



Assessment Of Adverse Childhood Experiences Among In-School Adolescents in Lagos State

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Abstract

Adverse Childhood Experiences (ACEs) refer to potentially traumatic events that can negatively affect a person's general health and well-being and have become increasingly recognised as a public health concern. Hence, the current study aimed to assess the prevalence of ACEs among in-school adolescents in Lagos State. A descriptive, cross-sectional research design was employed, with both purposive and convenience sampling techniques used to recruit 516 in-school adolescents, 251 males (48.6%) and 265 females (51.4%) from three selected secondary schools in Alimosho local government area of Lagos State. The participants responded to the Childhood Trauma Questionnaire (CTQ). Their mean age was 15.02 ± 1.56 years, and an overall 92.5% prevalence rate of adverse childhood experiences was found among these adolescents; 3.1% reported severe ACEs, while 38.8% and 50.6% reported moderate and severe ACEs, respectively. Physical abuse was 42.8%, emotional abuse 86.9% and sexual abuse 32.6%. Both physical and emotional neglect constituted a prevalence rate of 90.5% each. Also found were significant relationships among the components of ACEs- physical abuse, sexual abuse, emotional abuse, physical neglect and emotional neglect. Further analysis revealed that the minimisation/denial, which indicates the tendency to present an overly positive view of childhood using psychological defence mechanisms, was low among the adolescents, with 26.9% having no denial, 28.5% with low denial, 34.5% were moderate, and 10.1% high in denial tendency respectively. This study concluded that there is a high prevalence of adverse childhood experiences among in-school adolescents in Lagos State. They are a serious burden to these adolescents. Therefore, timely psychological interventions should be provided to those who have experienced or are experiencing ACEs.



Keywords: Assessment, adverse childhood experiences, in-school adolescents, trauma

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Introduction

Adverse Childhood Experiences (ACEs) are potentially traumatic events that occur in childhood, often leading to long-term negative impacts on an individual's mental and physical health. These experiences, which include forms of abuse, neglect, and household dysfunction, are major causes of various psychological and behavioural problems faced by adolescents. According to the World Health Organization (WHO, 2021), traumatic experiences during childhood, such as exposure to violence, can make adolescents vulnerable to mental health issues. Several studies have shown that traumatic childhood events, especially those arising from a child's immediate environment, significantly increase the risk of psychological and behavioural problems later in life (Downey & Crummy, 2022; Maurya & Maurya, 2023). These traumatic experiences are collectively referred to as Adverse Childhood Experiences (ACEs). ACEs refer to circumstances or events that cause stress and have long-term consequences on an individual's mental and physical well-being. The effects of ACEs often manifest during adolescence, adulthood, or later stages of life (O'Neill et al., 2023). Common examples of ACEs include physical, emotional, and sexual violence; neglect by caregivers or the environment; living in abusive households; exposure to parental substance abuse or criminal activities; and living with a caregiver who has a mental disorder (O'Neill et al., 2023). It is not uncommon for children to experience these adverse events during their adolescence (Crouch et al., 2019), with lasting effects that can carry into adulthood.

There are several forms of ACEs, including physical abuse, where a child might be pushed, slapped, or have objects thrown at them; emotional abuse, such as being insulted or sworn at; and sexual abuse, which may involve inappropriate touching by an older individual. Other forms of ACEs include neglect, which can be physical (e.g., deprivation of essentials like clothing and school supplies) or emotional (e.g., feelings of being unwanted by parents). In addition to these, living with a family member who abuses drugs or alcohol, witnessing domestic violence, experiencing parental separation or divorce, and having a household member incarcerated



are also considered ACEs. According to data from the 2017 Behavioral Risk Factor Surveillance System (BRFSS), updated in August 2021, one in six adults reported experiencing four or more types of ACEs. The data also showed that at least five of the top ten causes of death are associated with ACEs. Studies suggest that millions of children around the world are exposed to ACEs annually (Asmussen et al., 2020), leading to toxic stress that can alter brain development and influence how the body responds to future stressors. The Centers for Disease Control and Prevention (CDC, 2019) have recognized ACEs as a growing public health concern, linking them to chronic health problems, mental illness, and substance misuse in adulthood. Historically, ACEs are categorized into three major groups: abuse, neglect, and family or household challenges (Felitti et al., 1998).

Recent studies have revealed an increase in health and disability diagnoses associated with higher ACE scores, underscoring the profound impact of childhood adversity on health and development. As research on ACEs has evolved, it has become clear that these experiences are not just a social issue but a critical public health concern, influencing neurological, social-emotional, and behavioral development in young people (Salawu & Owoaje, 2020). The relationship between ACEs and poor adult health outcomes and risk behaviors is well-established, with significant implications for physical and mental well-being (Agbaje et al., 2021). Early research by Felitti et al. (1998) identified a strong relationship between retrospective reports of ACEs and adverse adult health outcomes. Adults with four or more ACEs are more likely to experience mental health issues, including substance use, depression, and suicide attempts. They are also more prone to physical health problems such as sexually transmitted infections, obesity, heart disease, diabetes, cancer, and stroke. Behavioral risk factors, such as smoking, having numerous sexual partners, and physical inactivity, are also linked to higher ACE scores.

