QUALITY OF COMPREHENSIVE SEXUALITY EDUCATION AND RISKY SEXUAL BEHAVIOUR IN NIGERIA'S HIGHER INSTITUTIONS OF LEARNING
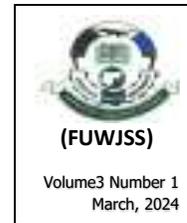
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Abstract

There are increasing interests among countries of the world, including Nigeria, to establish age-appropriate Comprehensive Sexuality Education (CSE) at primary and secondary school levels in order to prepare children and adolescents for healthy sexuality at older ages. Inspite these efforts, there seem to be a surge in risky sexual behaviours among students of higher institutions in Nigeria. In attempts to understand this enigma, this study interrogates the quality of CSE as delivered at Nigeria's primary and secondary educational institutions prior to tertiary education vis-à-vis undergrdautes' exposure to and involvement in risky sexual behaviour. The study employed a cross-sectional survey design which involved quantitative data collection from undergraduate students at Federal University of Technology, Akure (FUTA), Nigeria. Univariate, bivariate, and binary logistic regression analyses were used to predict the contribution of Comprehensive Sexuality Education to risky sexual behaviour. Results revealed that 62% of undergraduates who received CSE prior to tertiary education were found to be actively involved in risky sexual behaviour. Also, undergraduate students who had CSE by the end of their secondary education were significantly more likely ($OR = 1.517$; $CI = 1.089 - 2.113$) to be involved in risky sexual behaviours. The study concludes that adolescents in Nigeria's higher institutions are predisposed to risky sexual activities despite their prior exposure to Comprehensive Sexuality Education (CSE). The study recommends that quality CSE should be inculcated into tertiary education in Nigeria.

Keyword: Adolescent, sex education, poverty, risky behaviour

Introduction

Adolescents and young people's sexual health has remained paramount not only to their general wellbeing but for the progress of the nation because they constitute an integral part of the population. The World Health Organization (WHO) reported in 2018, that the world today has the largest generation of young people in history with 1.8 billion between the ages of 10 and 24 years (WHO, 2018). The United Nations Population Funds (UNFPA) had earlier reported in 2012, that Africa has the youngest population in the world with 70% of the population in sub-Saharan Africa under the age of 30 (UN, 2023). As enunciated by the report, more than one-third of the population is between the ages of 10-24 and sub-Saharan Africa is the only region of the world in which the numbers of young people continue to grow substantially. Furthermore, the World Bank reported in 2017, that adolescents make up a substantial 23% of Nigeria's population and this is expected to be more than double in the upcoming decades (World Bank, 2017). This extensive population and exponential growth in Africa's most populous nation is supposed to bring about tremendous economic growth and transformation if well harnessed (Nigeria Bureau of Statistics, 2019).

However, there are vices among these young people that may prevent Africa and Nigeria as a nation from achieving the desired economic and transformative growth. The National Coalition for Sexual Health (2013) asserted that to lay the foundation for good health and wellbeing across the lifespan, an understanding and promotion of the sexual health of young people is of critical importance. But, without due diligence to train them properly, adolescents remain vulnerable to risky sexual behaviours that may be detrimental to their health and overall wellbeing because they are a heterogeneous group with numerous and evolving needs, depending on their personal developmental stages and life circumstances (WHO, 2018). Comprehensive Sexuality Education (CSE) programmes have been found to be useful in the curtailment of adolescents' sexual behaviour which is a necessity to their well-being (Gomez-Lugo et al., 2022). CSE is a verified tool in proper training of children and adolescents in life skills that will help them make informed decisions before actions that will have dreadful consequences (Kemigisha et al., 2019). The efficacy of CSE programs was reiterated to reduce the rates of sexual activity, risky sexual behaviours including a number of partners and unprotected intercourse, sexually transmitted infections, and adolescent pregnancy among adolescents and young people (The American College of Obstetricians and Gynecologists, 2016; Michael, et al., 2023). This paper therefore examines the quality of Comprehensive Sexuality Education (CSE) as delivered at Nigeria's primary

and secondary educational institutions prior to tertiary education vis-à-vis undergrdautes' exposure to and involvement in risky sexual behaviour.

