of (1.17 ± 2.20) . This result indicates that from the listed six items of sexual reproduction education, three of the items had the highest mean scores $(7.03 \pm 2.69, 5.25 \pm 2.17, 4.64 \pm 1.79)$ in terms of their poor level of awareness of sexual reproduction education and how it affects their adoption of healthy lifestyle. This is because the grand mean was seen to be, 2.59, which is also above the cut-off mean score of 2.50. This indicated the extent of acceptance of the

items and how they individually predicted students' adoption of healthy lifestyle at different weights, which is based on the mean score of each item. This implies that the higher the mean score, the more the item is perceived as a predictive category. For instance, the Table 6 shows that for all the items descriptions, the respondents who have no idea that having sex with the opposite sex would result to a pregnancy had the highest mean score of (7.03 ± 2.69) while the respondents who were not aware that a sperm fertilizes an egg to form a foetus in the womb had the least mean score of (1.17 ± 2.20) . Therefore, the answer to the research question seeking to find out the extent to which sexual reproduction education predicts the adoption of healthy lifestyle among students in Ogoja Education Zone is that the extent to the prediction is very low. Thus, to give a fair explanation of the findings, it can be said that the extent of prediction of sexual reproduction education for the adoption of healthy lifestyle among students has not discouraged poor lifestyle in terms of indecent dressing, seductive behaviour and sexual promiscuity.

Hypothesis one

The first hypothesis of this study states that sexual reproduction education does not significantly predict the adoption of healthy lifestyle among students in terms of indecent dressing, seductive behaviour and sexual promiscuity. The independent variable in this hypothesis is sexual reproduction education while the dependent variable is adoption of healthy lifestyle among students assessed from three perspectives (indecent decent dressing, seductive behaviour and sexual promiscuity as well as the overall effectiveness). The variables were measured continuously. To test this hypothesis, simple linear regression was applied to the data. The result is presented in Table 3.

Table 3: Summary of simple linear regression analysis of the prediction on sexual reproduction education on the adoption of healthy lifestyle among students (N=800)

Lifestyle	Source of	Sum of		Mean			
Variables	Variation	Squares	Df	Square	F-ratio	p-level	R ²
Indecent dressing	Regression	3.828	1	3.828	.650	.000*	.003
	Residual	1284.258	798	5.819			
	Total	1288.086	799				
Seductive behaviour	Regression	23.898	1	23.898	2.569	.000*	.012
	Residual	2027.629	798	9.301			
	Total	2051.527	799				
Sexual promiscuity	Regression	19.743	1	19.743	2.115	.000*	.010
	Residual	2035.053	798	9.335			
Overall students' lifestyle	Total	2054.800	799				
	Regression	117.577	1	117.577	2.574	.000*	.009
	Residual	9956.110	798	45.670			
	Total	10073.686	799				

*p<.05

Table 3 shows that the analysis of variance in the regression output produced an F-ratio of .650 for indecent dressing, 2.569 for seductive behaviour, 2.115 for sexual promiscuity and 2.576 for overall students' lifestyle. These F-ratios were all statistically significant at .05 probability level. On the basis of this result, the first null hypothesis was rejected ($p < .05$). This means that, sexual reproduction education significantly predicts the adoption of healthy lifestyle among students in public secondary schools in terms of indecent dressing, seductive behaviour, sexual promiscuity and overall adoption of lifestyle by the students. The results also show that a coefficient of determination (R^2) of .003 for indecent dressing, .012 for seductive behaviour, .010 for sexual promiscuity and .009 for overall students' lifestyle. This implies that the 0.3 percent, 1.2 percent, 1.0 percent and 0.9 percent of the variance in indecent dressing, seductive behaviour, sexual promiscuity and the overall students' lifestyle respectively was accounted for by sexual reproduction education. Thus, 99.7 percent,

98.8 percent, 99.0 percent and 99.1 percent of the variance in indecent dressing, seductive behaviour, sexual promiscuity, and overall lifestyle respectively, may be attributed to the effect of other variables extraneous to the study.

Hypothesis two

The second hypothesis of this study states that safe sex education does not significantly predict adoption of healthy lifestyle among students in terms of indecent dressing, seductive behaviour, sexual promiscuity and the overall students' lifestyle. The independent variable in this hypothesis is safe sex education while the dependent variable is adoption of healthy lifestyle among students assessed from three perspectives (indecent dressing, seductive behaviour, sexual promiscuity and the overall students' lifestyle). The variables were measured continuously. To test this hypothesis, simple linear regression was applied to the data. The result is presented in Table 4.

