

INFLUENCE OF SEX EDUCATION ON RISKY SEXUAL BEHAVIOUR AMONG FEMALE STUDENTS IN PUBLIC SECONDARY SCHOOLS IN FEDERAL CAPITAL TERRITORY, ABUJA, NIGERIA

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Abstract

The study: Influence of Sex Education on Risky Sexual Behaviour among Female Students in Public Secondary Schools in Federal Capital Territory, Abuja, Nigeria was carried out to determine the influence of sex education on the prevalence of risky sexual behaviour among female students of public secondary schools in Federal Capital Territory (FCT), Nigeria adopting cross sectional research design. A sample size of 398 respondents was drawn from female students' population of 85,724 covering three out of the six Area Councils using random sampling while the selected participating schools and participants were drawn purposively. Data collected from semi - structured questionnaire were analysed using response rate analysis, descriptive statistics, and inferential statistics with the aid of Statistical Package for the Social Sciences, version 25(SPSS, 25), Microsoft Excel and Chi -square. Findings from the study revealed that risky sexual behaviour is still prevalent among female students of public secondary schools in Federal Capital Territory. Based on the findings, the study concludes that female public secondary school students in FCT are still engaging in risky sexual behaviours. It therefore, recommends that, FCT Administration should review the existing sex education policy to favour domestication of sex education in all secondary schools in the territory and to support intervention strategies that will help curtail prevalence of risky sexual behaviours among the students.

Keywords: Risky, sexual behaviour, sex education, female students'

Introduction

Increase prevalence of risky sexual behaviours among adolescents in general is a global issue especially among female students in school setting, therefore, calling for urgent prevention and intervention. United Nations Programme on HIV/AIDS (UNSAIDS, 1997, 2024) affirmed the vulnerability of young women to sexual risk

taking leading to preventable exposure to sexually transmitted diseases including HIV/AIDS, early and un- intended pregnancy (which may lead to poor academic performance, School dropout or death due to poorly managed abortion), and AIDS related death; which ultimately could result to low productivity thereby, affecting National development. Sex education should have been a panacea to sexual risk taking by Nigerian youth especially female secondary school students but for visible gaps created by adequate policy deficiency, disproportionate shift between sex education knowledge and practice, dominant intervening variables of culture and religion, self - concept of sex education teachers, lack or inadequate parental and community involvement in sex education.

Risky sexual behaviours may be understood either according to the behaviour itself - unprotected vagina, oral or anal intercourse - or the nature of sex partners - HIV positive individuals, intravenous drug users or 'non-exclusive partners as rightly noted by Eaton et al. (2023). Sex education is conceptualized in this study as dissemination of sexual information to secondary school students for the prevention and intervention of risky sexual behaviours.

In spite of numerous programs and efforts through various media, literature still report increase in prevalence of risky sexual behaviours. Wagle and Karki (2024), and Komuhangi et al. (2025) highlighted increased prevalence of risky sexual behaviour among young girls globally and in Nigeria in particular. It is in view of increase in prevalence of risky sexual behaviour globally and in Nigeria that the study determined the influence of sex education on risky sexual behaviour among female students in public secondary schools in FCT.

Conceptual Review

Risky Sexual Behaviour

Risky sexual behaviour is any behaviour in relation to sexual exploit that may be inimical to healthy sexual life of those involved in such behaviour. Such behaviour includes having sex without any form of contraception or having sex with high-risk individual like HIV positive individuals. Musibau et al. (2023) described risky sexual behaviours as actions that increase person's risk for sexually transmitted diseases

and unwanted pregnancies while Jepsen et al. (2023) referred to risky sexual behaviour as sex without contraception, sexualized substance use, sex work, leading to health consequences for oneself or intimate partners. According to Healthwise (2017), a British Columbia health link; "examples of high -risk sexual behaviour includes:" unprotected intercourse, unprotected mouth-to-genital contact, starting sexual activity at a young age, having multiple sex partners, having a high-risk partner.

Sex Education

Sex education, a process of disseminating sexual information to elicit formative behaviour especially in youth has attracted intense debate among scholars due to intricacies and controversies surrounding the subject matter. Different authors and scholars attempt to define or describe "sex education' base on their understanding of the concept. According to World Health Organization (WHO, 2023), 'comprehensive sexual education gives young people accurate, age - appropriate information about sexuality and their sexual and reproductive health, which is critical for their health and survival'. while Planned Parenthood Federation of America (PPFA, 2025) sees sex education as a "high quality teaching and learning about a broad variety of topics related to sex and sexuality.