Conceptualizing Comprehensive Sexuality Education

The United Nations Educational, Scientific and Cultural Organization [UNESCO] (2018) defined Comprehensive Sexuality Education as a curriculum-based process of teaching and learning about the cognitive, emotional, physical, and social aspects of sexuality. It aims to equip children and young people with knowledge, skills, attitudes, and values that will empower then to realize their health, well-being and dignity as well as develop respectful social and sexual relationships, considering how their choices affects their well-being and that of others, including understanding and ensuring the protection of their rights throughout their lives. By implication, CSE according to the United Nations Population Fund (UNFPA) (2015), involves a positive view of sexuality, which is holistic and goes beyond pregnancy and sexually transmitted infections (STIs). CSE in essence, when fully adopted and utilized can mitigate and curb sexuality problems and its associated social vices allies including cultism, drug use disorder, internet fraud, and bullying (Wangamati, 2020).

The Sustainable Development Goals (SDGs) 2030 is in full support of CSE, for instance, Goal three which is in pursuit of healthy lives and promotion of people's well-being at all ages has as one of its targets, the provision of universal access to sexual and reproductive healthcare services, including family planning, information and education, and the integration of reproductive health into national strategies and programmes. Closely linked to the above is Goal four which detailed that there should be inclusive and equitable quality education and promotion of lifelong learning opportunities. Moreover, target 4:7 stressed the need for all learners to acquire the knowledge and skills needed to promote sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development (United Nations, 2015). Furthermore, UNESCO (2015) affirmed that education is a key determinant of health because it develops the knowledge, values, attitudes, and skills required to make informed choices and adopt healthier behaviours. Olufadewa et al., (2021) opined that school-based sexuality education is an important strategy to increase awareness about sexual health among youths and adolescents.

The Sexuality Information and Education Council of the United States [SIECUS] affirmed in 2021 that programmes that incorporate elements of CSE have been shown to improve academic success, prevent sexual abuse, dating violence and bullying, help young people develop healthier

relationships, delay sexual initiation, and reduce unintended pregnancies, HIV/AIDS and other STIs (SIECUS, 2021). UNESCO (2009) identified life skills that are acquired through sexuality education to include: good analysis of media; Assertiveness; Conflict resolution; Coping with emotions; Coping with stress; Decision making; Effective communication; Effective negotiation; Goal setting; Help-seeking behaviour; Journaling; Leadership; Refusal skills; Self-control; Self-defence; Self-worth/esteem; Time management; and Health seeking behaviour. The possession of these qualities builds up the necessary strength required for proper behaviour in adolescence. Sexuality education is imperative in sub-Saharan Africa, where social norms and gender inequality influence the expression of sexuality and sexual behaviour, making the male domineering and subjecting the female to male sexual control (Adebola, 2020; Ewemooje, Biney, & Amoateng, 2020; Biney, Ewemooje, & Amoateng, 2022).

The school system has been adjudged, as an increasingly important platform for engaging with young people in health programmes and has been used on several occasions to advance the course of such programmes like the CSE (Ramirez-Villalobos, et al., 2021). The World Health Organization opined in 2018, that with the growing retention of adolescents in schools in many countries, the task of developing and scaling-up health initiatives within the schools should be a priority (WHO, 2018). Esere (2008) affirmed from her findings that children who had access to sexuality education were better prepared against risky sexual behaviour than those who do not. In the same vein, Kolawole (2010) averred from another study that there is need for a well-thought-out scientific information and knowledge if adolescents are going to be sexually healthy. In line with the belief that the school system is viable for sexual behavioural moulding and modifications, the Nigerian government has for long joined other nations of the world to launch CSE in her school curriculum as parts of effort to scale up healthy living among children and adolescents. For instance, UNESCO (2021) reported that Nigeria has made credible progress in nation-wide decentralization of CSE programmes particularly in schools to have well-informed children and adolescents.

