Ghana Journal of Education: Issues and Practice (*GJE*)



NYANSAPO - "Wisdom Knot"

Symbol of wisdom, ingenuity, intelligence and patience

Demographic Factors and Online Sexual Behaviours of Tertiary Institution Students in Osun State, Nigeria: Counselling Implications

Michael Adeniyi Omoyemiju

Department of Educational Foundations and Counselling, Obafemi Awolowo University, Ile-Ife, Nigeria

Email Address: adeyemiju@oauife.edu.ng

Abstract

The study examined the dimension of online sexual behaviour of tertiary institution students in Osun State, Nigeria. It also investigated the predictive contribution of demographic factors on online sexual behaviour of students. Descriptive correlational design was adopted for the study. The population for the study consisted of all tertiary institution students in Osun State. A sample of 1600 students was selected to participate in the study. Online Sexual Behaviour Scale (OSBS) was the instrument designed and used to collect data for the study. Frequency counts was used to answer the research question while linear regression analysis used to test the research hypothesis. The findings showed that 34.1% of students sampled have experienced partnered-arousal with another person while 48.5% of them have experienced nonarousal. Only 17.4% of them have had experience of solitary arousal with another person. The result also showed that place of residence was the strongest predictor of online sexual behaviour among students (B = 12.164; t = 10.091; p < 0.05). This study concluded that demographic factors were predictive factors of online sexual behaviour among tertiary institution students. Thus, appropriate counselling implications were made, and it was recommended that counselling psychologists and sex educators should develop a comprehensive programme that will specifically promote safe online sexual practices among students.

Key words: Sexual behaviour, Predictors, Online, Students, Demographic Factors.

Introduction

In Nigeria and the rest of the world, sexual activities of tertiary institution students have continued to increase and change in the last

two decades. Not only that, advent of the internet and its utilization rate by students have also increased with a great influence on their sexual expression (Johnson, 2015). Apart from academic importance of internet to students, students also make use of internet for social interaction and express their sexuality. Some of the activities that also came out of this include online dating and online sex, which may have devastating effects if not properly expressed by students. Kuss, Van Rooiji, Shorter, Griffiths, and Van de Mheen (2013) have reported that there is a positive association between the rate of students' use of internet and risky sexual behaviours. When the internet is used as a means of expressing sexual behaviour by one person to another or to self, it is referred to as online sexual behaviour.

Online sexual behaviour has been described as the use of the Internet for activities involving sexual expression with the aims of recreation, entertainment, exploration, support, education, commerce and/or in search of sexual/romantic partners (Cooper & Griffin-Shelly, 2002). Johnson (2015) describes online sexual behaviour as sexual activities that take place with the use of the internet and/or mobile phone. By implication, for online sexual behaviour to take place, there must be availability of internet service and this can take place with the use of computer devices such as desktop, micro or minicomputer and even smart phones. In the last two decades due to the increase in the availability and accessibility of internet facilities all over the world, young people's use and participation in online sexual activities have increased and this has changed the way they expressed their sexuality (Barrada, Gomez, & Castro, 2019).

Online sexual behaviour has been categorised into three different but interrelated levels. They are non-arousal, solitary arousal, and partnered-arousal (Shaughnessy, & Byers 2017). Non-arousal sexual activities refer to sexually-related activities that are not centered around materials that are sexually stimulating, yet rather include educational as well as relational experiences, such as visiting educational sites, looking for dating accomplices on the internet, etc. Solitary-arousal sexual activities include single direction access or creation of stimuli that are sexually explicit (for instance, posting or viewing pictures or videos that are sexually explicit). The partnered-arousal sexual exercises are intuitive and require the involvement of one other individual at the least for the sexual action to happen (e.g., trading instant messages about wanted or fantasized sexual acts with

someone else, taking part in sexual acts simultaneously as another person on webcam).

Some studies elsewhere have associated online sexual behaviour with increased sexual risk-taking behaviour (Wolak, Finkelhor, Mitchell & Ybarra, 2008; Baumgartner, Valkenburg & Peter 2010). Apart from this, there is a high risk of meeting dishonest people who may have contracted HIV/AIDS probably because of the intensity of involvement in behaviour ranges from non-sexual relationship to unprotected sexual intercourse with multiple partners. Most activities that youth practice offline, they also do online.

