



Prevalence and factors associated with bullying among secondary school students in Bayelsa State

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Abstract

Context: Bullying probably represents the most obvious juvenile violence, manifested irrespective of location and type of school. Is a widespread public health concern among adolescents and has been reported in Nigerian secondary schools, with prevalence rates ranging from 40% to 85%. As an emergent issue affecting many students globally, it is a threat that should not be ignored

Objective: To determine the prevalence of bullying and identify risk factors for being bullied and being a bully among in-school adolescents in Bayelsa State.

Materials and Methods: A descriptive cross-sectional study was conducted involving 404 secondary school adolescents, using multistage random sampling. Data were collected using a questionnaire adapted from the bullying section of the Nigerian version of the Global School-based Student Health Survey (GSHS) and the LMS retrospective bullying questionnaire. Associations were assessed using the chi-squared test, with significance set at $p \leq 0.05$.

Results: The prevalence of bullying was 85.6%. Reported types included physical (77.7%), verbal (76.2%), psychological (66.8%), and sexual (38.6%) bullying. Additionally, 14.4% of participants identified themselves as bullies. Victims were significantly targeted for perceived vulnerabilities, including being considered "weird" ($p < 0.001$), "weak" ($p < 0.001$), or from "poor families" ($p = 0.003$). Teacher-led victimization was significantly associated with physical ($p = 0.001$), psychological ($p = 0.009$), and sexual ($p = 0.037$) bullying. Predictors of perpetration included having friends who are bullies (aOR = 4.232, $p < 0.001$), desire for control (aOR = 2.302, $p = 0.011$), school gender structure (aOR = 2.753, $p = 0.008$), and previous victimization (aOR = 268.714, $p < 0.001$).

Conclusion: Prevalence of bullying is high among the respondents. Schools should implement policies to protect vulnerable students and provide early psychosocial intervention for victims to reduce progression to perpetration.

Keywords: Prevalence, Bullying, Adolescents, Secondary School Students, Bayelsa State.

Introduction

On any given day, more than one billion children worldwide attend school.¹ Schools are uniquely

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DOI: 10.61386/imj.v19i4.1371

positioned to deliver the quality education that is the right of every child.² For many children, however, the school environment represents a very different universe, where they may be exposed to violence and may also be taught violence.² Bullying probably represents the most obvious juvenile violence manifested irrespective of location and type of school.³

According to UNICEF, bullying can be identified through the following three characteristics: intent, repetition, and power.⁴ Definitions of bullying from previous studies all stem around these characteristics. Bullying is an intentional, hurtful behaviour. It can be physical or psychological. It is often repeated and characterized by an inequality of power so that it is difficult for the victim to defend him/herself.⁵ Bullying is defined as the repetitive, intentional hurting of one person or group by another person or group, where the relationship involves an imbalance of power causing physical and psychological damage.³ Bullying encompasses verbal attacks, physical assault, relational/social aggression and cyberbullying.^{5,6}

Worldwide, a high percentage of students are involved in bullying every school day, either as bullies, victims, or both (2), it has been reported that those who have experienced bullying sometimes turn out to be bullies themselves. This phenomena has been explained by several behavioural theories. Organization Cultural Theory and the social learning theory acknowledge that majority of bullying behaviours are learned or acquired from the community or the society or even from the school; they are not merely inherited. Self-esteem and social isolation theory states that bullying behaviors are often associated with individuals feeling worthless or excluded and in turn may target others to increase their own self-esteem or gain control.⁷⁻⁹

Bullying is a worldwide problem among school children; a multi-country survey from 66 countries shows the prevalence of bullying ranging from 7-70% among school children.¹⁰ in the United States 19.2% of students ages 12-18 years in grades 6-12 experienced bullying nationwide during the 2021/2022 school year. Among that study population, 14.5% reported being bullied repeatedly, with the prevalence of bullying higher in middle school (26.3%) than in high school (15.7%). The prevalence of bullying was higher among female students (21.8%) than among male students (16.7%).

