



Availability, Accessibility and Utilisation of Sex Education Information Resources among Undergraduates in a Nigerian University of Education

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Abstract

Access to accurate sex education information resources (SEIR) and its utilisation are critical for reproductive health well-being and informed decision-making of humans including undergraduates. However, the extent to which these undergraduates find and use reliable information remains inconsistent. Therefore this study examined availability, accessibility and utilisation of sex education information resources among undergraduates in Tai Solarin Federal University of Education. The descriptive survey research design of the ex-post facto type and mixed method of quantitative and qualitative method was adopted for the study. The population of the study consisted of undergraduates across the six colleges in the university. Using proportionate stratified random sampling technique the undergraduates were stratified based on the Colleges. From each stratum a proportionate 5% (1,001) sample size was drawn. Questionnaire and Focus Group discussion was used as the data collection instrument. A cohort of 18 students were randomly selected based on ballot from 38 academic departments across the six colleges. Findings revealed that hospitals (63.1%), primary health care centres (61.1%) and social media platforms (61.2%) were moderately available while the most accessible resources were Radio/television (58.2%), and family members (54.2%). The findings further revealed a strong positive relationship between availability and accessibility ($r = 0.762$, $p < 0.01$), accessibility and utilisation ($r = 0.783$, $p < 0.01$) of SEIR. The study concluded that the strong positive relationship between availability, accessibility and utilisation of SEIR indicates that convenience, privacy, and ease of access are the primary determinants of whether the undergraduates will actually use the SEIR. The study recommended that the university should incorporate sex education in the curriculum of GNS course for all undergraduate students.

Keywords: Sex Education Information Resources (SEIR), Comprehensive Sexuality Education (CSE), Availability, Accessibility, Utilisation

INTRODUCTION

The provision of Comprehensive Sexuality Education (CSE) to young adults such as undergraduates has become a crucial pillar in the current global public health discourse for attaining the Sustainable Development Goals

(SDGs) pertaining to gender equality and health. This is because early marriage and early unintended pregnancy are global concerns for girls' health and education: low and middle-income countries, adolescent girls aged 15-19 have an estimated 21 million pregnancies each year, half of which are unintended (UNESCO, 2025). Consequently, the university environment becomes the transitional setting for undergraduates navigating difficult reproductive health decisions. However, the availability (the physical presence of information) and accessibility (the ease of obtaining that information without social or physical barriers) have a significant impact on

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the effectiveness of these decisions. Adolescence and early adulthood represent a critical period marked by significant physical, emotional, and social changes (Galanaki, & Leontopoulou, 2017) including the onset of sexual activity. For undergraduates in tertiary institutions, this phase often coincides with increased autonomy and exposure to diverse social influences, making them potentially vulnerable to risks associated with unprotected sex, unintended pregnancies, and sexually transmitted infections (STIs). Effective sex education is widely recognized as a crucial tool in empowering young people with the knowledge and skills necessary to make informed decisions about their sexual health and well-being (Goldfarb & Lieberman, 2021).

Sex education was confirmed as a public act upon the approval of the National Family Life and HIV Education Curriculum developed by the National Educational Research and Development Council (NERDC) in collaboration with the Universal Basic Education, Federal Ministry of Education, in 2003 (NERDC, 2003). The main objective of this curriculum was to; assist individuals in having a clear and factual view of humanity and provide individuals with information and skills necessary for rational decision making about their sexual health among other things. Sex education (SE) also known as sexual education is a broad term that encompasses the provision of information, skills, and attitudes related to human sexuality and relationships especially among young adults (Ages 15-24 years). Its primary aim is to empower, in the context of this study undergraduates to make informed decisions about their sexual health and well-being. Undergraduates are enrolled in institutions of higher learning for a bachelor's degree program. Most undergraduates in Nigeria usually fall within the age of 14-24 years (Popoola et al, 2018) which accounts for 50% of the population in Nigeria (NERDC, 2003). This age bracket is often referred to as a translational phase between childhood to adulthood which signifies the onset of individuals undergoing significant physical, emotional, social, and cognitive development requiring adequate sex education resources (Mastorci et al, 2024).

For the undergraduates the lack of reproductive health knowledge can compromise their health decisions and increase risks of unintended pregnancies and sexually

transmitted diseases (Aini et al, 2025) resulting in challenges related with stress from juggling roles, financial difficulties, psychological trauma, lack of support from family members, social stigma and physiological changes if not properly managed (Femi-Aderinto, 2023). In order to align with the NERDC (2003) objectives, undergraduates need to make informed decisions on their sexual health. The informed decision on sex education by the undergraduates ranges from decision on contraception and sexually transmitted infection (STI) prevention, understanding the reproductive organs including mensuration, sexual decision making, and reproductive health among many others. Among undergraduates, access to comprehensive sex education resources is therefore paramount, because university students are within the age group at highest risk for acquiring sexually transmitted infections and other negative health outcomes (Cassidy et al, 2018). Early pregnancy and utilisation of sex education resources among undergraduates has emerged as a significant concern, posing challenges to institutions of higher learning (Ukwuije, 2023; Obafemi, et al 2025)