A study of an online project, including data from 20 European countries, found that there was a statistically significant gender difference in sexting and the study predicted that in countries with more traditional male and female roles, boys engaged in sexting more than girls (Baumgartner, Sumter, Peter, Valkenburg, & Livingstone, 2014). In a related study conducted by Ungdomsstyrelsen (2012), it was reported that girls posted sexual pictures more often than boys. Another study had reported that 35.2% to 45.2% of men who had sex with other men are those who engaged in unprotected sex and had used the internet as a means of linking up with their sex partners (Klein, 2010). Other reported issues, especially among young women includes emotional and sexual dangers, such as getting involved with someone who was not the one met online, contracting STD or even becoming pregnant (Couch, Liamputtong, & Pitts, 2012). Another related problem and risktaking decision are experiences of sexual violence and abuse such as sexual exploitation and rape. All these are potent enough to lead to negative psychological (depression, aggression, low self-esteem, suicidal ideation), educational (school dropout, illiteracy), social (social unrest and imbalance), and physical health (cardiovascular health problem, HIV/STDs) issues and may impair the overall well-being of victims or cause even untimely death.

All these online sexual behaviours which may lead to increased risks of experiencing consequences are known as online sexual risk behaviour. Baumgartner, Valkenburg and Peter (2010) defined online sexual risk behaviours as a means of exchanging intimate sexually insinuating messages or material with individuals exclusively known online. For instance, some studies have identified online sexual behaviour like sexting with high-risk sexual behaviours like multiple partners, anal sex and unprotected sex (Benotsch, Snipes, Martin, &

Bull, 2013; Perkins, Becker, Tehee, & Mackelprang, 2014; Rice et al., 2014). Relatedly, in a study by Wolak, Finkelhor, Mitchell and Ybarra (2007), 49% of the youth had communicated online with a stranger. In Nigeria for instance, there was information about the sudden death of Cynthia Osogwu, a former student of Nasarawa State University, who was reportedly invited by her Facebook friends from Abuja to Lagos and got killed by the same set of Facebook friends after she had been raped (Usman, 2012). Notwithstanding the dangers, these risky behaviours are steadily becoming social norms among young adults, especially undergraduates.

Many studies have shown that human risky sexual behaviours are the product of many factors such as age, gender, environment, place of residence, religious affiliation (Ogungbamila, 2013: Letamo, & Mokgatlhe, 2013; Amoateng, Kalule-Sabiti &Arkaah. Odimegwu & Somefun, 2017). Particularly in Nigeria, previous studies have affirmed the influence of student's demographic factors on sexual behaviour (Ogungbamila, 2013: Arulogun, Ogbu & Dipeolu, 2016; Ifeadike, Nnebue, Oparaji, Okorie, Okoro, & Okoyechira, 2018). Even though empirical information on the demographic factors of students' online sexual behaviour is still very scanty in sexuality literature, most of the available empirical studies were fraught with the inability to explain the risky sexual behaviour with respect to the prevailing on the online activities of students across various tertiary institutions.

It has been established empirically that about 99% of Nigerian youths are exposed to at least one media source or the other (National Population Commission, 2009), where sexuality-related information is disseminated and with the evidence that tertiary institution students access the internet using their mobile phones, laptops and other media devices (Omoyemiju, 2018), get connected with the opposite sex and engage in a dating relationship with each other (Nwosu, 2017). Given the growing trendy phenomenon of sexual behaviour, then what is the dimension of online sexual behaviour among tertiary institution students in Osun State? Scientific information about online sexual behaviour, which can be used to develop appropriate counselling intervention for students and in taking reproductive health decisions by students is very scanty in literature.

Following this background, it is now essential for the counselling psychologists to be inclined with empirical information about online sexual behaviours of tertiary institution students which can

be used to help students avoid undesired outcomes. Therefore, the aim of this study is to examine the predictive contribution of demographic factors like age, gender, place of residence, institution ownership type, religious affiliation and residential type on online sexual behaviour of students. In order to achieve this objective, the research question and hypothesis raised are:

The Research Question:

What is the dimension of online sexual behaviour among students?

The Research Hypothesis:

Demographic factors will not significantly predict the online sexual behaviour of students.

Methods

This was an exploratory study using descriptive correlational design. All tertiary institution students in Osun State, Nigeria formed the study population. Proportionate stratified sampling technique was used to select a total sample of 1,600 students from four institutions (two universities and two polytechnics) using institution's ownership as strata. The selection procedure used is summarised in Table 1.

