Prevalence and determinants of sexting behaviour among undergraduates in Kwara State

Balogun Abdulrasa Olatunji, Obimuyiwa Gabriel Ayodeji, Abdulaziz Isiaka, Oniye
Department of Social Sciences Education, University of Ilorin, Nigeria

ABSTRACT
This study investigates the prevalence and determinants of sexting behaviour among undergraduates in Kwara State. The population for this study comprised all undergraduates in Kwara State while the target population was undergraduates of three universities in the Kwara States. A stratified sampling technique was used to categorize universities based on ownership (Federal, State and Private) as well as gender. A random sampling technique was used to select 100 undergraduates from each university, totaling 300 respondents. A researcher-designed questionnaire titled Prevalence and Determinants of Sexting Behaviour Questionnaire (PASODOBEQ) was used to elicit information from sampled respondents. The instrument was validated by experts in Sociology of Education and Educational Psychology. Test re-test method of reliability was applied to test the reliability of the instrument, using the Pearson Product Moment Correlation statistics. The coefficient value of 0.86r was derived. The data collected were analyzed using percentage, mean, standard deviation and Multiple Regression Statistical Tool. The result of the findings revealed that sexting behaviour is prevalent among undergraduates and low self-esteem and peer association are significant determinants. The study recommended among others that schools authorities as a matter of fact should organize a sensitization workshop or seminar for undergraduates on the meaning, ripple effects and the punishment associated with sexting behaviour for necessary social adjustment.

Keywords:
Determinants
Low self-esteem
Peer association
Prevalence
Sexting
Social

INTRODUCTION
The advent of the new communication system such as smartphones and social media sites in the world today has made people to exhibit different behavioural patterns in the society most especially in higher institution of learning. The new behavioural pattern exhibiting by adolescents due to the advent of social media is sexting. Sexting is the demonstration of making, sharing, sending or posting of explicitly express messages or pictures by means of the Internet, cell phones or other electronic gadgets by individuals, particularly young people [1]. It is normally characterized as the virtual recording of explicitly suggestive or express pictures and sharing by utilizing cell phones, informing or through the web on long range interpersonal communication sites, for example, Whatsapp, Facebook, Instagram, and YouTube to say however a couple.

The spate of sexting has been at alarming in human society due to the increase in the use of mobile phones in accessing different social media sites. International Telecommunication Union in 2013 reported that over 500 million people in Africa are mobile phone users. Literature has demonstrated that cell phone...
has been used for different activities such as internet connection, sending messages, to access various social media sites, etc. The mobile phone usage has assumed the new dimension in Nigeria because of the rate at which it is used for internet connection had increased from 0.06% to 3.6% within the period of year 2000 to 2005 and subsequently increased from 24% to 32.9% in the year 2010 and 2012 respectively [2]. Among users of cell phone and social media sites are adolescents who constituted over 30% of phone users. The study conducted [3] in the USA shows that 18% of sampled population had engaged in sending sexually suggestive messages and images of themselves to other colleagues. Similarly, the outcome of the investigation on prevalent of sexting behaviour among young adolescents revealed that 30% and 89% of young adolescents involved in sexting. This has shown that the rate is high among young adolescents.

More so [4] confirmed that numerous Nigerian universities students have been cited by the media to have ascribed the principal gathering of these lascivious substances from a companion. In addition, the study conducted [5] revealed that 25% of undergraduate females and 33% of undergraduate males had sent and received bare/semi-naked pictures (that are initially intended to be private) from their peers. Likewise, report of the study led [6] stated that among 575 members, of age range 14 - 24 years uncovered that 20% had sent sexually suggestive messages, while 33.2% had gotten sexts, 44% had high scores in extraversion, 46.5% had moderate – extreme hazardous telephone use, 16% had ever had intercourse while 40.0% of these had different sexual accomplices. In the same vein [6] affirmed that; ninety (16.0%) respondents out of 250 undergraduates sampled had ever engaged in sexual relations due to involvement in sexting, 183 (31.9%) of the respondents knew somebody who had sent explicitly suggestive pictures or content, 115 (20.1%) had sent sexts, and 189 (33.2%) had gotten sexts. This has shown that sexting is paramount among young adolescents in Nigeria.

