



The Prevalence of Cyber Harassment among Pre-university Students of Obafemi Awolowo University, Nigeria

Omowunmi Busola Adenaike, Obafemi Awolowo University, Nigeria, busolaadenaike@yahoo.com,  0000-0002-2952-9659

Oluwaseun Solomon Omotehinse, Obafemi Awolowo University, Nigeria, omotehinse65@gmail.com,  0000-0003-3835-646X

Keywords

Cyber Harassment
Pre-University Students
Technology

Article Info:

Received : 30-12-2023
Accepted : 28-07-2024
Published : 01-08-2024

Abstract

This study identified the forms of Cyber Harassment experienced by pre-university students of Obafemi Awolowo University, Nigeria. Also, this study investigated the common perpetrators of cyber harassment against the students. This study also determined the coping strategies employed in dealing with cyber harassment. Finally, this study investigated the predictive ability of demographic variables on cyber harassment. The survey research method was adopted for this study. The population consisted of 2157 pre-university students of Obafemi Awolowo University, Nigeria. A total of 912 students were selected as samples for this study. A questionnaire was used in collecting data for this study. The data collected were analyzed using Cluster Analysis, Frequency and Percentages, Relative Significance Index (RSI) and Regression. The results showed that the prevalent form of cyber harassment experienced by the students include social exclusion harassment, while visual/sexual and verbal/written harassments were also experienced by significant percentage of the respondents. Also, male and female co-students and friends are the most perpetrators of cyber harassment against the students. The result further showed that active ignoring, helplessness/self-blame were the most adopted strategies. While assertiveness, close support, technical coping and retaliation were moderately adopted. The result finally showed that students age, religion and family types predict students' experiences of cyber harassment, while students' sex did not. The study concluded that social isolation is the most experienced form of cyber harassment, while co-students and friends appeared to be the most perpetrators of cyber harassment against the students.

DOI: 10.52963/PERR_Biruni_V13.N2.03

To cite this article: Adenaike, O. B., & Omotehinse O. S (2024). The prevalence of cyber harassment among pre-university students of Obafemi Awolowo University, Nigeria. *Psycho-Educational Research Reviews*, 13(2), 116-128. doi: 10.52963/PERR_Biruni_V13.N2.03

INTRODUCTION

Harassment has been a prevailing issue in the world for a very long period of time now (Olweus, 2013). Harassment is the persistence attack and criticism on an individual causing worry and distress to that person (Oksanen, Celuch, Latikka, Oksa & Savela, 2022). It could come in the form of sexual harassment, verbal harassment, physical harassment and so on (Quinones, 2020; Raver & Nishii, 2010). Previously, harassment involved face to face activities with the victim and the perpetrators, however, in recent times, harassment has been taken to the internet as a result of the development in technology and this is commonly referred to as cyber harassment (Freeman, Zamanifard, Maloney & Acena, 2022).

Cyber harassment involved the use of internet to harass, and it does not require whether the victim is known to the perpetrators or not. The perpetrators can operate under anonymity and so their identity is unknown to the victim(s) (Hafeez, 2014). Cyber harassment is the use of Information and Communications Technology (ICT) to harass, control, manipulate or habitually disparage a child, adult, business or group without a direct or implied threat of physical harm. Its forms include verbal, sexual, emotional or social abuse among many others (Mendonca & D’Cruz, 2021). Cyber harassment can be further categorized into cyberstalking or internet troll. This can also be in form of direct harassment, invasion of privacy and denial of access.

Furthermore, people in different parts of the world now communicate together on a variety of devices such as cell phones, tablets, or computers. A picture/photo, video, text message, or email may be viewed by an individual, shared with another or “go viral” and spread to hundreds of thousands of users in a matter of minutes (Bloom, Garicano, Sadun & Van Reenen, 2014). Technology keeps improving, which in turn influences the way people interact by promoting global communication and allowing individuals to connect with others more readily.

Whereas, due to advancement in technology and educational technology, online communications is now part of teaching and learning process in almost every tertiary institution campuses. For instance, a study in Washington DC among college seniors’ students showed that virtually 100% of college seniors had access to the Internet (Harris Interactive, 2001). This is because it is required today that students take their own computer to campus, and some schools even require all students to have one. Schools now run online programmes that require students to be connected to the internet. Almost all universities and colleges now make high-speed Internet access available in the halls of residence and provide computer labs and library computer access for students who do not have their own computer. Students at times connect with their lecturers, friends and family through different online means such as e-mail among others (Franklin, 2015). Also, many students make use of Instant Messenger (I-M), which allows real-time communications through typing of messages back and forth across the Internet (Bouhnik & Deshen, 2014).

Without doubt, the use of the Internet has many benefits that enrich students’ scholarly and social experiences through access to a multitude of information and entertainment Web sites, libraries, online databases of scholarly journals, newsgroups, just to mention a few. However, evidence also exist about the variety of difficulties that the use of the Internet has caused, most especially uncontrolled access to the internet by young students and adolescents (Shatri, 2020; Sowmya & Roja, 2017). Some of these include cyber addiction, identity theft, exposure to unwanted violent and/or pornographic content or messages, e-mail harassment, cyberstalking and “cyber harassment” (Rapisarda & Kras, 2023; Opesade & Adetona, 2021; Attrill-Smith & Wesson, 2020). The extent to which college students experience these problems and know what to do if they occur is largely unknown.