Table 1: Schools and students selected for the study

Institution	Private	Public	Total
Polytechnic	300	500	800
University	300	500	800
Total	600	1000	1600

Five Faculties/Schools common to all four institutions were selected by purposive sampling. Based on the population size, while 300 students each were selected from two private institutions (one university and one polytechnic) making a total of 600 students selected from private institutions. Also, 500 students each were selected from two government owned institutions (one university and one polytechnic) making a total of 1000 students selected from public institutions. Data were collected using a self-developed instrument

titled "Online Sexual Behaviour Scale (OSBS)". The OSBS has two sections. Section A contained four items on demographic information of the respondents. This section was designed to elicit information about gender, age, institution type, academic level, place of residence in school and religious affiliation. Section B contained 21 items measuring online sexual behaviour of respondents. (non-arousal, solitary arousal, partnered arousal). Under this section, participants were asked to indicate the frequency of their engagement in online sexual activities using the three dimensions: non-arousal (e.g., looked for information about sexual activities online), solitary-arousal (e.g., viewed sexually explicit pictures involving men and women), and partnered-arousal (e.g., wrote and sent stories about sexual acts to someone through email and/or social network site) activities. All the 21 items were carefully worded and scrutinised on the basis of the face, construct and factorial validity.

In order to determine the suitability and adequacy of the instrument, the instrument was subjected to Kaiser-Mever-Olkin measure of sampling adequacy and Bartlett's Test of Sphericity (BTS). The results showed that only 17 out of 21 items in the instrument conformed to Kaiser (1974) criteria; the remaining four did not conform and were deleted. In determining the internal consistency of the instrument, Cronbach alpha, Split-half and Spearman Brown were used to test the degree of its internal consistency. The reliability coefficients obtained from Cronbach alpha, Split-half and Spearman Brown were 0.922, 0.801 and 0.892 respectively. Participants were asked to rate the level of reflection with which they had engaged in each behaviour during the past few months on a 5-point Likert-type scale, ranging from True of Me (4) to Neutral (0). The items were scored 4, 3, 2, 1 and 0 for "True of Me", "Somewhat True of Me", "Somewhat Untrue of Me", "Untrue of Me" and "Neutral" respectively.

The individual's score on the 17 items was computed. With this procedure, the maximum obtainable score was 68 while the minimum was zero. The higher the score, the more an individual engages in online sexual activities. The instrument was administered with the assistance of four research workers under the supervision of the principal researcher. Data collected were subjected to descriptive and inferential statistical analyses. The research question was answered using descriptive statistics while the research hypothesis was tested using multiple regression analysis.

Results

Sample Characteristics

This section describes the demographic factors of students with respect to their gender. The summary is presented in Table 2.

Table 2: Students' demographic factors across gender

Demographic factors	Male	Female	Total
	(N=690)	(N=910)	(N=1,600)
Age Bracket			
15-19	16.0	22.2	38.2
20-24	20.4	31.5	51.9
25-29	6.5	2.9	9.4
>29	0.2	0.2	0.5
Institution Ownership			
Private	18.4	19.1	37.5
Public	24.8	37.8	62.5
Level			
Part I	13.6	18.5	32.1
Part II	10.9	16.6	27.6
Part III	5.8	6.6	12.3
Part IV	12.3	14.9	27.2
Part V	0.5	0.2	0.8
Religion			
Christianity	31.4	42.1	73.5
Islamic	10.4	13.5	23.9
Traditional	1.4	1.2	2.6
Residential Type			
School Hostel	11.4	15.2	26.6
Off Campus	31.8	41.6	73.4

As shown in Table 2, out of 1,600 sampled participants, 690 (43.1%) of them were male while 910 (56.9%) were female. This is an indication that the population is skewed towards female. Also, 38.2% of the participants were within 15-19 age brackets out of which16.0% and 22.2% of them were male and female respectively. In addition, the majority (51.9%) of the participants were found within 20-24 age

brackets of which 20.4% and 31.5% were male and female respectively. While 9.4% of the participants were within 25-29 age brackets, 0.5% of them reported to be more than 29 years old. It was also observed from the result that more than half (62.5%) of the participants were students of government owned institutions while 37.5% of them were students of private institutions with the greatest number of them skewed towards female. About one-third of the sampled participants were in the 2nd and 4th year of their study in their respective institutions. Thirtytwo percent of the participants were in the first year. Furthermore, the majority of the participants (73.4%) reported residing outside the school community and 73.5% of them were practising Christian religion.

