



CHILD ABUSE AND SOCIO-DEMOGRAPHIC FACTORS PREDICTING AGGRESSIVE BEHAVIOR AMONG IN-SCHOOL ADOLESCENTS

Emmanuel E. UYE

Department of psychology, University of Ibadan, Nigeria

ORCID: <https://orcid.org/0000-0002-7867-270X>

emmanuel.e.uye@gmail.com

Omowonuola H. RAJI

Department of psychology, University of Ibadan, Nigeria

ORCID: <https://orcid.org/0000-0002-7867-270X>

omowonuolaraji@gmail.com

Eshoe G. EHONDOR

Department of psychology, University of Ibadan, Nigeria

ORCID: <https://orcid.org/0009-0007-3539-6809>

esoheehondor@yahoo.com

Received: March 29, 2024

Accepted: June 17, 2024

Published: June 30, 2024

Suggested Citation:

Uye, E. E., Raji, O. H., & Ehondor, E. G. (2024). Child abuse and socio-demographic factors predicting aggressive behavior among in-school adolescents. *Turkish International Journal of Special Education and Guidance & Counselling (TIJSEG)*, 13(1), 69-78.



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Abstract

This study examines child abuse, class of study and gender as predictors of aggressive behavior among in-school adolescents in Ibadan, Oyo State, Nigeria. The study adopted across-sectional survey design while a simple random sampling technique was used to select five secondary schools in the study area. Validated questionnaires were used to gather data from 195 in-school adolescents. Data collected were analyzed using multiple regression, t-test of independent samples and one-way analysis of variance. Three hypotheses were tested and accepted at a $p < .05$ level of significance. The result revealed that dimensions of child abuse jointly predicted aggressive behavior among in-school adolescents. Also, the result indicated that class of study significantly influences aggressive behavior. However, gender marginally influences aggressive behavior among study participants. The study concluded that child abuse and class of study are significant contributors to aggressive behavior. It is recommended that parents, teachers and other stakeholders should help to reduce incidence and prevalence of child abuse in order to reduce aggressive behavior.

Keywords: Aggressive behavior, child abuse, class of study, gender, in-school adolescents.

INTRODUCTION

Aggression is an evolutionarily conserved behavior that controls social hierarchies and protects valuable resources like mates, food, and territory. In most cases, aggression is a normal and necessary component of social behavior (Meghan & Scott, 2019). However, some forms of aggression are considered pathological behaviors that threaten lives with negative consequences on the victims. Maremmanni et al. (2020) define aggression as an overt, often harmful, social interaction aim to inflict damage or other unpleasantness upon another individual. Aggressive behavior is typically observed during adolescence. Aggression has been found to be one of the milestones in adolescents' developmental stages (United Nations Children's Fund (UNICEF, 2022). Aggressiveness is multifaceted in nature and noticeable among in-school adolescents. Studies from school and community-based national surveys have found that 1 in every 10 in-school adolescents have suffered one form of aggressive behavior or the others (Rub, 2018).



Aggressive behavior as a phenomenon among in-school adolescents tend to be on the increase globally. The World Health Organization (WHO) estimated that aggressive behavior among in-school adolescents below the age of 19 years accounted for 227 deaths daily globally (Abdumalik et al., 2016). The data on aggressive behavior among in-school adolescents in Nigeria has also been reported to be on the increase (Sydney-Agbor, 2016). Aggression as an excessive conduct disorder behavior is fast becoming a defining characteristic among learners in institutions of learning (Nnodum, Agbaenyi, & Ugwuegbulam, 2014). Two types of aggressive behavior are common among in-school adolescents: Reactive aggression which is a hostile and impulsive behavior in response to frustration or a perceived threat while proactive aggression involves commission of aversive acts that are often unprovoked and directed toward possessing objects or controlling others (Dodge & Cole, 1987).