More specifically, cyber harassment as one of these difficulties is seen as an act used by one or more online users attempting to psychologically devastate another online user(s). This behaviour has led to the death of so many teenagers and young adults in the western world (Erdur-Baker & Kavşut,

2007). Several studies have been conducted on cyber harassment among students in Nigeria, however, many of these studies largely focused on prevalence of cyber harassment (Mustapha, Muhammad & Olowoniyi, 2021; Olasanmi, Agbaje & Adeyemi, 2020), awareness and context (Olumide, Adams & Amodu, 2015). However, studies which explored the types/forms of cyber harassment, with focus on investigating the perpetrators from the victims' perspectives, are still largely unavailable, hence this study.

PURPOSE OF THE STUDY

The main objective of this study is to investigate the forms and predictive factors and perpetrators of cyber-harassment among pre-university students of Obafemi Awolowo University, Nigeria. This is with a view to understanding the prevalent form(s) of cyber harassment students are exposed to and factors which may predispose students to cyber harassment. This study will help in identifying common perpetrators of cyber harassment against the students

SPECIFIC OBJECTIVES

The specific objectives of this study are to:

- i. identify the prevalent forms of Cyber Harassment experienced by pre-university students of Obafemi Awolowo University, Nigeria
- ii. investigate the common perpetrators of cyber harassment against the pre-university students of Obafemi Awolowo University, Nigeria
- iii. determine the coping strategies used by the students in dealing with cyber harassment
- iv. investigate the predictive ability of demographic variables on cyber harassment of pre-university students of the institution

RESEARCH QUESTIONS

Based on the stated objectives above the following research questions will be generated

- i. What forms of Cyber Harassment is mostly experienced by pre-university students of Obafemi Awolowo University, Nigeria?
- ii. Who are the common perpetrators of cyber harassment against the pre-university students of Obafemi Awolowo University, Nigeria?
- iii. What are the coping strategies used by the students in dealing with cyber harassment?

RESEARCH HYPOTHESES

The following hypothesis was raised

- i. There is no significant predictive ability of demographic variables on cyber harassment of pre-university students of the institution

METHOD

The study adopted descriptive survey research design. This research design was adopted in order to help the researcher gain insight into the phenomenon being studied, while providing basis to appropriately describe the population, as well as the distribution of the variables, most especially without regard to any causal or other hypothesis (Aggarwal & Ranganathan, 2019). The descriptive survey research design accurately captures this study as data collected from the respondents, who could also be described as the representative sample, will be generalizable on the whole population (Aggarwal & Ranganathan, 2019).

POPULATION

The population for this study consisted of pre-university students of Obafemi Awolowo University, Nigeria. The preuniversity students of this institution consisted of students offering two different programmes, which include Pre-degree programme and Joint Universities Preliminary Examination Board (JUPEB) programme. According to statistics provided by the Pre-University programme management, there were 692 JUPEB students in the University for the 2021/2022 academic session, while there were 1465 Pre-degree students for this same academic session, making a total of 2157 students for the two programmes. This population was considered more appropriate for this study as they constitute young individuals, many of which are just gaining independence from their parents, and becoming more exposed to using the internet. This will help in understanding the forms of cyber harassment young people are exposed to and those who perpetrate this against them.

SAMPLE AND SAMPLING TECHNIQUE

A sample of 912 students, representing 42% of the population was selected from the pre-university students of Obafemi Awolowo University. However, after the collection and cleaning of the data, about 11 responses were discarded as they were not completely filled, leaving total of 901 respondents which were finally selected for this study. This number can be said to represent adequate sample, from which the result could be generalized on the whole population. Moreover, the sample comprised 564 females and 333 males between the age range of 15 and 30, selected using multistage sampling technique (which involved three stages of selection). In the first stage, two programmes were selected from the pre-university programmes being offered by the university using simple random technique. In the second stage, students were selected from each of the programmes using convenience sampling technique. Thus, a total of 467 students were selected from those in JUPEB programme, while a total of 434 students were selected from those in pre-degree programme. The choice of these sampling procedures were to minimize bias in sample selection and ensure that selected samples adequately represent the whole population. The demographic information of the respondents was presented in Table 1.