Research Ouestion: What is the dimension of online sexual behaviour of students?

To answer this question, all the items on online sexual behaviour were subjected to Exploratory Factor Analysis (EFA) in order to identify the latent constructs underlying the online sexual behaviour of students. During this process, the whole construct was scaled down into three factors (non-arousal, solitary-arousal and partnered-arousal). Each of these factors was regarded as a dimension of online sexual behaviour and was labeled with a nominal value ranging from one to three. The resulting scores were used to build the three dimensions of online sexual behaviour. The result is summarised in Table 3.

Table 3: Descriptive statistics of dimension of online sexual behaviour of students

Dimension of online sexual Behaviour	Frequency	Percentage	
Partnered Arousal	546	34.1	
Non-Arousal	776	48.5	
Solitary Arousal	278	17.4	
Total	1600	100.0	

From Table 3, it was observed that 34.1% were reported to have experienced or expressed partnered-arousal while about half of them (48.5%) to have experienced non-arousal. Only 17.4% of the students have had experience of solitary arousal. In addition, the results on the

dimensions of online sexual behaviour among students were cross-tabulated with respect to students' demographic factors (sex, age, religion, institution type and place of resident) and were subjected to descriptive statistics. The result is presented in Table 4.

Table 4: Descriptive statistics of dimensions of online sexual behaviour across demographic factors of students

Demographic	Pattern of Online Sexual Behaviour				
Factors	Partnered	Non-Arousal	Solitary	Total	
	Arousal		Arousal		
Gender	%	%	%	%	
Male	10.5	23.2	9.4	43.1	
Female	23.6	25.5	8.0	56.9	
Age Bracket					
15-19	18.1	15.1	5.0	38.2	
20-24	13.8	27.8	10.4	51.9	
25-29	2.0	5.4	2.0	9.4	
30 and above	0.2	0.2	0.0	0.5	
Institution Ownership					
Private	18.6	8.0	10.9	37.5	
Public	15.5	40.5	6.5	62.5	
Religion					
Christianity	30.4	30.5	12.6	73.5	
Islamic	3.6	16.1	4.1	23.9	
Traditional	0.1	1.9	0.6	2.6	
Residential Type					
School Hostel	16.4	5.1	5.1	26.6	
Off Campus	17.8	43.4	12.2	73.4	

From Table 4, it was observed that 10.5% of male participants and 23.6% of female participants were found to have experienced partnered arousal. While 23.2% and 25.5% of male and female participants had exhibited non-arousal respectively, only 9.4% and 8.0% of male and female participants had claimed to have exhibited solitary arousal respectively. With these figures, it is concluded that online sexual behaviour was relatively more prevalent among female than male students and was skewed towards non-arousal.

It was also observed that 18.1%, 13.8%, 2.0% and 0 (0.2%) of participants who claimed to have demonstrated partnered arousal were within the age range of 15-19, 20-24, 25-29 and 30 years and above respectively. While 15.1%, 27.8%, 5.4% and 0.2% of participants that manifested non-arousal were found within the age ranges of 15-19, 20-24, 24-29, and 30 years and above respectively, only 5.0%, 10.4%, 2.0% and 0.0% of those who were within the age ranges of 15-19, 20-24, 25-29 and 30 years and above were found to exhibit solitary arousal respectively. The implication of these figures is that online sexual behaviour was more prevalent among students within the age range of 20-24 years than other age groups. It was observed that 18.6%, 8.0% and 10.9% of participants that exhibited partnered arousal, non-arousal and solitary arousal respectively were students of private institutions while 15.5%, 40.5% and 6.5% of those that claimed to have expressed partnered arousal, non-arousal and solitary arousal respectively were students of government owned institutions.

Also, 30.4%, 30.5 and 12.6% of the participants that practise Christian religion were found to have experience partnered arousal, non-arousal and solitary arousal respectively, while 3.6%, 16.1% and 4.1% that reported to have expressed partnered arousal, non-arousal and solitary arousal were those practicing Islamic religion. Only 0.1%, 1.9% and 0.6% them that claimed to be practising traditional religion were found to have exhibited partnered arousal, non-arousal and solitary arousal respectively. Lastly, the results showed that 16.4%, 5.1% and 5.1 of those who manifested partnered arousal, non-arousal and solitary arousal were campus residents while 17.8%, 43.4% and 12.2% of the participants that exhibited partnered arousal, non-arousal and solitary arousal were living outside the campus.