The usefulness of CSE in this generation cannot be overemphasized, for instance, Boonstra (2011) stated that compared with the youth of the past generations, young people today have more opportunities and challenges. They are likely to have more independence from parents and spend more time in school. They as well have more access to the radio, television, internet, and mobile phones (Adebola and Adebola, 2015). They also enter adolescence earlier and healthier, postponing marriage and childbearing until later, and are more likely to have sex before marriage (Ononokpono, Adebola, Gayawan, & Fagbamigbe, 2022). The Nigerian Demographic and

Health Survey [NDHS] as reported by the National Population Commission [NPC] in conjunction with USAID in 2018 reported that the level of unprotected sex is high among adolescents, indicating 35% females and 10% males with low use of contraceptives. The report also added that pre-marital sex and co-habitation among students of higher institution is on the increase in Nigeria (NPC & ICF, 2018). This is indicative of the high number of unplanned pregnancies, abortions and STIs including HIV among students (Inthavong, Ha, Anh, & Sychareun, 2020). Adolescents' involvement in risky sexual behaviour leaves them vulnerable to adverse consequences (Haruna et al., 2018). Therefore, this study seeks to interrogates the present quality of CSE as delivered at Nigerian educational institutions prior to tertiary education vis-à-vis their exposure to and involvement in risky sexual behaviours.

Theoretical Framework

This study is guided by the Theory of Planned Bahaviour postulated by Ajzan in 1991 and the Critical Pedagogy (Freire, 1970). The theory of planned behaviour reasoned that attitudes, subjective norms, and perceived behaviour predict behavioural intentions. The quality of CSE is however shaped by students' attitudes toward responsible sexual behaviour with a higher likelihood of adopting such behaviours. The CSE also influence students' perceptions of what their peers, instructors, and society expect regarding sexual behaviour and with positive social norms established through education risky sexual behaviours will be discouraged. Nevertheless, the quality of CSE affects students' perceived ability to control their sexual behaviour; this call for a comprehensive and empowering education program that enhance students' confidence in making informed choices.

To further examine the quality of CSE, Critical Pedagogy should be employed to emphasize a participatory and reflective approach to education, encouraging learners to critically analyse and question societal norms. It is expected that quality CSE will foster critical thinking and consciousness about societal norms related to sexuality, encouraging students to question and challenge stereotypes and unhealthy practices. This should then empower students to make informed decisions about their sexual health, promoting autonomy and self-efficacy. Hence, integrating these theoretical frameworks, this study sought to explore how the quality of CSE in a Nigeria's higher institution of learning influences students' attitudes, behaviours, and perceptions regarding sexual health. The interplay of demographic, social, and cultural factors within the educational context will be considered to develop a comprehensive understanding of the dynamics involved.

Research Methodology

The study was conducted at Federal University of Technology, Akure (FUTA), Nigeria with students' population of about 20,000 undergraduate students. This cross-sectional study administered structured questionnaires on the undergraduate students to gather background information such as socio-demographic characteristics, previous comprehensive sexuality education and sexual behaviours of the respondents. This was analysed to give a general assessment of sexual behaviours among FUTA students. The study employed a multi-stage sampling technique to select the sample of respondents. Firstly, five schools were selected from the 8 Schools at FUTA. Secondly, a sample of 27 departments were selected across the 5 schools using probability proportional to size design. At the third stage, students were selected from each selected Department using simple random sampling method based on their academic level (100L-500L). Therefore, from these 27 departments, a university-wide representative sample of 712 students aged (17years and above) were selected for this study.