The psychological impact of ACEs has been extensively studied, with anxiety, depression, self-esteem, and stress frequently cited as indicators of mental distress (Zhang et al., 2024). These symptoms often serve as precursors to more severe mental health issues that persist from childhood into adulthood. Agbaje et al. (2021) reinforced this, noting that ACEs can have lasting psychological consequences, contributing to emotional and mental distress throughout life. In a study conducted by Shattnawi et al. (2024) in Jordan, the prevalence of ACEs and their relationship with self-esteem among secondary school students were examined. Emotional abuse was the most frequently reported form of abuse, followed by household violence, bullying, and physical abuse. The study found that ACEs had a significant negative impact on self-esteem, with physical abuse,



emotional neglect, and physical neglect being the strongest predictors of lower self-esteem scores. Gender differences were also observed, with male students reporting more instances of physical abuse and neglect, while female students reported higher rates of household violence.

The global prevalence of ACEs has been highlighted in various studies. Chang et al. (2019) emphasized the widespread nature of childhood trauma and its association with negative mental health and developmental outcomes. Similarly, Manyema and Richter (2019) examined the prevalence of ACEs in low-income settings in South Africa, where socio-economic challenges often compound childhood trauma. Their findings revealed a strong correlation between ACEs and poor health outcomes in adulthood, emphasizing the need for tailored public health interventions in these contexts. Research by Bellis et al. (2019) in North America also revealed a graded relationship between the number of ACEs experienced and the likelihood of poor physical and mental health outcomes in adulthood. Kappel et al. (2021) further supported these findings, linking ACEs to psychological distress and mental health challenges. These studies, conducted across different geographical regions, demonstrate the far-reaching consequences of childhood trauma, revealing the importance of interventions focused on mitigating the long-term effects of ACEs. Violence is another critical area of concern related to ACEs. Bellis et al. (2023) expanded on this, exploring how childhood trauma contributes to intimate partner violence in adulthood. Furthermore, Meeker et al. (2021) found that youth with multiple ACEs reported 3 to 15 times the odds of a range of negative health experiences.

In a study conducted by Amene et al (2024) examining participants from Cote d'Ivoire, Kenya, Lesotho, Mozambique, and Namibia on the prevalence of adverse childhood experiences found that the most common type of ACEs was witnessing physical violence followed by experiencing physical violence and sexual violence male experienced at least one form of ACEs more than their female counterparts. In the Nigerian context, Salawu and Owoaje, (2020) revealed a high prevalence of ACEs, with 92% of participants in their study reporting exposure to at least one ACE. This contrasts with the lower prevalence reported in the Nigerian National Survey of Mental Health and Wellbeing, which indicated that 40% of respondents had experienced ACEs. The most commonly reported ACE was emotional neglect, consistent with findings from other countries such as Romania, Russia, and Latvia, and emotional neglect was highly prevalent but overlooked in those countries, as cited in (Salawu &Owoaje, 2020). Interestingly, males in the Nigerian study reported higher rates of physical neglect than females, reflecting trends observed in high-



income countries like the United States (Salawu & Owoaje, 2020). However, in some low- and middle-income countries (LMICs), higher rates of neglect are reported among females (Salawu & Owoaje, 2020). Additionally, psychological or emotional abuse was reported by 40.2% of respondents, with physical abuse more common among males (Salawu & Owoaje, 2020). These findings echo global estimates from the WHO (2021), which states that 25-50% of children worldwide have experienced physical abuse. Sexual abuse, though less commonly reported, was more frequently experienced by female respondents in the Nigerian study, a trend that aligns with global literature on ACEs. Other common ACEs reported included household substance abuse, parental separation or divorce, and witnessing violence against mothers (Broekhof et al., 2023). Children from single-parent or polygamous households were more likely to experience ACEs, a pattern also seen in other African contexts where polygamy can lead to household conflict (Salawu & Owoaje, 2020). Additionally, children from lower socio-economic backgrounds were at greater risk of experiencing ACEs, reinforcing the well-established link between poverty and increased childhood stress and neglect (Salawu & Owoaje, 2020). Research by Agbaje et al. (2021) further explored the relationship between ACEs and poor health outcomes in sub-Saharan Africa. The study found that 86.7% of participants reported experiencing at least one ACE, with females reporting a higher number of ACEs, particularly in relation to sexual abuse. Physical abuse and emotional abuse were also prevalent, with over 70% of participants reporting physical abuse and 56.2% reporting emotional abuse. This large-scale study covered multiple countries in sub-Saharan Africa, including Côte d'Ivoire, Kenya, and Namibia, confirming the high prevalence of ACEs in the region (Agbaje et al., 2021). ACEs have a profound and long-lasting impact on individuals' mental and physical health, with effects that extend well into adulthood (Agbaje et al., 2021).

