

Childhood Trauma and Depression as Predictors of Anti-social Behaviour Among Secondary School Adolescents in Keffi, Nasarawa State, Nigeria

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Abstract—Childhood trauma and depression are significant predictors of anti-social behaviour among adolescents. This study examined the relationship between childhood trauma and depression as predictors of antisocial behaviour among secondary school adolescent in Keffi, Nasarawa State, Nigeria. A total of 145 participants were randomly selected and 3 standardized instruments collected data on childhood trauma, depression and anti-social behaviour. Data collected were analyzed using correlation and t-test analysis to test the stated hypotheses. Hypotheses 1 and 2 were tested using Pearson-r correlation to measure relationship between childhood trauma, depression and antisocial behaviour. Also, hypothesis 3 was tested using multiple regression to measure joint influence of childhood trauma and depression on antisocial behaviour. The findings revealed that childhood trauma (0.062**) and depression (0.055**) independently associate with antisocial behaviour. Also, there is a combined influence of childhood trauma and depression on anti-social behaviour among adolescents in Keffi [$F(2, 143) = 68.25, p < .05$]. This means that adolescents who experienced higher levels of childhood trauma and depression are more likely to engage in anti-social behaviours, such as aggression, truancy, and other forms of behavioural misconduct.

Index Terms—Adolescents, Antisocial Behaviour, Childhood Trauma, Depression.

1. Introduction

Adolescence is a developmental period marked by significant biological, psychological, and social transitions that shape an individual's personality, values, and behaviour. As young people navigate this stage, they are susceptible to various internal and external influences that can either support or hinder their emotional and behavioural development [1]. One of the most profound challenges facing adolescents today particularly in developing countries such as Nigeria is the impact of adverse childhood experiences, especially trauma and depression, which often manifest in anti-social behaviours such as aggression, truancy, substance abuse, and criminality in later life [2], [3].

Childhood trauma refers to a wide range of adverse experiences during a child's formative years, including physical, emotional, or sexual abuse; neglect; witnessing domestic violence; losing a parent; and experiencing poverty or

displacement [4], [5]. Such experiences disrupt the normal development of the brain and can impair a child's ability to form secure attachments, regulate emotions, and relate socially to others. These disruptions can persist into adolescence and adulthood, often culminating in mental health issues such as childhood trauma and post-traumatic stress disorder (PTSD), depression, and anti-social behaviour [6].

Depression, a common mental disorder among adolescents, often coexists with or arises from traumatic childhood experiences. It is characterized by persistent sadness, loss of interest in activities, low self-worth, and difficulty in concentration, often leading to impaired functioning in school, relationships, and family life [7]. In adolescents, depression frequently presents differently than in adults, with irritability, hostility, and risk-taking behaviours being more prominent symptoms [8]. When left untreated, adolescent depression can escalate into serious issues such as substance abuse, self-harm, and anti-social conduct.

This link between mental health and behavioural outcomes highlights the need to approach anti-social behaviour not just from a disciplinary perspective but also from a psychological and preventive standpoint. In the Nigerian context, these issues are further exacerbated by socioeconomic factors such as poverty, family instability, poor access to mental health services, and community violence. Nasarawa State, like many regions in Nigeria, experiences high rates of poverty, low school retention, and limited social support structures, especially for vulnerable children and adolescents [9]. Many families face economic hardships that lead to poor parenting, exposure to violence, and emotional neglect all of which are significant contributors to trauma and depression in children [10].

Without intervention, these adolescents may drop out of school, become involved in crime, or suffer chronic mental health challenges that continue into adulthood. Despite growing recognition of these issues globally, there is still a scarcity of empirical studies in Nigeria especially in Nasarawa State, that examine the complex relationship between childhood trauma, depression, and anti-social behaviour. Much of the existing literature is based on Western populations, whose socio-cultural

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and economic environments differ significantly from that of Nigerian adolescents [11]. As such, there is a pressing need for local research to understand how these psychological factors interplay within the specific context of Nasarawa State. By doing so, the research aims to inform policymakers, educators, mental health professionals, and caregivers on the need for early intervention, trauma-informed care, and adolescent mental health services in the region. Ultimately, understanding the psychological underpinnings of anti-social behaviour is vital for designing preventive and rehabilitative strategies. If childhood trauma and depression are found to significantly predict anti-social behaviour, interventions can be developed to target these issues early potentially reducing delinquency, improving academic outcomes, and promoting healthier adolescent development in Nasarawa State and beyond.