Table 1. Demographic Information of the Respondents

<i>Variables</i>	<i>Categories</i>	<i>Frequency</i>	<i>Percent</i>
Sex	Female	564	62.6
	Male	333	37.0
	No Response	4	.4
	Total	901	100.0
Age	15-20	713	79.1
	21-25	166	18.4
	26-30	14	1.6
	Above 30	4	.4
	No response	4	.4
Total	901	100.0	
Programme	JUPEB	467	51.8
	Pre-degree	434	48.2
	Total	901	100.0
Religion	Christianity	644	71.5
	Islam	211	23.4
	Traditional	30	3.3
	Others	15	1.7
	No Response	1	.1
Total	901	100.0	
Family type	Monogamy	594	65.9
	Polygamy	151	16.8
	Single parent	67	7.4
	Divorced	25	2.8
	Widow/Widower	28	3.1
	No Response	36	4.0
	Total	901	100.0

Table 1 presents the demographic information of the respondents. On the Table, 62.6% of the respondents were females, while 37.0% were males, implying that more males were represented in the study than females. Also, 79.1% of the respondents were between the age of 15 and 20, 18.4% were between the age of 21 and 25, 1.6% were between the age of 26 and 30, while 0.4% were above the age of 30. From this, it can be concluded that majority of the respondents were between age 26 and 20 years. Also, 71.5% of the respondents were Christians, 23.4% were Muslims, 3.3% were Traditional worshipers, while 1.7% belonged to other religions, implying that majority of the respondents were Christians. Also, 65.9% of the respondents came from Monogamous family, 16.8% were from Polygamous family, 7.4% were from Single Parenting, 2.8% were from Divorced home and 3.1% had one or both of their parents already dead. From this, it can be concluded that majority of the respondents were from Monogamous family.

INSTRUMENT

A questionnaire titled “Cyber Harassment Questionnaire” was used to collect data for this study. The questionnaire contained four Sections. Section A contained items on the demographic variables of the respondents. These cover the sex, age, religion and family types of the respondents. This section was used to gather information on the personal information of the respondents. Section B contained 26 items on Cyber Harassment, adapted from Lee, Abell and Holmes, (2017). These items measured three forms of cyber harassment which include Verbal/Written harassment (items 1 to 10), Visual/Sexual harassment (items 11 to 20) and Social Exclusion Harassment (items 21 to 26). The response type ranged from Always, Sometimes, Rarely and Never. The validity and reliability of the questionnaire were carried out by the original author, among 378 respondents. As presented by the author, the reliability value was 0.95, while the validity results showed a Comparative Fit Index (CFI) of 0.97, Tucker-Lewis Index (TLI) of 0.95, root mean square error of approximation (RMSEA) of 0.08 and standardized root mean square residual (SRMR) of 0.07. These were considered appropriate for conducting the research (Kline, 2011). Based on this, the researchers did not consider the need to revalidate the instrument.

Section C of the questionnaire contained items on the perpetrators of Cyber Harassment towards the students. The response type ranged from Always, Sometimes, Rarely and Never. This section was used in knowing the common and other perpetrators of cyber harassment. Section D of the questionnaire contained 23 items developed by the researchers through literature on the coping strategies adopted by the students in dealing with cases of cyber harassments. These items were divided into seven sections to address different coping strategies adopted by the students. These include Distal advice (items 1 to 3), Assertiveness (items 4 to 7), Helplessness/self-blame (items 8 to 10), Active ignoring (items 11 to 12), Retaliation (items 13 to 16), Close supports (items 17 to 20) and Technical coping (items 21 to 23). The response type also ranged from Always, Sometimes, Rarely and Never.

RESULTS

RESEARCH QUESTION 1

What forms of Cyber Harassment is mostly experienced by pre-university students of Obafemi Awolowo University, Nigeria?

To answer this question, the Section B of the questionnaire which addressed Cyber Harassment was adopted. The responses of the respondents to this Section were scored in such a way that a score of 4 was allotted to Always, a score of 3 was allotted to Sometimes, a score of 2 was allotted to Rarely and a score of 1 was allotted to Never. After this, the items were categorized into the types of cyber harassment identified in the questionnaire. In the categorization, items 1 to 10 were added together to represent Verbal/Written Harassment, items 11 to 20 were added together to represent

Visual/Sexual Harassment, and items 21 to 26 were added together to represent Social Exclusion Harassment. These different categorizations were subjected to Cluster analysis and the results are presented in Tables 2 to 4.

Table 2. *Final Cluster Centers of Forms of Cyber Harassment Experienced by Pre-university Students of Obafemi Awolowo University, Nigeria*

	Cluster		
	1	2	3
Verbal/Written	13.01	27.15	37.20
Visual/Sexual	11.83	24.42	33.66
Social Exclusion	7.52	14.56	18.61

Table 2 presents the final cluster centers of the categorizations of forms of cyber harassment experienced by the respondents. Judging from the nearest of the mean, social exclusion harassment could be said to belong to cluster 1, visual/sexual harassment could be said to belong to cluster 2, while verbal/written harassment could be said to belong to cluster 3. The number in each cluster is displayed in table 3.

Table 3. *Number of Cases in each Cluster of Forms of Cyber Harassment Experienced by Pre-university Students of Obafemi Awolowo University, Nigeria*

Cluster	1	537.000
	2	252.000
	3	112.000
Valid		901.000
Missing		.000

Table 3 presents the number of cases in each of the clusters of cyber harassment indicated. As seen on the Table, cluster 1 have a total of 537 cases, cluster 2 has a total of 252 cases and cluster 3 has a total of 112 cases. These were subjected to descriptive analysis, in line with the identification presented in Table 2, and the result is presented in Table 4.