The pervasiveness of sexting among youths has been a source of concern to various researchers as evident completely from study to study. In recent couple of years, prominent media sexting cases has created a perception among the general population that sexting amidst youth is universal. For instance, in Florida, 18-year-old Philip Alpert sent naked photos of his 16-year-former sweetheart to her family and companions and was in this manner accused of appropriation of child pornography and required to enlist as a sex guilty offender ([7] referred to in [8]). In a survey of high school students in England, 30 percent of the respondents said they knew somebody who had been unfavourably influenced by sexting, however, 40 percent did not see anything amiss with sending a semi-naked photograph and 15 percent did not see anything amiss with sending a completely bare photograph [9].

According to [10] proclaimed that the most essential exchange of explicitly suggestive pictures has been between romantic accomplices, partner outside the relationship, and potential relationship in which no less than one individual would like to be in. Nonetheless, sexting has been appeared to be connected with a few variables, including health risk practices (some of which have crushing results), ecological and individual components [11]. Evidences abound that sexting has been found to happen most every now and then between young people (including teenagers) in a romantic relationship and related to other sexual hazardous practices (e.g., various sexual accomplices and usage of drugs/alcohol preceding sex [5-14].

The existence of sexting behaviour in the Western countries have provided great opportunities for different scholars to research on the causes, consequences and propounds relevant theories to showcase its graveyard effects in the educational sector. Sexting does not exist in a vacuum; it is occurred due to numerous causes. Among factors responsible for sexting behaviour in the midst of young adolescents are alcohol and drug use. These are found to be associated with sexual behaviour because excessive alcohol intake promotes dysfunctional social behaviours [15, 16]. In the course of considering predictors of sexting behaviour, the most determinant of sending different kinds of sexually suggestive messages and images was being in a relationship, because those who are in relation were likely to send sexts than single. Additionally, [17] reported that sexually energetic persons stood to twice possibly send unclothed self-images than their non-sexually lively foils. According to [18] said that the main motive behind sexting behaviour includes romantic relationships or romantic interests; even though some sext persons had not met before. Romantic relationships or romantic interests have been observed as one of the major factors behind adolescents’ indulgence in sexting in higher institutions of learning. The involvement in sexting has been adjudged to be as a result of the attitudes of the persons who sent towards sexting behaviour. This conclusion has generated mixed feelings among the respondents as is evident in the survey conducted by the National Campaign’s Sex and Tech in 2008 which testify to the fact that the vast majority of respondents were of the opinion that persons who engage in sexting were with the attitudes of flirty (69%), bold (66%), and confident (49%). In contrary, it was also observed that the majority of sampled respondents thought that persons who sent sext were sluttly (65%), desperate (59%), and insecure (51%).

Another factor considered to be responsible for sexting behaviour among young adults is self-esteem. The National Campaign [5] reported that there is significant relation between sexting and self-esteem as the person with high self-esteem perceived to be bold and confident which allows them to grow the
attitude of self-control. In that case, they were adjudged to not likely involve in sexting while those with low self-esteem were perceived to be with the attitudes of uncertainty which prompts them to be subjected to peer pressure. This signifies that persons with low self-esteem were more likely involved in sexting behaviour. More so, high self-esteem can reduce the odds of involving in sexting while low self-esteem can increase the odds [18]. Having ground knowledge in the cause of sexting behaviour among students of higher institutions will expose the school authorities, parents, government and religious organizations to various degrees of experiences their children are passing through with the expectation that it will afford the great opportunity for proper counseling of their children on the dangerous effect of the cell phone.

Sexting has some basic results never again best for the individual taking and sharing the photos, also for the individual on receiving end. Sexting patterns among Nigerian universities students could come full circle in social and sexual issue with young people trying to fulfill a detonated sexual inclination and sexual culture ([19] in [20]). Sexting can harm personal relationships with friends, boyfriend/girlfriend and family, and in addition harming a young person's reputation. This may result in: finishing the relationship when trust is broken by appearing or sharing a private sext; loss of a present place of employment, grant or position; future scholastic open doors being influenced; future profession openings being limited; entry into certain countries being forbidden because of child pornography [21].

