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Published in the Slovak Republic International Journal of Media and Information Literacy Has been issued since 2016. E-ISSN: 2500-106X 2021, 6(1): 4-16

DOI: 10.13187/ijmil.2021.1.4 www.ejournal46.com



The Internet and Adolescent Safety: Peer Influence and Gender Difference as Potential Risk-Factors of Cyberbullying among Nigerian Secondary School Adolescents

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Abstract

While adolescents in many nations across the world are getting exposed to various forms of cyberbullying and online harms, little attention has been devoted to examining the implications of gender and peer influence in secondary school adolescents' involvement in cyberbullying in Nigeria. Addressing this void in the literature, the present study investigated the internet use pattern and peer victimisation among 992 secondary school adolescents in the fourth to sixth (senior) grades (age ranging from 15 to 17 years; males = 55.9 %). The data were collected using a questionnaire with a very high alpha coefficient of α = .92 and analysed using SPSS (v. 22). The findings revealed an alarmingly high incidence level (76 %) and that more male adolescents were involved in cyber victimisation and more female adolescents in cyber predation, a quite surprising phenomenon as far as the Nigerian school context is concerned. The results of the study highlight the importance of gender difference, peer influence and the degree of internet use as potential risk factors of cyberbullying among Nigerian in-school adolescents.

Keywords: adolescent internet behaviour, cyberbullying, Nigeria, gendered cyberbullying, parental, peer influence.

1. Introduction

The speedy diffusion of mobile and smartphones has tremendously paved the way for children and adolescents to gain access to a vast array of inappropriate and hurtful digital content online such as brainstorming acts of violence, hard-core pornography and other extremely obnoxious material (Livingstone et al., 2011; Okorie, Ekeanyanwu, 2014). Despite the skyrocketing incidence of cyber risks in countries across the globe and the rising wave of research interest the phenomenon arouses, there is an observed dearth of research in the incidence of cyberbullying in Nigerian secondary schools. Most of the available literature focused on cybercrimes (internet fraud) and cyber immorality and delinquent behaviours such as the use of pornographic sites and sexting among the youth (older adolescents and young people).

To close the research void, this study was deemed imperative. Hinged on the principles of the Social Cognitive Learning Theory (SCLT) (refer to Section 3), this study primarily sought to provide empirical evidence on the level of cyberbullying incidence and gendered involvement in the phenomenon among Nigerian secondary school adolescents. Specifically, the researchers chose to conduct this study with a sample of older adolescents, i.e., students in senior secondary school (SSS) grades for pragmatic reasons: access and the use of the internet, as well as the higher

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likelihood of involvement in cyberbullying and reporting same, are most observed phenomena among my sample, ensuring a larger sample and high power. The literature has established that the time a child spends online is one of the yardsticks for the measurement of children's internet use level, which research correlates to the likelihood of kids' involvement in cyberbullying. A popularly investigated cyberbullying factor, peer influence (peer approval or disapproval) (Okanlawon et al., 2015) was also examined in this study.

Statistics have shown that the internet penetration rate in Nigeria in 2016 was 40 %, implying that about 70 % of the country's projected 180 million population access the internet, a large percentage of whom are children and adolescents (which is nearly the entire population of the United Kingdom). The country's National Communications Commission (NCC) projects that the country will achieve by 2020 a 76 % broadband penetration. In 2014, Nigeria ranked second among countries with the most enthusiastic internet users (Plumptre, 2016). These statistics have important policy and social wellbeing implications; policy in the sense that the internet is expected to impact tremendously toward the country's socio-economic development, while social wellbeing in the sense that the internet is envisaged to impact the social wellbeing of the country's population of users.

Therefore, to provide a further understanding of cyberbullying and related child's onlinerisky behaviours among Nigerian school adolescents, this paper aimed to determine (i) the level of cyberbullying incidence; (ii) the gendered involvement (gender difference) of the adolescents in cyberbullying; (iii) the adolescents' average time spent using the internet and (iv) the likelihood of peer influence as a risk-factor of cyberbullying. This paper continues in the next section with a discussion on the methods of the study. Then the main findings are presented and discussed. The concluding notes are discussed at the end.

