The Influence of Cyber-Impersonation on Psycho-Social Adjustment of Public University Students in North Central States of Nigeria

S. A. ALAO & B. N. KOHOL Ph.D

College of Agricultural and Science Education, Department of Educational Foundations and General Studies, Federal University of Agriculture, Makurdi

Abstract
The study investigated the perceived influence of cyber impersonation on psycho-social adjustment of public university students in North Central States of Nigeria. The study looked at the perceived influence of cyber impersonation on fear and depression of public university students. Two specific objectives with corresponding research questions guided the study and two hypotheses were formulated and tested at 0.05 level of significance. The study adopted a survey research design. The population of the study comprises one hundred and fourteen thousand, fifty four (114054) students for the 2017/2018 academic session in the public universities in North-Central, Nigeria. The sample size of 399 students was drawn for the study using proportionate stratified and accidental sampling techniques. The instrument for data collection was an adapted structured questionnaire titled "Cyber Impersonation and Psycho-social Adjustment Questionnaire" (CIPSAQ). The questionnaire was validated by experts and its reliability was established using Cronbach Alpha method which yielded coefficient of 0.81. Data collected for the study was analyzed using Means and Standard Deviation to answer the research questions and Chi-Square Statistic to test the hypotheses at 0.05 level of significance. Findings of the study revealed that, cyber impersonation has significant negative influence on fear and depression among public university students in North Central States of Nigeria. The study concluded that being the victim of cyber impersonation is associated with significant psycho-social adjustment problems among public university students in North Central, Nigeria. Based on the findings, the study recommended that, Professional Guidance counsellors in universities should provide victims of cyber impersonation with psycho-education, behavior modification strategies and link them with other relevant resources to help such clients cope with the negative consequences associated with cyber- impersonation.
Key words: Cyber-Bullying, Cyber- Impersonation, Psycho-Social Adjustment, Depression and Fear

I.   Introduction

Cyberbullying is a relatively new phenomenon associated with the widespread adoption of various digital communication technologies, including the internet and mobile phones. Cyberbullying is a concept with roots in traditional, face-to-face bullying and no indication of disappearing any time soon (Davison & Stein, 2014). It is the use of email, cell phones, text messages, and Internet sites by an individual or group of individuals to repeatedly threaten, harass, embarrass, or socially exclude someone of less power (Li, 2007). The defining characteristic of cyberbullying is the use of digital technology, which allows cyberbullies to attack their victims in front of a much larger, often virtual audience for extended periods of time behind a veil of anonymity (Dempsey, Sulkowski, Nichols, & Storch, 2009).

Cyberbullying continues to be a serious issue for youth of all races, especially given the adverse mental health effects suffered by some victims. As the Internet is becoming the preferred method of communication for youths, it is also becoming a site for harassment, exacerbated by perceptions of anonymity, greater technological knowledge among youths, and the ability of harassing messages (Li, 2007). The explosive growth and development of the Internet has significantly contributed to the emergence of social networking sites in the cyber space (Okorie, Oyedepo & Usaini, 2012). The Internet has also transformed the cultural landscape in modern societies by re-inventing the way individuals interact and how relationships are developed (Okorie & Ekeanyanwu, 2014). Despite the numerous benefit of this access to information and opportunities to socialize children and young people seem at risk of negative experiences and harmful behaviours when navigating cyberspace. One of such negative experiences is the act of cyber- impersonation.

Cyber-Impersonation attacks are a low-tech form of cyber attack that uses social engineering to gain access to a system or network. The attacker "impersonates" or plays the role of someone that the victim is likely to trust, and can be convincing enough to trick the victim into allowing access to information or systems. Attackers find potential victims through their social media profiles. The most common platforms used are Facebook, Twitter, and LinkedIn, where information is often easily accessed by anyone. Attackers gather information like name, email address, school, job title and description, location and more. Attackers use several tactics to fool their victims, including simple ones like editing the display name on a free email account, or even going as far as registering a look-alike email domain creating a new email using a similar one to the person being impersonated. The attacker then sends an email or series of emails that create urgency for the victim to send the attacker the information they are requesting. For someone to be guilty of an online impersonation, they need to use a false persona to cause you harm or defraud you. For example, someone who pretended to be your long-lost cousin in order to trick you into giving them money would be committing fraud. Similarly, someone who pretends to be you in order to make embarrassing statements and harm your reputation is also crossing the line. Cyber impersonation is capable of causing depression and fear among victims.

Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behaviour feelings, and sense of well- being. People with a depressed mood may be notably sad, anxious, or empty; they may also feel notably hopeless, helpless, dejected, or worthless. On the other hand, fear is a feeling induced by perceived danger or <u>threat</u> that occurs in people which causes a change in functions and ultimately a change in behavior such as fleeing, hiding, or freezing from perceived traumatic events. Students who experience depression and fear as a result of cyber- impersonation need help to be psycho-socially adjusted to cope with life and to maintain relationships. Psycho-social adjustment is the accommodation of a person to a life – altering event or transition (Anderson, Keith and Novak, 2002). It is also described as the process a person strives to achieve good fitness in person – environment congruence is known as psycho-social adjustment (Denga, 2002).

Cyber impersonation attacks can cause quite a bit of damage, according to researchers. The pervasiveness of cyber impersonation among youths particularly among Students is well documented. One of the biggest concerns about cyberbullying like impersonation however, is the effects on victims' mental health, social, and interpersonal problems which sometimes lead to suicide and depression (Bhatta et al., 2014; Juvonen et al., 2003; Kubiszewski et al., 2015; Price, Chin, Higa-McMillan, Kim, & Frueh, 2013). More than half of youths who are victims of cyberbullying had clinically significant anxiety scores and clinically significant depression (Price et al., 2013). Youths who are bullied are more likely to report depression, low self-esteem, poor school performance, and suicide attempts; being bullied is also associated with higher odds of suicidal ideation, regardless of an adolescent's gender, race/ethnicity, or sexual orientation (Bhatta, Shakya, & Jefferis, 2014; Mueller, James, Abrutyn, & Levin, 2015; Sampasa-Kayinga et al., 2014). Bully-victims experience a great amount of psychological issues as well, including the risk of developing multiple psychopathologies, being socially ostracized by their peers, and experiencing elevated levels of depression and loneliness (Juvonen et al., 2003; Shojaei et al., 2009). However, other research found that cyber victimization was only weakly associated with symptoms of social anxiety, not depression (Dempsey et al., 2009). Recently Amalu (2018) carried out a study on Cyber Bullying and Psychological Well-being among Undergraduates in the University of Calabar. The result revealed that there is significant relationship between Cyber-bullying and psychological wellbeing among University of Calabar students as it affects the emotional, social and physical well-being of both the victims and perpetrators. Adolescents who are cyber bullies reported increased depressive affect, fear/anxiety, loneliness suicidal behaviour and somatic symptoms, while the perpetrators are more likely to report increased substance use, aggression and delinquent behavior. Mishna, Cook, Gadalla, Daciuj and Solomon (2009) conducted a study on cyber bullying behaviours among middle and high school students. Findings of the study revealed that, victims of cyber bullying reported feeling angry, sad, and depressed after being bullied online. Mager (2015) in a study on "Cyber-Victimization, Depression, and Social Anxiety among College Students reported that cyber-victimization correlated positively with depressive symptoms. Na, (2014) and Akcil (2018) stated that cyber bullying manifest in psychological problems like school phobia. Yubero, Larranaga and Martinez, (2011) reported that, social anxiety (fear of negative evaluation) increased the likelihood of cyber bullying victimization.

Statement of the Problem

Students use the internet, cell phones, and text messaging to stay connected to friends and access to technology is available everywhere and at all times. While most internet use is fun and beneficial, there are increasing problems of students using the internet or other mobile devices to send or post harmful or cruel text or images to bully and harass others. It has been observed by researchers that the internet is being used to cause some social vices in the cyber space. One of such vices is cyber- impersonation particularly among Students in Universities in Nigeria and North Central states of Nigeria in particular. The researchers observed this scenario

from the interactions with victims of cyber-harassment as guidance counselors. Victims of cyber-impersonation harassment sometimes have fear and feel depressed. Students with such experience need help to be psycho-socially adjusted in order to cope. It is based on this that the perceived influence of cyber impersonation on the psycho- social adjustment of public university students in North Central States of Nigeria was investigated.

Research Questions
The following research questions guided the study
1. What is the perceived influence of cyber impersonation on depression among public university students in North Central States of Nigeria?
2. What is the perceived influence cyber impersonation on fear among public university students in North Central States of Nigeria?