Some factors have been investigated as predictors of aggressive behavior among in-school adolescents. One factor considered in this study is child abuse. The World Health Organization (WHO) defines child abuse as "all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power" (WHO, 2016). The five components of child abuse/maltreatment have been explained by Bernstein et al. (1994). The first is emotional abuse, this has to do with verbal assaults on a child's sense of worth or well-being or any humiliating or degrading behavior directed toward a child by an adult or older person. The second is sexual abuse that is any sexual contact or conduct between a child younger than 18 years of age and an adult or older person. Third is physical abuse which has to do with bodily assaults on a child by an adult or older person that posed a risk of resulting in injury. Fourth is physical neglect which consists of the failure of caretakers to provide for a child's basic physical needs, including food, shelter, clothing, safety, and health care. It also includes poor parental supervision if it places children's safety in jeopardy. Finally, emotional neglect has to do with the failure of caretakers to meet children's basic emotional and psychological needs, including love, belonging, nurturance and support.

Studies have investigated the dimensions of child abuse predicting aggressive behavior among in-school adolescents. For example, Allen (2017) found that physical abuse in childhood predicted overall aggression in adulthood. In their own study Carli et al. (2014) found physical neglect to significantly influence aggressive behavior in adulthood. Mbilinyi et al. (2012) found relationship between sexual abuse and psychological aggression among their study participants. Also, emotional abuse was found to increase aggressive behavior among youths who live in poverty and communities with higher rates of violence (Silva et al. 2014; Zurbriggen et al. 2010). An earlier study by Sansone et al. (2012) has reported physical neglect, emotional abuse, physical abuse, and sexual abuse as different types of childhood abuse which eventually predicted aggressive behavior among in-school adolescents.

The second factor considered in this study to influence aggressive behavior among in-school adolescents is gender. Whether the individual is a male or female has influence in their aggressive behavior. Some studies have been conducted on in-school adolescents on aggressive behavior (Bucur et al., 2020; Sidhu, Kaur, Sangha, Bansal, 2019). In one study, boys were found to have higher levels of physical as well as verbal aggression than girls (Sandeep Panchal, 2021). Earlier, Ami et al. (2017) found boys to have higher levels of aggression than girls. Also, boys high in aggression used more abusive and foul language and were involved in destructive activities compared to girls who rarely used abusive language or physical fight (Wani et al., 2017). Further study by Elmasry et al. (2016) found male in-school adolescents to be significantly more physically and verbally aggressive compared to their female counterparts. Other extant studies have equally confirmed that gender differences existed on aggressive behavior among in-school adolescents (Archer & Coyne, 2005; Brendgen et al., 2005; Card et al., 2008; Giles & Heyman, 2005; Ostrov & Keating, 2004).



Finally, the class of study was considered in this study to influence aggressive behavior among in-school adolescents. This is the number of years or the class the in-school adolescent has spent in the school or the class they are presently. This was operationalized as Senior Secondary (SSS) 1-3 in this study. Studies have demonstrated that class of study has a significant influence on aggressive behavior among in-school adolescents. For example, Choudhary et al. (2022) found significant differences in the prevalence of aggressive behavior among children from classes 9th to 12th in physical aggression, verbal aggression, anger and hostility. Also, Verma et al. (2021) determined the prevalence of aggression and the class of study among school-going adolescents. The study found a statistically significant correlation between aggression and class of study. The in-school adolescents in senior classes were more aggressive compared to those in junior classes.

Taking into consideration, the increasing acts of aggressive behavior among in-school adolescents are not given proper investigation. Also, few studies that examined child abuse and aggressive behavior tend to give varying results across populations and different samples which left gaps in knowledge that need to be investigated.

Purpose of the Study

Therefore, the main purpose of this study was to investigate the influence child abuse, gender and class of study on aggressive behavior among in-school adolescents in Ibadan North-East Local Government Area in Oyo State, Nigeria. The specific objectives of the study were

1. to test whether child abuse dimensions will jointly and independently predict aggressive behavior among in-school adolescents in Ibadan North-East LGA in Oyo State, Nigeria.
2. to investigate whether gender and class of study will significantly influence aggressive behavior among in-school adolescents in the study population.