Table4: Summary of simple linear regression analysis of the prediction of safe sex education on the adoption of healthy lifestyle among students (N=800)

Lifestyle	Source of	Sum of		Mean			
Variables	Variation	Squares	Df	square	F-ratio	p-level	R ²
Indecent dressing	Regression	14.100	1	14.100	2.413	.000*	.011
	Residual	1273.986	798	5.844			
	Total	1288.086	799				
Seductive behaviour	Regression	2042.659	1	2042.66	50.185	.102	.996
	Residual	8.868	798	.041			
	Total	2051.527	799				
Sexual promiscuity	Regression	2006.517	1	2006.58	9059.5	.102	.977
	Residual	48.283	798	.221			
	Total	2054.800	799				
Overall students' lifestyle	Regression	8712.974	1	8712.97	1395.9	.000*	.865
	Residual	1360.713	798	6.242			
	Total	10073.686	799				

*p<.05

Table 4 shows that the analysis of variance in the regression output produced an F-ratio of 2.413 for indecent dressing, 50.185 for seductive behaviour, 9059.5 for sexual promiscuity and 1395.9 for the overall students' lifestyle. These F-ratios were not all statistically significant at .05 probability level. Table 14 indicates that the calculated values of seductive behaviour and sexual promiscuity were greater than p-value at .05 but less than the calculated values of indecent dressing and the overall students' lifestyle. On the basis of this result, the second null hypothesis was rejected ($p < .05$). This means that, safe sex

education significantly predicts the students' adoption of healthy lifestyle in terms of indecent dressing and overall students' lifestyle but not in seductive behaviour and sexual promiscuity. The result also shows that a coefficient of determination (R^2) of .011 for indecent dressing, .996 for seductive behaviour, .997 for sexual promiscuity and .865 for the overall students' lifestyle. This implies that, 1.1 percent, 99.6 percent, 99.7 percent and 86.5 percent of the variance in indecent dressing, seductive behaviour, and sexual promiscuity and overall, respectively was accounted for by safe sex education. Thus, 98.9 percent, 0.4

percent, 0.3 percent and 13.5 percent of the variance in indecent dressing, seductive behaviour, sexual promiscuity and the overall students' lifestyle respectively, may be attributed to the effect of other variables extraneous to the study.

VII. DISCUSSION OF FINDINGS

The result of the first hypothesis indicated that the level of adoption of a healthy lifestyle among students in the Ogoja Education Zone of Cross River State is significantly low. Additionally, the finding showed a significant predictive relationship between sex education and students' adoption of a healthy lifestyle, particularly in areas such as indecent dressing, seductive behavior, sexual promiscuity, and overall lifestyle choices. This finding aligns with the study by Wambuka and Eleuther (2021), which revealed that 28.8% of adolescents in Morogoro Municipal secondary schools were not sexually promiscuous due to early exposure to sexual and reproductive health education. Their study also found that a large proportion of students engaged in risky sexual behaviors—including having multiple partners, initiating sex at an early age (between 10–15 years), inconsistent condom use, and involvement with significantly older sexual partners. Furthermore, the study revealed that students with higher levels of awareness regarding sexual and reproductive health were less likely to engage in such risky behaviors.

The finding of this study equally tallies with that of Silva (2019) whose results indicated the overall effect of sexual reproduction education interventions in seductive behaviour and indecent dressing among students. The finding also revealed that parental participation in the sexual reproduction education programme, age of the participants, virgin-status of the sample, grade level, percentage of females, scope of the implementation were associated with variations in students' adoption of healthy lifestyle.

The finding of this study is also in agreement with that of Khadigeh and Farangis (2019) which revealed that sexual reproduction education had positive effects on sexual attitudes or activities of women. The finding further revealed that sexual reproduction education was effective in increasing the sexual autonomy of female college students. The finding of this study is

equally in agreement with that of Leung and Sheek (2020) and Hussein, Xiao and Samuel (2018) who found that school-based sexual health education and training positively influenced students' learning processes through engagement, enjoyment, excitement, attractiveness, and participation. They also fostered critical thinking skills, improved confidence, increased motivation, and stimulate a habit of self-regulatory learning among students.

Correspondingly, the finding is in tandem with that of Adeokun, Ricketts, Ajuwon and Ladipo (2019) whose overall, results revealed sexual reproduction education helped the students to know when their ovulation occurs, 47% knew pregnancy could result from first coitus and 56% knew of contraception. 84% opined that adolescents should be given sexuality education but only 48.3% had received any. It was concluded that sexuality education should be provided for in-school adolescents through their preferred and reliable sources of information.