Research hypotheses
The following hypotheses were formulated and tested at 0.05 level of significance:
1. Cyber impersonation has no significant perceived influence on depression among public university students in North Central States of Nigeria
2. Cyber impersonation has no significant perceived influence on fear among public university students in North Central States of Nigeria

II. Methodology

The study adopted a survey research design and was carried out in North Central States of Nigeria. The population of this study comprises all the one hundred and fourteen thousand, fifty four (114054) students for the 2017/2018 academic session in the public universities in North-Central, Nigeria. The sample size for the study was 399 students in the six public universities. The sample was drawn using proportionate stratified and accidental sampling techniques. The instrument for data collection was an adapted structured questionnaire titled "Cyber Impersonation and Psycho-Social Adjustment Questionnaire" (CIPSAQ). The questionnaire has two sections - A and B. The questionnaire was validated by three experts from Guidance and Counselling Unit, and Measurement and Evaluation, all from Federal University of Agriculture, Makurdi. To ensure the internal consistency of the items of the adapted questionnaire, it was trial tested on a smaller sample of 30 students from University of Nigeria, Nsukka (UNN) who were not part of the study but possessed similar characteristics with the study sample. The reliability of the instrument was estimated using Cronbach Alpha method and a reliability coefficient of 0.81 was obtained. The data collected was analyzed using Means and Standard Deviation to answer the research questions while Chi-Square Statistic was used to test the null hypotheses at 0.05 level of significance.

III. Results

Research Question 1: What is the perceived influence of cyber impersonation on depression among public university students in North Central States of Nigeria?

Table 1: Mean and Standard Deviation Analysis of the perceived influence of cyber impersonation on depression among public university students in North Central States

S/N	Item Statement	N	SA	A	D	SD	Mean	SD	Decision
1	Students feel so unhappy and cannot stand anything else when they experience cyber impersonation	399	40	101	160	98	2.45	.97	Disagree
2	Students feel they are being punished whenever they experience cyber impersonation	399	84	169	79	67	2.67	.99	Agree
3	Students feel the future is hopeless and things cannot improve when they experience cyber impersonation	399	67	101	149	82	2.38	.99	Disagree
4	Students gets bored with everything when they experience cyber impersonation	399	82	163	80	74	2.63	1.01	Agree
5	Cyber impersonation makes students to lose appetite	399	66	100	170	63	2.42	.94	Disagree
6	Students hate themselves whenever they experience cyber impersonation	399	66	194	83	56	2.67	.91	Agree
7	Students lose interest in their peers whenever they experience cyber impersonation	399	72	189	94	44	2.72	.88	Agree
8	Students feel irritated whenever they experience cyber impersonation	399	80	183	77	59	2.71	.95	Agree
9	Students feel worried that they cannot think of anything else when they experience cyber impersonation	399	77	184	69	69	2.67	.98	Agree
	Grand Mean						**2.59**	**.96**	**Agree**

Source: Field Work: 2019

Analysis of data as presented in Table 1 shows the mean responses of respondents on the perceived influence of cyber impersonation on depression of public university students in North Central States of Nigeria with corresponding Standard Deviations values. Data presented on Table 1 revealed that, except for item 1, 3 and 5 with a mean values of 2.45, 2.38 and 2.42 respectively which are below the benchmark of 2.50, the respondents agreed to all other items (2, 4, 6, 7, 8 and 9) with mean scores ranging from 2.63 – 2.72 which are above the benchmark of 2.50. The table also revealed close Standard Deviation values ranging from .88 – 1.01 which showed that the respondents were homogeneous in their responses. The grand mean of all the items was revealed to be 2.59 and SD= .96. With this grand mean, it can be deduced from this finding that cyber impersonation has negative perceived influence on depression among public university students in North Central States

Research Question 2: What is the perceived influence of cyber impersonation on fear among public university students in North Central States?

Table 2: Mean and Standard Deviation Analysis of the perceived influence of cyber impersonation on fear of public university students in North Central States

S/N	Item Statement	N	SA	A	D	SD	Mean	SD	Decision
10	Students always panic whenever they experience cyber impersonation	399	40	185	93	81	2.46	.92	Disagree
11	Students fear for their safety whenever they experience cyber impersonation	399	51	214	55	79	2.59	.95	Agree
12	Students fear mingling with their peers when they experience cyber impersonation	399	58	199	79	63	2.63	.92	Agree
13	Students feel being startled when they experience cyber impersonation	399	61	178	92	68	2.58	.94	Agree
14	Students are unable to cope with things when they experience cyber impersonation	399	55	180	93	71	2.55	.94	Agree
15	Students fear being criticized by peers whenever they experience cyber impersonation	399	40	193	82	84	2.47	.93	Disagree
16	Students become emotionally upset whenever they experience cyber impersonation	399	42	219	67	71	2.58	.90	Agree
	Grand Mean						**2.55**	**.93**	**Agree**