Access to comprehensive and accurate sex education information resources plays a pivotal role in shaping undergraduates' understanding of reproductive health, contraception, and responsible sexual behaviour. When these resources are readily available, easily accessible and utilised students are better equipped to navigate their sexuality safely and avoid adverse outcomes such as early and unplanned pregnancies (Obafemi et al, 2025). Conversely, inadequate access or underutilisation of such resources can contribute to knowledge gaps and increased vulnerability. In the Nigerian context, and specifically within the university setting, the availability, accessibility utilisation of sex education information resources among undergraduates may vary significantly. Tai Solarin Federal University of Education (TASFUED) established in 2005 is the premier university of education in Nigeria and plays a pivotal role in shaping the future of young individuals especially in the education sector. However, the effectiveness of sex education programs in the university will hinge on the availability, accessibility and utilisation, of sex education information resources.

The availability of sex education information resources encompasses a variety of information resources ranging from using channels such as schools, religious houses, community, organisations, healthcare providers, and online resources, to the use of traditional sources like textbooks, magazines, newspapers, pamphlets to online platforms and interactive workshops. In the same vein, the extent to which these resources are readily accessible within institutions and communities varies significantly. Factors such as cultural norms, funding constraints, and institutional policies may influence the breadth and depth of available resources. Accessibility to these resources on the other hand refers not only to the physical presence of information resources but also to the ease of obtaining and comprehending them (Obafemi et al 2025). For undergraduates, barriers to accessibility may include stigma surrounding discussions of sexuality, lack of tailored resources for diverse populations, and limited awareness of available services. The effectiveness of sex education programs ultimately depends on their utilisation by the target audience (Obafemi et al 2025). Utilisation on the other hand is the intentional decision to use sex education resources in order to make informed decisions. Despite the availability of resources, factors such as misinformation, peer influence, and discomfort discussing sensitive topics may hinder undergraduates' willingness to engage and use sex education materials.

There has been some progress made by higher educational institutions in Nigeria in providing sex education. Some universities have incorporated sexuality education into their curriculum or offered courses related to sexual and reproductive health. For instance, at the University of Lagos, the Gender and sexuality studies program offers academic courses, guest lectures and research opportunities that explore issues related to sexuality and gender. Also at Obafemi Awolowo University, Ile-Ife there is a gender and social policy program that includes courses on sexual and reproductive health, gender equality and HIV/AIDS prevention. Similarly, at the Ahmadu Bello University, Zaria there is a gender studies Centre that conducts research and offers courses related to gender issues, including sexuality. At TASFUED, there is also a Centre for Human Right and Gender Advocacy. However, despite these efforts by institutions of higher learning it

appears that availability, accessibility and utilisation of sex education information resources appear low. This study therefore investigated the availability, accessibility and utilisation of sex education information resources to undergraduates in TASFUED.

STATEMENT OF THE PROBLEM

For undergraduates, especially those at the premier university of Education like TASFUED, who will eventually work as teachers, comprehensive sexual health literacy is an essential prerequisite. To reduce reproductive health risks and get ready for their roles in teaching, these students should ideally have unrestricted access to verified sex education resources. The need for sexual health information and the availability of these resources in a university environment, however, continue to diverge. Perhaps because of administrative bottlenecks and prevailing sociocultural stigmas, formal information resources whether in the university library, health Centre, or digital repositories appear to be either critically scarce or functionally inaccessible, even though students are increasingly exposed to sexual health issues. Consequently, inadequate access, availability and utilisation of sex education information resources, may force students to rely on unregulated digital content and unverified peer networks, which may spread false information and dangerous behaviours. The availability of sex education programs can therefore impact students' knowledge about contraception, pregnancy prevention, and reproductive rights. Limited access to accurate sex education information and resources may contribute further to higher rates of unplanned pregnancies.

Additionally, the consequences of information void are evidenced by the rising incidence of unintended pregnancies and STIs among undergraduates as seen from data at the university health centre, which not only threatens their health but also undermines their academic focus and future professional efficacy. If the barriers to resource availability and accessibility are not empirically identified and addressed, the university risks perhaps producing a cohort of educators ill-equipped to address sexual health issues in the broader Nigerian school system. Sex education information resources and other support

systems for undergraduates can help to make informed choices in order to continue their education. It is against this background that the study intends to examine the availability, accessibility and utilisation of sex education information resources among undergraduates in Tai Solarin Federal University of Education (TASFUED).

Research Questions

The following research questions guided the study:

1. What is the level of availability of sex education information resources to undergraduates in Tai Solarin Federal University of Education?
2. What is the level of accessibility of sex education information resources to undergraduates in Tai Solarin Federal University of Education?
3. What is the extent of use of sex education information resources by undergraduates in Tai Solarin Federal University of Education?