The study would provide a better insight into the influence of child abuse dimensions on aggressive behavior among in-school adolescents in the study area. Also, the school authority and teachers would be furnished with relevant information about the nature, environments, dimensions and consequences of aggression among in-school adolescents. Finally, results from this study would provide the basis for the formulation of policies for anti-violence and aggression campaign in the schools by the relevant authority.

Theoretical constructs

The following theoretical constructs were used to anchor this study.

Frustration-Aggression Theory: This theory (also known as frustration-aggression-displacement theory) was first proposed by Dollard et al. (1939). The theory says that frustration causes aggression, but when the source of the frustration cannot be challenged, the aggression gets displaced onto an innocent target. For example, if a child is abused and humiliated at home and cannot respond to this for fear of more abuse, threat, or intimidation, the child may go to school and take his/her anger and frustration out on his colleagues in school (most especially junior or weaker classmates). However, the theory has undergone revisions over the years (Berkowitz, 1989). Berkowitz (1989) has reformulated the theory to mean that frustration would 'generate aggressive inclinations only to the extent that they produce negative affects' (p.71). This implies that it is 'negative affect that is the proximal cause of aggressive responses, and that frustration are just one of many potential sources of negative affect' (Breuer & Elson, 2017, p.6).

Social Learning Theory: This theory believes that aggression is learned by observing, imitating and reinforcement (Taylor et al., 2006). In the first place, a child observes other people who are being aggressive or controlling their aggression and learns by imitation, to display aggression or control it. It does not matter whether a child sees the behavior in real life situations or in televisions. Also, Oostendorp (2003) confirmed that children who prefer violent video games are most likely to be above average in aggression. Parenting



style characterized by aggression, threats and hostility tends to train children in the use of aggressive behavior by modelling such action. Children learn to be aggressive by being exposed to an aggressive model of parenting. The child's environment in these families is characterized by many examples of aggressive behavior, manifesting itself in physical and verbal abuse between members of the family.

Hypotheses

Three hypotheses were tested:

H1: Child abuse dimensions-emotional abuse, physical abuse, sexual abuse, physical neglect, and emotional neglect-would jointly and independently predict aggressive behavior among in-school adolescents in Ibadan North Local Government Area (LGA).

H2: Male in-school adolescents would significantly report higher on aggressive behavior than female in-school adolescents in Ibadan North LGA.

H3: Class of study (SSS1, SSS2, & SSS3) would significantly influence aggressive behavior among in-school adolescents in Ibadan North LGA.

METHOD

Research Design

The study adopted cross-sectional survey research design while data were collected using validated questionnaires. The independent variables were child abuse, class of study and gender while the dependent variable was aggressive behavior. The study was carried out in Ibadan North-East Local Government Area (LGA), Oyo State, Nigeria. The population of the study was in-school adolescents from five Senior Secondary School (SSS) 1-3 from public secondary schools selected from Ibadan North East LGA.

The Participants

A total of 195 in-school adolescents participated in the study. Descriptive statistics revealed that 89 (46%) were males, while 106 (54%) were females with ages ranging between 13 and 20 years ($M=16.69$, $SD=1.34$). The analysis further showed that 117 (60%) were from SSS 1, 47 (24%) were from SSS 2, and 31(16%) were from SSS 3. In terms of whom the participants live with, 12 (6%) live with their father, 52(27%) reside with their mother, 109(56%) reside with both parents, while 22 (11%) live with either caregivers or relatives (not their parents).

Sampling Techniques

The study adopted a simple random sampling technique to select five out of 34 government senior secondary schools in Ibadan North-East LGA while a convenience sampling technique was used for 200 participants (40 participants from each school) for questionnaire administration.

Research Instruments

Two research instruments were used in data collection.