2. Statement of the Problem

Anti-social behaviour among adolescents has become an increasing concern in many Nigerian communities, including those in Nasarawa State. These behaviours ranging from truancy, aggression, substance abuse, cultism, to juvenile delinquency pose significant threats to personal development, public safety, and social cohesion [12]. Adolescents who exhibit such behaviours often experience disruptions in education, strained family relationships, and limited prospects for healthy adult functioning. Despite various school-based and societal interventions aimed at curbing these behaviours, the trend continues to escalate, indicating a deeper underlying issue that has yet to be adequately addressed. Research suggests that childhood trauma is a strong predictor of maladaptive behaviour during adolescence and adulthood. Traumatic experiences such as physical and emotional abuse, sexual molestation, neglect, loss of a parent, and witnessing domestic violence are common among Nigerian children, especially in disadvantaged regions [13]. These adverse experiences have been shown to interfere with emotional regulation, impair cognitive development, and alter behavioural patterns [14]. Unfortunately, such traumatic events are often overlooked or minimized in many Nigerian communities due to cultural norms, lack of awareness, and stigma surrounding mental health.

Closely linked to childhood trauma is the issue of adolescent depression, which is a growing but under-recognized problem in sub-Saharan Africa. Depression in adolescence can manifest as persistent sadness, hopelessness, irritability, poor concentration, and disengagement from social and academic life [15]. Studies have shown that depression not only affects emotional wellbeing but can also contribute to increased risk-taking and anti-social behaviours, such as fighting, lying, stealing, and substance use [16]. However, due to poor mental health infrastructure, stigma, and insufficient screening in schools, many adolescents in Nasarawa State go undiagnosed and unsupported.

In the Nigerian context, mental health services are largely underdeveloped and inaccessible to most adolescents, particularly those in rural or low-income settings like Nasarawa State [17]. Schools are often under-equipped to address

students' psychological needs due to the absence of professional counsellors and psychoeducational programs. As a result, behavioural issues are often misinterpreted as mere indiscipline rather than symptoms of deeper emotional distress. Consequently, many adolescents who experience trauma and depression are punished rather than supported, which only exacerbates their behavioural issues and pushes them further into marginalization and anti-social behaviours.

3. Objectives

To achieve this purpose, the following specific objectives guided this study:

- (i) To determine the significant relationship between childhood trauma and anti-social behaviour among adolescents.
- (ii) To examine the relationship between depression and anti-social behaviour among adolescents.
- (iii) To examine the joint influence of childhood trauma and depression on anti-social behaviour among adolescents.

4. Hypotheses

- (i) There will be a significant relationship between childhood trauma and anti-social behaviour among adolescents.
- (ii) There will be a relationship between depression and anti-social behaviour among adolescents.
- (iii) There will be a joint influence of childhood trauma and depression on anti-social behaviour among adolescents.

5. Literature Review

Research shows that trauma in early life not only has immediate psychological consequences but can also result in long-term behavioural dysfunctions. According to a study, individuals exposed to trauma in childhood are more likely to exhibit externalizing behaviours such as aggression, defiance, and criminality during adolescence [18]. This aligns with Bandura's social learning theory, which posits that behaviours are learned through observation and imitation, especially when reinforced within one's environment [19]. In households or communities where violence, neglect, or emotional instability are common, children may internalize these behaviours as acceptable or necessary for survival. Similarly, Ajayi and Soyombo examined the influence of childhood maltreatment on juvenile delinquency in Lagos State [20]. The study, involving 200 incarcerated adolescents, showed that emotional abuse and parental neglect significantly contributed to their engagement in robbery, cultism, and violent outbursts. The findings support the assertion that adverse early life experiences contribute to behavioural maladjustment in Nigerian youths.