From the global perspective, the literature demonstrates that parental control could influence adolescents' involvement in cyberbullying especially through education and interaction with them (Festl et al., 2013). However, influence from peers has been found to influence adolescents' involvement the more (Nikken, de Graaf, 2013). According to the findings of a research study conducted by Hinduja and Patchin (Hinduja, Patchin, 2013) adolescents are more likely to report peers involved in cyberbullying behaviour. Hence, the behaviour of a peer can influence adolescent in various ways. Similar findings in a study of German high school teenagers and cyberbullying carried out by Festl and colleagues (Festl et al., 2013) found that the number of cyberbullies in a class (i.e., the school class environment) influences students to perpetrate cyberbullying acts. This demonstrates that close peers can influence teenagers' involvement in cyberbullying.

Further, the literature has identified various types of the peer, which include members of the same social groups (such as classmates, relatives and neighbors), peers linked to other people with whom they have something in common (e.g., they are fans of the same football club) and peers associated to the individual through friendship or professional relationship (Alum, 2016; Festl et al., 2013). Peer behaviour is shown to influence the likelihood of cyberbullying just like adults' behaviour does in children's life (Baldry et al., 2018). A study on peer-group dynamics performed by Vanned Abele and colleagues (Vanned Abele et al., 2013) discovered that adolescents who felt greater peer pressure and a need for fame were more likely to be involved in cyberbullying incidents as bullies, e.g., by creating and posting hurtful videos and images of others. Peer norms and behaviour are shown to influence the adolescents and impact in the relationship between them and their parents. For example, the findings of an exploratory study performed by Sassoon and Mensch (Sassoon, Mensch, 2014) on the association between peer and parental relationships and risky online behaviour among Israeli youth stressed that restrictive parental control can increase the prospect of teenagers' perpetrating risky behaviour online. Most importantly, that effect coupled with peers' approval could lead to the understanding that approval from peers reduces the effect of restrictive parental control (Alum, 2016).

From the Nigerian context, a research study performed by Okoye and colleagues (Okoye et al., 2015) on the effect of cyberbullying among schoolchildren in Nigeria revealed that there is a significant relationship between schoolchildren's self-esteem, self-concept, self-efficacy and cyberbullying. Cyberbullying reduces children's confidence and leads to low self-esteem. This finding supports the 2010 report of the National Crime Prevention Council (NCPC) which describes cyberbullying as a modern method of victimisation that affects the psychological wellbeing of over 40 % of adolescents in the past years. Furthermore, the study shows that cyberbullying has a significant negative impact on the psychological wellbeing of school-going adolescents. However,

the study did not investigate gender differences in adolescents' involvement in cyberbullying nor determine the level of cyberbullying incidence in the nation's secondary schools.

Furthermore, a research study involving a sample of 653 adolescents which was performed by Louie and colleagues (Louie et al., 2015) reported similar findings. The study which aimed to determine the prevalence and correlates of cyberbullying among school-going adolescents in the Nigerian state of Oyo ran a three-month survey during which data on the respondents' information on the history of online harassment was investigated. The average respondents' age was between 11.5 and 16.5 years old, and 51.5 % of them were female. The findings revealed that a vast number (39.8 %) of the respondents had been cyberbullied, while only 23.9 % and 21 % of them had bullied someone and were both cyberbullies and victims respectively. Furthermore, all the respondents had internet-enabled mobile phones, about half of them could access the internet and 40 % of them accessed the internet daily. The most interesting findings of the study are that students who had been the victims of cyberbullying and heavy internet users (those with daily access) were significantly unlikely to become cyberbullies (perpetrators). Both those studies confirmed the incidence of cyberbullying in the country and its increasing devastation in the youngsters. However, the studies did not specifically report the actual level of the incidence nor any gender implications of cyberbullying in the country's secondary schools.

Regarding porn-related cyberbullying, an online analytical survey conducted by a prominent social media strategist and brand consultant, Plumptre showed that Nigerians visit pornographic websites tremendously. The survey indicated that in 2015, Nigeria's Google search for pornographic-related material ranked above 80 % on a scale of 0 to 100 % and that the volume of the country's average monthly searches for porn online via Google was 135,000. The survey further shows that the popularity of pornographic content searches online in the country had risen above Google's rating of 70 % since 2009, and that surprisingly, in December 2014 and 2015, i.e., for two consecutive years, Nigeria exceeded the United States (US) in the popularity of online searches for pornographic materials. Remember, the US is more than twice Nigeria's size and has one of the highest internet penetration rates in the world (Plumptre, 2016).