Table 4. *Descriptive Statistics of the Prevalent Forms of Cyber Harassment Experienced by Pre-university Students of Obafemi Awolowo University, Nigeria*

Cyber Harassment	Frequency	Percent
Social Exclusion	537	59.6
Visual/sexual	252	28.0
Verbal/Written	112	12.4
Total	901	100.0

Table 4 presents the results of the prevalent forms of Cyber Harassment experienced by pre-university students of Obafemi Awolowo University, Nigeria. On the table, 537 students, representing 59.6% of the respondents experienced social exclusion harassment, 252 students, representing 28.0% of the respondents were victims of visual/sexual cyber harassment, while 112 students, representing 12.4% of the respondents experienced verbal/written harassment. From this, it could be concluded that the prevalent forms of harassment experienced by the students include social exclusion harassment, while others, such as visual/sexual and verbal/written harassments are also experienced by significant amount of the respondents.

RESEARCH QUESTION 2

Who are the common perpetrators of cyber harassment against the pre-university students of Obafemi Awolowo University, Nigeria?

To answer this question, Section C of the questionnaire on Perpetrators of Cyber Harassment towards the students were adopted. This Section was in such a way that a score of 4 was allotted to Always response, a score of 3 was allotted to Sometimes response, a score of 2 was allotted to Rarely

response and a score of 1 was allotted to Never response. These were initially subjected to analysis of frequency and percentages, after which Relative Significance Index (RSI) were performed on the responses in order to analyze the relative importance of each item in comparison to others. The result is presented in Table 5.

Table 5. Common Perpetrators of Cyber Harassment against the Pre-university Students of Obafemi Awolowo University, Nigeria

S/N	Perpetrators	Always	Sometimes	Rarely	Never	RSI	Rank
1.	Lecturers	190 (21.1)	66 (7.3)	69 (7.7)	573 (63.6)	0.465	4
2.	Co-students (males)	155 (17.2)	158 (17.5)	132 (14.7)	454 (50.4)	0.504	1
3.	Co-students (females)	155 (17.2)	120 (13.3)	137 (15.2)	487 (54.1)	0.484	3
4.	Siblings	146 (16.2)	87 (9.7)	84 (9.3)	582 (64.6)	0.444	6
5.	Other Family Relations	130 (14.4)	112 (12.4)	91 (10.1)	565 (62.7)	0.446	5
6.	Friends	137 (15.2)	172 (19.1)	146 (16.2)	444 (49.3)	0.501	2
7.	Distance relations	91 (10.1)	140 (15.5)	108 (12.0)	561 (62.3)	0.434	8
8.	Community dwellers	72 (8.0)	166 (18.4)	116 (12.9)	545 (60.5)	0.435	7
9.	Religious Leaders	67 (7.4)	139 (15.4)	102 (11.3)	591 (65.6)	0.412	9
10.	Father	71 (7.9)	126 (14.0)	101 (11.2)	603 (66.9)	0.407	10
11.	Mother	60 (6.7)	126 (14.0)	107 (11.9)	608 (67.5)	0.400	12
12.	Guardian	78 (8.7)	101 (11.2)	112 (12.4)	605 (67.1)	0.403	11

Table 5 presents the result of the perpetrators of cyber harassment against pre-university students of Obafemi Awolowo University, Nigeria. Judging from the RSI, co-students who are male happen to ranked as 1st perpetrators of cyber harassment, followed by friends, which ranked as second, female co-students ranked as 3rd perpetrator, lecturers ranked as 4th perpetrator, other family relations ranked as 5th perpetrator, respondents’ siblings ranked as 6th perpetrator. The least perpetrators include mothers which ranked as 12th, guardians which ranked as 11th, fathers which ranked as 10th and religious leaders which ranked as 10th. From the above results, it can be concluded that the greatest perpetrators of cyber harassment against the students include their co-students and friends.

RESEARCH QUESTION 3

What are the coping strategies used by the students in dealing with cyber harassment?

To answer this question, Section D of the questionnaire which addressed the Strategies used in Coping with Cyber Harassment was adopted. The responses of the respondents to this Section were scored in such a way that a score of 4 was allotted to Always, a score of 3 was allotted to Sometimes, a score of 2 was allotted to Rarely and a score of 1 was allotted to Never. After this, the items were categorized into the different types of coping strategies identified in the questionnaire. In the categorization, items 1 to 3 were added together to represent Distal advice strategy, items 4 to 7 were added together to represent Assertiveness strategy, items 8 to 10 were added to represent Helplessness/Self-blame strategy, items 11 to 12 were added to represent Active ignoring strategy, items 13 to 16 were added together to represent Retaliation strategy, items 17 to 20 were added to represent Close support strategy, while items 21 to 23 were added together to represent Technical coping. These different categorizations were subjected to Cluster analysis and the results are presented in Tables 6 and 8.