Hypothesis

The null hypothesis was tested at 0.05 level of significance:

H₀: There will be no significant relationship between the availability, accessibility and utilisation of sex education information resources among Tai Solarin Federal University of Education undergraduates.

RELATED WORKS

Concept of sex education and Sex Information Resources

Sex education is a comprehensive approach to providing individuals with accurate information, skills, and attitudes related to human sexuality, sexual health, relationships, and reproduction. It encompasses a wide range of topics and aims to promote healthy sexual behaviours, prevent adverse sexual health outcomes, and foster positive attitudes towards sexuality. According to UNESCO (2018), sex education covers various aspects of human sexuality, including anatomy, reproductive physiology, contraception, sexually transmitted infections (STIs), sexual orientation, consent, and healthy relationships. It provides individuals with the knowledge and understanding they need to make informed

decisions about their sexual health and behaviour. In addition, effective sex education takes a holistic approach that considers the physical, emotional, social, and cultural dimensions of sexuality. It addresses not only the biological aspects of reproduction but also the emotional and interpersonal aspects of sexual relationships (Santelli et al., 2017). This approach recognizes that sexual health is influenced by factors such as social norms, cultural beliefs, and access to healthcare services.

Also, based on the submission of World Health Organization (2010), sex education is tailored towards the developmental stage and needs of learners. It begins in childhood with age-appropriate information about body parts, puberty, and personal boundaries and continues through adolescence and adulthood with more comprehensive discussions about sexual health, contraception, and relationship dynamics. One of the primary goals of sex education is to promote healthy sexual behaviours and reduce the risk of negative sexual health outcomes such as unintended pregnancy and STIs. DeMaria and Brown (2019) added that sex education promotes inclusivity and non-judgmental attitudes towards diverse sexual orientations, gender identities, and relationship styles. It aims to create a safe and supportive learning environment where individuals feel comfortable discussing sensitive topics and asking questions without fear of stigma or discrimination. Furthermore, as pointed out by UNFPA (2018) sex education empowers individuals to make autonomous and responsible decisions about their bodies and relationships. It emphasizes the importance of communication, mutual respect, and consent in sexual interactions and teaches skills for negotiating boundaries and seeking help in situations of coercion or abuse.

Availability of sex education information resources

The availability of sex education information resources can be influenced by government policies and regulations. While there is growing recognition of the importance of comprehensive sexuality education, the implementation of such programs varies across states and educational institutions due to inconsistencies in policies (UNFPA Nigeria, 2020). Similarly, in developed countries like the United States, the availability of sex

education resources is affected by state-level policies and regulations. Research by Lindberg et al. (2016) highlighted the impact of state laws on the provision of comprehensive sex education in schools, with some states mandating abstinence-only programs over comprehensive approaches.

Educational institutions play a crucial role in providing sex education information resources to undergraduates. In Nigeria, universities and colleges may offer counselling services, health clinics, or peer education programs that provide students with access to information on sexual health issues (Asekun-Olarinmoye et al., 2020). Similarly, in developed countries, many educational institutions have implemented comprehensive sex education programs as part of their curriculum. Research by Plunkett et al. (2019) emphasized the importance of school-based sex education in promoting positive sexual health outcomes among adolescents. Technological advancements have expanded access to sex education information resources through online platforms and mobile applications. In developing nations of the world, digital platforms such as websites, social media, and mobile apps are increasingly used to disseminate information on sexual health and reproductive rights (UNFPA Nigeria, 2020). Studies further revealed that the most common sources of sex education information resources are family, friends, school, and the internet, depending mainly on the reliability of the source and the anonymity when using it (Silva et al 2024). Osadolor (2022) study also found out that the most common sources of first sex education among the respondents are school, family, social media, and others are television, books or magazines. Likewise, in developed countries, online resources and digital platforms provide undergraduates with access to comprehensive sex education information. Research by Widman et al. (2018) highlighted the effectiveness of online interventions in promoting sexual health knowledge and behaviours among college students in the United States.

Cultural attitudes and stigma surrounding sexuality can impact the availability of sex education information resources. In Nigeria, conservative cultural norms may hinder open discussions about sexuality and limit access to comprehensive sex education (Babalola et al., 2019). In the same vein, in some developed

countries, cultural taboos surrounding sexuality can contribute to the lack of availability of sex education resources. Research by Hussen et al. (2020) highlighted the importance of culturally sensitive approaches to sex education that address diverse beliefs and values. Addressing barriers to access requires a multi-faceted approach that involves collaboration between policy-makers, educators, healthcare providers, and digital platforms to ensure that undergraduates have access to accurate, age-appropriate, and culturally sensitive sex education resources.