Additionally, gaming, social media and virtual reality are recently shown to have an influence on the types of pornographic content young people consume in Nigeria - the population of young people in the country constitutes 70 %. Among the country's states with the popularity for pornographic content searches online Enugu, Oyo, Ogun, Rivers, Lagos, Abiah and Cross River ranked the highest from high to low respectively. Lagos state ranked highest in rape pornographic videos online (some parts of the data of the present research were collected in a secondary school in Lagos state). In fact, among the top 50 websites visited by Nigerians, a popular pornographic site ranked more popular than even the most prominent jobs and news websites (Plumptre, 2016).

Theoretical Framework: This study adopted Albert Bandura's (Bandura, 1999) Social Cognitive Learning Theory (SCLT) to explain the implications of the findings of this study. Like home, the school environment and the virtual environment online are learning environments. The literature defines learning as "A persisting change in human performance or performance potential as a result of the learner's interaction with the environment" (Driscoll, 1994: 8-9). On their part, Weinstein and Mayer define learning as "The relatively permanent change in a person's knowledge or behaviour due to experience" (Weinstein, Mayer, 1986: 1040). While, Shell sees learning as "An enduring change in behavior, or in the capacity to behave in a given fashion, which results from practice or other forms of experience" (Shell, 1986: 412).

SCLT proffers a "framework" through which human behaviour can be understood, predicted and changed (Green, Pail, 2009). It heavily focuses on "cognitive concepts" – "how children and adults operate cognitively on their social experiences and how these cognitions then influence behavior and development" (Nibali, 2011-2012: 11). The main assumptions of SCLT are rooted in the notions that by watching what other people do, people learn to do things and that the processes of human thoughts are pivotal to understanding personality. According to Green and Pail (Green, Pail, 2009) cited in Nibali, SCLT seeks to explain socialization comprehensively, including the myriads of processes involved when individuals acquire the norm and thoughts of their society and that SCLT consists of four types of learning effects as follows (Nibali, 2011-2012: 13):

1. Observational Learning Effect: Acquiring new behaviour from a model

2. Response Facilitation Effect: According to the literature increased frequency of learned behaviour after a model is reinforced for the same behaviour.

3. Response Inhibition Effect: Decreased frequency of learned behaviour after observing punished model.

4. Response disinhibition Effect: Return of inhibited response after observing model behave that adverse consequences.

SCLT further argues that people are affected by their environments in such a way that they are "partial products of their environments" and that people's choices are influenced by their beliefs and capabilities. SCLT proffers an internal principle comprising of three interacting elements (personal factors, behaviour and environment) termed the "triadic reciprocity." A keener observation reveals that these three fundamental elements "work in a reciprocal nature" (Nibali, 2011-2012: 14) as shown in Figure 1.



Fig. 1. The single internal principle of SCLT proposed by Bandura (Bandura, 1997) Source: (Nibali, 2011-2012: 15)

2. Materials and methods

Participants: Participants of this study were 1,087 secondary school (secondary school) adolescents in the 3rd to 6th senior grades selected from the Nigerian states of Kano, Lagos and the Federal Capital Territory (FCT) public unity colleges using stratified random sampling (male: n = 615, 56.6 %; female: n = 472, 43.4 %). Senior grades students were selected as a sample because they were older adolescents among whom internet access and use (factors which Oyewusi, Orolade, 2014) correlated to children's involvement in risky online behaviour) is remarkably prevalent. The findings of a study conducted by Barlett and Coyne (Barlett, Coyne 2014) emphasised that boys perpetrate more cyberbullying during older adolescence supports my decision.

According to the UNESCO Institute for Statistics (UIS), the population of secondary school students in the country is 25,346,640 (UIS, 2018) while, according to the information made available to the research team by the schools' management the actual population of students in the three selected schools is 12,939,131. Because they represent one of the groups of heavy internet users in the country (Freedom House, 2017) and are highly vulnerable to cyberbullying (Rashid et al., 2017), the population of interest is senior secondary school students. The age of the respondents ranged from 15 to 17 years old (M = 16.29 years, SD = 1.528).

Procedures: Stratified random sampling was employed to determine the study's population while Taro Yamane's sampling technique was used to determine the sample sizes from each selected school's sampling frame. There are 104 federal unity schools in the country (Students.com, 2018), 63 of which are co-educational colleges while the remaining are girls-only schools except for a few, e.g., King's College Lagos. Given that previous studies have found a correlation between adolescents and online risks (see Hinduja, Patchin, 2014; Okoye et al., 2015; Simon, 2017).