Across Africa, high prevalence's have been reported; studies among adolescents in schools in Egypt and Ghana, reported prevalence 67.5%, 77.6%, and 56% among study group.^{3,11,12} Bullying is a widespread issue in Nigerian

secondary schools, with prevalence rates ranging from 40% to 85%.¹³⁻¹⁷ A significant portion of adolescents report experiencing at least one form of bullying. A study in 2023 reported that about 51.9% of adolescent school students in Nigeria said they experienced at least one type of bullying, while 27.9% said they were bullies themselves. They also reported that the occurrence of bullying was mainly in the classrooms (75%) and that 58.3% of bullies were classmates.¹⁸ A comparative study between urban and rural school in Southern Nigeria showed there were more victims of bullying in urban schools 63.1% compared to rural school 42.7%.¹⁹ A prevalence rate of 73% and 61.3% for boys and girls respectively were reported in a study conducted in Kano, Nigeria.¹⁷ The reasons for geographic variations in prevalence of bullying in Nigeria is largely unknown.

From a study in Adamawa, out of all the risk factors presented to the students, watching violent films ranked most significant risk factor associated with bullying followed by feeling older than others²⁰ while about half of the sampled population believed that copying parent's aggressive behaviour could be responsible. The main reason identified for being bullied in both urban and rural schools in a comparative study was small physique.¹⁹ Unfortunately, this is a factor that is non-modifiable for a person. Having unsupportive teacher was highlighted as a factor contributing to the likelihood of being bullied in another study.¹⁷ Exposure to insults and bad language in homes and school climates were significant predictors of being a victim of bullying,¹¹ while witnessing family members use weapons was among significant factor associated with being a bully.

For child victims of violence, of which bullying is a major one, school can become an ordeal rather than an opportunity.² Bullying influences the victim's physical, emotional, social and educational wellbeing.¹⁰ Children who are bullied will often exhibit a marked decline in school achievement and a reluctance to participate in school activities.² Bullied children's mental and physical health is also at risk: they may show signs of depression, have problems eating, and sleeping or complain of physical symptoms such as headaches or stomach aches.²¹ A study from Adamawa in Northern Nigeria, reported from students perspective, the

effect of bullying to include isolation, non-attendance in school, fearful looking and can make a student hate going to school amongst other findings.²⁰ Recent studies suggest that around half of all children involved in bullying are both victims and perpetrators, and that they are the most troubled of all children involved in this manifestation of violence.²²

Despite the high burden of bullying across various nations, this issue remains under-researched in Nigeria and Bayelsa state. Although some researchers have reported the prevalence of bullying in schools from different states in Nigeria, there is limited data on its prevalence and associated factors in Yenagoa, Bayelsa State. This study aims to fill that gap by determining the prevalence of bullying, the prevalence of the various types, describing the patterns, and identifying the predictors for being a bully among secondary school students in Yenagoa LGA of Bayelsa State. Recommending and actualizing the mitigating measures against bullying depends on having knowledge on the risk factors³ and understanding specific risk factors in each locality. This survey hopes to highlight the extent of this issue and provide essential data for stakeholders and policymakers, enabling them to tackle the problem effectively.

Materials and Methods

Study location: The study was conducted among students in selected public and private schools in Yenagoa Local Government Area of (LGA) of Bayelsa state. The LGA has about 41 public secondary schools and over 336 private secondary schools.

Study Population: comprised of junior and senior secondary school students of both public and private schools in Bayelsa State

Study design: This was a descriptive cross-sectional study conducted between July and November 2022.

Sample size determination: A minimum sample size was calculated using the Cochran formula for cross-sectional studies.

$n = \frac{z^2 pq}{d^2}$ ²³ where n is the desired sample size.

Z is the standard deviation at the 95% confidence interval, which is taken as 1.96;

p is prevalence taken as 59.9% (0.599) from the prevalence of bullying form a previous study done

in Nigeria by Fenny and Falola.²⁴

q is 1 - p, which is 0.401

d is the acceptable margin of error or degree of precision=0.05. An upward adjustment for 10% to account for nonresponse and inappropriate entries gave a minimum sample size of 405.