Accessibility to Sex Education Information Resources

Accessibility to sex education information resources for undergraduates varies depending on factors such as geographic location, socio-economic status, cultural norms, and institutional support. Access to sex education resources can be limited in rural areas due to a lack of health facilities and educational infrastructure. A study by Odeyemi et al. (2020) found that adolescents in rural communities faced challenges in accessing comprehensive sexuality education due to the scarcity of trained educators and inadequate facilities. Similarly, in developed countries like the United States, geographic disparities in access to sex education resources persist. Research by Kortsmit et al. (2019) highlighted disparities in the provision of sexual health services and education across different states, with rural areas often having fewer resources and limited access to healthcare facilities.

In addition, the presence of institutional support can enhance the accessibility of sex education resources for undergraduates. In Nigeria, universities and colleges may offer counselling services, health clinics, or peer education programs that provide students with information and support on sexual health issues (Asekun-Olarinmoye et al., 2020). In developed countries, educational institutions play a crucial role in providing comprehensive sex education programs. Research by Plunkett et al. (2019) highlighted the importance of school-based sex education in promoting positive sexual health outcomes among adolescents in the United Kingdom.

Utilization of Sex Education Information Resources by Undergraduates

Sex education plays a pivotal role in promoting sexual health, preventing sexually transmitted infections (STIs), and facilitating informed decision-making among undergraduates. Recent studies have highlighted the diversity of sex education information resources accessed by undergraduates. A survey conducted by Smith et al. (2021) revealed that undergraduate students predominantly rely on online platforms for sex education information, including websites, social media platforms, and mobile applications. These digital resources offer anonymity and accessibility, making them attractive to young adults exploring sexual health topics. Furthermore, traditional resources such as pamphlets, books, and educational sessions remain relevant, particularly within university settings where educational campaigns and workshops are commonly organized (McDonagh et al., 2020). Similarly, the study of Ukwuije (2023) on the use of internet in sex education among undergraduates found out the internet was the most utilized source.

The frequency of utilizing sex education information resources among undergraduates varies across studies. Research by Jones and Johnson (2022) found that the majority of undergraduates' access sex education information online at least once a week, with a significant portion reporting daily usage. This frequent engagement reflects the importance placed on staying informed about sexual health matters. However, the frequency of utilization may vary based on factors such as gender, sexual orientation, and cultural background, highlighting the need for targeted interventions to ensure equitable access (Fisher et al., 2023). The utilization of sex education information resources by undergraduates is characterized by a reliance on online platforms, frequent engagement with digital resources. By leveraging technology while ensuring the accuracy and accessibility of information, stakeholders can empower undergraduates to make informed decisions and promote sexual health and well-being.

METHODOLOGY

The study adopted a design of the ex post facto type. The population of the study consisted of undergraduate students across the six colleges in TASFUED: College of Humanities, Science and Information Technology, Social and Management Sciences, Vocational and Technology Education, College of Specialised and Professional Education and College of Hospitality Agricultural Management. Currently there are 20,010 undergraduate students. The instruments was a structured questionnaire and an interview schedule for Focus Group Discussion. Using a proportionate stratified random sampling technique the undergraduates were stratified based on the Colleges. From each stratum a proportionate 5% (1,001) sample size was drawn. The questionnaires was administered on the students. Also a cohort of 18 students was randomly selected based on balloting from all the 25 academic departments across the six colleges. The selected students were subjected to Focus Group Discussion (FGD) for 2 hours based on a FGD schedule to prepared and validated by the researchers to further probe into the items in the questionnaire and elicit information that may be difficult to get through questionnaire to further complement the use of the questionnaire. Both qualitative and quantitative data were collected for the study for a period of four weeks using trained research assistants. The instrument was validated by seasoned experts and Cronbach alpha reliability of 0.80 was obtained through a trial test on 30 undergraduates from Olabisi Onabanjo university and Federal university of Agriculture. Data collected from surveys, interviews, and stakeholder consultations was analysed using appropriate statistical techniques and qualitative methods statistical tools, of t-test, frequency count, percentages as well as mean and standard deviation.

RESULTS AND DISCUSSION

Results

Results in Table 1 revealed that the majority, 50.2%, are from the Library and Information Science department, making it the most represented. This is followed by English and Political Science, each accounting for 4.4% of the respondents, and Business Education at 3.6%. Other notable departments include Secretarial Administration and Education

(3.0%), Economics (2.6%), and Agricultural Science (2.6%). Departments such as Educational Technology, Social Studies, and Yoruba each represent 1.6%, while Christian Religion Studies, Geography, and Chemistry account for 0.6% each. The least represented departments, with 0.2% each, include Adulthood Education, Entrepreneurship, and Fine Art, among others. Overall, the result reflects diverse departmental representation among the respondents, totalling 1001 undergraduates.

Table 1. Department of Respondents.