This study's participants were selected from three co-ed unity colleges one in each of the country's three major geopolitical regions, namely the North, the North-Central and the South. The co-ed colleges were divided into three clusters based on the country's three main regions. One unity college was randomly selected from each of the clusters, which resulted in the selection of

Federal Government College (FGC) Kano at Kano State, in the Northern region; Federal Government College (FGC) Ruboshi at FCT, in the North-Central region; and Federal Science and Technical College (FSTC) Yaba at Lagos State, in the Southern region. However, the adolescents' region of the study was not computed in this study.

After data gathering was completed, a total of 1,043 questionnaires were successfully retrieved out of which 51 unusable questionnaires were discarded during data screening and cleansing, leaving behind only 992 (male: n = 555, 55.9 %: female: n = 437, 44.1 %) usable measures. For the data analysis, SPSS version 22 was employed. Exploratory data analysis (EDA) was run to determine the most critical items on the scale. The scale's validity and reliability were tested based on Brown's (Brown, 2006) recommendation that factor loading with >.50 is good. Items that did not meet this cut-off value were eliminated from further analysis.

Measures: The measures were adopted with modifications from the works of Yusuf and colleagues (Yusuf et al., 2018b), Wright (Wright, 2015) and Jung and colleagues (Jung et al., 2014). One variable (construct) was associated with this questionnaire, which is, peer influence in cyberbullying. It was divided into two sub-constructs: (i) Peer influence on cyber victimisatio ($\alpha = .98$) and (ii) Peer influence on sex-related cyber victimisation ($\alpha = .85$). With an overall alpha coefficient of .92 (see Table 1), this questionnaire presents an acceptable Cronbach alpha coefficient in terms of reliability (see Medrano, Aierbe, 2008). Five-point Likert-type scales were adopted throughout the measures (see Brown, 2006; Wright et al., 2014), with 1 (never) to 5 (very often).

Table 1. The Peer Influence	Cyberbullying	Scale
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S/No	The Peer Influence Scale's Items	Cronbach alpha
	Peer influence on cyber victimisation	.98
1	Someone sent me a nasty message online or electronically.	
2	Someone called me insulting names online or electronically.	
3	Someone gossiped about me online or electronically.	
4	Someone posted pictures of me which I didn't want to share with	
	others online or electronically.	
	Peer influence on sex-related cyber victimisation	.85
5	Someone sent me pictures of others engaged in sexual intercourse.	
6	Someone sent me videos of others doing a sex-related activity.	
7	Someone asked me to upload pictures of me nude.	
8	Someone asked me to upload pictures of my private parts.	
9	Someone asked me whether I've ever had sex.	
10	Someone asked me to upload videos of my private parts.	
11	Someone deliberately tuned in to a satellite television channel while I	
	was sitting in a room with them on which I saw nude adults.	
12	Someone played a video of others engaged in sexual intercourse and	
	showed it to me on their mobile phone.	
Overall C	Cronbach alpha	.92

3. Discussion

The result shows a very high prevalence of the children's online-risky behaviour as shown in Table 2, the prevalence level paints a disturbing picture of the dark webs of risks, uncertainties, threats and dangers looming in the encrypted walls of the online world which our kids frequent. In effect, this implies that among every 10 Nigerian secondary school adolescents, eight of them (add/subtract two adolescents) have been involved in a cyberbullying incident whether as victims, offenders or both. If the standard deviation percentage of 16.4 (which is approximately equivalent to a ratio of two persons) is added to the average percentage (75.6 + 16.4), the incidence rate shoots up to 92 %, meaning a clear majority (92 %) of them have been involved in cyberbullying, which is very alarming. However, if the standard deviation percentage is subtracted from the average percentage, the incidence rate drops down to 59.2 %, suggesting that more than a half of them have been involved in cyberbullying, which is rather moderate. The incidence mean percentage is obtained as follows:

som/m (100)

where 3.78/5 x 100

Where: som = the scale's overall mean M = the highest mean value that can be scored based on the five-point Likert scale used

Adolescents' Gendered Involvement in Cyberbullying: A clear majority of the male adolescents (M = 4.09, SD = .78), which is equivalent to 82 % used the internet as opposed to their female counterparts' 61 % users (M = 3.06, SD = 1.05) (refer to Table 1). The wider variation in female adolescents' mean value suggests relatively inconsistent responses. Given that online use (e.g., social media use, instant messaging apps use and surfing the Web) is associated with the internet, this result suggests a male-dominated internet use in Nigerian the secondary school context. Past research (Adesina, 2017; Camerini et al., 2020; Cortoni, 2017; Killer et al., 2019; Wright, 2017) has supported this finding.