Table 6. Final Cluster Centers of the Coping Strategies used by the Students in Dealing with Cyber Harassment

	Cluster						
	1	2	3	4	5	6	7
Distal advice	6.42	8.24	4.77	3.87	3.26	10.94	10.97
Assertiveness	13.43	10.22	12.15	6.21	4.64	14.75	14.42
Helplessness/self-blame	6.54	7.28	5.47	5.62	3.33	10.56	9.68
Active ignoring	4.72	4.76	4.01	4.05	2.26	7.05	5.82
Retaliation	6.71	10.67	5.81	7.13	4.31	14.16	9.99
Close Support	12.97	10.69	6.54	9.68	4.39	14.41	7.32
Technical Coping	11.03	7.79	6.79	8.95	3.55	10.61	5.05

Table 6 presents the final cluster centers of the categorizations of the strategies adopted by the respondents in coping with cyber harassment. Judging from the nearest of the mean, Retaliation could be said to belong to cluster 1, Assertiveness belonged to cluster 2, Helplessness/self-blame could be said to belong to cluster 3, Distal advice could be said to belong to cluster 4, Active ignoring could be said to belong to cluster 5, Close Support belonged to cluster 6, while Technical Coping could be said to belong to cluster 7. The number in each cluster is displayed in table 7.

Table 7. Number of Cases in each Cluster of the Coping Strategies used by the Students in Dealing with Cyber Harassment

Cluster	1	72.000	Retaliation
	2	114.000	Assertiveness
	3	124.000	Helplessness/self-blame
	4	63.000	Distal advice
	5	370.000	Active ignoring
	6	85.000	Close Support
	7	73.000	Technical Coping
Valid		901.000	
Missing		.000	

Table 7 presents the number of cases in each of the clusters of coping mechanisms adopted by the respondents in coping with cyber harassment indicated. As seen on the Table, cluster 1 has a total of 72 cases, cluster 2 has a total of 114 cases, cluster 3 has a total of 124 cases, cluster 5 has a total of 370 cases, cluster 6 has a total of 85 cases, while cluster 7 has a total of 73 cases. These were subjected to descriptive analysis, in line with the identification presented in Table 6, and the result is presented in Table 8.

Table 8. Descriptive Statistics of the Coping Strategies used by the Students in Dealing with Cyber Harassment

Coping Strategies	Frequency	Percent
Retaliation	72	8.0
Assertiveness	114	12.7
Helplessness/self-blame	124	13.8
Distal advice	63	7.0
Active ignoring	370	41.1
Close Support	85	9.4
Technical Coping	73	8.1
Total	901	100.0

Table 8 presents the results of the coping strategies adopted by the students in dealing with Cyber Harassment. On the table, 370 (41.1%) of the students adopts active ignoring, 124 (13.8%) of the students adopt helplessness and/or self-blame, 114 (12.7%) of the students adopt assertiveness strategy, 85 (9.4%) of the students adopt close support, 73 (8.1%) of the students adopt technical coping, 72 (8.0%) of the students adopt retaliation, while 63 (7.0%) of the students adopt distal advice coping strategy. From the table, it can be concluded that the most adopted coping strategies against cyber harassment include active ignoring, helplessness and/or self-blame and assertiveness.

HYPOTHESIS 1

There is no significant predictive ability of demographic variables on cyber harassment of pre-university students of the institution.

To test this hypothesis, the respondents' demographic variables and their scores on sexual harassment were subjected to Multiple Regression analysis. This was done using the demographic variables as the independent variables, while the cyber harassment scores served as the dependent variable. The results are presented in Tables 9 and 10.

Table 9. Model Summary of the Predictive Ability of Demographic Variables on Cyber Harassment of Pre-university Students of the Institution

Model Summary					ANOVA		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	df	F	Sig.
1	.307 ^a	.094	.090	21.62613	4	22.085	.000 ^b

a. Dependent Variable: Cyber Harassment

b. Predictors: (Constant), Family type, Sex, Age, Religion

Table 9 presents the model summary of the predictive ability of demographic variables of sex, age, religion and family types on cyber harassment of pre-university students of the institution. On the table, the R square was 0.094, while the adjusted R square was 0.090. This can be interpreted to mean that the demographic variables of sex, age, religion and family types accounts for a maximum of 9.4% and a minimum of 9.0% of the variance explained in cyber harassment. Also, on the table, the p value (0.000) was found to be less than 0.05 threshold for social sciences. Thus, it can be concluded that respondents' demographic variables of sex, age, religion and family types significant predict their experience of sexual harassment. In order to understand the predictive ability of each of the demographic variables and their contributions, the coefficient table is presented below:

Table 10. Coefficients of the Predictive Ability of each of the Demographic Variables on Cyber Harassment of Pre-university Students of the Institution

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	32.260	2.964		10.883	.000
	Sex	-2.753	1.549	-.059	-1.778	.076
	Age	8.203	1.627	.174	5.042	.000
	Religion	5.509	1.296	.152	4.250	.000
	Family type	2.245	.825	.097	2.723	.007

a. Dependent Variable: Harassment

Table 10 presents the significant results of the predictive ability of demographic variables of sex, age, religion and family type on cyber harassment of pre-university students of the institution. On the table, the age of the respondents (B = 8.203, p < 0.05), religion of the respondents (B = 5.509, p < 0.05) and family type (B = 2.245, p < 0.05) significantly predict students' experience of cyber harassment. However, students' sex (B = -2.753, p > 0.05) did not predict students' experience of cyber harassment. Also, on the table, respondents' age, religion and family types were found to positively predict students' experience of cyber harassment. To interpret this, for the age, it could be said that the younger the students, the more they experience cyber harassment; also, the more their religion tilt towards Christianity, the more their experience of cyber harassment; and the more students from monogamy family, the more their experience of cyber harassment.