Department	Frequency	Percentage (%)
Accounting	8	.8
Adult Education	4	.4
Adulthood Education	2	.2
Agricultural Science	26	2.6
Animal Science	2	.2
Biology Education	28	2.8
Business Education	36	3.6
Chemistry	6	.6
Childhood Education	14	1.4
Christian Religion Studies	6	.6
Computer Science	20	2.0
Creative Art	10	1.0
Economics	26	2.6
Educational Management	14	1.4
Educational Technology	16	1.6
English	44	4.4
Entrepreneurship	2	.2
Entrepreneurship Education	22	2.2
Fine Art	2	.2
Fisheries and Wildlife Management	2	.2
French	2	.2
Geography	6	.6
Guidance and Counselling Psychology	14	1.4
Health Education	10	1.0
History & Diplomatic Studies	24	2.4
Hotel Hospitality Management	2	.2
Human Kinetic	2	.2
Islamic Studies	18	1.8
Library and Information Science	503	50.2
Mathematics	10	1.0
Physics	8	.8
Political Science	44	4.4
Secretarial Administration and Education	30	3.0
Social Studies	16	1.6
Technical Education	2	.2
Theatre Art	2	.2
Transportation Management	2	.2
Yoruba	16	1.6
Total	1001	100

Research Question 1: What is the level of availability of sex education information resources to undergraduates in Tai Solarin University of Education?

Result in Table 2 revealed that the weighted mean of the availability of sex education information resources, as measured on a three-point Likert scale, is 1.98 (SD = 0.375), reflecting a moderate level of availability. The most available resources for sex education include social media platforms such as Facebook and Twitter ($\bar{x}$ = 2.18, SD = 0.598), family members ($\bar{x}$ = 2.13, SD = 0.608), clinics ($\bar{x}$ = 2.11, SD = 0.628), primary health care centres ($\bar{x}$ = 2.10, SD = 0.616), and parents ($\bar{x}$ = 2.08, SD = 0.614). Conversely, the least available resources were the Scaleteen website, dedicated to sex education for teens and young adults ($\bar{x}$ = 1.83, SD = 0.706), online courses on sexual health through platforms such as Coursera and Udemy ($\bar{x}$ = 1.83, SD = 0.714), and attending webinars on sexual health ($\bar{x}$ = 1.82, SD = 0.765). This suggests that interpersonal and healthcare-related sources are more readily available compared to digital platforms and online learning resources.

Research Question 2: What is the level of accessibility of sex education information resources to undergraduates in Tai Solarin University?

Result in Table 3 reveal the weighted mean of the accessibility of sex education information resources, measured on a three-point Likert scale (1 = Not Accessible, 2 = Accessible, 3 = Highly Accessible), is 2.04 (SD = 0.385), indicating a generally accessible range of resources. The most accessible resources are social media platforms such as Facebook and Twitter ($\bar{x}$ = 2.22, SD = 0.634), family members ($\bar{x}$ = 2.17, SD = 0.655), radio/television ($\bar{x}$ = 2.13, SD = 0.634), teachers ($\bar{x}$ = 2.13, SD = 0.642), and parents ($\bar{x}$ = 2.13, SD = 0.646). The least accessible resources include the Scaleteen website ($\bar{x}$ = 1.81, SD = 0.666), the Sexual Health Alliance organization ($\bar{x}$ = 1.89, SD = 0.690), and attending webinars on sexual health ($\bar{x}$ = 1.89, SD = 0.759). These findings highlight that interpersonal and traditional media sources are more readily accessible compared to some specialized or digital platforms.

Research Question 3: What is the extent to which TASUED undergraduates utilize sex education information resources?

Result in Table 4 revealed that the weighted mean for the extent of utilization of sex education information resources is 2.03 (SD = 0.403), reflecting use of these resources overall. The most utilized resources include social media platforms such as Facebook and Twitter ($\bar{x}$ = 2.21, SD = 0.639), friends as sources of information ($\bar{x}$ = 2.16, SD = 0.654), parents ($\bar{x}$ = 2.16, SD = 0.658), clinics ($\bar{x}$ = 2.11, SD = 0.652), and libraries ($\bar{x}$ = 2.10, SD = 0.681). The least utilized resources are the Scaleteen website for sex education aimed at teens and young adults ($\bar{x}$ = 1.87, SD = 0.681), attending webinars on sexual health ($\bar{x}$ = 1.88, SD = 0.708), and the Sexual Health Alliance's resources for professionals and non-professionals ($\bar{x}$ = 1.89, SD = 0.707). This highlights a preference for easily accessible and familiar sources of information such as social media, friends, and family, while less emphasis is placed on specialized online platforms and organized webinars.

Hypothesis 1: There is no significant relationship between the availability, accessibility, and utilization of sex education information resources and the prevalence of early pregnancy among Tai Solarin Federal University of Education undergraduates.

The result in Table 5 presented the relationships between the availability, accessibility, and utilization of sex education information resources, employing Pearson correlation analysis. Results revealed a strong positive correlation between the availability and accessibility of these resources (r = 0.762, p < 0.01), suggesting that improved availability significantly enhances accessibility. Similarly, a strong positive relationship was observed between accessibility and utilization (r = 0.783, p < 0.01), as well as between availability and utilization (r = 0.703, p < 0.01), indicating that both factors are critical in driving effective use. These findings highlight the interconnected nature of these variables and underscore the importance of ensuring availability and accessibility to foster utilization. All the correlations were statistically significant at the 0.01 level, based on a sample size of 1,001 respondents.