Research Hypothesis: Demographic factors will not significantly predict the online sexual behaviour of students.

This hypothesis was tested using regression analysis. The result of the regression analysis on the predictive contribution of the combination of the six explanatory variables (sex, age, level, religion, place of residence and institution type) on online sexual behaviour of students are summarized in Table 5.

Table 5: Summary of multiple regression analysis on the predictive contribution of explanatory variables on online sexual behaviour

Model	R	R Square	Adjusted R Square	Std. Error	P
Sex					
Age Level	rel igion 0.366^a 0.134 0.131 12				
Religion		12.56012	0.000		
Residence					
Institution Type					

Dependent variable: online sexual behaviour

The demographic factors explored as predictors of students' online sexual behaviour were gender, age, level, religion, place of residence and institution type. As observed from Table 1, a coefficient of determination R-square value of 0.134 and Adjusted R-square value of 0.131 were obtained. This is an indication that the model can account for at least 13.1% and at most 13.4% of any variance observed in online sexual behaviour. The value was statistically significant at 0.05 level. This implies that the combination of all the demographic factors (gender, age, level, religion, place of residence and institution type) are potent predictive factors of students' online sexual behaviour. Furthermore, the predictive contributions of each of the demographic factors to online sexual behaviour of students were determined. The result is presented in Table 6.

Table 6: Influence of demographic factors on students' online sexual behaviour

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	В	Std. Error	Beta		
(Constant)	30.626	2.787		10.988	0.000
Gender	-3.963	0.645	-0.146	-6.142	0.000
Age	0.260	0.141	0.055	1.847	0.065
Tertiary institution	-11.723	1.052	-0.421	-11.145	0.000
Level	0.010	0.003	0.089	2.959	0.003
Religion	2.132	0.649	0.081	3.285	0.001
place of residence	12.164	1.205	0.399	10.091	0.000

a. Dependent variable: online sexual behaviour

R Square = 0.134, Adjusted R Square = 0.131

As shown in Table 6, out of the six demographic variables of students, gender (B = 0.3.963; t = -6.142; p < 0.05), tertiary institution type (B = 11.723; t = 11.145; p <005), level (0.010; 2.959; p <0.05), religion (B = 2.132; t= 3.285; p <0.05) and place of residence (B = 12.164; t = 10.091; p < 0.05) were found to be significant, only age (B = 0.260; t = 1.847; p > 0.05) of the students was not significant. Furthermore, while level, religion and place of residence are direct and positive predictors of online sexual behaviour of students, gender and tertiary institution type inversely predicts it. This is an indication that for every unit of gender, age, institution type, level religion and place of residence, there is a corresponding contribution of -3.963, 0.260, -11.723, 0.010, 2.132 and 12.164 to the online sexual behaviour of students, It can then be summarized that all the demographic variables can account for 13.4% of the variability in online sexual behaviour of students. In summary, place of residence was the strongest predictor of online sexual behaviour among students.

Discussion

29

The focus of this study was to explore the predictive contribution of demographic factors on students' online sexual behaviour in Osun State. The researcher's belief was that if school counsellors and school managements are aware of these explanatory factors, appropriate guidance and counselling intervention strategies would be developed to reduce its adverse effect on the life of students, and allow students to take healthy sexual and reproductive health decision. The finding from the study showed that almost half of the sampled students reported to have expressed non-arousal form of online sexual behaviour to self or to another person. These online sexually related exercises are not centered around materials that are sexually stimulating, but include relational experiences such as visiting sites, looking for dating partners on the web. Notwithstanding many advantages of this type of online sexual behaviour, individuals may experience the negative consequences of it such as the problematic use of internet, unwanted sexual approaches, cyberbully and violence, relationship breakdown, sexual exploitation and abuse, and even sudden death if not properly expressed (Jonsson, 2015).

Approximately one-third of the students have expressed partnered-arousal form of online sexual activities with others. This is an indication that online sexual activities such as, exchanging instant texts about fantasized sexual acts with someone else, participating in sexual acts simultaneously with another person on webcam and online pornography have been expressed by this group of students. Students that ever engage in these online sexual activities with partners usually stimulate each other sexually by exchanging explicit digital text messages, images, and videos of themselves. This sometimes may have socially harmful effects on online sexual partner especially if they are anonymous partners or strangers to each other. This corroborates the submission of Arulogun, Agbu and Dipeolu (2016) that many students and young adults that ever had online chatting admitted discussing relationships with strangers. Since many unsafe sexual practices can be learned or expressed as it is found in the partnered-arousal from online sexual behaviour, regular sexuality education is one of the measures that must be put in place in various institutions to prevent students from socially harmful and negative health effects of online sexual activities.