However, data was collected from 404 students giving a response rate of 99.8%.

Data Collection and measures: A semi-structured, pretested, self-administered questionnaire was used to collect data from 404 respondents. The questionnaire was adapted from the bullying section of the Nigerian version of the Global School-based Student Health Survey (GSHS).²⁵ and LMU Retrospective bullying questionnaire.²⁶ The questionnaire comprised four sections: socio-demographic characteristic, family structure, prevalence and the Risk and protective factors for bullying.

Sampling technique: Participants were selected via a multistage sampling technique. Twelve secondary schools comprising 6 Public and 6 private schools were selected.

A multistage sampling technique was utilized. For public schools, both available boarding schools (1 boys'-only, 1 girls'-only) were purposively selected. From the 39 public day schools, 4 schools (1 boys'-only, 1 girls'-only, and 2 mixed schools) were selected using simple random sampling via balloting. For private schools, the sole private boarding school was purposively selected, while 5 private day/mixed schools were chosen from the private school registry via simple random sampling by balloting.

Proportionate to size allocation was done to determine the number of students to be selected per school, then systematic random sampling was used to select the students from each of the classes after determining the sample interval.

Data Management: Data was analysed using statistical product and service solutions SPSS version 25. Qualitative data were summarized as frequencies/proportions for various variables. Quantitative data were summarised as means and standard deviation. To achieve a multifactorial analysis, the relationship between categorical variables (such as student perceptions and teacher involvement) and specific forms of bullying was assessed using the Pearson Chi-square (chi²) test.

Furthermore, to determine the effects and predictive factors of perpetration, binary logistic regression was performed. Results were expressed as Odds Ratios (OR) with 95% Confidence Intervals (CI). A p-value of less than 0.05 was considered statistically significant for all associations. This approach allowed for the identification of independent predictors that contribute to the cycle of violence within the school ecosystem

Ethical clearance: was obtained from the Federal Medical Centre Research ethics committee with protocol No: 1165 and written permission obtained from the State Ministry of Education and the various school authorities. **Informed assent/consent:** Assent was obtained by ticking a consent box on hardcopy questionnaire by eligible study population following an explanation of study aim on the questionnaire. Consent was obtained from those above 18 years. Additional en-bloc informed consent and permission was obtained from school representatives of the Parents-Teachers Association.

Results

Table 1: Socio-demographic Characteristics of respondents

Variables	Frequency	Percentage
Age Group		
10 – 14	246	60.9
15 – 19	158	39.1
Mean age 13.7± 2.03 years		
Median 14.00		
Mode 14		
Sex		
Male	203	50.2
Female	201	49.8
Religion		
Christianity	395	97.8
Islam	7	1.7
Others	2	0.5
Gender Structure		
Mixed	145	35.9
Boys only	131	32.4
Girls only	128	31.7
Type of school		
Public Boarding School	70	17.3
Public day School	258	63.9
Private Boarding School	30	7.4
Private day School	46	11.4
Class		
JSS	227	56.2
SSS	177	43.8

A total of 404 students aged 10-19 years participated in this study, comprising 203 (50.2%) male and 201 (49.8%) female students. The mean age of the participants was 13.7± 2.03 years. Approximately one-third (35.9%) of the participants were in mixed

schools, another third (31.7%) were in girls-only schools, another third (32.4%) were in boys-only schools, and approximately two-thirds (63.9%) were in public day schools. A little above half (56.2%) were in junior secondary school (Table 1).