Discussion

The result on the availability of sex education information resources to undergraduates revealed a moderate level of availability of Facebook, X (Twitter), family members, clinics, primary health care centers and parents while the least available sources are online courses on sexual health through platforms such as Coursera and Udemy and attending webinars on sexual health. This suggests that interpersonal and healthcare-related sources are more readily available compared to digital platforms and online learning resources. This finding corroborates the findings of Silva (2024) and Osadolor (2022) that the common sex education resources are family, friends, internet, social media and school.

Result from the quantitative data also revealed the thoughts of the undergraduates using pseudo names saying:

Respondent A: I have never seen anything like that since I resumed. Maybe it's available, but it's not visible or advertised to us. Most of the things I know, I hear from friends or sometimes from TV shows.....- Ifeanyi (100L, Political Science).

..... I think it depends on your department. For those in health-related courses, they may have access to such resources. But for the rest of us, nothing official is made available. I mostly discuss sex education topics with friends..... - Tunde (300L, Educational Management).

Table 2. Availability of Sex Education Information Resources.

Availability of Sex Education Information Resources	Not Available	Available	Readily Available	Mean ($\bar{x}$)	SD
Planned Parenthood website which is a leading provider of sexual health	425 42.5%	300 30.0%	276 27.6%	1.85	.824
Scaleteen website dedicated for information on sex education for teens and young adults	347 34.7%	474 47.4%	180 18.0%	1.83	.706
Centre for Disease control and prevention which has information on sexual health	301 30.1%	502 50.2%	198 19.8%	1.90	.699
Sexual health alliance-organisation with resources for both professional and non-professional on sexual health	349 34.9%	438 43.8%	214 21.4%	1.87	.738
Primary Health Care Centres	144 14.4%	611 61.1%	246 24.6%	2.10*	.616
Hospitals	146 14.6%	631 63.1%	224 22.4%	2.08*	.603
Advocates for Youth Organisation	295 29.5%	460 46.0%	246 24.6%	1.95	.734
Online courses on sexual health on websites such as Coursera, Udemy	355 35.5%	462 46.2%	184 18.4%	1.83	.714
Attending Webinars on sexual health	401 40.1%	382 38.2%	218 21.8%	1.82	.765
Books on sex education	265 26.5%	550 54.9%	186 18.6%	1.92	.667
Magazines	229 22.9%	560 55.9%	212 21.2%	1.98	.664
Articles on sex education	277 27.7%	524 52.4%	200 20.0%	1.92	.686
Pamphlets/bulletins	309 30.9%	480 48.0%	212 21.2%	1.90	.715
Radio programmes	178 17.8%	601 60.1%	222 22.2%	2.04*	.631
Social media such as Facebook, Twitter	106 10.6%	612 61.1%	283 28.3%	2.18*	.598
Clinics	148 14.8%	595 59.4%	258 25.8%	2.11*	.628
Libraries	203 20.3%	576 57.6%	222 22.2%	2.02*	.652
Friend	153 15.3%	611 61.1%	237 23.7%	2.08*	.619

Family members	129 12.9%	615 61.5%	257 25.7%	2.13*	.608
Church Programmes	213 21.3%	553 55.3%	235 23.5%	2.02*	.669
Radio/Television	164 16.4%	597 59.6%	240 24.0%	2.06*	.631
Health workers/Doctor	190 19.0%	567 56.6%	244 24.4%	2.05*	.657
Teacher	165 16.5%	608 60.7%	228 22.8%	2.06*	.624
Parents	151 15.1%	617 61.6%	233 23.3%	2.08*	.614
Sexual Health Tracking Apps for tracking menstrual cycle and ovulation	346 34.6%	419 41.9%	236 23.6%	1.89	.755
YouTube Channels like sex planations	331 33.1%	482 48.2%	188 18.8%	1.86	.706
Criteria mean = 2.00		Weighted Mean		1.98	.375

Table 3. Accessibility of sex education information resources.