Drawing on the literature that suggests a correlation between individuals' internet use level and the likelihood of being involved in risky cyber behaviour (e.g., Balakrishnan, 2015; Lazuras et al., 2019; Okorie, Ekeanyanwu, 2014;), Nigerian male adolescents are more likely to fall prey to online predators, target others or both. Past studies (e.g., Oyewusi, Orolade, 2014; Vandebosch, Cleemput, 2009; Wright, 2017) have all reported similar findings. However, in many other parts of the world, e.g., in South-East Asian countries like Malaysia, female users often outstrip male users (Yusuf et al., 2018a).

Tambawal and Umar (Tambawal, Umar, 2017) suggested that under normal circumstances boys tend to be bullies than girls and that bullying is reported from both boys' and girls' dormitories on the school campus. However, this notion does not exempt girls from the likelihood of being bullies as well, as argued in the preceding paragraph. This supports Bandura's SCLT internal principle's triadic reciprocity regarding the reciprocal interactions among environmental factors, personality factors and behavioural factors that shape an individual's learning process in an online social environment that is full of child-risky behaviours. For instance, in Nigerian secondary schools, senior students openly bully adolescents in junior grades, a sub-culture which is widely known as 'seniority'. Even though several past studies may not have supported the notion that youth who are physically bully have tendencies of becoming cyberbullies (e.g., Van Cleemput et al., 2014; Wong et al., 2018), the vicarious urge for taking revenge (which is psychological, see Kowalski et al., 2014) could, however, be hidden for years until the victim is grown enough (become senior) to avenge themselves on others through the 'transfer of aggression.' These incidents are widely reported among school adolescents, a phenomenon that is likely to metamorphose seniority into 'cyber seniority'.

In this Nigerian context, in real life, male teenagers are ordinarily more associated with covert, aggressive behaviour than female teenagers (Okorie, Ekeanyanwu, 2014; Umeogu, Ojiakor, 2014) unlike in the contexts of other parts of the world (e.g., Bergmann, Baier, 2018; Cho, Galehan, 2019; Cho, Rutsu, 2020; Englander et al., 2017). This finding is rather strange. Given that the sample of the study was selected from formal education institutions, which are characteristically rather closed environment whose members tend to share certain social and behavioural norms and sub-cultures and where peer influence is very high (Camerini et al., 2020; Festl et al., 2013; Umeogu, Ojiakor, 2014), the incidence of peer influence in the youngsters' involvement in cyberbullying as predators might have been impacting the occurrence and counter-occurrence of the cyber behaviour virtually among the same individuals and groups; hence, the unvaried results.

Adolescents' Average Time Spent Online: The results showed the presence of a moderately significant mean gender differences in the time spent using the internet by both male and female adolescents. Older teenagers used the Web the most. This result supports the research that correlates internet use to age (Barlett, Coyne, 2014; Camerini et al., 2020; Cortoni, 2017) (refer to Table 2). Male adolescents spent more time surfing the Web than their female counterparts. This result loosely confirms the claim that in the Nigerian society, technology access and use is gendered. This could be due to variations in the lifestyles of secondary school adolescents in contrast with those of other, non-student teenagers. Past research (Njoh, 2018) has shown that in Africa (including Nigeria), access to modern information and communication technology (ICT) is correlated to individuals' socio-economic status, literacy and/or educational levels.

Nowadays, it is becoming customary in many countries across the world children's access to the internet is often restricted and controlled by parents, teachers and other concerned adults for the safety and well-being of the kids following the increasing rates of online risks (Barlett, Helmstetter, 2017; Camerini et al., 2020; Cortoni, 2017; DQ, 2017). Nonetheless, more and more

teenagers nowadays get access to ubiquitous technology, which is increasingly becoming more affordable. Online chatting, taking selfies, recording videos and posting the same on their social networking sites' profiles are some of the activities they spend a lot of their leisure times doing. These online behaviours increase the adolescents' levels of human-computer interaction, which as the literature shows, is likely to expose them to cyber predators, which undermines the safety of the online environment. Past research has suggested children's internet use intensity is a correlate of the likelihood of their involvement in cyberbullying whether as actors, victims or both (Alim, 2016; Cortoni, 2017; Englander et al., 2017; Oyewusi, Orolade, 2014; Okoye et al., 2015). Moreover, the present make of new information technology has not been created with locating children and adolescents at its centre.