Young adults’ sexuality and its imports consequences had continued to be a major concern in higher institutions across Nigeria. This invariably may result into sexual risk behaviour which may put adolescents at danger of sexually transmitted diseases (STDs), unintended pregnancy and HIV/AIDS (among others) that transports a distinctive set of prices not alone to the adolescents who were indulged in the act but also to the overall majority in the society ([22]; United States Centers for Disease Control and Prevention, 2013 in [17, 23] reported that sexting can also result into teen suicide, depression, pornography charges, and cyber bullying. He said this may likely happen if oftentimes, young people fail to know the consequences and the permanency of the illicit acts on the cyberspace. The pictures sent to one and other may remain permanent via the social media in the cyberspace which can be retrieved as at when needed. This can lead to difficulty in getting job and destroy already built relationships as many people do more search on internet to know more on their partner or the applicants. More so, Sending and receiving sexually suggestive images between companions may likely be hazardous—particularly if eventually it boomerangs and the image mistakenly gets into the wrong hands [24]. As soon as an image is dispersed by electronic means, the senders have no control over it and it may later leading to probable disgrace, humiliation, mortification, and most of all attempted suicide or death [25].

As a result of all these, despite the way that the literature about sexting barely exists in Africa, including Nigeria as placed [6], yet the few ones examined the real reasons for this demonstration in our students; Among numerous others, [18] explored sexting and dangerous sexual conduct among University of Ghana students, [26] concentrated on the utilization of obscene material, sex contrasts, and HIV unsafe sexual conduct, some centered around the impression of stakeholders in order to uncover root causes and recommended solutions as expressed by these stakeholders. Yet, it is worthy of noting that to fill this lacuna, it is the need of time that the pervasiveness cum social determinants of this conduct among undergraduates in Nigeria, institutions should be studied to proffer great solutions which achieve positive and desirable learning behavioural change. On this note, this study was conducted to ascertain the prevalence and social determinants of sexing behaviour among undergraduates in Nigeria institutions.

2. THEORETICAL FRAMEWORK

This study hinged on the theory of Planned Behaviour [27] The theory as it is has three component variables such as attitudes, subjective norm and perceived behavioural control. These variables are major in determinants of human behaviour in the society and the tendency to behave in a certain manner. Attitude according [28] is the judgment of the possible outcomes in performing the specific behaviour. Subjective norm is termed as the perception of support the doer of action may likely receive from the people who so dare to them. Perceived behavioural is the extent to which individual exercise control over involvement in definite behaviour.

In the precise term, the theory states that individuals are more likely to exhibit certain character if they actually have favourable attitude towards particular act and at the same time if they possessed strong subjective norm and higher behavioural control [28]. The theory is relevant to this study as it describes behavioural tendency of sexting. This invariably signifies that more favourable attitude towards sexting; more approving subject norm or support from the peers to engage in the act and higher perceived behavioural control were associated with a higher likelihood of involving in sexting behaviour [29].

Prevalence and determinants of sexting behaviour among undergraduates ... (Balogun Abdulrasa Olatunji)
The following questions were raised to guide this study: (i) Do sexting behaviour prevalent among undergraduates in Kwara State?, (ii) Are the low self-esteem and peer association determining sexting behaviour among undergraduates in Kwara State?

The following hypothesis was postulated for the study: Low self-esteem and peer association are not the determinants of sexting behavior.

3. RESEARCH METHOD

Descriptive survey design of the survey type was employed in this study. This design is considered to be appropriate because it gives factual information about the sample respondents and caters for a large number of samples. The population for this study consisted of all undergraduates in Kwara State while the target populations were undergraduates in three universities in Kwara State which includes the University of Ilorin, Kwara State University and Al-Hikmah University. Stratified sampling technique was used to categorise the universities in Kwara State into Federal, State and Private. Simple random sampling technique was used to select 100 respondents from each university totaling 300 respondents. The questionnaire designed by the researchers was used to elicit information from sampled respondents. The questionnaire is titled Prevalence and Determinants of Sexting Behaviour Questionnaire (PADOSEBEQ).

The questionnaire comprised of three sections A, B and C. Section A of the questionnaire gathered information on demographic description or information of a respondent, section B elicited information on the prevalence of sexting behaviour and C obtained data on determinants of sexting behaviour. Face and content validity approach was used to validate the designed questionnaire by the experts in the Educational Research, Measurement, and Evaluation, Sociologists of Education and Educational Psychologists in the Department of Social Sciences Education, University of Ilorin. The instrument was pilot tested twice on the subset of the population at the interval of three weeks through test re-test method of reliability. The two results generated were correlated using Pearson Product Moment Coefficient. Thereafter, the reliability index of 0.86 was obtained. The mean rating was used to answer research questions while Multiple Regression Statistics was used to test the hypothesis postulated.