Table 2: Prevalence of types of bullying

Variable	Frequency	Percentage
Bullied in School		
Yes	344	85.1
No	60	14.9
How many persons have bullied you?	Multiple answers	
	N= 344	
One boy	60	17.4
Several boys	69	20.1
One girl	30	8.7
Several girls	51	14.8
Both boys and girls	52	15.1
My Teachers	28	8.1
Physically bullied in School		
Yes	314	77.7
No	90	22.3
Form of Physical bullying	Multiple answers	
	N=314	
Hit (Knocked on the Head)	166	52.9
Slapped	131	41.7
Flogged	108	34.4
Pushed	104	33.1
Beaten up	83	26.4
Kicked	54	17.2
Injured	50	15.9
Extortion	28	8.9
Did you consider this bullying attack serious?		
Not at all	71	22.6
Only a bit	110	35.0
Quite serious	94	29.9
Extremely serious	39	12.4
Verbally bullied in School		
Yes	308	76.2
No	96	23.8
Form of Verbal bullying	Multiple answers	
	N= 308	
Made fun of me	134	43.5
Abused me	126	40.9
Lies/spread false rumours about me	79	25.6
Threatened me	76	24.7
Did you consider this verbal bullying attack serious?		
Not at all	79	25.6
Only a bit	93	30.2
Quite serious	89	28.9
Extremely serious	47	15.3
Duration of bullying		
Few days	215	69.8
Several weeks	48	15.6
Several months	19	6.2
A year or more	26	8.4
Psychologically bullied in School		
Yes	270	66.8
No	134	33.2
Forms of Psychological bullying	Multiple answers	
	N= 270	
Intimidation	111	41.1
Harassment	103	38.1
Humiliation	59	21.9
Isolation	36	13.3
Sexually bullied in school		
Yes	156	38.6
No	248	61.4
Forms of Sexual bullying	Multiple answers	
	N= 156	
Used dirty words	106	67.9
Threats or sexual touching	43	27.6
being grabby	26	16.7

Prevalence of Bullying

Table 2 reveals that of the 404 students who participated in this survey, 344 (85.1%) had experienced one form of bullying or the other while some have experienced more than one form of bullying. The prevalence of different types of bullying among the study participants was 314 (77.7%), 308 (76.2%), 270 (66.8%), and 156 (38.6%) for physical, verbal, psychological and sexual bullying respectively.

Those who experienced physical bullying, 52.9%,

41.7%, 34.4% and 33.1% reported being hit, slapped, flogged or pushed respectively; of which 23.3% and 9.7% considered the bullying attack quite or extremely serious.

Majority of those who experienced verbal bullying, were made fun of 134(32.4%) or abused 126(30.4%). Intimidation 111(27.5%) and harassment 103(25.5%) ranked highest for psychological bullying. Using dirty words 106(26.2%) was highest for sexual bullying.