Accessibility of Sex Education Information Resources	Not Accessible	Accessible	Highly Accessible	$\bar{x}$	SD
Planned Parenthood website which is a leading provider of sexual health	355 35.5%	336 33.6%	310 31.0%	1.96	.814
Scaleteen website dedicated for information on sex education for teens and young adults	333 33.3%	522 52.1%	146 14.6%	1.81	.666
Centre for Disease control and prevention which has information on sexual health	311 31.1%	462 46.2%	228 22.8%	1.92	.730
Sexual health alliance-organisation with resources for both professional and non-professional on sexual health	297 29.7%	514 51.3%	190 19.0%	1.89	.690
Primary Health Care Centres	164 16.4%	609 60.8%	228 22.8%	2.06*	.623
Hospitals	164 16.4%	597 59.6%	240 24.0%	2.06*	.631
Advocates for Youth Organisation	239 23.9%	512 51.1%	250 25.0%	2.01*	.699
Online courses on sexual health on websites such as Coursera, Udemy	309 30.9%	450 45.0%	242 24.2%	1.93	.739
Attending Webinars on sexual health	351 35.1%	412 41.2%	238 23.8%	1.89	.759
Books on sex education	225 22.5%	534 53.3%	242 24.2%	2.02*	.683
Magazines	187 18.7%	570 56.9%	244 24.4%	2.06*	.654
Articles on sex education	213 21.3%	556 55.5%	232 23.2%	2.02*	.667
Pamphlets/bulletins	277 27.7%	464 46.4%	260 26.0%	1.98	.733
Radio programmes	162 16.2%	569 56.8%	270 27.0%	2.11*	.648
Social media such as Facebook, Twitter	114 11.4%	550 54.9%	337 33.7%	2.22*	.634
Clinics	150 15.0%	597 59.6%	254 25.4%	2.10*	.627
Libraries	184 18.4%	538 53.7%	279 27.9%	2.10*	.674
Friend	167 16.7%	567 56.6%	267 26.7%	2.10*	.651

Family members	143 14.3%	543 54.2%	315 31.5%	2.17*	.655
Church Programmes	207 20.7%	509 50.8%	285 28.5%	2.08*	.697
Radio/Television	146 14.6%	583 58.2%	272 27.2%	2.13*	.634
Health workers/Doctor	168 16.8%	560 55.9%	273 27.3%	2.11*	.656
Teacher	151 15.1%	573 57.2%	277 27.7%	2.13*	.642
Parents	153 15.3%	567 56.6%	281 28.1%	2.13*	.646
Sexual Health Tracking Apps for tracking menstrual cycle and ovulation	293 29.3%	456 45.6%	252 25.2%	1.96	.737
YouTube Channels like sexplanations	291 29.1%	466 46.6%	244 24.4%	1.95	.730
Criteria mean = 2.00				Weighted Mean	2.04
					.385

Note * indicates significant

Table 4. Extent of Utilisation of Sex Education Information Resources.

Extent of Utilization of Sex Education Information Resources	Not Utilised	Utilised	Highly Utilised	Mean $\bar{x}$	SD
Planned Parenthood website which is a leading provider of sexual health	337 33.7%	372 37.2%	292 29.2%	1.96	.792
Scaleteen website dedicated for information on sex education for teens and young adults	307 30.7%	520 51.9%	174 17.4%	1.87	.681
Centre for Disease control and prevention which has information on sexual health	309 30.9%	454 45.4%	238 23.8%	1.93	.736
Sexual health alliance-organisation with resources for both professional and non-professional on sexual health	313 31.3%	488 48.8%	200 20.0%	1.89	.707
Primary Health Care Centres	180 18.0%	591 59.1%	230 23.0%	2.05*	.638
Hospitals	168 16.8%	601 60.1%	232 23.2%	2.06*	.629
Advocates for Youth Organisation	241 24.1%	538 53.8%	222 22.2%	1.98	.680
Online courses on sexual health on websites such as Coursera, Udemy	285 28.5%	490 49.0%	226 22.6%	1.94	.712
Attending Webinars on sexual health	317 31.7%	486 48.6%	198 19.8%	1.88	.708
Books on sex education	229 22.9%	522 52.2%	250 25.0%	2.02*	.692
Magazines	197 19.7%	574 57.4%	230 23.0%	2.03*	.653
Articles on sex education	235 23.5%	526 52.6%	240 24.0%	2.01*	.689
Pamphlets/bulletins	249 24.9%	512 51.2%	240 24.0%	1.99	.699
Radio programmes	185 18.5%	538 53.8%	278 27.8%	2.09*	.674
Social media such as Facebook, Twitter	120 12.0%	548 54.8%	333 33.3%	2.21*	.639
Clinics	162 16.2%	563 56.3%	276 27.6%	2.11*	.652
Libraries	188 18.8%	528 52.8%	285 28.5%	2.10*	.681
Friend	147 14.7%	549 54.9%	305 30.5%	2.16*	.654
Family members	161	543	297	2.14*	.663

	16.1%	54.3%	29.7%		
Church Programmes	191 19.1%	531 53.1%	279 27.9%	2.09*	.680
Radio/Television	166 16.6%	547 54.7%	288 28.8%	2.12*	.663
Health workers/Doctor	181 18.1%	550 55.0%	270 27.0%	2.09*	.666
Teacher	175 17.5%	567 56.7%	259 25.9%	2.08*	.653
Parents	149 14.9%	543 54.3%	309 30.9%	2.16*	.658
Sexual Health Tracking Apps for tracking menstrual cycle and ovulation	285 28.5%	470 47.0%	246 24.6%	1.96	.728
YouTube Channels like sexplanations	297 29.7%	475 47.5%	229 22.9%	1.93	.722
Criteria mean = 2.00				Weighted Mean	
				2.03	.403

Note * indicates significant

Table 5. Correlation showing relationship between Availability, Accessibility, Utilization and Perception of Sex Education Information Resources.