Peer Influence as a Potential Risk-Factor of Cyberbullying: The likelihood of the impact of peer groups' influence on the online behaviour of teenagers has been empirically confirmed. Festl and colleagues (Festl et al., 2013), Hinduja and Patchin (Hinduja, Patchin, 2012) and Kowalski and colleagues (Kowalski et al., 2018) emphasised that as well as the behaviour of parents and other adults in the teenagers' sphere, peer groups' behaviour can influence cyberbullying. The third aim of this study was to determine the peer groups' influence in cyber victimisation involving sexrelated behaviour as a risk-factor of cyberbullying among Nigerian secondary school adolescents. The researchers had explored peer groups' influence on unspecified cyber victimisation to gain an insight into the level of that problem among the adolescents earlier.

The level of cyber victimisation among the adolescents was generally high, for both genders, especially for girls even though the mean differences were negligible. Nonetheless, this finding may be providing some hints about the kinds of results to expect in future studies — more girls could be susceptible to falling prey to online predators more than boys, especially in a Nigerian context. The high scores of the peer influence on sex-related cyber victimisation construct were exceptionally disturbing. Parents, teachers and authorities could not imagine young boys and girls, who are regarded as future leaders getting involved in this kind of immoral act online, a behaviour capable of corrupting the kids' moral upbringing. Equally, of tremendous concern is the repercussion of the children's ruined morality on the larger society. Before this finding, the researchers expected the scores of the peer groups' influence construct to be higher than that of the influence of sex-related cyber victimisation among female adolescents. Ordinarily, girls appear physically and socially weaker than boys while boys appear bolder and more likely to initiate sexually seductive behaviour. Like in most other countries (Holfeld, Leadbeater, 2017; John et al., 2018), in Nigeria male users dominate social media platforms (Oyewusi, Orolade, 2014). Hence, the argument that female adolescents would be more susceptible to sex-related cyber victimisation especially arising from their male peers.

This unexpected finding is revealing some strange phenomena occurring in the dynamic socio-academic environment of the male and female teenagers which hitherto might have remained hidden to the outside world. Nowadays, many young boys and girls are falling prey to unsuspecting online bullies, who often expose their victims to immoral sexual content or harass them sexually via online, which impact negatively on their psychosocial wellbeing and academic performance (DeSmet et al., 2018; John et al., 2018; Kowalski et al., 2018; Longe et al., 2007).

The most intriguing part of this finding is the discovery that the male adolescents had been impacted by peer influence more rather than the female adolescents had been by sex-related cyber victimisation. This may be suggesting that more of male-to-male online sex-related victimisation occurs behind the encrypted walls of the country's cyberspace given that more males are on the internet than females. Furthermore, this finding may be supporting some media reports that many secondary school male teenagers were sexually abused by men on campuses in the city of Kano in the North-Western Nigerian state of Kano in 2017. In a related development, the Nigerian Police and government officials uncovered rampant rape incidences mostly involving girls and young women in the city (Omoniyi, 2012). Furthermore, in recent years there have been media reports on same-sex marriage, or gay marriage mostly involving young males in several parts of the country.

The internet is a double-edged sword - it has provided both the bullies and victims with a robust alternative. In Nigeria, pre-marital or extra-wedlock are culturally, religiously and legislatively prohibited whether between male and female or same-sex persons (Umeogu, Ojiakor, 2014). More research needs to be conducted to determine the degree and effects of this cyber immoral behaviour among Nigeria's younger generations.

4. Results

The respondents' demographics that were measured are gender and age (see Table 2). The results show that most of the respondents were male 55.9 % (n = 555). The age range of the adolescents was 15 to 17 years old (M = 16.29, SD = 1.528). Many of the adolescents were 15-year-old (38.21 %, n = 379), that is, those in senior secondary school (SSS) 1 level. Similarly, the sixteen-year-old adolescents (those in SSS 2 level) constituted a large number (30.65 %, n = 304) but fewer than the 15-year-olds slightly (by only 7.6 %). The 17-year-old teenagers (who are in SSS 3 level) constituted the least number of respondents (27.52 %, n = 273).

Given that, in Nigeria, not all students in the same grades always belong in the same age groups as obtained in most advanced countries (UIS, 2018), a negligible percentage of under-15-year-old and over-17-year-old adolescents (1.51 % and 2.11 % respectively) were surveyed but not focused on because of the insignificance of the differences (Brown, 2006). Furthermore, because the adolescents' ages of concern ranged from 15 to 17 years old (as shown in Table 2), with a negligible percentage of over-17-year-olds (2.11 %) and under-15-year-olds (1.51 %). The age distribution is virtually uniform (M = 16.29, SD = 1.528), hence not focused on. With this low variance (1.528, or 1.53), the oldest adolescent was 17.83, or 18 years old while the youngest adolescent was 14.76, or 15 years old.