Theoretical Review

This study is rooted in Behaviourism, a theory founded by John B. Watson (1878 -1958), an American psychologist. The theory assumes that behaviour is learned through interaction with the environment and can be shaped or control using conditioning techniques. This theory emphasis on environmental factors in behavioural adaptation and moderation as noted by McLeod (2017, 2025), may be a veritable tool in achieving the aim of sex education. Human behaviour is often viewed as 'difficult' to understand or predict, and as such various etiological reasoning were advanced for occurrence of the phenomenon. It is in view of avoidance of doubt that behaviour of individuals or groups of individuals including risky sexual behaviours could actually be understood, studied and influenced that this study seeks to explore Behaviourist perspectives in understanding risky sexual behaviour among

female students of public secondary schools in FCT in order to proffer solution to eradicate or mitigate it.

Empirical Review

Prevalence of Risky Sexual behaviour

Risky sexual behaviour among youth has attained global dimensions and has thus draw attention of scholars to identify the variability and prevalence among young people in order to proffer solution to it. Gregory et al. (2024), and Odimewu and Somefun, (2017) reported increase in prevalence of risky sexual behaviour among young people in the population of their study.

Srahbzu and Tirfeneh (2020), Olatunji et al (2019); Fetene and Mekonen (2018) and Amare et al. (2018) alluded to increase prevalent of risky sexual behaviour among students in their study populations. Amare et al. (2018) obtained prevalence rate of between 23.3% - 60.9%, while Fetne and Mekonnen (2018) recorded 43.1% prevalent rate in their study population.

Impacts of Sex Education on Risky Sexual Behaviour

This sub section discusses the possible influence of sex education on different dimension of risky sexual behaviour from empirical point of view. According to Rodriguz - Garcia et al. (2025), most sex education programs demonstrated success in improving knowledge, attitudes, self - efficacy and intentions related to condom use and HIV/STI prevention as well as in reducing the number of sexual partners. Similarly, Musa (2022) affirmed that sex education had significant positive influence on the sexual behaviour of his study population. Rashid and Mwale (2016) while evaluating how sex education impacts on risky sexual behaviours among a community secondary school students reveals that a good number of school youths had enough sexual knowledge but still engaged in sexual risk. While Rashid and Mwale (2016) were not able to record any positive impact on youth sexual behaviours with sex education, Aloysius et al. (2020) reported positive impact of sex education on risky sexual behaviour among youth.

Methodology

Research Design

The researcher adopts cross-sectional research design which is a survey research design that generates both quantitative and qualitative data.

Population of the Study

The population of study consist of all female secondary school students in public secondary schools in the six Area Councils of the Federal Capital Territory. The Department of Planning, Research and Statistic, Federal Capital Territory, Abuja gave current total population of female students in all the public secondary schools in the six Area Councils to be 114,180 and a total population of 85,742 of the three Area Councils participating in the study (Table 1; column 9, rolls 5,6 and 8).

Table 1

Total Population of Students in FCT Public Secondary Schools by Gender and Area Council 2018/2019

AREA COUNCIL	2018/2019								
	JSS			SSS			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
ABAJI	3032	2527	5559	2467	2166	4633	5499	4693	10192
AMAC	31531	34907	66438	13773	16039	29812	45304	50946	96250
BWARI	13866	15297	29163	6707	9031	15738	20573	24328	44901
GWAGWAL ADA	10366	10736	21102	6362	6682	13044	16728	17418	34146
KUJE	6564	6352	12916	3412	4098	7510	9976	10450	20426
KWALI	4607	4010	8617	3141	2335	5476	7748	6345	14093
TOTAL	69966	73829	143795	35862	40351	76213	105828	114180	220008

Source: Department of Planning, Research and Statistic, Federal Capital Territory, Abuja (2021)

Sample Size and Sampling Technique

Sample size of 398 was obtained using Taro Yamane (1967) formula from total population of 85,724 of the three Area Councils participating in the study selected using random sampling.

The random sampling involved the selection of three area councils where the participating schools were selected. This was done by listing all the six-area council in the territory and randomly select the participating area councils using Fish bowl principle. Abuja Municipal Area Council, Bwari Area Council and Kuje Area Council were selected as participating Area Councils in the study.

Sample size of 398 female students of public secondary schools in the three Area Councils therefore, participated in the study based on the following proportionate sample size of each Area council as follows:

AMAC = 239 female students participated in the study

BWARI = 119 students participated in the study and KUJE = 40 students participated in the study.

Methods of Data Collection

Semi - structured closed - open - ended questionnaire was used to collect primary data for objectivity. This instrument was deemed sufficient for this study because objective and subjective disposition and thoughts of research participants were captured. The questionnaire was structured to cover the research questions and specific objectives of the study Consisting of six (8) sections.