Adverse childhood experiences (ACEs) have been found to be important contributors to adverse health and developmental outcomes in adolescents. ACEs include a variety of potentially traumatic events, including abuse, neglect, and dysfunctional households (Brown et al., 2024; Pierce et al., 2023). The significant effects that ACEs can have on a person's physical, emotional, and cognitive health are becoming more widely acknowledged worldwide. These effects frequently lead to long-term issues like mental health disorders, substance abuse, difficulties in school, and social dysfunction (Tzouvara et al., 2023; Webster, 2022; Zhang et al., 2024). International health and educational policies are progressively acknowledging the prevalence of ACEs and their adverse impacts, yet, many adolescents continue to be mistreated and at risk,



especially in poor nations (Meeker et al., 2021; Salawu &Owoaje, 2020; Stewart-Tufescu et al., 2022).

In Nigeria, socioeconomic difficulties, political instability, and a lack of social support networks all contribute to negative childhood experiences by increasing the likelihood that children would be exposed to traumatic events. The exact nature and magnitude of ACEs among adolescents, particularly in the educational setting, are still not well understood, despite the Nigerian government's and several NGOs' attempts to address child safety concerns. Furthermore, the chance of adolescents in school being exposed to ACEs is increased by Lagos State's high population density, socioeconomic disparities, and urban stresses. Many Lagos State adolescents continue to bear heavy emotional and psychological burdens from childhood hardship despite the fact that schools are supposed to be protecting places. Unfortunately, numerous adolescents suffer in silence as a result of the lack of comprehensive assessment and screening of ACEs in school settings, which negatively impacts their social development, mental health, and academic performance. Moreover, the lack of reliable data on ACEs among adolescents in Lagos State who are enrolled in school restricts the ability of educators, policymakers, and mental health specialists to develop and carry out focused interventions. Although there are some child safety and mental health measures in place, the dearth of scientific data unique to this demographic limit their efficacy. Therefore, in order to inform public health measures, educational policies, and mental health treatments targeted at alleviating the negative impacts of childhood trauma, an exhaustive assessment of ACEs among adolescents in Lagos State who are enrolled in school is both necessary and crucial. Therefore, this study attempts to fill this important gap by evaluating the different types and prevalence of ACEs among in-school adolescents in Lagos State.

Hence, the following research questions were raised:

What is the prevalence rate of ACEs among adolescents in Lagos State?

Will there be a correlation among sexual abuse, physical abuse, emotional abuse, and physical and emotional neglect among adolescents in Lagos State?

Will there be sex differences in ACEs among adolescents in Lagos State?



Research Objectives

The main objective of this study is to assess the prevalence of ACEs in an adolescent community sample. The main objective will be examined with the following specific objectives:

To examine the correlation among sexual abuse, physical abuse, emotional abuse, and physical and emotional neglect among adolescents in Lagos State.

To examine the influence of sex on adverse childhood experiences among adolescents in Lagos State.

Hypothesis

There will be a significant correlation among sexual abuse, physical abuse, emotional abuse, and physical and emotional neglect among adolescents in Lagos State.

Female students will score high on ACEs compared to their male counterparts

Methods

Design

The study employed a descriptive and cross-sectional research design using quantitative methods. The cross-sectional survey research design is suited for establishing the relationship between the variables under study at a single point in time in the absence of manipulations. The study was carried out among in-school adolescents in some selected private and public secondary schools in Lagos.

Setting

The research was conducted in Lagos State, focusing on some selected schools in Alimosho Local Government areas. A public, semi-private, and private school at both junior and senior levels was selected.

Study Population

The study was carried out among in-school adolescents in some selected private, semi-private and public secondary schools in Lagos.



Participants and Sampling Techniques

A sample size of 516 in-school adolescents was calculated using Yamane's (1967) statistical formula for determining a sample for a population of 606,906 students. A purposive sampling technique was used to select three schools, and a convenience sampling technique was used to administer the questionnaire to in-school adolescents in Lagos (251 males and 265 females) aged 11–19 years (mean = 15.02; SD = 1.56). The inclusion criteria were adolescents between the age range of 11 – 19 years attending secondary school in Lagos State.

Instruments

Childhood Trauma Questionnaire (CTQ): The Childhood Trauma Questionnaire (CTQ) developed by Bernstein and Fink (1998) is a standardized, retrospective 28-item self-report inventory that measures the severity of different types of childhood trauma, producing five clinical subscales, each comprised of five items: Emotional Abuse, Physical Abuse, Sexual Abuse, Emotional Neglect, Physical Neglect. The measure also includes a three-item Minimization/Denial scale indicating the potential underreporting of maltreatment. Participants respond to each item in the context of "when you were growing up" and answer according to a five-point Likert scale ranging from "never" = 1 to "very often" = 5, producing scores of 5 to 25 for each trauma subscale. The three items comprising the Minimization/Denial scale are dichotomized ("never" = 0, all other responses = 1) and summed; a total of one (1) or greater "suggests the possible underreporting of maltreatment (false negatives). The test-retest consistency of the CTQ was studied by the creators in a clinical population (n=40), showing substantial test-retest reliability with retests conducted after 1.6-5.6 months (mean 3.6 months) and showing a high intraclass correlation of all subscales (R=.79–0.86) (Bernstein & Fink, 1998).