Comprehensive Sexuality Education is measured using level of sexuality training at the three stages of home, primary and secondary schools. The response categories for level of sexuality training were "0 = None", "1 = Not comprehensive", "2 = Comprehensive" or "3 = Highly comprehensive". The three stages (home, primary and secondary schools) of sexuality training are then cumulated to generate a composite variable - Comprehensive Sexuality Education and it is measured as "0 = Non comprehensive" or "1 = Comprehensive". The risky sexual behaviours are measured using three risk indicators: non-use of contraceptive during sexual intercourse, multiple sexual partnerships, and early sexual debut. A student/respondent is said to be involved in sexual risk behaviour if he/she was involved in at least one of these practices. Considering non-use of contraceptive, respondents were asked to indicate whether they used any form of contraception during last sexual intercourse. The categorises are "0 = No" (non-use of contraception) or "1 = Yes" (contraception use). A respondent is said to have early sexual debut if he/she has sexual intercourse on or before age 14 years with response categorise: "0 = No" (non-early sexual debut) or "1 = Yes" (early sexual debut). Multiple sexual partnership is obtained from question on the number of sexual partners in the last 12 months which are dichotomised as "one (1) or none = 0" and "two (2) or more = 1."

The effects of age, gender, place of residence, School/Faculty, level of study, parent literacy, household size and household wealth index. All the predictor variables are measured as categorical variables. Age is measured as "1 = 17-19 years", "2 = 20 – 22 years" and "3 = 23 years above"; gender is measured as "1 = Male," and "2 = Female"; place of residence is measured

as "1 = urban" and "2 = rural"; school/faculty is measured as "1 = School of Physical Sciences", "2 = School of Life Sciences", "3 = School of Engineering and Engineering Technology", "4 = School of Agriculture and Agricultural Technology" and "5 = School of Computing"; level of study is measured as "1 = 100L", "2 = 200L", "3 = 300L", "4 = 400L" and "5 = 500L; parent literacy is measured as "0 = Non-literate" and "1 = Literate"; household size is measured as "1 = 1-4 persons", "2 = 5-6 persons" and "3 = more than 6 years"; household wealth index is measured as "1 = poorer," "2 = middle" and "3 = richer".

The data are analysed at two levels, namely, univariate and bivariate. At the univariate level, distribution of the socio-demographic characteristics of the selected undergraduate students is illustrated using descriptive statistics such as charts, frequencies, and percentages. At the bivariate level, the Pearson Chi-square test is used to measure the association between the socio-demographic characteristics and Comprehensive Sexuality Education, using $p - value < \alpha = 0.05$ as criterion for statistical significance. Also, the binary logistic regression technique is employed in modelling risky sexual behaviours using Comprehensive Sexuality Education variable. The result is interpreted using the Odds Ratio (OR), and this is deemed a significant predictor of sexual risk behaviour if the p-value associated with the Odds Ratio is < 0.05. All data are weighted and analysed using SPSS version 27.

Ethical clearance was obtained from Centre for Research and Development of Federal University of Technology, Akure, Nigeria. A formal approval was secured from the Centre with informed consent duly obtained from the participants before data were collected from them. All direct personal identifiers were omitted on the questionnaires by using code numbers. Data were stored on passworded system to avoid misuse or wrongful disclosure of information obtained from the respondents to maintain confidentiality. Participation in the study was voluntary and respondents can decide to leave at any point in time if not comfortable with the study.