The questionnaire contains closed-ended questions with multiple choice options structured on modified 1-5 Likert-type scale of Strongly Agreed (SA), Agreed (A), Undecided (UD), Disagreed (D), and Strongly-Disagreed (SD). Values for each scale are as follows: SA = 5, A = 4, UD =3, D = 2, SD =1. The open-ended sections of the questionnaire give room for respondents to freely express their opinions on the topic of current discourse.

Questionnaires were administered to participating students by the researcher and trained research assistants. Completed questionnaires were

collected through the same route immediately after completion of responding to questions on the questionnaire by research participants.

Operationalization of Variables

The key variables of the study operationalized are risky sexual behaviour and sex education. Thought of respondents concerning different items relating to each variable will be elicited using selected research instrument as follows:

Risky Sexual Behaviour

Variables measured by the instrument include types of risky behaviour: sex without the use of condom, involvement with large numbers of sexual partners, having sexual intercourse under the influence of substances such as alcohol or cocaine, early onset of sexual intercourse, having sex with high-risk individual like HIV positive individual, prostitution, lesbianism, anal and oral sexual intercourse. Similarly, factors of risky behaviour considered include: exposure to social media like internet, going into sexual intercourse at early age, lack of sexual efficacy, substance use, low academic performance, sexual violence, depression, suicide tendency, lack of parental communication, increase sexual opportunity, liberation from moral surveillance, witnessing of community violence, fear of embarrassment and concern about how they will be regarded by others, lack of education, ethnic origin, gender, low self-esteem and lack of skills for self-assertion.

Sex Education

The perceived factors responsible for failure of available sex education resources considered include parental illiteracy, low social status of parent, nature of occupation of parents, poverty, culture, religion, societal bad practices, peer pressure, drug addiction, inadequate program evaluation, lack of community participation among others and suggested available sources of sex education include: Internet, Television, Radio, Newspapers, Faith based organization, social networking, school social work education approach.

Method of Data Analysis

Data collected from semi - structured questionnaire were analysed using response rate analysis, descriptive statistics, and inferential statistics with the aid

of Statistical Package for the Social Sciences, version 25(SPSS, 25), Microsoft Excel and Chi -square.

Results and Discussion

This section presents and discusses the empirical findings of the study.

Response Rate Analysis

Table 2

Response Rate analysis

Questionnaires Administered in the Study	Filled Questionnaires Retrieved/Returned	Retrieved/Returned Questionnaires found valid for use	Response Rate (%)
398	385	375	93.75

Descriptive Analysis

Prevalence of Risky Sexual Behaviours

Table 3

How Prevalent is Risky Sexual Behaviour Among Female Secondary School Students in FCT

S/N	Prevalence of Sexual Behaviour	Weighted Score Remark					Total	Mean	
		VH	H	U	L	VL			
		5	4	3	2	1			
1	How common is the habit of sex without using condom	196	77	55	18	28	1517	4.06	S

2	How high or low are girls with many boyfriends	263	90	9	2	10	1716	4.59	S
3	How common are girls having sexual intercourse after drinking alcohol or smoking substances	184	109	35	20	26	1527	4.08	S
4	How common are girls starting dating before age 15	221	109	4	21	19	1614	4.32	S
5	Girls feel ashamed to seek medical help due to culture and religion	110	97	59	72	36	1295	3.46	NS
6	How common is rape and sexual harassment in your school	91	38	77	107	61	1113	2.98	NS
7	How common are girls dating just any person without knowing their HIV status	258	81	11	14	10	1685	4.51	S
8	How common are girls dating for cash or influence	276	49	11	10	28	1657	4.43	S
9	How common is the act of girls dating girls	82	73	53	92	74	1119	2.99	NS

10	How common are girls engaging in anal sexual intercourse	64	89	92	59	70	1140	3.05	NS
11	How common are girls engaging in oral sexual intercourse	73	76	93	68	64	1148	3.07	NS
Weighted Average								3.77	

Note that those above the weighted average (i.e. ≥ 3.77 = Significant(S)) while those below (i.e. ≤ 3.77 = Not Significant (NS))

Impact of Sex Education

Table 4

The Perceived Impact of Sex Education on Female Students of FCT Public
Secondary Schools

S/N	Impact of Sex Education	Weighted Score					Total	Mean	Remark
		VH	H	U	L	VL			
		5	4	3	2	1			
1	Increase use of condom during sexual intercourse	123	125	56	26	44	1375	3.69	NS
2	Reduction in number of sex partner	166	102	40	29	37	1453	3.89	NS
3	Increase in number of student that practice abstinence	157	112	36	29	40	1439	3.85	NS
4	Reduction in number of students that engage in sex early	213	83	23	22	33	1543	4.13	S
5	Reduction in unwanted pregnancy	215	116	10	15	18	1617	4.32	S
6	Increase in academic performance	206	97	33	16	22	1571	4.20	S
7	Increase in self esteem	206	102	29	22	9	1578	4.22	S