In terms of gender difference, this study found that female students had a slightly higher percentage above male students when non-arousal form of online sexual behaviours are expressed. The finding deviated from the submission of Beutel et al., (2017) which reported higher score for men against women in a similar study. The reason for the difference in the results from the two studies may be attributed to factors such as different sample size used, age range of the participant as well as cultural beliefs and value system of the nations (settings) where the studies were conducted. But just like the submission of Wery and Billieux,(2016), this is an indication that female students are more interested in online sexual activities than male students.

Another factor identified in the study is religious factor. Although, studies relating to religious factors and online sexual behaviour is very scarce in the literature probably as a result of internet development which has influenced human sexuality. Ordinarily, it is expected that religion will play a positive role in shaping the sexual behaviour of students due to the indoctrination of moral lessons and beliefs associated with the three main types of (Christianity, Islamic and traditional) religion being practised in Nigeria. Participation in religious activities and belief in a spiritual power have been identified as protective factors in a number of adverse environments (Richardson & Stoneman, 2015) and it has also helped young people survive difficult situations (Szaflarski, 2013). However, in this study, it was found that partnered arousal is more expressed among those that are practising Christianity. The implication of this is that a majority of the students that are at risk of online sexual behaviour are those practising Christianity followed by those practicing Islamic and traditional religion.

In terms of age, it has been reported and identified in this study that those students in active age of 20-24 years manifested non-arousal more than those in other age groups did. It is an indication that this active population may be at risk of negative consequences of online sexual behaviour if measures to mitigate the negative exhibition of risky sexual behaviour are not put in place. The finding therefore affirms previous documentation of Ogungbamila, (2013); Arulogun, Ogbu and Dipeolu (2016) that young people within the age bracket of 20-24 years reported more negative attitude toward internet sexual related activities. Another demographic factor that may require the intervention of

31

counselling psychologists is the institution ownership type. It was found in this study that 40.5% of sampled students were schooled in the government owned institutions, which belong to the State and Federal government, and the majority of these students were residing outside the school community. It is believed that students who are living off-campus are likely to exercise more freedom of online risky sexual expression than those that are living within the school campus and this may put them at risk of sexual violence and exploitation.

The result of testing the hypothesis indicated that each of the demographic factors (gender, religion, institution ownership, residential type) has a statistically significant contribution toward online sexual behaviour of students, only age appeared to be insignificant. More importantly, place of residence was the strongest predictor of online sexual behaviour among students. It can therefore be summarized that demographic factors are potent enough in predicting online sexual behaviour of students. Previous studies in Nigeria have affirmed the influence of student's demographic factors on sexual behaviour (Ogungbamila, 2013; Arulogun, Ogbu & Dipeolu, 2016; Ifeadike et al., 2018) though empirical information on the demographic factors of students' online sexual behaviour is still very scanty in sexuality literature.

Counselling Implications

Since it has been established that demographic factors of students in tertiary institutions are predictive factors of their online sexual expression, it becomes imperative for counselling psychologists to come up with measures such as counselling tips, psychotherapies and other counselling frameworks that can mitigate the negative effect of the risks associated with online sexual behaviour among this active age group.

A more inclusive sexuality education is highly required to prevent students from making unhealthy sexual decision. This would empower young people to develop stronger, positive and healthy relationships with opposite sex within and outside the school. The university counsellors can render this sexuality education from time to time, especially during orientation programme organized for the fresh students.

When there are sensitive issue like online sexual problem, many victims may want to seek help using online approach. Online

counselling services can only be provided when the counselling service provider is well grounded and skillful enough to help clients or victims of online sexual issues. Therefore, school management and education policy makers need to ensure they employ quality and competent counsellor who can provide students with online counselling service. They must also ensure that stable and functioning internet facilities are available for effective service delivery.

Conclusion

This study concluded that demographic factors are predictive and explanatory factors for online sexual behaviour among tertiary institution students even though place of residence was the strongest predictor of online sexual behaviour among students.

Recommendations

Now that it has been empirically established that students of tertiary institutions often exhibit online sexual behaviour with associated sexual risk-taking behaviours. This study therefore recommended that counselling psychologists and sex educators should develop a comprehensive programme that will specifically promote safe online sexual practices among students.