Procedures

The research explained the purpose of the research to the school administration, and verbal assent was obtained from the participants' teachers, principal, and proprietor/proprietress before administering the instrument. Students who volunteered and gave their agreement to participate were given the questionnaire by the researcher, who visited each classroom. The researcher established a positive rapport with the participants and explained the goal of the study while assuring them of its confidentiality. The participants filled out the surveys right away while the researcher waited to pick them up. Over the course of two weeks of fieldwork, 530 copies of the research

instruments were administered, 526 were recovered, and 516 were found to be valid. This equates to a 97% response rate.

Statistical Analysis

Both descriptive and inferential statistics were used to analyse the data with the aid of SPSS version 25 statistical software. The stated hypotheses were tested using a correlation matrix and t-test for independent means.

Results

Descriptive Statistics

Table 1.2:

Summary table showing the prevalence of adverse childhood experiences among adolescents in Lagos State.

Variables	N	Mean	SD	None %	Low %	Moderate %	Severe %	Prevalence %
Physical abuse	516	8.1	3.60	57.2	14.5	15.1	13.2	42.8
Emotional abuse	516	10.88	3.25	13.2	57.6	19.8	9.5	86.9
Sexual abuse	516	6.77	3.53	67.4	12.8	10.1	9.7	32.6
Physical neglect	516	11.83	3.06	9.5	18.0	19.0	53.5	90.5
Emotional neglect	516	19.05	5.91	9.5	14.7	12.0	63.8	90.5
ACEs	516	54.25	11.17	7.6	50.6	38.8	3.1	92.5



From the table, it could be deduced that the prevalence of physical abuse among adolescents was 42.8%, emotional abuse was 86.9%, sexual abuse was 32.6%, physical neglect was 90.5%, and emotional neglect was also 90.5%. The overall result of the adverse childhood experiences showed that the prevalence of adverse childhood experiences among adolescents in Lagos State was 92.5%, which denotes a high prevalence of adverse childhood experiences among adolescents in Lagos State.

Table 1.1 Minimization/Denial

Value	Frequency	Percentage
0	139	26.9
1	147	28.5
2	178	34.5
3	52	10.1
Total	516	100.0

The result from Table 1.1 revealed that the minimisation/denial, which indicates the tendency to present an overly positive view of childhood using psychological defence mechanisms, was low as 26.9% of the adolescents didn't deny, 28.5% had low denial, 34.5% were moderate, and 10.1% had a high denial tendency. Furthermore, a total of one (1) or greater "suggests the possible underreporting of maltreatment (false negatives).

Inferential Statistics

Table 2.1

Summary of correlation matrix showing the relationship among sexual abuse, physical abuse, emotional abuse, and physical and emotional neglect among adolescents in Lagos State.

Variables	Mean	SD	1	2	3	4	5
1. Physical abuse	8.10	3.60	-				
2. Emotional abuse	10.88	3.25	-.423**	-			
3. Sexual abuse	6.77	3.53	-.412**	.153**	-		
4. Emotional neglect	19.05	5.92	-.137**	.121**	-.103*	-	
5. Physical neglect	11.83	3.056	.133**	.278**	.058	.417**	-

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

From Table 2.1, it can be revealed that there was a significant negative relationship between physical abuse and emotional abuse ($r = -.423$; $P < .01$), sexual abuse ($r = -.412$; $P < .01$) and emotional neglect ($r = -.137$; $P < .01$) but a significant positive relationship exists between physical abuse and physical neglect ($r = .133$; $P < .01$). There was also a significant positive relationship emotional abuse and sexual abuse ($r = .153$; $P < .01$), emotional neglect ($r = .121$; $P < .01$) and physical neglect ($r = .278$; $P < .01$). Furthermore, there was a negative significant relationship between sexual abuse and emotional neglect ($r = -.103$; $P < .05$) but no significant relationship between sexual abuse and physical neglect ($r = .058$; $P > .05$). Lastly, there was a significant positive relationship between emotional neglect and physical neglect ($r = .417$; $P < .01$).

Table 2.2:
Summary table of independent t-test showing the influence of sex
on ACEs among in-school adolescents in Lagos State.

	Sex	N	X	STD	df	t-value	Sig
Adverse Childhood Experiences (ACEs)	Male	251	53.99	12.55	514	.628	.626
	Female	265	54.47	9.69			

From the table, it could be revealed that there is no significant difference between males and females in adverse childhood experiences ($t(514) = .628$; $P > .05$). The result runs contrary to the stated hypothesis. Therefore, the stated hypothesis is thereby rejected.