Buss-Perry Aggression Questionnaire This was used to measure aggressive behavior. The scale developed by Buss and Perry (1992). It is a 29-item questionnaire rated on a 5-point Likert's format ranging from 1 = completely false for me to 5=completely true for me. It measures physical, verbal, anger, and hostility aggression. Sample items include: "I get into fights a little more than the average person" and "If I have to resort to violence to protect my rights, I will". The original authors reported Cronbach's alpha of .85. Fariz et al. (2016) reported Cronbach's alpha for the subscales as physical aggression (.81), verbal aggression (.82), anger/emotional aggression (.73), and hostile aggression (.87). This study found Cronbach's alpha of .69 for the composite aggressive behavior scale. Higher scores indicate higher aggressive behavior.



Childhood Trauma Questionnaire Short Form (CTQ-SF) This was used to assess child abuse. The scale developed by Bernstein et al. (1994). The scale identified and measured the prevalence of retrospective childhood trauma. It is a 28-item scale presented on a 5-point Likert's format ranges from 'never true' (score 1) to 'very often true' (score 5). The CTQ-SF 28 has six subscales: Emotional abuse (EN), physical abuse (PA), sexual abuse (SA), emotional neglect (EN) and physical neglect (PN). Sample of items: "People in my family called me things" and "Parents too drunk/high to take care of the family". The original authors reported Cronbach's alpha of 0.72 and Wang et al. (2022) reported the following Cronbach's alpha for each subscale: Emotional Abuse (.68), Physical Abuse (.77), Sexual Abuse (.76), Emotional Neglect (.82) and Physical Neglect (.48). In the current study, Cronbach's alpha calculated was 0.74 for the composite scale and for the subscales, these were: emotional abuse (.61) emotional neglect (.54), physical abuse (.72), sexual abuse (.78), and minimizing or denial (.51).

Procedure for Data Collection

The researchers presented a letter of introduction from the Department of Psychology, University of Ibadan, Nigeria to the school principals of the selected secondary schools in the study area. After permission was granted by the school principals, a teacher was assigned to gather the in-school adolescents in each school for the administration of the questionnaires. The researchers addressed the participants and were told that participation in the study was voluntary. They were equally told that they can stop filling in the questionnaire at any point in time. They were assured that their responses would be treated confidentially. The questionnaires took less than 20 minutes to complete. All questionnaires were collected on the spot. The researchers administered 200 questionnaires (40 in each school). During the screening of the questionnaires, five questionnaires were found to have missing data and were removed thus left with 195 that were used for the final analysis.

Data Analysis

Data collected were analyzed using SPSS version 26. Both descriptive and inferential statistics were used to analyze data. Hypotheses 1 was tested using multiple regression analysis, hypothesis 2 was tested using t-test of independent sample means while hypothesis three was tested one way Analysis of Variance. All hypotheses were accepted at $p < .05$ level of significance.

RESULTS

The first analysis was the zero-order correlation which was used to establish the relationship among dimensions of child abuse namely emotional abuse, physical abuse, sexual abuse, physical neglect, emotional neglect, and minimizing/denial and aggressive behavior and the result is presented in Table1.

Table1. Zero-order correlation analysis among child abuse dimensions and aggressive behavior.

SN	Variables	1	2	3	4	5	6	7	M	SD
1	Emotional Abuse	-	.66	.56	.29	-.34	.39*	.16*	9.76	3.89
2	Physical Abuse		-	.56*	.28*	.32*	.36*	.25*	9.56	4.09
3	Sexual Abuse			-	.20*	-.30*	.31*	.15*	9.25	4.53
4	Physical Neglect				-	.10	-.12	.00	13.04	2.63
5	Emotional Neglect					-	-.60*	-.14*	18.30	3.53
6	Minimizing/Denial						-	.19*	78.85	13.91
7	Aggressive behavior							-	16.69	1.34

* Correlation is significant at the .01 level (2-tailed).



The results in Table 1 indicated that emotional abuse ($r = .16, p < .05$), physical abuse ($r = .25, p < .05$), sexual abuse ($r = .15, p < .05$) and minimizing/denial ($r = .19, p < .05$) all had significant positive relationships with aggressive behavior while emotional neglect had a significant negative correlation with aggressive behavior ($r = -.14, p < .05$). However, physical neglect had no significant relationship with aggressive behavior ($r = .00, p > .05$).