A growing body of empirical evidence has established a significant relationship between childhood trauma and the development of anti-social behaviours during adolescence. A study conducted a longitudinal study in the United States to assess the long-term effects of childhood abuse and neglect [21]. Their findings revealed that individuals who experienced abuse were significantly more likely to engage in violent and

criminal behaviour in adolescence and adulthood compared to their non-abused counterparts. Similarly, previous study found that physical abuse during early childhood predicted increased levels of aggression and conduct disorder in adolescence [22]. The study, which included over 400 children from diverse backgrounds, emphasized the role of parental hostility and neglect in the development of oppositional and anti-social tendencies.

Furthermore, several studies have found strong correlations between depression and anti-social behaviour. A study demonstrated that adolescents who experienced clinical depression were at higher risk of engaging in criminal and anti-social acts, especially when their condition was comorbid with other psychological disorders [16]. In addition, another study demonstrated that depression can impair judgment and impulse control, leading adolescents to engage in behaviours that violate social norms or laws [23]. Similarly an analysis of 38 empirical studies involving 17,832 adolescents and concluded that depression was a significant predictor of both internalizing (e.g., withdrawal) and externalizing (e.g., aggression) behaviours [24]. The study found that adolescents who feel hopeless or devalued may project their pain outward in the form of anti-social acts.

Gender plays a moderating role in the relationship between depression and anti-social behaviour. Previous research indicates that males are more likely to externalize their depressive symptoms through aggression and criminal behaviour, whereas females may be more prone to internalizing responses such as withdrawal and self-harm [25]. Another researchers demonstrated that depression mediates the relationship between trauma and aggression [26]. Their findings suggested that unresolved emotional issues arising from childhood adversity increase the risk of maladaptive behavioural expressions, especially among boys.

Addressing the co-occurrence of depression and anti-social behaviour requires a multi-dimensional approach. Early screening for depressive symptoms in children and adolescents can help identify those at risk of engaging in anti-social behaviour. Therapeutic interventions such as Cognitive Behavioural Therapy (CBT) and Dialectical Behaviour Therapy (DBT) have proven effective in treating depression and reducing impulsive and aggressive behaviour [27]. Family-based therapies, school-based mental health programs, and community engagement initiatives can also play a role in breaking the cycle of depression and anti-social conduct. Moreover, trauma-informed care that addresses past abuse or neglect can be particularly beneficial in addressing the root causes of these issues.

In the same vein, [28] examined the joint influence of childhood trauma and depression on anti-social behaviour. The study discovered that early exposure to sexual abuse and trauma predicted later depression and conduct problems. In another study, adolescents with multiple adverse childhood experiences (ACEs) showed higher levels of depression and were more likely to engage in cultism, bullying, and theft [29]. A study in Nigeria examined the relationship between childhood trauma, depression, and anti-social behaviour among secondary school

students in Benue State, Nigeria [30]. The findings revealed that trauma had a significant positive correlation with both depression ($r = .63$, $p < .01$) and anti-social behaviour ($r = .71$, $p < .01$).

6. Methodology

A. Design

This study adopted a correlation survey research design. This design is appropriate because it allows the researcher to examine the relationships between childhood trauma, depression, and antisocial behaviour among adolescents in Keffi Local Government Nasarawa State.

B. Population and Sample

The total population of people living in Keffi LGA of Nasarawa State according to a recent projection for Keffi LGA estimates a population of 142,900 [31]. However, the population of adolescents in the two selected secondary schools (Government Secondary School Yelwa, and Keffi South Government Secondary School) is 674. A sample size of 145 was estimated using the Z-Score formula. The study adopted a stratified sampling technique to select participants across the two schools and simple random sampling technique to select the sample size by giving equal opportunity to every individual to be selected for the study.

C. Instruments

The study adopted two instruments for data collection, such as Childhood Trauma Questionnaire (CTQ) developed by Bernstein and Finkin [32], Beck's Depression Inventory (BDI-II) developed by Beck [33] and Antisocial Behavior Scale (ABS) developed by Elliot et al. [34].