Discussion

This study explored the prevalence of ACEs among adolescents in Lagos State, Nigeria. Our results showed that ACEs were prevalent in the study population. The overall prevalence of ACEs in this study was 92.5%, with physical and emotional neglect having the highest prevalence of 90.5% each. This result is similar to a report on the Adverse Childhood Experiences survey conducted among youths in some developed countries (Chipalo, 2024; Martin et al., 2023; Shattnawi et al., 2024; Kappel et al., 2021). A similar trend occur in sub-Saharan Africa, where the majority of the participants reported that they had experienced at least one ACEs (Amene et al., 2024). However, the Nigerian National Survey of Mental Health and Wellbeing documented a lower prevalence of 40% of ACEs among



respondents who were exposed to at least one adverse childhood experience by the age of 16 years (as cited in Salawu &Owoaje, 2020). This lower prevalence could be because the study reported ACEs in the first sixteen years of life while our study reported ongoing ACEs among adolescents. Hence, our study captured the occurrence of ACEs that the adolescent has faced during childhood or is currently facing. Physical and emotional neglect were the most prevalent form of ACEs in the study population. This implies that the adolescents felt ignored as children and did not receive adequate affection or care. Salawu and Owoaje (2020) found a similar result that most participants, representing 92%, reported they had experienced adverse childhood experiences, which implies that most adolescents in Lagos State, at one point or another, had experienced adversity during their upbringing. They further claimed that the most prevalent ACEs were psychological neglect and physical neglect, which aligned strongly with the findings of this study. Furthermore, the WHO national prevalence study of child maltreatment in Romania, Russia and Latvia documented similar trends (Salawu &Owoaje, 2020).This emphasizes the fact that both physical and emotional neglect are the commonest forms of ACEs, which are not visibly seen, often go unrecognized, but often cause harm to the child's developing brain(Webster et al., 2022).

The prevalence of physical abuse was 42.8%, which was quite moderately low. There is, however, a variation in the occurrence of physical abuse in different countries. A national study among youths in Canada and Latvia, which are high-income countries, documented a lower prevalence of physical abuse (Strine et al., 2012), which agrees with our findings. Similarly, a study conducted in Nigeria reported that 36.5% of the respondents experienced physical abuse (Salawu & Owoeye, 2020). Moreso, studies in other low- and middle-income countries(LMICs)also documented a lower prevalence of physical abuse. (Cerna-Turoff et al., 2021;Madigan et al., 2023). The results contradicted a research report by WHO, which asserted that 25% to 50% of children are physically abused globally W.H.O (as cited in Atiqul Haque, 2019).

Emotional abuse was reported by 86.9% of the respondents. Our findings agree with a study conducted by the World Studies of Abuse in the Family Environment (World SAFE) among youths in five countries of the world, namely Chile, Egypt, India, Philippines, and the USA, which documented that Egypt had the highest occurrence of emotional abuse (as cited in Salawu and Owoaje, 2020).Emotional abuse is as damaging as physical and sexual abuse because it puts the victim at equal risk of mental and physical health problems (Dye, 2019). However, this contradicts the findings of Salawu and Owoaje



(2020), who found a low prevalence of emotional abuse among respondents. Their result revealed that 40.2% reported that they experienced emotional abuse during childhood.

Sexual abuse was not so commonly reported in this study, and this agrees with the findings of Salawu and Owoaje (2020), who reported a low prevalence of sexual abuse (11.5%) and Gilbert et al. (2009), who claimed that sexual abuse is experienced by 15–30% of girls and 5–15% of boys respectively. The low prevalence could result in cultural silence, especially in LMICs and most parts of Africa, which also fosters the tendency to under-report sexual abuse for fear of being stigmatized, laughed at or even where the victim cannot talk about her experience of cultural reasons.

The findings from the study further reveal a significant relationship among different forms of abuse (physical, emotional, and sexual) and neglect (emotional and physical) among adolescents in Lagos State. First, the study showed a significant negative relationship between physical abuse and emotional abuse, and this suggests that adolescents who experience higher levels of physical abuse are less likely to report emotional or sexual abuse, as well as emotional neglect. This may indicate that while physical abuse is common, emotional and sexual abuse may be underreported or concealed, leading to some types of abuse going unreported or untreated. The study further revealed that there is a positive correlation between physical abuse and physical neglect, which implies that physical abuse may coexist with neglect, further compounding the adverse effects of maltreatment.

This may indicate that while physical abuse is common, emotional and sexual abuse may be underreported or concealed, leading to some types of abuse going unreported or untreated. This association implies that adolescents who are physically abused may also be neglected, adding to the load of maltreatment and perhaps worsening the negative emotional, mental, and behavioural impacts on the victim. In the case of emotional abuse, the study revealed there is a positive correlation between sexual abuse, emotional neglect, and physical neglect, which means that emotional abuse often coexists with other forms of maltreatment. Adolescents who report emotional abuse are also likely to experience sexual abuse, neglect, or both. This finding is consistent with previous literature (Heim et al., 2013), which highlights the cumulative nature of abuse and neglect, where multiple forms of maltreatment often occur together and can lead to the development of neurotic personality traits (Bakker et al., 2006).