Hypotheses testing

H1: Child abuse dimensions of emotional abuse, physical abuse, sexual abuse, physical neglect, emotional neglect, and minimizing or denial would jointly and independently predict aggressive behavior among in-school adolescents. This was analysed using multiple regression analysis and the result is presented in Table 2

Table 2. Multiple Regression Analysis showing Joint and Independent Predictors of Aggressive Behavior among In-school Adolescents

Predictors	β	t	p	R	RR^2	F	p
Emotional Abuse	-.05	-.44	>.05	.27	.08	2.37	.05
Physical Abuse	.25	2.52	<.05				
Sexual Abuse	.00	.02	> .05				
Physical Neglect	-.05	-.61	> .05				
Emotional Neglect	-.01	-.07	> .05				
Minimizing/Denial	.10	1.08	> .05				

Dependent Variable: Aggressive Behavior

Table 2 show multiple regressions of the dimensions of child abuse on aggressive behavior among in-school adolescents in Ibadan metropolis. The results revealed that child abuse dimensions jointly predicted aggressive behavior among study participants ($R^2 = .27, F_{(6, 189)} = 2.37, p < .05$). This suggests that physical neglect, emotional abuse, emotional neglect, physical abuse sexual abuse, and minimizing or denial contributed 8% variance observed on aggressive behavior other variables not included in this study accounted for aggressive behavior. Also, the result indicated that physical abuse independently predicted aggressive physical behavior ($\beta = .25, p < .05$). However, other dimensions of child abuse did not independently predict aggressive behavior among study participants. Therefore, the hypothesis was partially confirmed.

H2: Male in-school adolescents would report higher on aggressive behavior than their female counterparts. This was tested using t-test of independent samples and the result is presented in Table 3.

Table 3. T-test of independent samples showing mean differences between male and female on aggressive behavior.

Dependent Variable	Gender	N	Mean	Std.Dev.	df	t	p
Aggressive behavior	Male	89	79.17	13.45	193	.30	>.05
	Female	106	78.58	14.34			

Table 3 shows t-test independent of sample mean of gender difference on aggressive behavior among in-school adolescents. The result indicated no significant difference between male and female in-school



adolescents on aggressive behavior. However, a close observation of the mean showed that male in-school adolescents scored higher in aggressive behavior ($Mean = 79.17$, $SD = 13.45$) compared to female in-school adolescents ($Mean = 78.53$, $SD = 14.34$). Therefore, the hypothesis is partially supported.

H3: Class of study would significantly influence aggressive behavior among in-school adolescents SSS 2 in-school adolescents would manifest aggressive behavior more than SSS 2 and SSS 3 in-school adolescents. This was analyzed using One-Way Analysis of Variance as presented in Table 4.

Table 4. One-way analysis of variance showing differences among SSS 1, SSS2 and SSS3 in-school adolescents on aggressive behavior.

	SS	df	MS	F	p
Between Groups	1627.92	2	813.96	4.35	<.05
Within Groups	35897.46	192	186.97		
Total Dependent Variable: A	37525.39	194			

Dependent variable: Aggressive behavior

The results in Table 4 showed that there is a significant difference among SSS1, SSS2 and SSS 3 students on aggressive behavior [$F_{(2, 192)} = 4.35$, $p < .05$]

The Post Hoc analysis was used to describe the multiple comparisons among SSS 1, SSS 2 and SSS3 in-school adolescents on aggressive behavior and it is presented in Table 4a

Table 4a. Post Hoc multiple comparisons showing differences among SSS 1, SSS2 and SSS3 in-school adolescents on aggressive behavior

Class	M	SD	MD	P
SSS 1	76.49	12.09	-5.85*	<.05
SSS 2	82.34	16.86	-5.96*	<.05
SSS 3	82.45	13.98	-.11	>.05

Dependent Variable: Aggressive Behavior

*The mean difference is significant at the .05 level. MD =Mean Difference

The results in Table 4a indicated SSS 2 participants ($M = 82.34$, $SD = 16.86$) manifested higher aggressive behavior than SSS1 participants ($M = 76.49$, $SD = 12.09$) while there was no significant differences between SSS2 and SSS3 participants on aggressive behavior. This supported hypothesis three.