1) Childhood Trauma Questionnaire (CTQ)

Childhood trauma questionnaire (CTQ) was developed by Bernstein and Finkin [32] to assess experiences of abuse and neglect during childhood, focusing on five domains: emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. The instrument is 18-item scale, 9-item to measure cyberbullying victimization and 9-item to assess the frequency of cyberbullying offending from participants. Participant's responses was measured on a 4-point Likert scale: 1 = Never, 2 = Sometimes, 3 = Often, 4 = Always. The validation process involved comparing self-reports of childhood trauma with clinician ratings, structured interviews, and other relevant psychological measures. The CTQ demonstrated, high internal consistency for its five subscales (emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect), with Cronbach's alpha values typically above 0.71.

2) Beck's Depression Inventory (BDI-II)

BDI-II is a 21 item self-report instrument developed by Beck [34] to assess the existence and severity of symptoms of depression, with a response option to be measured on a 4-point Likert scale: 1 = Never, 2 = Sometimes, 3 = Often, 4 = Always. Each of the 21 items corresponding to a symptom of depression is summed to give a single score for the BDI – II. Total score of 0 -13 is considered minimal depression, 14 – 19 is mild

depression, 20 – 28 is moderate, and 29 – 63 is severe depression. BDI – II is positively correlated with the Hamilton Depression Rating Scale with a Pearson r of 0.71, showing good agreement. The test has a high one-week test-retest reliability (Pearson $r = 0.93$), suggesting that it was not overly sensitive to daily variations in mood. The test also has high internal consistency ($\alpha = .91$) [33].

3) Antisocial Behaviour Scale (ABS)

ABS is 10-items self-report instrument measure antisocial behaviors in children and adolescents. ABS is designed with a response option to be measured on a 4-point Likert scale: 1 = Never, 2 = Sometimes, 3 = Often, 4 = Always [34]. The internal consistency of the scale was established by using Cronbach's alpha coefficient and a reliability of 0.79.

D. Techniques for Data Analysis

All analyses were conducted using the SPSS software version 26. Pearson-r correlation was used to examine the independent relationship between childhood trauma, depression and antisocial behaviour to test hypothesis 1 and 2. To check the second hypothesis, a multiple regression was used to examine the joint influence of childhood trauma and depression on antisocial behaviour among adolescents in Keffi, Nasarawa State, Nigeria.

E. Ethical Considerations

This study was conducted in accordance with ethical guidelines. The research involved the analysis of anonymized data, ensuring that no personally identifiable information were retained. Given the nature of the study, informed consent was required from participants. The original data collection processes were conducted in compliance with relevant ethical guidelines, and the secondary analysis of these data cover the original ethical approval. All data used in this study were anonymized to protect participant's privacy. No personally identifiable information were included in the analysis, and stringent measures were taken to ensure data confidentiality.

7. Results

As shown in Table 1, from the total of 145 participants (100%), 57.2% fall within the 15–19 years age group, while 42.8% are within 13–15 years, indicating that the majority are older adolescents. Also, 51.7% are female, while 48.3% are male, showing a fairly balanced distribution with a slight female dominance. In addition, 53.1% are in SS1–SS3, while 46.9% are in JSS1–JSS3, indicating that more respondents are in senior secondary classes. The study recorded 55.2% from urban schools, while 44.8% are from rural schools, showing a slight dominance of urban respondents. Also, 48.3% of

participants live with parents, 20.7% with their mother, 12.4% with their father, 13.8% with family members, and 4.8% in other arrangements, which indicated that nearly half live in intact family settings. Finally, out of the total of 145 respondents (100%), 53.8% are Christians, 41.4% are Muslims, and 4.8% belong to other religions, indicating that Christianity is the most represented religion.

Variables	Frequency	Percentage
Age Group:		
13-15	62	42.8%
15-19	83	57.2%
Total	145	100%
Gender:		
Male	70	48.3%
Female	75	51.7%
Total	145	100%
Class Level:		
JSS1-JSS3	68	46.9%
SS1-SS3	77	53.1%
Total	145	100%
Location:		
Urban	80	55.2%
Rural	65	44.8%
Total	145	100%
Living With:		
Mother	30	20.7%
Father	18	12.4%
Both Parents	70	48.3%
Family Members	20	13.8%
Others	7	4.8%
Total	147	100%
Religion:		
Islam	60	41.4%
Christianity	78	53.8%
Others	7	4.8%
Total	145	100%

8. Test of Hypotheses

Hypothesis One: Hypothesis one states that there will be a significant relationship between childhood trauma and anti-social behaviour among adolescents in Keffi, Nasarawa State, Nigeria. The hypothesis was tested using Pearson-r correlation analysis to analyze the relationship between childhood trauma and antisocial behaviour and the result presented in table 2.