Table 3: Socio-demographic Factors associated with being bullied

Variable	Physically bullied			Verbally Bullied			Psychologically bullied			Sexually bullied		
	Yes N(%)	No (%)	χ^2	Yes (%)	No (%)	χ^2	Yes (%)	No (%)	χ^2	Yes (%)	No (%)	χ^2
Age												
10-14	191 (60.8)	55(61.1)	0.002	190 (61.7)	56(58.3)	0.346	169 (62.6)	77 (57.5)	0.990	106 (67.9)	140 (56.5)	5.315
15-19	123 (39.2)	35(38.9)		118 (38.3)	40(41.7)		101 (37.4)	57 (42.5)		50 (32.1)	108 (43.5)	
<i>p-value</i>	0.961			0.556			0.320			0.021*		
Sex												
Male	158 (50.3)	45(50.0)	0.003	152 (49.4)	51(53.1)	0.417	133 (49.3)	70 (52.2)	0.318	56 (35.9)	147 (59.3)	20.933
Female	156 (49.7)	45(50.0)		156 (50.6)	45(46.9)		137 (50.7)	64 (47.8)		100 (64.1)	101 (40.7)	
<i>p-value</i>	0.958			0.518			0.593			0.000*		
Type of School												
Public Boarding	60 (19.1)	10(11.1)	20.824	61 (19.8)	9(9.4)	6.233	47 (17.4)	23 (17.2)	5.960	32 (20.5)	38 (15.3)	5.738
Public Day	209 (66.6)	49(54.4)		189 (61.4)	69(71.9)		181 (67.1)	77 (57.5)		101 (64.7)	157 (63.3)	
Private Boarding	20 (6.4)	10(11.1)		24 (7.8)	6(6.3)		16 (5.9)	14 (10.4)		12 (7.7)	18 (7.3)	
Private Day	25 (7.9)	21(23.3)		34 (11.0)	12(12.5)		26 (9.6)	20 (14.9)		11 (7.1)	35 (14.1)	
<i>p-value</i>	0.000*			0.101			0.114			0.125		
Gender structure												
Mixed	107 (34.1)	38(42.2)	2.061	105 (34.1)	40(41.7)	2.436	91 (33.7)	54 (40.3)	1.842	33 (21.2)	112 (45.2)	33.706
Boys Only	104 (33.1)	27(30.0)		100 (32.5)	31(32.3)		92 (34.1)	39 (29.1)		50 (32.1)	81 (32.7)	
Girls Only	103 (32.8)	25(27.8)		103 (33.4)	25(26.0)		87 (32.2)	41 (30.6)		73 (46.8)	55 (22.2)	
<i>p-value</i>	0.357			0.296			0.398			0.000*		
Class												
JSS	172 (54.8)	55(61.1)	1.140	174 (56.5)	53(55.2)	0.049	153 (56.7)	74 (55.2)	0.076	99 (63.5)	128 (51.6)	5.461
SSS	142 (45.2)	35(38.9)		134 (43.5)	43(44.8)		117 (43.3)	60 (44.8)		57 (36.5)	120 (48.4)	
<i>p-value</i>	0.286			0.825			0.783			0.019*		
Family structure												
Monogamous	229 (72.9)	70(77.8)	0.855	225 (73.1)	74(77.1)	0.618	188 (69.6)	111(82.8)	8.120	121 (77.6)	178 (71.8)	1.669
Polygamous	85 (27.1)	20(22.2)		83 (26.9)	22(22.9)		82 (30.4)	23 (17.2)		35 (22.4)	70 (28.2)	
<i>p-value</i>	0.355			0.432			0.004*			0.196		

*Statistically significant

Table 4: Risk and Protective factors for bullying among respondents

Variable	Physically bullied			Verbally Bullied			Psychologically bullied			Sexually bullied		
	Yes N (%)	No (%)	χ^2	Yes (%)	No (%)	χ^2	Yes (%)	No (%)	χ^2	Yes (%)	No (%)	χ^2
I am seen as weird												
Yes	93 (29.6)	6 (6.7)	19.917	92 (92.9)	7 (7.1)	20.168	80 (80.8)	19 (19.2)	11.556	44 (44.4)	55 (55.6)	1.881
No	221 (70.4)	84 (93.3)		216 (70.8)	89 (29.2)		190 (62.3)	115 (37.7)		112 (36.7)	193 (63.3)	
<i>p-value</i>	0.000*			0.000*			0.001*			0.170		
I am Weak												
Yes	85 (91.4)	8 (8.6)	13.048	79 (84.9)	14 (15.1)	5.058	77 (82.8)	16 (17.2)	13.889	42 (45.2)	51 (54.8)	2.185
No	229 (73.6)	84 (26.4)		229 (73.6)	82 (26.4)		193 (62.1)	118 (37.7)		114 (36.7)	197 (63.3)	
<i>p-value</i>	0.000*			0.025*			0.000*			0.139		
I am not Popular												
Yes	70 (93.3)	5 (6.7)	12.962	69 (92.0)	6 (8.0)	12.631	65 (86.7)	10 (13.3)	16.346	39 (52.0)	36 (48.0)	6.962
No	244 (74.2)	85 (25.8)		239 (72.6)	90 (27.4)		205 (62.3)	124 (37.7)		117 (35.6)	212 (64.4)	
<i>p-value</i>	0.000*			0.000*			0.000*			0.008*		
I am Dull												
Yes	12 (100.0)	0 (0.0)	3.545	12 (100.0)	0 (0.0)	3.855	11 (91.7)	1 (8.3)	3.441	8 (66.7)	4 (33.3)	4.106
No	302 (77.0)	90 (23.0)		296 (75.5)	96 (24.5)		259 (66.1)	133 (33.9)		148 (37.8)	244 (62.2)	
<i>p-value</i>	0.076			0.077			0.115			0.067		
I am from a Poor Family												
Yes	46 (93.9)	3 (6.1)	10.620	45 (91.8)	4 (8.2)	7.790	41 (83.7)	8 (16.3)	7.135	25 (51.0)	24 (49.0)	3.621
No	268 (75.5)	87 (24.8)		263 (74.1)	92 (25.9)		229 (64.5)	126 (35.5)		131 (36.9)	224 (63.1)	
<i>p-value</i>	0.003*			0.004*			0.008*			0.057		
Bullied by Teachers												
Yes	28 (100.0)	0 (0.0)	8.623	21(75.0)	7 (25.0)	0.025	25 (89.3)	3 (10.7)	6.843	16 (57.1)	12 (42.9)	4.358
No	286 (76.1)	90 (23.9)		287 (76.3)	89 (23.7)		245 (65.2)	131 (34.8)		140 (37.2)	236 (62.8)	
<i>p-value</i>	0.001*			0.873			0.009*			0.037*		