4. DATA ANALYSIS AND RESULTS

Research Question One: Do sexting behaviour prevalent among undergraduates in Kwara state?

Data in Table 1. revealed the responses of the sampled respondents on the prevalence of sexting behaviour among undergraduates in Kwara State. It was observed that all the items had mean scores above 2.5 benchmarks. This indicates that sexting behaviour is prevalent among undergraduates. More so, among the items that measure sexting behaviour item 1, 2 and 3 were ranked 1st, 2nd and 3rd respectively. This mean that the majority of respondents send, receive and create sexually suggestive messages or pictures.

Table 1. Prevalence of sexting behaviour among undergraduates in Kwara State

<table>
<thead>
<tr>
<th>Prevalence of sexting behavior</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you receive sexually related text messages?</td>
<td>3.32</td>
<td>0.75</td>
<td>1st</td>
</tr>
<tr>
<td>How often do you send sexually related messages?</td>
<td>3.04</td>
<td>0.87</td>
<td>2nd</td>
</tr>
<tr>
<td>How often do you create and send sexually explicit messages?</td>
<td>2.74</td>
<td>0.89</td>
<td>3rd</td>
</tr>
<tr>
<td>How often do you create and send sexually explicit images of self?</td>
<td>2.59</td>
<td>0.91</td>
<td>4th</td>
</tr>
<tr>
<td>How often do you create and send sexual images of someone else?</td>
<td>2.57</td>
<td>0.92</td>
<td>5th</td>
</tr>
</tbody>
</table>

Hypothesis One: Peer association and low self-esteem are not predictors of sexting behaviour among undergraduates in Kwara State.

Results in Table 2, reveal that independent variables of peer association and low self-esteem accounted for 0.255 representing 25.5% of the dependent variable of sexting behaviour among undergraduates in Kwara State, with adjusted r square of 0.49 and a standard error of 9.975. It should be noted therefore that the remaining 74.5% of sexting behaviour among undergraduates will be accounted for by variables outside the model.

Table 2. Model summary of interactive determinants of sexting behaviour by peer association and low self-esteem of undergraduates in Kwara State

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R Square</th>
<th>Std. error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.255</td>
<td>0.65</td>
<td>0.49</td>
<td>9.975</td>
</tr>
</tbody>
</table>

Results in Table 3, indicate that the variable of peer association and low self-esteem contributed significantly to sexting behaviour among undergraduates as seen in the degree of freedom of 2 and 297, with an F ratio of 4.41 that is significant at p = .019. On the basis of the results, the null hypothesis is rejected which means that peer association and low self-esteem are significant predictors of sexting behaviour among undergraduates in Kwara State.

Table 3. Regression analysis showing how peer association and low self-esteem determines sexting behaviour among undergraduates in Kwara State

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>209.095</td>
<td>2</td>
<td>104.548</td>
<td>4.41</td>
<td>.019</td>
</tr>
<tr>
<td>Residual</td>
<td>7042.605</td>
<td>297</td>
<td>23.712</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7251.700</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Sexting Behaviour
b. Predictors: (Constant), Peer Association and Low Self-esteem.

To examine the contributions of the independent variables (peer association and low self-esteem) together, results of Standard Error, Beta and T were computed and the output reported as shown in Table 4.

Table 4. Relative contributions of peer association and low self-esteem to sexting behaviour among undergraduates in Kwara State

<table>
<thead>
<tr>
<th>Model</th>
<th>(B)</th>
<th>Std. error</th>
<th>(Beta)</th>
<th>(t)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>27.412</td>
<td>4.658</td>
<td></td>
<td>5.885</td>
<td>.000</td>
</tr>
<tr>
<td>Peer association</td>
<td>.718</td>
<td>.298</td>
<td>.257</td>
<td>3.312</td>
<td>.011</td>
</tr>
<tr>
<td>Low self-esteem</td>
<td>.700</td>
<td>.285</td>
<td>.231</td>
<td>2.453</td>
<td>.016</td>
</tr>
</tbody>
</table>

Results in Table 4 reveal the contribution of each of the independent variables to the model. It reveals that peer association contributed to Beta weight of .257 and t-value of 3.312 which is significant at .011. Also, low self-esteem contributed Beta weight of .231 and the t-value of 2.453 which is significant at .016. This means that both variables contributed significantly to sexting behaviour among undergraduates.