DISCUSSION

The results of this study found that social exclusion harassment is the most prevalent types of cyber harassment experienced by pre-university students of Obafemi Awolowo University, Nigeria.

Also, result found that significant number of the students experienced visual/sexual cyber harassment, as well as verbal/written cyber harassment. This result of this study partially correlates with that of Thorvaldsen et al. (2016) where verbal and visual cyber harassment were found to be prevalent among their respondents however, unlike this present study, social exclusion was found to be very limited among the students sampled. However, the findings of Chi, Lan, Ngan and Linh (2020) were in line with this present study as they found verbal, visual and social isolation cyber harassment are some of the most experienced cyber harassments by their respondents. In the same vein, the result of the study conducted by Mustapha, Muhammad and Olowoniyi (2021) among students found that all forms of cyber harassment, including the ones mentioned in this current study, were being perpetrated and experienced by their respondents (both perpetrators and victims). Also, the study of Agustiningsih and Yusuf (2023) supported the findings of this study, as they found that social exclusion and verbal/written cyber harassment are some of the most experienced cyber harassment by students. Reasons for this present result may be due to the "controlled environment" most of the respondents live in, seeing that they are pre-university students. The other forms of cyber harassment may be considered as dangerous ones, which may attract severe punishment from the school authority, hence, the higher likelihood to engage in social isolation harassment, as compared to other forms of cyber harassment. Also, considering that these respondents were pre-university students, the autonomy to act in certain ways may not be fully guaranteed (Ismail & Yin, 2020) compared to the autonomy at the disposal of university students (Ozer, 2013). Thus, any disobedient acts may bring grave consequences and punishment to the students. Hence the dominance of social isolation form of cyber harassment, which may have little or no consequences.

Furthermore, results found that most perpetrator of cyber harassment against the students are male and female co-students, friends and lecturers, while parents, such as fathers, mothers and guardians were least perpetrators of cyber harassment against the students. Most of the research available on cyber harassment perpetrators focused on students being either victims or perpetrators (Rice et al., 2015; Kopecký, 2014). Studies which examined the contributions of significant others could not be found as at when this study is being conducted. Even though, this finding revealed that co-students and friends were the highest perpetrators of cyber harassment against the students, the contributions of others such as lecturers, family relations, siblings, religious leaders cannot be underestimated, as this finding have shown that these individuals contribute significantly to cyber harassment experienced by the respondents of this study.

In addition, the results of this study showed the strategies adopted by students in coping with cyber harassment. The results showed that active ignoring, helplessness/self-blame were the most adopted strategies. While assertiveness, close support, technical coping and retaliation were moderately adopted. This result of this study was found to be consistent with the findings of Chi et al. (2020) where ignoring was found to be one of the major ways through which students cope with cyber harassment as bullying, as most of their respondents chose not to share the information with their teachers and parents. Also, Chi et al. (2020) found that students' preference to discuss the issue of cyber harassment with their friends and retaliation were considered as the other alternatives of coping with the incident. As seen in this study, seeking close support and retaliation were found to be moderately employed in coping with cyber harassment. The findings of Gupta, Soohinda, Sampath and Dutta (2023); Espino, Guarini and Del Rey (2023), Machackova, Cerna, Sevcikova, Dedkova and Daneback (2013) among others were in support of this study as they found that ignoring, seeking supports, technical coping as well as retaliation as some of the coping strategies being adopted in dealing with cyber harassment.

Reasons for these coping strategies may be due to the nature of the prevalent form of cyber harassment experienced by the students. For instance, social isolation was found to be the most experienced. This may not warrant taking any other steps than just ignoring the perpetrators to concentrate on their studies or move with other friends (Machackova et al., 2013). Also, consequences

for this may not be as severe as consequences for other form of cyber harassment which may not have grave effects on the victims (Tokunaga, 2010). Also, it is believed that ignoring and inaction is a potent way through which perpetrators of cyber harassment could be stopped in carrying out such act in some other circumstances (Parris, Varjas, Meyers & Cutts, 2011), hence, the adoption of this strategy.

Results finally showed that students age, religion and family types were predictive factors in students' experiences and predispositions to cyber harassment, while students' sex were found to not predict experience of cyber harassment of the respondents. For age, the younger students were found to experience high level of cyber harassment; for religion, those practicing Christianity were found to experience more of cyber harassment; and students from monogamy family were found to experience high level of cyber harassment. The study of Mustapha et al. (2021) both agreed and disagreed with the findings of this current study. For instance, the sex of the students was found to predispose them to cyber harassment, however, unlike this present study, factors such as religion and age were not found to predispose students into cyber harassment. However, the study of Agustiniingsih and Yusuf (2023) found that the sex of students does not predispose them to cyber harassment, thereby, agreeing with this present study. The findings of Machackova et al. (2013) also disagreed with the results of this study, as sex was found to significantly predict students' experience of cyber harassment, while age was found to have no predictive ability. From this, it can be concluded that previous research shared diverse perspective on this. However, probable reasons for this present research could be due to the fact that both male and female respondents have equal access to the internet and both genders can perpetrate and also fall victim of cyber harassment (Rice et al., 2015). Even though, it is often expected that female students may be prone to sexual harassment from their male counterparts, it is however important to note that the male students may not be willing to say provocative, sexually demeanor words against their female counterparts due to fear of punishment and other consequences, seeing the pre-university students live in a controlled environment. While for age, there is high probability that those of younger age experience cyber harassment, due to certain fact such as being new in the environment and the probability of being at the lower classes and grades (Campbell, 2005). For religion, this can be justifiable as results for this study showed that religious leaders were parts of perpetrators of cyber harassment against the students, while family members were also found to be among the perpetrators of cyber harassment against the respondents for this study. This may be the probable reasons why religion and family types were predictors of cyber harassment among the students.