Following the increased use of the internet for sexual expression among students which is currently influencing the real social interactions and practices, curriculum development experts should as a matter of urgency revise all human sexuality related courses or subjects and factor-in online sex education. This may reduce the magnitude of risks of experiencing associated consequences among students.

Finally, government should provide necessary and required supports for professional counsellors and other social workers to embark on awareness and sensitization programme on dangers associated with unsafe online sexual practices in schools.

References

Amoateng, A. Y., Kalule-Sabiti, I., & Arkaah, Y. J. (2014). The effect of socio-demographic factors on risky-sexual behaviours of adolescents in the North West Province of South Africa. *African Population Studies* 28(1), 487–498

- Arulogun, O. S., Ogbu, I. A., & Dipeolu, I. O. (2016). Influence of internet exposure on sexual behaviour of young persons in an urban district of Southwest Nigeria. *The Pan Africa Medical Journal*, 25, 261-265.
- Barrada, J. R., Ruiz-Gomez, P., Correa, A. B., & Castro, A. (2019). Not all online sexual behaviour are the same. *Frontiers in Psychology*, 10, 339.
- Baumgartner, S. E., Sumter, S. R., Peter, J., Valkenburg, P. M., & Livingstone, S. (2014). Does country context matter? Investigating the predictors of teen sexting across Europe. *Computers in Human Behaviour*, *34*, 157-164.
- Baumgartner, S. E., Valkenburg, P. M., & Peter, J. (2010). Assessing causality in the relationship between adolescents' risky sexual online behaviour and their perceptions of this behaviour. *Journal of Youth and Adolescence*, 39, 1226-1239.
- Benotsch, E. G., Snipes, D. J., Martin, A. M., & Bull, S. S. (2013). Sexting, substance use, and sexual risk behaviour in young adults. *Journal of Adolescent Health*, *52*, 307-313.
- Beutel et al., (2017). Prevalence and determinants of online-sex use in the German population. *Public library of science*, 12(6). Retrieved 26 November, 2019 from https://www.researchgate.net/publ ication/317682447.
- Cooper, A., & Griffin-Shelly, E. (2002). The internet: The new sexual revolution. *In A. Cooper (Ed), Sex and the Internet: A guidebook for clinicians (p.p. 1-15)*. New York: Brunner. Rutledge.
- Couch, D., Liamputtong, P., & Pitts, M. (2012). What are the real and perceived risks and dangers of offline dating? Perspectives from online daters. *Health, Risk and Society*, *14*(7/8), 697-714.
- Ifeadike, C. O., Nnebue, C. C., Oparaji, C. I., Okorie, O. F., Okoro, U. C., & Okoyechira V. C. (2018). Sexual risk behaviours and associated factors among senior secondary schools adolescents in Owerri, Imo State Nigeria. *International STD Research Review*, 7(2), 1-12.

- Jonsson, L. S. (2015). *Online sexual behaviours among Swedish youths: characteristic, associations and consequences*. Linkoping: Liu-Tryck. Retrieved 13 July, 2016 from http://www.diva/porta.org/ smash/get/diva2.
- Kaiser, H. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36.
- Klein, H. (2010). Men who specifically seek unprotected sex partners via the internet: Whose profiles are the most searched for by other site users? *Journal of Gay, Lesbian and Social Service*, 22(4), 413–431.
- Kuss, D. J., Van Rooij, A. J., Shorter, G. W., Griffiths, M. D., & Van de Mheen, D. (2013). Internet addiction in adolescents: Prevalence and risk factors. *Computers in Human Behaviour*, 29(5), 1987-1996.
- Letamo, G., & Mokgatlhe. L. L. (2013). "Predictors of risky sexual behaviour among young people in the Era of HIV/AIDS: Evidence from the 2008 Botswana AIDS Impact Survey III." *African Journal of Reproductive Health*, 17(3), 169-181.
- National Population Commission [Nigeria] and ICF Macro, (2009). Nigeria Demographic and Health Survey 2008. Abuja, Nigeria: National Population Communication and ICF Macro.
- Nwosu, J. C. (2017). Dating and academic performance: An empirical analysis among babcock university's undergraduate students in Ogun State. *British Journal of Education*, *5*(11), 112-118.
- Odimegwu C., & Somefun, O. (2017). "Ethnicity, gender and risky sexual behaviour among Nigeria youth: An alternative explanation." *Reproductive Health* 14(16). Retrived 16 August, 2017 from https://dx.doi.org/10.1186%2Fs12978- 017-0284-7.
- Ogungbamila, A. (2013). Demographic predictors of premarital sexual behaviours among undergraduates. *Nigerian Journal of Applied Behavioural Sciences*, (1), 68-74.