Source: Field Work: 2019

Analysis of data as presented in Table 2 shows the mean responses of respondents on the perceived influence of cyber impersonation on fear of public university students in North Central States of Nigeria with corresponding Standard Deviations values. Data presented on Table 2 revealed that, except for item 10 and 15 with a mean values of 2.46 and 2.47 respectively which are below the benchmark of 2.50, the respondents agreed to all other items (11, 12, 13, 14, and 16) with mean scores ranging from 2.55 – 2.63 which are above the benchmark of 2.50. The table also revealed high Standard Deviation values ranging from .90 – .95 which showed that the respondents were homogeneous in their responses. The grand mean of all the items was revealed to be 2.55 and SD= .96. With this grand mean, it can be deduced from this finding that cyber impersonation has negative perceived influence on fear among public university students in North Central States of Nigeria.

Hypothesis 1: Cyber impersonation has no significant perceived influence on depression among public university students in North Central States of Nigeria.

Table 3: Chi-Square test of the perceived influence of Cyber impersonation on depression of public university students in North Central States

	Df	x^2cal	Sig	Alpha Level	Remark
Chi-Square	24	802.050	.000	.05	Significant
Sample		339			

Df = Degree of Freedom; x^2cal = Chi-Square Calculated Value; Sig = P-Value

Table 3 shows the Chi-square value of 802.050, degree of freedom df=24 and a sig (P-value=0.00) which is less than the alpha value (α=.05). Since P<.05, the result is significant, therefore the null hypothesis is rejected. This implied that, cyber impersonation has significant influence on depression of public university students in North Central States of Nigeria.

Hypothesis Two: Cyber impersonation has no significant perceived influence on fear among public university students in North Central States, Nigeria.

Table 4: Chi-Square test of the perceived influence of Cyber impersonation on fear among public university students in North Central States

	Df	x^2cal	Sig	Alpha Level	Remark
Chi-Square	18	1388.734	.000	.05	Significant
Sample		339			

Df = Degree of Freedom; x^2cal = Chi-Square Calculated Value; Sig = P-Value

Table 4 shows the Chi-square value of 1338.734, degree of freedom df=18 and a sig (P-value=0.00) which is less than the alpha value (α=.05). Since P<.05, the result is significant, therefore the null hypothesis is rejected. This implied that, cyber impersonation has significant influence on fear among public university students in North Central States of Nigeria

IV. Discussion

Findings of the study in respect of research question 1 which sought to find out the perceived influence of cyber impersonation on depression revealed that cyber impersonation has negative influence on depression among public university students in North Central States of Nigeria. In a similar vein, a related test of hypothesis as shown on table 3 revealed that, cyber impersonation has significant influence on depression among public university students in North Central States of Nigeria. This finding corroborate with that of Mishna, Cook, Gadalla, Daciuj and Solomon (2009) whose study on cyber bullying behaviours among middle and high school students reported that, victims of cyber bullying (cyber impersonation) reported feeling anger, sadness, and depression after being bullied online. The finding however disagree with that of Mager (2015) whose study on "Cyber-Victimization, Depression, and Social Anxiety among College Students reported that cyber-victimization correlated positively with depressive symptoms. This finding as observed implied therefore that, cyber impersonation is a cyber bullying factor that negatively influence students' depression.

The second finding of the study revealed that, cyber impersonation has negative influence on fear among public university students in North Central States of Nigeria. A related test of hypothesis revealed that cyber impersonation has significant influence on fear among public university students in North Central States of Nigeria. This finding conforms to the submission of Na, (2014) and Akcil (2018) who stated that cyber bullying manifest in psychological problems like school phobia. The findings also conforms with that of Navarro, Yubero, Larranaga and Martinez, (2011) who reported that, social anxiety (fear of negative evaluation) increased the likelihood of cyber bullying victimization. Cyber bullying victimization as reported by Navarro, Yubero, Larranaga and Martinez, (2011) could be cyber impersonation suffered by victims. This finding as observed infer that, cyber impersonation enhances social anxiety/insecurity and social isolation, and provides fewer opportunities to develop social competences among university students.