Gender	Category	f	%	Mean	SD
	Male	555	55.9		
	Female	437	44.1		
	Total	992	100		
Age	<15	15	1.51	16.29	1.528
	15	379	38.21		
	16	304	30.65		
	17	273	27.52		
	>17	21	2.11		

Table 2. The Adolescents' Demographics (n = 992)

Note: f = Frequency; % = Percentage; SD = Standard deviation

To determine the cyberbullying incidence among Nigerian secondary school adolescents was investigated as Objective 1. The result in Table 3 shows a very high prevalence of the child's online-risky behaviour. With an incidence average of M = 3.78 (SD = .82), which is equivalent to 75.6 % (± 16.4) as shown in Table 3.

Also, to determine the likelihood of peer influence as a risk-factor of cyberbullying was investigated as Objective 4 of this study. In addition to showing the level of the incidence of cyberbullying which is Objective 1), Table 3 also shows the level of the likelihood of peer influence becoming a risk-factor of cyberbullying in this context. The peer influence scale was divided into two sub-scales namely (i) peer influence on cyber victimisation (which was used to measure the adolescents' likelihood of getting involved in cyber victimisation because of peer influence) and (ii) peer influence on sex-related cyber victimisation (which, as the name suggests, was used to gauge the adolescents' likelihood of getting involved in sex-related online victimisation because of peer influence). Further, as shown in Table 3, peer influence on cyber victimisation was less gendered with the scores for both the male (M = 4.10, SD = .88) and female (M = 4.23, SD = .87) adolescents having an insignificant difference of the mean value (M = .13). However, peer influence on sex-related cyber victimisation was gendered with the scores for both the male (M = .13). However, peer influence on sex-related cyber victimisation was gendered with the scores for both the male (M = .1.26).

Gender involvement in cyberbullying was investigated as Objective 2 while the time spent online by the adolescents was investigated as Objective 3 and the results showed the presence of a moderately significant mean gender differences in the time spent using the internet by both male and female adolescents as shown in Table 2 and Table 3. While regarding the use level, the results show that on average, the male adolescents used the internet for 14.33 (SD = 2.45) hours per week while the female adolescents used it for 11.74 (SD = 3.01) hours per week (see Table 4). Older teenagers used the Web the most. On average, as boys went online for between 12 and 17 weekly hours (approximately 1.7 to 2.4 daily hours), their female counterparts went online for 9 to 15 weekly hours (approximately 1.3 to 2.1 daily hours). The variation was statistically insignificant. The overall average internet surfing weekly hours for both boys and girls was 13.04 (SD = 2.73), i.e., between 10.31 and 12.61 hours online weekly (or, 1.50 to 1.80. hours daily) as shown in Table 4.

Table 3. The Peer Influence Scale's Scores based on Gender (n = 992)

S/No	Measures	Gender			
-		Male Female		le	
		Μ	SD	М	SD
	The Peer Influence Scale				
(i)	Peer influence on cyber victimisation	4.10	.88	4.23	.87
(ii)	Peer influence on sex-related cyber victimisation	3.89	.92	2.63	.89
Constr	ructs' overall mean	3.74	.84	3.39	.85
Scale's overall mean				3.78	.82
Incide	nce mean percentage	75.6 ± 1	16.4		

The results for the exploration of unspecified cyber victimisation showed that the impact of peer groups' influence in female adolescents' cyber victimisation recorded the highest mean value (M = 4.23, SD = .87) in the construct, only M = .13, SD = .01 lower than that for male adolescents (M = 4.10, SD = .88), which was also very high. The construct had a very high overall mean value of M = 4.17, SD = .88 (see Table 4). As the results for parental influence construct, these results also showed slightly higher peer groups' impact on female adolescents than on their male counterparts. Next is peer influence in sex-related in cyber victimisation construct. It recorded a tremendously high mean value (M = 3.89, SD = .92) for boys, significantly higher than that for girls (M = 2.63, SD = .89), which was so low. Nonetheless, the construct recorded a high overall mean value (M = 3.26, SD = .55). We need to understand this problem further if it must be successfully curbed among the young lads.