		Availability	Accessibility	Utilization	Perception
Availability of Sex Education Information Resources	Pearson Correlation	1	.762**	.703**	.357**
	Sig. (2-tailed)		.000	.000	.000
	N	1001	1001	1001	1001
Accessibility of Sex Education Information Resources	Pearson Correlation	.762**	1	.783**	.377**
	Sig. (2-tailed)	.000		.000	.000
	N	1001	1001	1001	1001
Extent of Utilization of Sex Education Information Resources	Pearson Correlation	.703**	.783**	1	.381**
	Sig. (2-tailed)	.000	.000		.000
	N	1001	1001	1001	1001

**. Correlation is significant at the 0.01 level (2-tailed).

.....Most of what I know about sex education is from social media or Google, not from the school.....-Mariam (200L, LIS).

...During my 200 level, a reproductive health NGO came to talk to us, and they shared flyers and materials. That's the only time I got access to sex education content. I also learn some things from watching health programmes on TV....-Zainab (400L, Biology Education).

The level of accessibility of the undergraduates to sex education information resources revealed that the most accessible sex education resources are social media platforms such as Facebook and Twitter, family members, radio/television, teachers and parents. While the least accessible resources are sexual health alliance organisation and attending webinars on sexual health. These findings highlight that interpersonal and traditional media sources are more readily accessible compared to some specialised or digital platforms.

To corroborate these findings the focus group interview excerpts revealed that the undergraduates affirmed that

..... It's more accessible on my phone than in school. I use Google, Instagram, and sometimes Nairaland forums to read up. In school, there's nothing digital or official I can point to that makes it easy to access sex education-Farouk (200L, Chemistry Education).

....Me I get most of my sex education information from YouTube and WhatsApp groups. I don't think TASUED has any centralised platform for that kind of thing. Maybe the health centre has something, but I've never been told.....-Emeka (400L, Political Science Education).

.....It's not accessible in the real sense. I am not even aware of any posters or clubs that promote that kind of information openly. If you ask someone for help, they may even look at you somehow...- Deborah (100L, Social Studies).

.....As a health education student, I can say we have access to some materials, but they are mostly in printed textbooks. They're not free or handed out, so others who are not in my department may not have that kind of access.....-Bolaji (200L, Health Education).

The extent to which the undergraduates utilise sex education information revealed that the most utilised resources are social media platforms such as Facebook and Twitter, friends, parents, clinics and libraries. The least utilised resources are attending webinars on sexual health, and the Sexual Health Alliance's resources for professionals and non-professionals. This highlights a preference for easily accessible and familiar sources of information such as social media, friends, and family, while less emphasis is placed on specialised online platforms and organised webinars.

The focus group participants were of the view that

.....I've used YouTube videos and blogs more than anything from school. The fear of being judged makes many girls avoid using the available resources in public places. But personally, I try to stay informed because I don't want an unplanned pregnancy to affect my studies....-Mariam (200L, English Education).

.....Some students utilise the resources, but not to a great extent. I think there's still a gap between availability and actual use. People fear being judged or misunderstood if they're seen reading such materials, especially in the library. So they prefer to browse discreetly online....-Seyi (300L, Library & Information Science).

.....Me, I just learn from my friends or from TV. I've never used any school materials to learn about sex education. Most guys my age just believe they already know it all, so we don't really go and look for official information....-Emeka (400L, Political Science Education)

.... To be sincere, the utilisation is low. People prefer to gist with friends than go and look for proper resources. I've never personally used any material from TASFUED about sex education. Everything I know is from social media and sometimes from what older people tell us...- Tunde (300L, Educational Management).

CONCLUSION

The study investigated the availability, accessibility and utilisation of sex education information resources among undergraduates in Tai Solarin Federal university of Education. The findings from the study was able to affirm that availability, accessibility, and utilisation do not exist in isolation; they function as a continuous pipeline. Availability alone is insufficient if sex education resources exist in a university library or health center but are locked behind complex administrative procedures before access, poor digital infrastructure, or social stigma, accessibility drops, and utilisation ultimately collapses. The study further concludes that a strong positive relationship exist between accessibility and utilisation which indicates that convenience, privacy, and ease of access are the primary determinants of whether undergraduates will actually use sex education information resources. When barriers to access are removed, undergraduates naturally utilise the resources more frequently.

RECOMMENDATIONS

The study therefore recommended the following:

1. There should be provision of information resources on sex education in the university library.
2. There should be synergy and regular awareness campaigns/road walk/talk shows by center for Gender advocacy, university health center and the counselling unit of the university to sensitise undergraduates on their reproductive health and information resources available within the university.
3. The university should incorporate sex education in the curriculum of GNS course for all undergraduate students.
4. At the university library, counselling centre and the university medical centre sex education information resources should be placed in easily navigable, semi-private sections rather than behind restricted desks requiring permission.

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