As shown in Table 2, the Pearson's correlation coefficient is 0.062**, which signifies a positive correlation between childhood trauma and anti-social behavior among adolescents in Keffi, Nasarawa. The results showed a statistical significance at $P < .000$. This means that adolescents who experienced higher levels of childhood trauma are more likely to engage in anti-social behaviours such as aggression, truancy, and other forms of behavioural misconduct.

Hypothesis Two: Hypothesis two states that there will be a

		Childhood Trauma	Antisocial Behaviour
Childhood Trauma	Pearson Correlation	1	.062**
	Sig. (2-tailed)		.000
	N	145	145
Antisocial Behaviour	Pearson Correlation	.062**	1.000
	Sig. (2-tailed)	.000	
	N	145	145

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

Table 3
Correlation between depression and antisocial behaviour

		Depression	Antisocial Behaviour
Depression	Pearson Correlation	1	.055**
	Sig. (2-tailed)		.000
	N	145	145
Antisocial Behaviour	Pearson Correlation	.055**	1.000
	Sig. (2-tailed)	.000	
	N	145	145

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

Table 4
Multiple regression of childhood trauma, depression and antisocial behaviour

DV	Constant	R	R ²	F	df	95%CI	β	T	P
Antisocial Behaviour	Constant	0.70	0.49	68.25	2.143	0.70	0.501		
	Childhood Trauma					[0.349, 0.622]	0.327	6.85	.000
	Depression					[0.181, 0.546]		4.00	.000

significant relationship between depression and antisocial behaviour among adolescents in Keffi, Nasarawa State, Nigeria. The hypothesis was tested using Pearson-r correlation analysis to analyze the relationship between depression and anti-social behaviour and the result presented in table 3.

As shown in Table 2, the Pearson's correlation coefficient is 0.055**, which signifies a positive correlation between depression and anti-social behavior among adolescents in Keffi, Nasarawa State, Nigeria. The results showed a statistical significance at $p < .0001$. This indicates that adolescents with higher levels of depression are more likely to engage in anti-social behaviour.

Hypothesis Three: Hypothesis three states that there will be a joint influence of childhood trauma and depression on anti-social behaviour among adolescents in Keffi, Nasarawa State, Nigeria. The hypothesis was tested using multiple regression analysis to analyze the joint influence childhood trauma and depression and anti-social behaviour and the result presented in table 4.

The results of hypothesis three analysis showed a statistically significant combined influence of childhood trauma and depression on anti-social behaviour among adolescents in Keffi, Nasarawa State [$F(2, 143) = 68.25, p < .05$]. This indicates that the model explains 49% of the variance in anti-social behaviour ($R^2 = 0.49$), suggesting a moderate level of influence. Childhood trauma was found to significantly influence anti-social behaviour among adolescents Keffi, Nasarawa State ($\beta = 0.501, t = 6.85, p < .05, 95\% \text{ CI } [0.349, 0.622]$). Also, depression has influence on anti-social behaviour among adolescents in Keffi, Nasarawa State ($\beta = 0.327, t = 4.00, p < .05, 95\% \text{ CI } [0.181, 0.546]$), indicating that depression is associated with poor anti-social behaviours. Overall, childhood trauma and depression jointly and significantly influence anti-social behaviour among adolescents in Keffi, Nasarawa State, Nigeria.