Table 1: Sociodemographic Distribution of the Respondents

	Frequency	Percent
Age		
17- 19 years	136	19.1
20 - 22 years	284	39.9
23 years & above	292	41.0
Gender		
Male	475	66.7

Female	237	33.3
Place of Residence		
Urban	563	79.1
Rural	149	20.9
School/Faculty		
School of Physical Sciences	187	26.3
School of Life Sciences	126	17.7
School of Engineering and Engineering Technology	156	21.9
School of Agriculture and Agricultural Technology	123	17.3
School of Computing	120	16.9
Level of Study		
100L	257	36.1
200L	134	18.8
300L	99	13.9
400L	82	11.5
500L	140	19.7
Parent Literacy		
Non-Literate	151	21.2
Literate	561	78.8
Household Size		
1-4 persons	169	23.7
5-6 persons	403	56.6
> 6 persons	140	19.7
Household Wealth Index		
Poorer	63	8.8
Middle	588	82.6
Richer	61	8.6
Total	712	100.0

Quality of Comprehensive Sexuality Education among Undergraduates in Nigerian Higher Institutions

The quality of comprehensive sexuality education of the undergraduate students is presented in Figure 1, this shows that approximately five-in-every-nine (54.5%) undergraduate students have comprehensive sexuality education at the point of entering higher institution. Among these students, two-in-every-seven (28.7%) of them are involved in risky sexual behaviours

(see Figure 2). Approximately one-fifth (19.1%) of the students are teenagers, two-fifths (39.9%) of them are between age 20-22 years while the rest of them are 23 years and above as shown in Table 1. Two-thirds (66.7%) of the students are males while one-in-every-three (33.3%) students are females. Approximately four-in-every-five (79.1%) of them lived in the urban settlements before gaining admission into the university while only one-in-every-five (20.9%) of them lived in the rural areas. More than a quarter (26.3%) of them are currently studying Physical sciences courses, 21.9% of them are studying Engineering and Engineering Technology while the least (16.9%) studied courses among them are in Computing. Approximately four-in-every-five (78.8%) of the students' parents are literates while only 21.2% of them are non-literate. More than half (56.6%) of the students live in households with 5-6 persons, 23.7% live in smaller household size of 1-4 persons while the rest (19.7%) live in households with more than 6 persons. Also, more than four-in-every-five (82.9%) of them live in a household with middle wealth index, 8.8% live in poorer households while only 8.6% live in richer households.
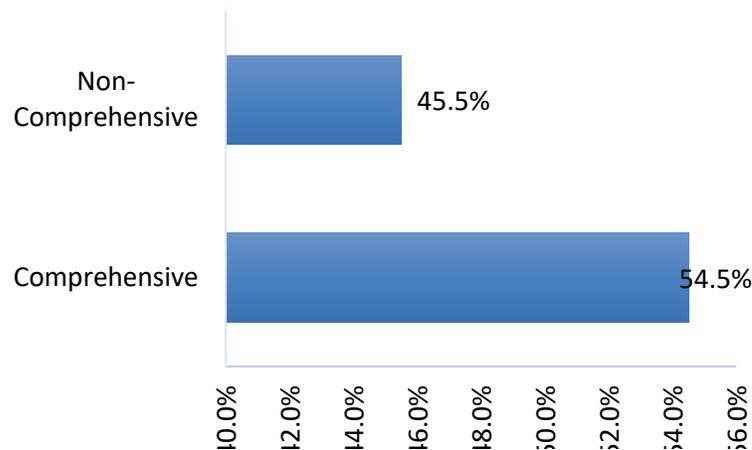

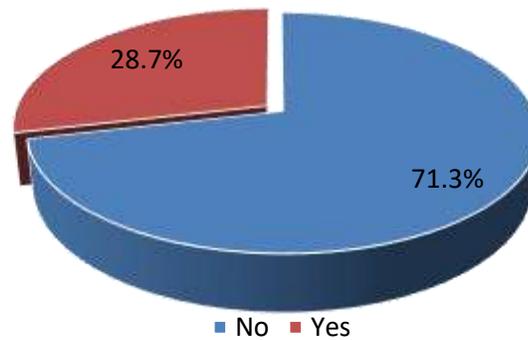**Figure 1: Quality of Comprehensive Sexuality Education among Undergraduate Students**