8	Reduction in rate of sexually transmitted diseases	216	106	23	13	16	1615	4.32	S
9	Reduction in death due to HIV/AIDS	209	121	13	15	16	1614	4.32	S
10	Increase in national productivity	202	118	19	20	15	1594	4.26	S
Weighted Average								4.12	

Note that those above the weighted average (i.e. ≥ 4.12 = Significant(S)) while those below (i.e. ≤ 4.12 = Not Significant (NS))

Inferential Analysis

Chi - square is used to test two null hypotheses: Risky Sexual Behaviours have no significant Prevalence among Female Secondary School Students in FCT's Public schools and Sex Education has no significant Impact on Risky Sexual Behaviour among Female Secondary School Students in FCT's Public Schools

Table 5

Cross Tabulation of Chi-square Result

Variables

	Risky Sexual Behaviours have no significant Prevalence among Female Secondary School Students in FCT's Public schools
Chi-Square	128.304 ^a
Df	16
Asymp. Sig.	.000

a. 16 cells (64.0%) have expected count less than 5. The minimum expected count is .02.

Conclusions based on decision rule

Since the p-value = 0.000 is less than the level of significance (0.05), we reject the null hypothesis and conclude that risky sexual behaviours have significant prevalence among female secondary school students in FCT's public schools.

Table 6

Cross Tabulation of Chi-square Result

Variables

Sex Education has no significant Impact on Risky Sexual Behaviour among Female Secondary School Students in FCT's Public Schools	
Chi-Square	58.814 ^a
Df	16
Asymp. Sig.	.000

a. 12 cells (48.0%) have expected count less than 5. The minimum expected count is .88.

Conclusions based on decision rule

Since the p-value = 0.000 is less than the level of significance (0.05), we reject the null hypothesis and conclude that sex education has significant impact on risky sexual behaviour among female secondary school students in FCT's public schools.

Findings reveals that risky sexual behaviour is common in FCT Public Secondary Schools especially among the female students. Results of various analysis (SPSS 25 - Tables 2 - 6) indicated that risky sexual behaviour is prevalent among female secondary school students of FCT's public secondary schools. Table 3 shows the prevalence of risky sexual behaviour among student of FCT public secondary schools which revealed a high number of girls with many boyfriends (4.83), girls dating for cash or influence (4.52), girls dating without knowledge of HIV status (4.50), girls dating before the age of 15 (4.40), girls having sexual intercourse due to the influence of alcohol/ drugs (4.03), and sex without using condom (3.90). And finally, on this section, table 5 showed cross tabulation of chi-square where the p-value (0.000) is less than the level of significance (0.05), leading to conclusion that

risky sexual behaviours have significant prevalence among female secondary school students in FCT's public schools. The implication of this finding is that students are vulnerable to sexually transmitted diseases and unwanted pregnancy which could lead to low academic performance, school dropout and possible death from AIDS or abortion. The result of this analysis is consistent with the findings of Srahbzu and Tirfeneh (2020), and Frances et al. (2024).

The impact of sex education on female students of FCT public secondary school as reported in Table 4 revealed a reduction in unwanted pregnancy (4.32), reduction in rate of sexually transmitted diseases (4.32), reduction in death due to HIV/AIDS (4.32), increase in national productivity (4.26), Increase in self-esteem (4.22), increase in academic performance (4.20), and reduction in number of student that engage in sex early (4.13). While, reduction in number of sex partner (3.89), increase in number of student that practice abstinence (3.85), and increase use of condom during sexual intercourse (3.69) were not significant. This implies that sex education plays important role in reducing some dimension of risky sexual behaviour among female students of FCT public schools while there was no significant positive impact on numbers of sex partners, practice of abstinence and condom use. Similarly, the null hypothesis was rejected as shown in table 6. This finding is consistent with the findings of Aloysius et al. (2020) who recorded positive impact of sex education on risky sexual behaviour in the population of their studies and inconsistent with the findings of Rashid and Nwale (2016) who could not report positive impact on youth sexual behaviour with sex education.

Conclusion and recommendation

Conclusion

Based on research findings of study under current consideration, the researcher concludes that risky sexual behaviour has significant prevalence among female students of FCT's public secondary schools leading to preventable consequences in spite of efforts by some actors like the NGOs, Government and individual with interest in youth reproductive health and that available sex education resources have not sufficiently address all dimensions of risky sexual behaviours.

5.2 Recommendation

In view of research findings, the researcher therefore recommends that there should be sex education modification to accommodate effective means of educating adolescents especially young girls on sexual issues. Sex education policy and curriculum should put into consideration professionals in the field of sex education in prevention and intervention efforts towards eradicating or mitigating the effects of risky sexual behaviour among female secondary school students in particular and Nigerian adolescents in general.

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