Factors associated with the various type of being a victim of bullying

Being physically bullied was associated with attending a public school and also proportions were higher for those in boarding schools ($\chi^2 = 20.82$; $p = 0.00$), also for those who are seen as weird ($\chi^2 = 19.917$; $p = 0.000$), weak ($\chi^2 = 13.048$; $p = 0.000$), not popular ($\chi^2 = 12.962$; $p = 0.000$), from a poor family ($\chi^2 = 10.620$; $p = 0.003$), and bullied by teachers ($\chi^2 = 8.623$; $p = 0.001$).

Verbal bully was associated with been seen as weird ($\chi^2 = 20.168$; $p = 0.000$), weak ($\chi^2 = 5.058$; $p = 0.025$), not popular ($\chi^2 = 12.631$; $p = 0.000$) and from a poor family ($\chi^2 = 7.790$; $p = 0.004$).

Psychological bullying was associated with those from polygamous family ($\chi^2 = 8.120$; $p = 0.004$), seen as weird ($\chi^2 = 11.556$; $p = 0.001$), weak ($\chi^2 = 13.889$; $p = 0.000$), not popular ($\chi^2 = 16.342$; $p = 0.000$), from a poor family ($\chi^2 = 7.135$; $p = 0.008$), and by teachers ($\chi^2 = 6.843$; $p = 0.009$).

Sexual bullying was associated with the younger adolescents ($\chi^2 = 5.315$; $p = 0.021$), being female ($\chi^2 = 20.933$; $p = 0.000$), in a girl only school ($\chi^2 = 33.706$; $p = 0.000$), in the JSS ($\chi^2 = 5.416$; $p = 0.019$), not popular ($\chi^2 = 6.962$; $p = 0.008$), and being bullied by teachers ($\chi^2 = 4.358$; $p = 0.037$). Table 3 & 4.

Table 5: Being a bully

Variable	Frequency	Percentage
Have you bullied anyone before		
Yes	58	14.4
No	346	85.6
If you have bullied anyone before, have you been bullied yourself	N=58	
Yes	48	82.8
No	10	17.2
If yes, who bullied you	Multiple answers	
My siblings	13	27.1
My neighbours	7	14.6
In school	11	22.9
My teachers	6	12.5
My friends	20	41.7

Factors for being a bully

Table 5 shows that 58 (14.4%) of the participant have been bullies themselves while 48(82.8%) of these have experienced been bullied before. Majority were bullied by Friends, Siblings and in school.