Figure 2: Students' Involvement in Risky Sexual Behaviours

Socio-Demographic Determinants of Comprehensive Sexuality Education in Nigeria

Table 2 measures the association between the socio-demographic characteristics and Comprehensive Sexuality Education (CSE). This shows that previous place of residence, students' school/faculty, level of study, parental literacy, household wealth index and risky sexual behaviours are significantly associated with comprehensive sexuality education. Here, the result shows that slightly more than three-fifths (61.0%) of the teenagers aged 17-19 years had comprehensive sexuality education, 51.8% of those aged 20-22 years had CSE while 54.1% of those aged 23 years and above had CSE. More (58.2%) female students had comprehensive sexuality education while 52.6% of the male students had CSE. Almost three-fifths (58.8%) of the students who lived in the urban areas before gaining admission into the university had comprehensive sexuality education while a little proportion (38.3%) of those who lived in the rural before admission into university had CSE. Many (81.0%) of those studying life sciences courses had CSE, 61.8% of those studying agriculture and agricultural technology had CSE while less than half of those studying; Engineering and Engineering Technology (48.1%), Physical Sciences (46.0%) and Computing (40.8%) courses had CSE. Many (65.0%) of the 100 level students had CSE which is the highest percentage while only 34.3% of the 300 level students had CSE.

Two out of every five (41.7%) students whose parents are non-literate had comprehensive sexuality education while 57.9% of those whose parents are literate had comprehensive sexuality education. More than half (52.7%) of students who live in smaller households (1-4 persons) had comprehensive sexuality education, 57.8% of those who live in households with 5-6 persons had CSE while less than half (47.1%) of those living in households of more than 6 persons had CSE. More than four-in-every-five (83.6%) of those

living in richer households had comprehensive sexuality education, 54.9% of those living in middle households had CSE while a small fraction (22.2%) of those living in poorer households had CSE. This shows that as the households wealth index increases, the comprehensive sexuality education among the students increases. The result further shows that more than half (51.6%) of those who are not involved in risky sexual behaviours had comprehensive sexuality education. However, more than three-fifths (61.8%) of those involved in risky sexual behaviours had comprehensive sexuality education. Furthermore, the binary logistic regression analysis confirms this by showing that undergraduate students who had comprehensive sexuality education by the end of their secondary education are significantly more likely (OR = 1.517; CI = 1.089 – 2.113) to be involved in risky sexual behaviours than their counterparts who do not have comprehensive sexuality education (See Table 3).

Table 2: The Association between the Socio-Demographic Characteristics and Comprehensive Sexuality Education (CSE)

	Non-Comprehensive		Comprehensive		p-value
	Number	**Percent**	**Number**	**Percent**	
Age					0.2
17- 19 years	53	39.0%	83	61.0%	
20 - 22 years	137	48.2%	147	51.8%	
23 years & above	134	45.9%	158	54.1%	
Gender					0.158
Male	225	47.4%	250	52.6%	
Female	99	41.8%	138	58.2%	
Place of Residence					<0.001
Urban	232	41.2%	331	58.8%	
Rural	92	61.7%	57	38.3%	
School/Faculty					<0.001
School of Physical Sciences	101	54.0%	86	46.0%	
School of Life Sciences	24	19.0%	102	81.0%	
School of Engineering and Engineering Technology	81	51.9%	75	48.1%	
School of Agriculture and Agricultural Technology	47	38.2%	76	61.8%	

School of Computing	71	59.2%	49	40.8%
Level of Study				<0.001
100L	90	35.0%	167	65.0%
200L	66	49.3%	68	50.7%
300L	65	65.7%	34	34.3%
400L	36	43.9%	46	56.1%
500L	67	47.9%	73	52.1%
Parent Literacy				<0.001
Non-Literate	88	58.3%	63	41.7%
Literate	236	42.1%	325	57.9%
Household Size				0.079
1-4 persons	80	47.3%	89	52.7%
5-6 persons	170	42.2%	233	57.8%
> 6 persons	74	52.9%	66	47.1%
Household Wealth Index				<0.001
Poorer	49	77.8%	14	22.2%
Middle	265	45.1%	323	54.9%
Richer	10	16.4%	51	83.6%
Risky Sexual Behaviour				0.014
No	246	48.4%	262	51.6%
Yes	78	38.2%	126	61.8%

Table 3: Bivariate Analysis of the Comprehensive Sexuality Education and Risky Sexual Behaviours using Binary logistic regression model.