- Omoyemiju M. A. (2018). Effect of cognitive restructuring and social skill therapies on internet addiction among students in Obafemi Awolowo University, Ile-Ife, Nigeria. Unpublished Ph.D. thesis, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Perkins, A. B., Becker, J. V., Tehee, M., & Mackelprang, E. (2014). Sexting behaviors among college students: Cause for concern? *International Journal of Sexual Health*, 26, 79–92. Retrived 16 August, 2017 from https://doi.org/10.1080/19317611.2013.841792.
- Rice, E., Gibbs, J., Winetrobe, H., Rhoades, H., Plant, A., Montoya, J., & Kordic, T. (2014). Sexting and sexual behavior among middle school students. *Pediatrics*, 134, e21 8. Retrived 16 August, 2017 from https://doi.org/10.1542/peds.2013-2991.
- Richardson, E. W., & Stoneman, Z. (2015). The road to membership: The role of resilience in seeking and maintaining membership in a faith community for families of children with disabilities. *Journal of Disability and Religion*, 19(4), 312–339.
- Shaughnessy K., Fudge, M., & Byers, E. S. (2017). An exploration of prevalence, variety, and frequency data to quantify online sexual activity experience. *Canadian. Journal of Human Sexuality*. 26(1), 1-16.
- Szaflarsk,i M. (2013). Spirituality and religion among HIV-infected individuals. *Current HIV/AIDS Report*. 10(4), 324–332.
- Ungdomsstyrelsen (2012). Utsatt? Unga, sex och Internet [Victimized? Youth, sex and the Internet]. *Stockholm:* Ungdomsstyrelsen.
- Usman, E. (2012). How ex-General's daughter, Cynthia, was killed by facebook "friends". *Vanguard. Retrieved January 9, 2017 from http://www.vanguardngr.com/2012/08/*
- Wery, A., & Billieux, J. (2016). Online sexual activities: An exploratory study of problematic and non-problematic usage patterns in a sample of men. *Computers in Human Behaviour* 56, 257-266.

- Wolak, J., Finkelhor, D., Mitchell, K. J. & Ybarra, M. L. (2008). Online "predators" and their victims: Myths, realities, and implications for prevention and treatment. *American Psychologist*, 63: 111-128.
- Ybarra, M. L., Mitchell, K. J., Finkelhor, G., & Wolak, J. (2007). Internet prevention messages. Targeting the right online behaviours. *Archives of Pediatrics and Adolescent Medicine*, 161, 138-145.

Appendix Online Sexual Behaviour Scale

Dear Respondent,

This instrument is designed to elicit information on-line sexual behaviour of students, The information to be elicited with this instrument is strictly for academic purposes. All information provided will be kept confidential. We humbly seek your support and cooperation.

Thank you.

SECTION A: General Information
1. Sex: Male Femal
2. Age as at last birth day:
3. Academic Level (part):
4. Course of study:
5. Institution Type: Public Private
6. Religion Affiliation: Christianity
SECTION B: Online Sexual Behaviour Items
Please respond to each statement below by ticking (✓) the response that
best describe your level of reflection to each of the items. Note that

KEY: ToM= True of Me, SToM=Somewhat True of Me, NTR= Neutral, SUToM= Somewhat Untrue of Me, UToM= Untrue of Me

there is no right or wrong answer to any of the items.

contain sexual content through social network platform (badoo, facebook, whatsapp, e-mail, twitter, etc.)

- 9 I have sent messages that contain sexual content to someone through social network platform (badoo, facebook, whatsapp, e-mail, twitter, etc.)
- 10 I enjoy discussing matters relating to sexual activity with others online using my mobile phone or computer
- 11 I satisfy my sexual urge with others online using my mobile phone or computer
- 12 I have had sex with another person online using my mobile phone or computer
- I have had real life sex (offline) with someone whom I met on the Internet
- 14 I have posted sexual pictures of myself on the Internet or via using my mobile phone or computer
- 15 I have sold sexual services to someone online using my mobile phone or computer
- I have at least one online romantic partner whom I met online
- 17 I have more than one romantic partners in the real life that I met online