The study further revealed a negative relationship between sexual abuse and emotional neglect, indicating that as sexual abuse increases, emotional neglect decreases, or vice versa. This suggests that adolescents who are sexually abused may receive some emotional support, maybe from parents or other adults, which could conceal or lessen emotional neglect symptoms. On the other hand, adolescents who experience emotional neglect could be less likely to reveal sexual abuse because they lack emotional support, or they might be less exposed to situations where sexual abuse takes place. This inverse association may indicate the various manifestations of abuse and neglect as well as the differing reactions of caregivers or those in positions of influence. For example, emotional neglect can be more subtle. It may cohabit in complicated ways with other types of maltreatment, whereas sexual abuse is a more obvious and direct form of maltreatment. Additionally, it can imply that sexual abusers occasionally employ emotional support as a kind of compensation, which makes it more difficult to identify neglect.

However, no significant relationship was found between sexual abuse and physical neglect, suggesting that these two forms of maltreatment may be less directly related in the context of adolescents in Lagos State.

A significant positive relationship was revealed between emotional neglect and physical neglect, and this indicates that these two forms of neglect are strongly associated. Adolescents who experience emotional neglect are likely to experience physical neglect as well, which is consistent with the idea that neglect often encompasses multiple areas of a child's life, leading to widespread deficits in care and support.

For the second hypothesis, an independent t-test revealed no significant difference between male and female adolescents on ACEs. This finding is contrary to the hypothesis that female students would score higher on ACEs compared to their male counterparts. The lack of significant difference suggests that both male and female adolescents are equally vulnerable to experiencing adverse childhood events in this population. This result contrasts with some previous studies (Martin et al., 2023; Haahr-Pedersen et al., 2020; Raimo et al., 2024; Salawu & Owoaje, 2020; Shattnawi et al., 2022), which often report that females tend to experience more emotional and sexual abuse, while males are more likely to experience physical abuse. The similarity in ACEs scores between genders in this study could be a reflection of cultural or contextual factors unique to Lagos State, where both males and females might be exposed to similar risks or reporting patterns for abuse and neglect.



Conclusion

This study showed a high prevalence of ACEs among adolescents in Lagos State, Nigeria. Emotional abuse, physical and emotional neglect were the most commonly reported form of ACEs while most of the respondents had experienced all forms of ACEs.

Recommendations

These findings highlight the need for government, non-governmental organisations and private sectors to develop intervention programs to address parental education and provide support to educate parents and caregivers about non-violent ways of disciplining children and the consequences of experiencing adversity or abuse on the development of individuals. These will reduce the risk factors for ACEs and provide an enabling environment for optimal child growth and development

Limitations and Suggestions for Future Research

The results of this study are subject to some limitations. Firstly, the study adopted a descriptive and cross-sectional study, hence the cause-effect relationship of the variable could not be established. Although, the study revealed the prevalence of ACEs but could not provide intervention program for adolescents who experienced ACEs. Future research should consider conducting intervention study. Furthermore, there is the possibility of recall bias because of the retrospective reporting of ACEs experienced during the childhood, hence there is the possibility of under-reporting or over-reporting the event. The study also made use of one variable which is ACEs, future research should consider examining additional factors such as social economic status, family background, parental upbringing, that could predict ACEs especially among adolescents and young adults.

Reference

Agbaje, O. S., Nnaji, C. P., Nwagu, E. N., Iweama, C. N., Umoke, P. C. I., Ozoemena, L. E., & Abba, C. C. (2021). Adverse childhood experiences and psychological distress among higher education students in Southeast Nigeria: an institutional-based cross-sectional study. *Archives of public health*, 79(1), 62. <https://doi.org/10.1186/s13690-021-00587-3>

Amene, E.W., Annor, F.B., Gilbert, L.K., McOwen, J., Augusto, A., Manuel, P., N'gouanma Nobah, M.T.V., & Massetti, G.M. (2024). Prevalence of Adverse Childhood Experiences in sub-Saharan Africa:



A multicountry analysis of the Violence Against Children and Youth Surveys (VACS). *Child Abuse & Neglect*, 150.

Atiqul Haque, M., Janson, S., Moniruzzaman, S., Rahman, A. K. M. F., Islam, S. S., Mashreky, S. R., & Eriksson, U. B. (2019). Children's exposure to physical abuse from a child perspective: A population-based study in rural Bangladesh. *PloS one*, 14(2), e0212428. <https://doi.org/10.1371/journal.pone.0212428>

Asmussen, K., Fischer, F., Drayton, E., & McBride, T. (2020). Adverse childhood experiences: What we know, what we don't know, and what should happen next. *Early intervention foundation*, 92.

Bakker, A. B., Van der Zee, K. I., Lewig, K. A., Dollard, M. F. (2006). The relationship between the big five personality factors and burnout: A study among volunteer counselors. *Journal of Social Psychology*. 146(1):31–50. doi: 10.3200/SOCP.146.1.31-50.

Bellis, M. A., Hughes, K., Ford, K., Ramos Rodriguez, G., Sethi, D., & Passmore, J. (2019). Life course health consequences and associated annual costs of adverse childhood experiences across Europe and North America: a systematic review and meta-analysis. *The Lancet. Public health*, 4(10), e517–e528. [https://doi.org/10.1016/S2468-2667\(19\)30145-8](https://doi.org/10.1016/S2468-2667(19)30145-8)

Bernstein D., Fink L. (1998). *Childhood Trauma Questionnaire. A Retrospective Self-Report Questionnaire and Manual*. San Antonio, The Psychological Corporation.