CONCLUSION

From the above result, it can be concluded that social exclusion cyber harassment is the most prevalent among pre-university students of Obafemi Awolowo University, Nigeria. In addition, visual/sexual cyber harassment, as well as verbal/written harassment were found to be experienced by the students. Also, the study concluded that the most common perpetrators of cyber harassment include co-students and friends. Also, the most adopted strategies in coping with cyber harassment was active ignoring. Whereas factors such as age, religion and family types significantly predict students' predisposition to sexual harassment, while sex did not.

SUGGESTIONS FOR FURTHER STUDIES AND RECOMMENDATION

Future research could investigate the long-term effects of cyber harassment on the academic and social performances of the students through the adoption of longitudinal research. This will not only provide information on the prevalence and forms of cyber harassment but also its effects. This will also help in devising means through which cyber harassment could be addressed among students.

Seeing that this study is limited to providing information on the forms of cyber harassment and perpetrators, it is recommended that future research look into appropriate interventions which could help in addressing the prevalence of and reducing the effects of cyber harassment among students.

This will be useful in discouraging the perpetrators of cyber harassment, and helping the victims in overcoming the mental and social challenges associated with the occurrences of cyber harassment.

AUTHOR CONTRIBUTIONS

Omowunmi Busola Adenaike contributed to the background of the study and research objectives. She was also responsible for the data collection and data coding. Oluwaseun Solomon Omotehinse was responsible for research methodology, the cleaning of the data, analysis of the data, interpretation of the results and the discussion of the findings. Both authors reviewed and approved the final manuscript.

REFERENCES

- Aggarwal, R., & Ranganathan, P. (2019). Study designs: Part 2—descriptive studies. *Perspectives in clinical research, 10*(1), 34-36. https://doi.org/10.4103%2Fpicr.PICR_154_18
- Agustiniingsih, N., Yusuf, A. (2023). Types of cyberbullying experienced by adolescents. *Malaysian Journal of Medicine & Health Sciences, 19*, 99-103.
- Attrill-Smith, A., & Wesson, C. (2020). The psychology of cybercrime. *The Palgrave handbook of international cybercrime and cyberdeviance*, 653-678.
- Bloom, N., Garicano, L., Sadun, R., & Van Reenen, J. (2014). The distinct effects of information technology and communication technology on firm organization. *Management Science, 60*(12), 2859-2885. <https://doi.org/10.1287/mnsc.2014.2013>
- Bouhnik, D., & Deshen, M. (2014). WhatsApp goes to school: Mobile instant messaging between teachers and students. *Journal of Information Technology Education. Research, 13*, 217-321. <http://dx.doi.org/10.28945/2051>
- Campbell, M. A. (2005). Cyber bullying: An old problem in a new guise?. *Journal of Psychologists and Counsellors in Schools, 15*(1), 68-76. <http://dx.doi.org/10.1375/ajgc.15.1.68>
- Chi, P. T. L., Lan, V. T. H., Ngan, N. H., & Linh, N. T. (2020). Online time, experience of cyber bullying and practices to cope with it among high school students in Hanoi. *Health psychology open, 7*(1), p.2055102920935747. <https://doi.org/10.1177%2F2055102920935747>
- Erdur-Baker, Ö., & Kavut, F. (2007). Cyber bullying: A new face of peer bullying. *Eurasian Journal of Educational Research, 27*, 31-42.
- Espino, E., Guarini, A. & Del Rey, R. (2023). Effective coping with cyberbullying in boys and girls: the mediating role of self-awareness, responsible decision-making, and social support. *Curr Psychol 42*, 32134-32146. <https://doi.org/10.1007/s12144-022-04213-5>
- Franklin, D. S. (2015). "Will the internet ever replace colleges and universities as we know it today?" An internet discussion about the future of higher education. *Procedia-social and behavioral sciences, 176*, 738-744. <https://doi.org/10.1016/j.sbspro.2015.01.534>
- Freeman, G., Zamanifard, S., Maloney, D., & Acena, D. (2022). Disturbing the peace: Experiencing and mitigating emerging harassment in social virtual reality. *Proceedings of the ACM on Human-Computer Interaction, 6*(CSCW1), 1-30. <https://doi.org/10.1145/3512932>
- Gupta, S., Soohinda, G., Sampath, H., & Dutta, S. (2023). Cyberbullying: A study of its extent, coping resources, and psychological impact among college students. *Industrial psychiatry journal, 32*(2), 375-379. https://doi.org/10.4103/ipj.ipj_40_23
- Hafeez, E. (2014). Cyber Harassment and Its Implications on. *Horizons, 8*(2), 29-48.
- Ismail, R., & Yin, K. Y. (2020). The impact of policy changes at the pre-university education on teaching, learning, and student performance. *Universal Journal of Educational Research, 8*(3), 1037-1045. <http://dx.doi.org/10.13189/ujer.2020.080338>
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York: The Guilford Press.
- Kopecký, K. (2014). Cyberbullying and other risks of internet communication focused on university students. *Procedia-Social and Behavioral Sciences, 112*, 260-269. <https://doi.org/10.1016/j.sbspro.2014.01.1163>