Table 4. The Adolescents' Internet Use based on Gender (n = 992)

Internet use based on gender				
Male		Female		
Mean	SD	Mean	SD	
4.09	.78	3.06	1.05	
Overall mean			3.58	.92
Average time spent using the internet per week				
Male		Female		
Mean	SD	Mean		SD
14.33	2.45	11.74		3.01
Overall mean		13.04		2.73

5. Conclusion

This study found that with an incidence percentage average of 76 %, the level of cyberbullying prevalence among Nigerian secondary school adolescents was very high. This finding is strange, it was unexpected. The finding rather suggests an alarming rate of the cyberbullying among the country's school adolescents, a phenomenon suggesting the possible implications of cyberbullying on the adolescents' social and psychological wellbeing. Furthermore, this study found that peer groups' influence highly impacted teenagers' likelihood to get involved in any form of cyberbullying incident as victims with the higher impact of peer influence on the female teenagers as compared to the males. Peer approval or disapproval has been shown to impact teenagers' online behaviour involving cyberbullying.

This finding validates many past research studies discussed in the reviewed literature. The findings also showed that peer influence impacted highly on the male adolescents' far more than it did on the female adolescents' involvement in online risky behaviour surrounding sexrelated cyber victimisation. The mean difference was highly significant, suggesting that peer groups' behaviour approving or disapproving the behaviour of others partaking in sex-related behaviour on the internet is more likely to impact very highly in male teens' partaking in pornrelated behaviour online. More female adolescents self-reported involvement in cyberbullying incidents as victims in comparison to male adolescents. Typically, girls are more likely to fear involvement in danger than boys. Many previous studies validated this finding. Similarly, more female adolescents by far reported having identified by gender the identity of others who cyberbullied them than male adolescents did. This finding is strange in the Nigerian context.

Ordinarily, girls are more pliable, meek and shy to retaliate threats, and would be more likely to seek help with victimisation than would boys regardless of the medium or milieu. Boys are more fearless, confident, and have higher tendencies of becoming aggressive; hence, they would not bother about reporting victimisation. Nowadays, more young males possess safety awareness skills, use the internet and surf the Web for longer hours on average than young females do. Therefore, ordinarily, more male teenagers are expected to be more likely to recognise the identities of others who bullied them online.

Despite this study providing further understanding to the literature about problems and issues surrounding cyberbullying among Nigerian school teenagers, it is not clear whether many of the cyberbullies preferred to reveal their identity to female victims only or possessed lower levels of technology use skills, so they could not conceal their online identity or the female respondents over-reported the incidents to create the impression of being active, male-like and tech-savvy. Other limitations are the sample was drawn from a population of senior secondary school students only, from three public secondary schools and three main geopolitical regions of the country.

Future research should focus on determining the effects of cyberbullying on adolescents' social and psychological wellbeing. The intimidations and dangers of the cyber world as discussed earlier emphasise that the roles and responsibilities of parents, teachers and other adults in educating their teenage children while online is enormously vital. With a suitable approach, internet risks among teenage children such as cyberbullying can be decreased. Without control and supervision from their parents, teachers and concerned adults in the society teenage children may confront and mismanage the bullying experience; and it is feared that that may cause other undesirable consequences including leading to depression and other psychological ill-health conditions. Apart from parents, important others that play a crucial role in the safety of children are teachers and schools. To curb the menace of cyberbullying and related children's online risks, safety awareness, especially children's cyber risks literacy should be incorporated into Nigerian schools' curricula.

6. Acknowledgements

This study was partially supported with a fellowship grant by the University of Maiduguri, Borno State, Nigeria (R/SP.6106/Vol. I). So, we want to express sincere appreciation to Prof. Dr Md Salleh Hj Hassan, who retired from active service from Department of Communication, Faculty of Modern Languages and Communication (FBMK), Universiti Putra Malaysia (UPM) in late 2017 for his academic, financial and moral support. We thank Dr Sarina Yusuf of UPM's Institute for Social Science Research (IPSAS) as well as Prof. Danjuma Gambo and Prof. Mohammed Gujbawu both from the Department of Mass Communication, the University of Maiduguri for their academic and moral support. These acknowledgements will not be complete without thanking Associate Professors Mohammed Bashir Tijjani, Mohammed Mahre and Saidu Ibrahim Ngulde all of the Faculty of Veterinary Medicine, University of Maiduguri as well as Dr Jafar Khoshrouzadeh, Department of Communication, FBMK, UPM for their useful advice and moral support toward the success of this study.

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