Broekhof, R., Nordahl, H. M., Tanum, L., & Selvik, S. G. (2023). Adverse childhood experiences and their association with substance use disorders in adulthood: A general population study (Young-HUNT). *Addictive behaviors reports*, 17, 100488. <https://doi.org/10.1016/j.abrep.2023.100488>

Brown, C., Nkemjika, S., Ratto, J., Dube, S. R., Gilbert, L., Chiang, L., Picchetti, V., Coomer, R., Kambona, C., McOwen, J., Akani, B., Kamagate, M. F., Low, A., Manuel, P., Agosto, A., & Annor, F. B. (2024). Adverse Childhood Experiences and Associations with Mental Health, Substance Use, and Violence Perpetration among Young Adults in sub-Saharan Africa. *Child abuse & neglect*, 150, 106524. <https://doi.org/10.1016/j.chiabu.2023.106524>

Brown, C., Nkemjika, S., Ratto, J., Dube, S. R., Gilbert, L., Chiang, L., Picchetti, V., Coomer, R., Kambona, C., McOwen, J., Akani, B., Kamagate, M. F., Low, A., Manuel, P., Agosto, A., & Annor, F. B. (2024).



Adverse Childhood Experiences and Associations with Mental Health, Substance Use, and Violence Perpetration among Young Adults in sub-Saharan Africa. *Child abuse & neglect*, 150, 106524. <https://doi.org/10.1016/j.chiabu.2023.106524>

Centers for Disease Control and Prevention. (2019). *Adverse childhood experiences (ACEs): Preventing early trauma to improve adult health*. Vital Signs. <https://www.cdc.gov/vitalsigns/aces/index.html>

Cerna-Turoff, I., Fang, Z., Meierkord, A., Wu, Z., Yanguela, J., Bangirana, C. A., & Meinck, F. (2021). Factors Associated With Violence Against Children in Low- and Middle-Income Countries: A Systematic Review and Meta-Regression of Nationally Representative Data. *Trauma, violence & abuse*, 22(2), 219–232. <https://doi.org/10.1177/1524838020985532>

Chang, X., Jiang, X., Mkandarwire, T., & Shen, M. (2019). Associations between adverse childhood experiences and health outcomes in adults aged 18-59 years. *PloS one*, 14(2), e0211850. <https://doi.org/10.1371/journal.pone.0211850>

Chipalo, E. (2024). Adverse Childhood Experiences and Mental Distress Among Adolescents and Youth in Zimbabwe. *Journal of Interpersonal Violence*, 39(21-22), 4329-4355. <https://doi.org/10.1177/08862605241234660>

Crouch, E., Probst, J. C., Radcliff, E., Bennett, K. J., & McKinney, S. H. (2019). Prevalence of Adverse Childhood Experiences (ACEs) among US children. *Child Abuse & Neglect*, 92, 209–218. <https://doi.org/10.1016/j.chiabu.2019.04.010>

Downey, C., & Crummy, A. (2022). The impact of childhood trauma on children's wellbeing and adult behavior. *European Journal of Trauma & Dissociation*, 6(1), 100237. <https://doi.org/10.1016/j.ejtd.2021.100237>

Dye H. L. (2019). Is Emotional Abuse As Harmful as Physical and/or Sexual Abuse?. *Journal of child & adolescent trauma*, 13(4), 399–407. <https://doi.org/10.1007/s40653-019-00292-y>

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventative Medicine*, 14(8), 245–258. [10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8)



Gilbert, L. K., Breiding, M. J., Merrick, M. T. Thompson, W. W., Ford, D. C., Dhingra, S. S., & Parks SE (2015). Childhood adversity and adult chronic disease: An update from ten states and the District of Columbia, 2010. *American Journal of Preventive Medicine*, 48, (3) 345. 10.1016/j.amepre.2014.09.006

Haahr-Pedersen, I., Perera, C., Hyland, P., Vallières, F., Murphy, D., Hansen, M., Spitz, P., Hansen, P., & Cloitre, M. (2020). Females have more complex patterns of childhood adversity: implications for mental, social, and emotional outcomes in adulthood. *European journal of psychotraumatology*, 11(1), 1708618. <https://doi.org/10.1080/20008198.2019.1708618>

Heim, C. M., Mayberg, H. S., Mletzko, T., Nemeroff, C. B., Pruessner, J. C. (2013). Decreased cortical representation of genital somatosensory field after childhood sexual abuse. *The American Journal of Psychiatry*;170(6):616–623. doi: 10.1176/appi.ajp.2013.12070950.