- Lee, J., Abell, N., & Holmes, J. L. (2017). Validation of measures of cyberbullying perpetration and victimization in emerging adulthood. *Research on Social Work Practice, 27*(4), 456-467. <https://doi.org/10.1177/1049731515578535>
- Machackova, H., Cerna, A., Sevcikova, A., Dedkova, L., & Daneback, K. (2013). Effectiveness of coping strategies for victims of cyberbullying. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 7*(3), article 5. <http://dx.doi.org/10.5817/CP2013-3-5>
- Mendonca, A., & D’Cruz, P. (2021). Workplace bullying, emotional abuse and harassment in the context of dirty work. *Special topics and particular occupations, professions and sectors, 4*, 551-586. http://dx.doi.org/10.1007/978-981-10-5154-8_21-1
- Mustapha, M. L., Muhammad, S. A., & Olowoniyi, F. F. (2021). Prevalence and forms of online harassment among undergraduates of a Nigerian University. *Spekta, 2*(1), 1-12. <http://dx.doi.org/10.12928/spekta.v2i1.2972>
- Oksanen, A., Celuch, M., Latikka, R., Oksa, R., & Savela, N. (2022). Hate and harassment in academia: The rising concern of the online environment. *Higher Education, 84*(3), 541-567. <https://doi.org/10.1007/s10734-021-00787-4>
- Olasanmi, O. O., Agbaje, Y. T., & Adeyemi, M. O. (2020). Prevalence and prevention strategies of cyberbullying among Nigerian students. *Open Journal of Applied Sciences, 10*(6), 351-363. <https://doi.org/10.4236/ojapps.2020.106026>
- Olumide, A. O., Adams, P., & Amodu, O. K. (2015). International Note: Awareness and context of cyber-harassment among secondary school students in Oyo state, Nigeria. *Journal of Adolescence, 39*(1), 10-14. <https://doi.org/10.1016/j.adolescence.2014.12.001>
- Olweus, D. (2013). Bully/victim problems among schoolchildren: Basic facts and effects of a school based intervention program. In *The development and treatment of childhood aggression* (pp. 411-448). Psychology Press.
- Opesade, A. O., & Adetona, A. O. (2021). An assessment of internet use and cyber-risk prevalence among students in selected Nigerian secondary schools. *Journal of Cybersecurity Education, Research and Practice, 2020*(2), 1-31. <https://doi.org/10.62915/2472-2707.1070>
- Ozer, B. (2013). Students’ perceptions regarding freedom in classroom. *The Anthropologist, 16*(3), 551-559. <http://dx.doi.org/10.1080/09720073.2013.11891381>
- Parris, L., Varjas, K., Meyers, J., & Cutts, H. (2011). High school student’s perceptions of coping with cyberbullying. *Youth & Society, 20*, 1-23.
- Quinones, L. M. (2020). Sexual harassment in public transport in Bogotá. *Transportation Research Part A: Policy and Practice, 139*, 54-69. <https://doi.org/10.1016/j.tra.2020.06.018>
- Rapisarda, S. S., & Kras, K. R. (2023). Cyberstalking. *Handbook on Crime and Technology*, 303-333.
- Raver, J. L., & Nishii, L. H. (2010). Once, twice, or three times as harmful? Ethnic harassment, gender harassment, and generalized workplace harassment. *Journal of applied psychology, 95*(2), 236-254. <https://doi.org/10.1037/a0018377>
- Rice, E., Petering, R., Rhoades, H., Winetrobe, H., Goldbach, J., Plant, A., & Kordic, T. (2015). Cyberbullying perpetration and victimization among middle-school students. *American journal of public health, 105*(3), e66-e72. <https://doi.org/10.2105/ajph.2014.302393>
- Shatri, Z. G. (2020). Advantages and disadvantages of using information technology in learning process of students. *Journal of Turkish Science Education, 17*(3), 420-428.
- Sowmya, S., & Roja, S. (2017). A study on advantages and disadvantages of internet. *International Journal of Academic Research and Development, 2*(6), 358-361.
- Thorvaldsen, S., Stenseth, A. M., Egeberg, G., Pettersen, G. O., & Rønning, J. A. (2016). Cyber harassment and quality of life. *Digital expectations and experiences in education* (pp. 163-182). Brill.
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior, 26*, 277-287. <https://doi.org/10.1016/j.chb.2009.11.014>