5. SUMMARY OF FINDINGS

Based on the analysis presented above, the following can be deduced:

a. Sexting behaviour is prevalent among undergraduates in Kwara State. It was also observed that undergraduates were mostly engaged in sending, receiving and creating sexually suggestive messages.

b. Peer association and low self-esteem are significant determinants of sexting behaviour among undergraduates in Kwara State.

6. DISCUSSION

The fundamental reason for this study was to look at the prevalence and determinants of sexting behaviours among undergraduates in Kwara State. One of the consequences of this investigation demonstrates that sexting behaviour is extremely basic among students in Kwara State and the idea of the sexting practices predominant among these students incorporate sending, accepting and making explicitly suggestive messages or pictures. This is steady [30] that, the predominant idea of sexting practices pervasive among the undergraduates incorporates getting and sending of either a bare or semi-naked picture/video or a sexual content just message (together alluded to as a "sext"). Not only this but also in agreement with the work [31] which revealed that sexting behaviour was predominant among secondary school students. This outcome is conceivable where no open line of correspondence exists among children and their parents when students are not sharpened on long and short terms mental results of sexting, where guardians neglect to impart about sexting to their children, and when children are not given an early introduction on body mindfulness and risk of sexting conduct.

The consequence of this investigation demonstrated that peer association and low self-esteem huge anticipated sexting behaviours among students in Kwara State. It was seen that increment in negative peer association and low self-esteem prompts a significant increment in sexting behaviours. This implies sexting practices can be anticipated by that peer association and low self-esteem. Undergraduates that connect with peers who display sexting practices and those with low self-esteem are subject to be attracted to sexting
conduct. This outcome is conceivable where students move with individuals fit for affecting their conduct adversely. This outcome supports that [32] who detailed that a huge relationship exists between peer association and low self-esteem even in middle childhood. Also in agreement with aftereffects of an investigation on 1,046 African American young people who found the impact of peer norms to shape both their sexual attitudes and practices [33, 34].

7. CONCLUSION
The research investigated the prevalence and determinants of sexting behaviour among undergraduates in Kwara State, Nigeria. The result of the findings revealed that sexting has been seen as norms which are very common among undergraduates and the nature of sexting prevalence in their midst is: sending, receiving and creating of sexually suggestive messages. It was also found that low-self-esteem and peer association were significant predictors of sexting behaviour amongst undergraduates.

8. RECOMMENDATIONS
School authority through counseling unit should enlighten and monitor undergraduates to use their own sexual activity, to reason through the thinkable costs of sexting and the ways to eradicate them, and to respect others’ sexual subjectivity. This is to neutralize the consequence of a peer pressure on female sexual activity via awaking female undergraduate’s policy-making authorities which will grow their self-confidence.

Also, parents ought to dependably remind their teenagers that sexting is illicit behaviour and should open a line of conversations about consequences sexting norm among the children. Schools authorities, as a matter of fact, should organize a sensitization workshop or seminar for undergraduates on the meaning, ripple effects and the punishment associated with sexting behaviour.

Be that as it may, there are still a few zones which further research work can be valuable. For example other research work could endeavor to discover different stakeholders besides the one utilized in this research work and inspect their observation on sexting conduct.

REFERENCES
Prevalence and determinants of sexting behaviour among undergraduates ... (Balogun Abdulrasa Olatunji)
Dr. A.O. Balogun is a Lecturer I with specialisation in Sociology of Education in the Department of Social Sciences Education, University of Ilorin, Ilorin, Nigeria. He is a level adviser and supervises undergraduate research projects.

Mr Obimuyiwa is a postgraduate student of Curriculum Development in Social Sciences Education in the Department of Social Sciences Education, University of Ilorin, Ilorin, Nigeria.

Dr Abdulaziz, Isiaka is a Lecturer I with specialisation in Sociology of Education in the Department of Social Sciences Education, University of Ilorin, Ilorin, Nigeria. He is a level adviser and supervises undergraduate research projects.

Mr. Oniye, R. Kolapo is an Assistant Lecturer with specialisation in Sociology of Education in the Department of Social Sciences Education, University of Ilorin, Ilorin, Nigeria. He is a level adviser and supervises undergraduate research projects.