Quality of Comprehensive Sexuality Education	Odd Ratio	95% Confidence Interval for Odd Ratio		p-value
		Lower Bound	Upper Bound	
Non-Comprehensive	1.000			
Comprehensive	1.517	1.089	2.113	0.014

Adolescents and young people in higher institutions, are within the growing and transition age where they experience sexual maturity urges and are open to undue experimentation. Sexual adventuring for them is therefore almost inevitable. As depicted in the result, even though majority of them attested to home and primary cum secondary school CSE, it still did not

curtail their involvement in pre-marital activities. Hence, there is need for a well thought out sexual education for adolescent's sexually health as earlier averred by Kolawole (2010), for it is known that access to quality CSE influences students' perceived ability to control their sexual behaviour. The results of this research have also shown that young people living in the rural areas are disadvantaged with comprehensive sexuality education as many of them do not get to be taught about CSE. Living in richer households has also been shown to increase comprehensive sexuality education among the undergraduates, this could be that poorer parents lack financial capacity to send their children to schools where they will be taught the proper sexuality education, and they may also not have access to electronic gadgets to give such information. This will in-turn leads to increment in risky sexual behaviour among the adolescent and young adults as already alluded to by earlier researchers that poverty contributes to young adults' risky sexual behaviours (Ewemooje, Biney, & Amoateng, 2019; Amoateng, Ewemooje, & Biney, 2022). Findings in this research also validated works of earlier researchers including Adebola (2018a), Brian, Umeononihu, Echendu, & Eke, (2016) and Santo, Ferreira, & Ferreira, (2022) as age and staying longer in school are significant factors in undergraduates' sexual activities as corroborated by Cortinez-Lopez, Cuesta-Lozano, & Luengo-Gonzalez, (2021). Other predisposing factors that may pressure them into risk sexual behaviour include, the environment, friends, and the internet as alluded to by Adebola (2018b) and Odii, Atama, Idemili-Aronu, & Onyeneho, (2020).

However, it is expected that previous comprehensive sexuality education will reduce risky sexual behaviour or activities among the undergraduate students. But, the reverse is the case here as findings in this research has shown that those who had comprehensive sexuality education by the end of their secondary education get involved more in risky sexual behaviours than their counterparts who do not. This raises questions on the quality of sexuality education received at these stages (home, primary and secondary schools) of education. Hence, the need for more thorough and comprehensive sexuality education at the higher institutions as already being alluded to by many researchers (Amaechi, Anyalebechi, & Ariole, 2016; Brian et al., 2016; Ejeh, 2022) because adolescents and young people at this time are in dire need of guidance in taking decisions.

Conclusion and Recommendation

Adolescents and young people, particularly those in higher institution of learning, are very important cohorts in Nigeria's population and economic dividend, and as such needs guidance in order to be productive. Adolescent in higher institutions have been found to be predisposed to risky sexual

activities despite their prior exposure to CSE. The discontinuance of CSE after the secondary school level is not in the best interest of their sexual health and overall wellbeing. This research recommends therefore that CSE be inculcated into tertiary education in Nigeria as the curriculum is rich enough to orientate students in necessary antics of handling relationships, and manipulative skills for day-to-day activities. This way, they can be correctly guided, and this will improve their well-being, academic performance as well as their general behaviour and mannerism.

Acknowledgement

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