Kappel, R. H., Livingston, M. D., Patel, S. N., Villaveces, A., & Massetti, G. M. (2021). Prevalence of Adverse Childhood Experiences (ACEs) and associated health risks and risk behaviors among young women and men in Honduras. *Child abuse & neglect*, 115, 104993. <https://doi.org/10.1016/j.chiabu.2021.104993>

Madigan, S., Deneault, A. A., Racine, N., Park, J., Thiemann, R., Zhu, J., Dimitropoulos, G., Williamson, T., Fearon, P., Cénat, J. M., McDonald, S., Devereux, C., & Neville, R. D. (2023). Adverse childhood experiences: a meta-analysis of prevalence and moderators among half a million adults in 206 studies. *World psychiatry : official journal of the World Psychiatric Association (WPA)*, 22(3), 463–471. <https://doi.org/10.1002/wps.21122>

Manyema, M., & Richter, L. M. (2019). Adverse childhood experiences: prevalence and associated factors among South African young adults. *Heliyon*, 5(12), e03003. <https://doi.org/10.1016/j.heliyon.2019.e03003>

Martin, E. L., Neelon, B., Brady, K. T., Guille, C., Baker, N. L., Ramakrishnan, V., Gray, K. M., Saladin, M. E., & McRae-Clark, A. L. (2023). Differential prevalence of Adverse Childhood Experiences (ACEs) by gender and substance used in individuals with cannabis, cocaine, opioid, and tobacco use disorders. *The American journal of drug and alcohol abuse*, 49(2), 190–198. <https://doi.org/10.1080/00952990.2023.2171301>



Maurya, C., & Maurya, P. (2023). Adverse childhood experiences and health risk behaviours among adolescents and young adults: Evidence from India. *BMC Public Health*, 23, 536. <https://doi.org/10.1186/s12889-023-15416-1>

Meeker, E. C., O'Connor, B. C., Kelly, L. M., Hodgeman, D. D., Scheel-Jones, A. H., & Berbari, C. (2021). The impact of adverse childhood experiences on adolescent health risk indicators in a community sample. *Psychological trauma: theory, research, practice and policy*, 13(3), 302–312. <https://doi.org/10.1037/tra0001004>

O'Neill, A., Humphrey, N., & Stapley, E. (2023). A systematic review of qualitative research focusing on emotional distress among adolescents: Perceived cause and helpseeking. *Adolescent Research Review*, 8(3), 387–402. <https://doi.org/10.1007/s40894-022-00203-7>

Pierce, H., Jones, M. S., Shoaf, H., & Heim, M. (2023). Early Adverse Childhood Experiences and Positive Functioning during Adolescence. *Journal of youth and adolescence*, 52(4), 913–930. <https://doi.org/10.1007/s10964-022-01729-8>

Salawu M., M. & Owoaje E. (2020) Prevalence and predictors of adverse childhood experiences among youths in rural communities of Oyo State, South-west, Nigeria. *Journal of Community Medicine and Primary Health Care*, 32 (2) 27-41. <https://dx.doi.org/10.4314/jcmphc.v32i2.3>

Shattnawi, K. K., Al Ali, N., & Ma'abreh, Y. M. (2024). Prevalence of Adverse Childhood Experiences and Their Relationship with Self-esteem Among School-Age Children in Jordan. *Child psychiatry and human development*, 55(1), 60–70. <https://doi.org/10.1007/s10578-022-01378-9>

Shattnawi, K.K., Al Ali, N. & Ma'abreh, Y.M. (2024). Prevalence of Adverse Childhood Experiences and Their Relationship with Self-esteem Among School-Age Children in Jordan. *Child Psychiatry Hum Dev* 55, 60–70. <https://doi.org/10.1007/s10578-022-01378-9>

Stewart-Tufescu, A., Struck, S., Taillieu, T., Salmon, S., Fortier, J., Brownell, M., Chartier, M., Yakubovich, A. R., & Afifi, T. O. (2022). Adverse Childhood Experiences and Education Outcomes among Adolescents: Linking Survey and Administrative Data. *International journal of environmental research and public health*, 19(18), 11564. <https://doi.org/10.3390/ijerph191811564>



Strine, T. W., Dube, S. R., Edwards, V. J., Prehn, A. W., Rasmussen, S., Wagenfeld, M., Dhingra, S., & Croft, J. B. (2012). Associations between adverse childhood experiences, psychological distress, and adult alcohol problems. *American Journal of Health Behavior*, 36(3), 408–423. 10.5993/AJHB.36.3.11

Tzouvara, V., Kupdere, P., Wilson, K., Matthews, L., Simpson, A., & Foye, U. (2023). Adverse childhood experiences, mental health, and social functioning: A scoping review of the literature. *Child abuse & neglect*, 139, 106092. <https://doi.org/10.1016/j.chiabu.2023.106092>

Webster E. M. (2022). The Impact of Adverse Childhood Experiences on Health and Development in Young Children. *Global pediatric health*, 9, 2333794X221078708.

<https://doi.org/10.1177/2333794X221078708>

World Health Organization. (2021). *Mental health of adolescents*.

<https://www.who.int/news-room/fact-sheets/>

Zhang, Z., Wang, W., Yuan, X., Wang, X., Luo, Y., Dou, L., Zhang, L., & Wu, M. (2024). Adverse childhood experiences and subsequent physical and mental health among young adults: Results from six universities in China. *Psychiatry Research*, 335, 115832.

<https://doi.org/10.1016/j.psychres.2024.115832>