Table 6: Factors associated with being a bully among the respondents

Variable	Have you bullied anyone before		χ^2	P-Value
	Yes n (%)	No n (%)		
Age (Years)				
10 - 14	32 (55.2)	214 (61.8)	0.930	0.335
15 - 19	26 (44.8)	132 (38.2)		
Sex				
Male	36 (62.1)	167 (48.3)	3.786	0.052
Female	22 (37.9)	179 (51.7)		
School Type				
Public Boarding school	2 (3.4)	68 (19.7)	10.149 ^b	0.015*
Public day School	46 (76.3)	212 (61.3)		
Private Boarding School	4 (6.9)	26 (7.5)		
Private day School	6 (10.3)	40 (11.6)		
Gender Structure				
Mixed School	34 (58.6)	111 (32.1)	19.521	0.000*
Boys only School	18 (31.0)	113 (32.7)		
Girls only School	6 (10.3)	122 (35.3)		
Class				
JSS	33 (56.9)	194 (56.1)	0.014	0.906
SSS	25 (43.1)	152 (43.9)		
Family Structure				
Monogamy	39 (67.2)	260 (75.1)	1.613	0.204
Polygamy	19 (32.8)	86 (24.9)		
I have been bullied before				
Yes	44 (75.9)	4 (1.2)	264.792 ^b	<0.001*
No	14 (24.1)	342 (98.8)		
I have witnessed abuse				
Yes	6 (10.3)	54 (15.6)	1.088	0.297
No	52 (89.7)	292 (84.4)		
I like to be in control				
Yes	18 (31.0)	61 (17.6)	5.674	0.017*
No	40 (69.0)	285 (82.4)		
I have friends who bully others				
Yes	14 (24.1)	26 (7.5)	15.387	0.000*
No	44 (75.9)	320 (92.5)		

^b fishers exact

Table 7: Predictors for being a bully among respondents

Variable	aOR	95% confidence interval	p-value
I have friends who bully others			
Yes	4.232	2.028 – 8.831	0.000*
No	1		
I like to be in control			
Yes	2.302	1.215 – 4.363	0.011*
No	1		
I have been bullied before			
Yes	268.714	84.687 – 852.655	0.000*
No	1		
Gender structure			
Mixed	2.753	1.309 – 5.791	0.008*
Single sex	1		

*Statistically Significant

Note that 1 on odds ratio stands for the reference variable

Factors associated with being a bully among the respondents

Factors associated with being a bully included being in Public Day School ($\chi^2 = 10.149$; $p = 0.017$), gender mixed school ($\chi^2 = 19.521$; $p = 0.000$), others included having been bullied before ($\chi^2 = 264.792$; $p = 0.000$), wanting to be in control ($\chi^2 = 5.674$; $p = 0.017$), and having friends who are also bullies ($\chi^2 = 15.387$; $p = 0.000$). Table 6.

Predictors included gender structure of the school

(aOR: 2.753; 95% CI = 1.309 - 5.791; $p=0.008$), having friends who are bullies (aOR: 4.232; 95% CI = 2.028 - 8.831; $p=0.000$), wanting to be in control (aOR: 2.302; 95% CI = 1.215 - 4.363; $p=0.011$) and having been bullied before (aOR: 268.714; 95% CI = 84.687 - 852.655; $p=0.000$). Table 7

Discussion

Our results show that over four-fifths of our study participants reported experiencing at least one form of bullying, with some experiencing more than one type. This proportion was higher than those reported in other studies conducted in Egypt (64.7%, 77.8%), Ghana (56%), across Nigeria (59.9%), and Edo State (51.9%). However, is comparable with other studies in Port Harcourt (82.2%) and a meta-analysis of 80 studies from various countries that reported ranges from 9% to 98%, Bullying prevalence varies from place to place. This can also be attributed to difference in study participants and data collection technique. It could also be as a result of increased awareness of what bullying is and its various forms among the study participants from enlightenment campaigns.