V. Conclusion and Recommendations

Based on the findings of the study, the researcher concluded that being the victim of cyber impersonation is associated with significant psycho-social adjustment problems. Cyber impersonated students are likely to experience higher levels of depression and fear. Being that most students who experience cyber impersonation in the university environment experience depression and fear, professional guidance counsellors need to step up to tackle the problem and apply counselling processes for helping victims.

Implications for Counselling
The negative link found between cyber impersonation, depression and fear among students in universities demonstrates the importance of addressing this issue in counseling, psychotherapy and advocacy.
Based on the findings of the study, the following recommendations were made:
1. Professional Guidance counsellors in universities should provide victims of cyber impersonation with psycho-education, behavior modification strategies and link them with other relevant resources to help such clients cope with the negative consequences associated with cyber- impersonation.
2. Given the prevalence rate of cyber impersonation among youths, university authorities should take preventive measure in the form of Advocacy to speak about the danger of cyber impersonation and the need for students to desist from it.

References

[1]. Akcil, S. (2018). Cyber-bullying-Victimization, Acculturative Stress, and Depression Among International College Students. Doctoral dissertation, Kent State University. <u>Google Scholar</u>
[2]. Anderson, D. M., Keith, J., & Novak, P. D. (Eds.). (2002). *Mosby's Medical Dictionary* (6th ed.). St. Louis, MO: Mosby, A Harcourt Health Science Company
[3]. Bhatta, M. P., Shakya, S., & Jefferis, E. (2014). Association of being bullied in school with suicide ideation and planning among rural middle school adolescents. *Journal of School Health*, 84(11), 731-738

[4]. Davison, C. B., & Stein, C. H. (2014). The dangers of cyberbullying. *North American Journal of Psychology*, 16(3). Retrieved from http://najp.8m.com
[5]. Dempsey, A. G., Sulkowski, M. L., Nichols, R., & Storch, E. A. (2009). Differences between peer victimization in cyber and physical settings and associated psychosocial adjustment in early adolescence. Psychology in the Schools, 46, 962-972
[6]. Juvonen, J., Graham, S., & Schuster, M.A. (2003). Bullying among young adolescents: The strong, the weak, and the troubled. *Pediatrics*, 112, 1231-1237
[7]. Kubiszewski, V., Fontaine, R., Potard, C., & Auzoult, L. (2015). Does cyberbullying overlap with school bullying when taking modality of involvement into account? *Computers in Human Behavior*, 43, 49-57
[8]. Li, Q. (2007). Bullying in the new playground: Research into cyberbullying and cyber victimization. *Australasian Journal of Educational Technology*, 23, 435-454
[9]. Mager K., L. (2015). Cyber-Victimization, Depression, and Social Anxiety among College Students. *Master's Theses*. Retrieved from http://thekeep.eiu.edu/theses/
[10]. Mishna, F., Saini, M., & Solomon, S. (2009). Ongoing and Online: Children and Youth's Perceptions of Cyberbullying. *Child Youth Serv Rev*., *31* (12); 1222-1228
[11]. Mueller, A. S., James, W., Abrutyn, S., & Levin, M. L. (2015). Suicide ideation and bullying among US adolescents: Examining the intersections of sexual orientation, gender, and race/ethnicity. American Journal of Public Health, 105, 980-985
[12]. Na, H. (2014). The Effects of Cyberbullying Victimization on Psychological Adjustments among College Students. Doctoral dissertationhttps://dspace-prod.lib.uic.edu/bitstream/handle/10027/11288/Na_Hyunjoo.pdf?sequence=1&isAllowed=yGoogle Scholar
[13]. Navarro, R., Yubero, S., Larranaga, E. & Martinez, V. (2011). Children's Cyberbullying Victimization: Associations with Social Anxiety and Social Competence in a Spanish Sample *Child Indicators Research* 5(2), 1-11
[14]. Okorie, N., Oyedepo, T., & Usaini, S. (2012). Internet, blogs and citizen journalism: promises and pitfalls to national development. *Journal of Media and Aesthetics*, (special edition),158-171
[15]. Price, M., Chin, M. A., Higa-McMillan, C., Kim, S., & Frueh, B. C. (2013). Prevalence and internalizing problems of ethnoracially diverse victims of traditional and cyber bullying. *School Mental Health,* 5, 183-191. doi:10.1007/s12310-013-9104-6
[16]. Sampasa-Kanyinga, H., Roumeliotis, P., & Xu, H. (2014). Associations between cyberbullying and school bullying victimization and suicidal ideation, plans and attempts among Canadian schoolchildren. PLoS ONE, 9, e102145