DISCUSSION, CONCLUSION and RECOMMENDATIONS

This study investigated predictive ability of child abuse, class of study and gender on aggressive behavior among in-school adolescents in Ibadan North-East LGA. Three hypotheses were generated, tested and accepted at a $p < .05$ level of significance.

The results of the hypothesis that the dimensions of child abuse (emotional abuse, physical abuse, sexual abuse, physical neglect, emotional neglect, and minimizing or denial) would jointly predict aggressive behavior among in-school adolescents was supported. However, only physical abuse was found to independently predict aggressive behavior among in-school adolescents in the study population. The finding is in agreement with Allen's (2017) and Auslander et al. 's (2017) studies who found physical abuse to predict aggressive behavior among their study participants. Extant study had also found childhood physical abuse to be a significant predictor of aggressive behavior (Berzesnki & Yates, 2010).

The second hypothesis that there would be significant gender difference in aggressive behavior among in-school adolescents was not supported. However, when the mean of the two genders were examined, male in-school adolescents tend to score higher on aggressive behavior than their female counterparts, thereby partially confirming the hypothesis. Previous studies have supported this finding where males were found



to be more prone to aggressive behavior than their female counterparts (Park et al., 2017; Obradovic-Tomasevic et al., 2019).

The result of the third hypothesis that class of study (SSS = Senior Secondary School) would significantly predict aggressive behavior among in-school adolescents was supported. There was a significant difference among the class of study (SSS1, SSS2 and SSS 3 students) on aggressive behavior. In-school adolescents in SSS2 were more aggressive than those in SSS1 and SSS3. The finding supported the result by Verma et al. (2021) who found class of study to have a significant influence on aggressive behavior among their study participants. The in-school adolescents who were in senior classes were more aggressive than those in junior classes. This finding also supported the result by Choudhary et al. (2022) who found significant differences in the prevalence of aggression among children from classes 9th to 12th. That physical aggression, verbal aggression and open hostility were progressively displaced by in-school adolescents among their study participants.

The study examined child abuse, class of study and gender on aggressive behavior among in-school adolescents. The study has empirically confirmed that dimensions of child abuse- emotional abuse, physical abuse, sexual abuse, physical neglect, emotional neglect, and minimizing or denial jointly predicted aggressive behavior among in-school adolescents in the study population. Also, class of study and gender influenced aggressive behavior among study participants.

Recommendations

Based on the findings of this study, the following recommendations are proffered.

1. Parents, guardians, caregivers and other stakeholders should be educated on the danger of child abuse and the effects such abuse would have in the psychological well-being of such child in the future.
2. School counselors should be empowered to identify and help in-school adolescents that have been abused in one way or the others. Sensitization programmes such as seminars, conferences, training should be conducted on a regular basis to inform and educate in-school adolescents on the do's and don'ts so as to avoid being abused by anyone that could lead to aggressive behavior.

Limitations and suggestions for further studies

The study has some shortcomings, which need to be addressed in further studies.

First, data were collected using self-reported questionnaires, which are subjected to response bias. Further studies should include focus group interviews and key informant interviews to triangulate data collected from self-report.

Second, five schools were selected with a sample size of 200 in-school adolescents thus hindering generalization of the study findings. Further studies would benefit from including more secondary schools and increasing the sample size.

Finally, one independent variable: child abuse was investigated in this study. Further studies should include parenting styles, learned helplessness and self-esteem on aggressive behavior.

Ethics and Conflict of Interest

As the authors of this work, we collected data in accordance with ethical rules governing research and acted in good faith to all our participants. We ensure that participation was voluntary. Also, we declare that there is no conflict of interest among the authors.



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