The commonest form of bullying amongst our study participants was physical bullying followed closely by verbal bullying. Physical bullying included slapping, flogging, pushed, beaten up, hit, and knocked on the head while verbal bullying involved being made fun of, abused, or threatened. This is in keeping with reports from other studies in Nigeria and other low and middle income countries.^{16,18,20,24,27}

It could be due to the fact that in this part of the world we still show aggression through the physical display of strength and inequalities of power and control measures to such aggression are not been enforced in some quarters. Also, most people who show physical aggression usually express verbal insults.

In contrast to physical bullying, verbal bullying was reported to be more common in some studies.^{16,27}

The prevalence of verbal bullying may be higher in some schools, because the school policies expressly prohibit physical fighting, thus bullies will channel their strength to verbal abuse. Other forms of bullying reported in this study were psychological bullying which included intimidation, harassment, humiliation and isolation. These have also been reported in some quarters^{18,27} and have far reaching

effects on the mental health of adolescents. Furthermore, the effects of verbal and psychological bullying are often emotional, resulting in low self-esteem or, in some cases, depression.

Sexual bullying was also reported in this study and using dirty words ranked the highest. These are comments of sexual nature that are used to intimidate, degrade or humiliate someone for their body image or sexuality, this could deteriorate to unwanted sexual harassment, acts or assault. Sexual bullying can cause victims to feel scared, anxious, humiliated and depressed.

Being bullied by teachers was associated with physical, psychological and sexual bullying. It has been reported that teachers act as bullies through inappropriate, excessive or unreasonable discipline, which could be in the form of physical aggression in flogging, hitting, pushing, grabbing or even fighting their students. Also, these bullying could be in the form of intimidation, humiliation which could involve public ridicule, constant criticism, degrading sexual comments or meting out punishment that is not appropriate for the situation or age. This could affect the students output and academic performance in school. Although it is important to note that a teacher's good intentions to discipline the student and bring out the best in them, could be misunderstood as bullying. Thus, teachers should follow proper discipline procedures and best practices regarding effective classroom management. They should treat their students with dignity, build relationships rooted in mutual respect and observe boundaries appropriate to a teacher's professional position.

The most striking statistical result is the Odds Ratio for perpetration: victims are 268 times more likely to become bullies themselves, confirming the Social Identity, social isolation and Self-Esteem theories. This "victim-turned-perpetrator" phenomenon is consistent with reports from Benin and Port Harcourt. It confirms a cycle of violence where aggression is a learned defense mechanism. The theories explained that bullying behaviors are often associated with individuals feeling worthless or excluded and may target others to boost their own self-esteem or gain control. Furthermore, the fact that having friends who bully others increases the risk 4-fold points to the "contagion effect" of bullying within social circles among adolescents in

schools. Also a desire to be in control are also linked to being more likely to be a bully; this is explained by social identity theory, which posits that individuals feel safer in groups where they are strong and may tend to exhibit aggressive behavior against groups they perceive as weak. This was also demonstrated in this study, as being perceived as weak, weird, not popular, and from a poor home, were all associated with all forms of bullying

Conclusion and Recommendation

Bullying and its various types was very prevalent among the study participants. Notable finding was that those who were bullied were more likely to bully others. Physical bullying was the most common form of bullying and most bullying occurred in the classroom. Teachers were also identified as perpetrators of various forms of bullying.

We recommend implementation of policies in schools to protect the most affected and vulnerable groups from being victims of school bullying. Teachers should be trained on proper disciplinary procedure and best practices in class management. Those experiencing bullying should be identified for psychotherapy to protect them from becoming bullies themselves. We advocate for rehabilitation for bullied students and sanctions for bullies.

Funding

The study was self-funded by the authors

Conflict of interest

The authors declare no conflict of interest

Authors' Contribution

All authors have accepted responsibility for the entire content of this manuscript and have approved its submission. OIO conceptualized the study. All authors participated in the study design and data collection. The OFE and KID drafted the initial manuscript. OIO performed statistical analysis and data interpretation. OIO and KID drafted the final manuscript. OFE and RFN critically reviewed and edited the manuscript for accuracy. All authors have read and approved the final version of the manuscript.

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