In the same vein, the finding supported that of Odo, Samuel, Nwagu, Nnamani and Atama (2018) and James (2012) and Alloysius (2020) whose findings indicated that risky sexual behaviours among adolescent undergraduate students was embedded in the poor quality of sex education by parents at early adolescence. As such, unprotected sex and multiple sexual partners were rampant among adolescents who were not exposed to quality sex education at early adolescence. Adolescents whose parents are religious and/or authoritative but did not teach sex education during early adolescence engaged in risky sexual behaviours in the university. Also, adolescent undergraduate students that were raised in rural areas indulged in unprotected sex because of limited access to sex education during early adolescence. The implication of this finding is that, the higher the level of sexual reproduction education, the higher a healthy lifestyle could be ensured among students while the lower level of sexual reproduction education, the lower the adoption of healthy lifestyle among students in terms of indecent dressing, seductive behaviour, sexual promiscuity and overall students' lifestyle. Therefore, the brain behind this finding could be that sexual reproduction education is a type of education that enables students to become aware of the nature of the complex life cycle in which a gamete with a single

set of chromosomes combines with another to produce a zygote that develops into an organism composed of cells with two sets of chromosomes. It helps students to develop a healthy attitude to healthy lifestyle by discouraging seductive behaviour and sexual promiscuity.

The finding on this hypothesis revealed that safe sex education significantly predicts the adoption of healthy lifestyle among students in terms of indecent dressing, seductive behaviour and sexual promiscuity and the overall students' lifestyle. The finding of this study is in congruence with that of Rai and Dayas (2020) whose finding reported that safe sex education in public health or behavioral nature-promoted condom use, sexual debut or delay, and number of sexual partners. It is also in alliance with that of Matos and Diniz (2012) whose results showed that students who had safe sex education in school mentioned more often having had fewer sexual risk behaviours (less occasional partners, less sex associated to alcohol and drugs, less STIs, less unwanted pregnancies and abortions). Most young people have reasonable knowledge, positive attitudes about contraception/STIs, and skills of condom use. Our study demonstrates positive associations between receiving sex education and protective sexual behaviours, knowledge, motivation and skills.

The finding is similarly in agreement with that of Maimunah (2019) who found that safe sex education is of utmost importance from the adolescents' perspective. The material contents of safe sex education according to respondents' perspective include (1) how to avoid sex and promiscuity; (2) the knowledge improvement on proper sex education; (3) the impacts of free-sex, including sexually transmitted diseases and teenage pregnancy; (4) self-protection (e.g. from free-sex and sexual harassments). This proved the necessity for both parents and teachers to provide adolescents with safe sex education.

The finding is also in agreement with that of Kumar and Goyal (2019) which revealed that 86.3% said sex education can prevent the occurrence of AIDS and 91.5% of adolescents prefer doctors should give them sex education followed by 83.0% school/teacher and least preference was parents 37.3%. There were substantial lacunae in the knowledge about

reproductive and sexual health. Students felt that sex education is necessary and should be introduced in the school curriculum.

The finding is also in tandem with that of Nduyen (2020) which indicated that young population's awareness of safe sex education in Vietnam was high; however, risky sexual behaviors also remain common but controlled. Sex-related educational programs about the consequences of substance use, multiple sex partners, and unprotected sex were developed and implemented in the sampled schools. The finding is equally in line with that of Douglas (2020), Craig (2019), Mwinga (2012) and Brithany (2020) whose results reasonably suggested that there could be an association between safe sex beliefs and sexual initiation. It is also in congruence with that of Nunu (2020) and UNAIDS (2020) and Ezeoke and Ezeaka (2020) whose results showed among other things that although respondents indicated school as their major source of information, a significant number of the respondents preferred parents to be their source of information on safe sex practices and there is a relationship between respondents' major source of information on safe sex practices and their sexual behaviour. The implication of this finding is that, the higher the level of safe sex education, the higher a healthy lifestyle could be ensured among students while the lower level of safe sex education, the lower the adoption of healthy lifestyle among students in terms of indecent dressing, seductive behaviour, sexual promiscuity and overall students' lifestyle. Therefore, the logic behind this finding is that safe sex is a practice of sexual activity using methods or devices to reduce the risk of transmitting or acquiring sexually transmitted infections, especially HIV. Safe sex is also sometimes referred to as safer sex or protected sex to indicate that some safe sex practices do not completely eliminate STI risks. Safe sex is having sexual contact while protecting oneself and a sexual partner against sexually transmissible infections (STIs) and unplanned pregnancy. Sexual contact that doesn't involve the exchange of semen, vaginal fluids or blood between partners is considered to be safe sex.

CONCLUSION

Based on the findings from the study, it was concluded that if and when sex education is properly handled about a broad variety of issues related to sex and sexuality, sexual reproduction, safe sex, birth control, sexual abstinence and premarital sex education, students would be able to adopt and promote healthy lifestyle among themselves in terms of decent dressing and do away with sexual promiscuity and seductive behaviours. It will also help them in exploring values and beliefs about issues on sex education and know how to manage their sexual health.

RECOMMENDATIONS

1. Family life education should be introduced in schools with a view of making teenagers understand the consequences of premarital sex and how they could avoid it in order to develop healthy lifestyle among themselves.
2. Parents and teachers have a role to play in counselling adolescents on family life education and more importantly on sexually transmitted infections which is making significant in-road among the adolescents' population, radio, newspapers and books/pamphlets should be used to reach the teenagers on family planning issues.

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