9. Discussion

There will be a significant relationship between childhood trauma and anti-social behaviour among adolescents in Keffi, Nasarawa State, Nigeria. The hypothesis was tested using Pearson-r correlation analysis and the result is revealed that a positive correlation between childhood trauma and anti-social behavior among adolescents in Keffi, Nasarawa. This implies

that adolescents who experienced higher levels of childhood trauma are more likely to engage in anti-social behaviours such as aggression, truancy, and other forms of behavioural misconduct. The finding of this study is supported by scholars who examined how childhood experience determined antisocial behaviour among basic school pupils in Oyo state, Nigeria [35]. The findings revealed bullying victimisation experiences as a cause of childhood trauma with significant impact on antisocial behaviour among basic school pupils in Oyo State, Nigeria. The study recommends implementing school-based behaviour management, peer mediation, and empathy building activities to reduce subtle antisocial behaviours.

In the same vein, Prescott and Allen [36] test whether adverse childhood experiences relate to risk of anxiety and antisocial behavior in adulthood. Their findings revealed that greater exposure to childhood maltreatment was associated with a greater experience of anxiety symptoms and greater antisocial behavior, including physical aggression, social aggression, and rule breaking (with medium effect sizes). This finding provides evidence that adverse childhood experiences have an important role in antisocial behavior. Similarly, a study in Nasarawa State investigated the influence of childhood trauma and substance use on adolescent's antisocial behaviour in some selected secondary schools in Lafia, Nasarawa State [37]. Findings indicated that there was a positive predictive relationship between childhood trauma and adolescent's antisocial behaviour [$r(219) = 0.672, P < 0.05$]. The study recommended that the family and society at large should come up with preventive programmes that will reduce the traumatic experiences of adolescents.

Rada et al. [38] analyze maladaptive schemas in relation to the potentially traumatic experience of being the victim of violence inflicted by family members through hitting and beating and in connection with violent behavior (in and outside school). The finding demonstrated that the Punitiveness schema achieves between victimization in the family and subsequent aggressive behavior is based on the internalization of the punitive parental figure and the victim's development of the belief that violence is the only answer when others do not meet their expectations. A study examined the direct and indirect effect of Adverse Childhood Experiences (ACEs) on Antisocial Behavior in Juvenile Offenders. Results showed that 96.9% of participants had experienced at least one ACE, establishing that

a significant and direct relationship was found between ACEs and antisocial behaviour. This finding provides valuable insights for interventions aimed at reducing juvenile recidivism [39].

Recent study conduct a systematic literature review to explore the profound impact of various childhood trauma types, including neglect, abuse, and sexual assault as critical factor contributing to increased risk of criminal behavior. The study evaluates the efficacy of evidence-based therapeutic interventions and result demonstrates significant potential in mitigating trauma symptoms, enhancing emotional regulation, and reducing criminal tendencies [40]. A study from Keffi revealed that the subtypes of Childhood Trauma (CT) were extremely powerful predictors in collectively explaining an extraordinary 85.1% of the variance in Antisocial Behavior (ASB) [41]. Recently, Musa *et al.* [42] examines how traumatic childhood experiences influence interpersonal relationships and criminal behaviour among undergraduate students at the University of Jos. Result revealed that traumatic experiences were significantly associated with higher tendencies toward criminal or antisocial behaviour ($r = .876$, $p < .01$). The study concludes that childhood trauma increase the likelihood of antisocial or criminal behaviour.

Hypothesis Two: There will be a relationship between depression and anti-social behaviour among adolescents in Keffi, Nasarawa State, Nigeria. The hypothesis was tested using Pearson-r correlation analysis and the result revealed positive correlation between depression and anti-social behavior among adolescents in Keffi, Nasarawa State, Nigeria. This implies that adolescents with higher levels of depression are more likely to engage in anti-social behaviour. The finding of hypothesis two is supported by the work of Kim *et al.* [43]. The authors aimed to examine the effects between depression and delinquent behavior in Korean adolescents based on sex differences. Result revealed that girls' depression at 15 years influenced their delinquent behaviors at 16 years. Similarly, previous study investigated the relationship between depression and antisocial behaviour in middle adolescence. The results indicated that antisocial behaviour was associated with depression [44]. Other study demonstrated an association between depression and antisocial behaviour [45].

In contrast, a study examined the associations between adolescent antisocial behavior and depressive symptoms, and result revealed that depressive symptoms (T1, T2) did not predict antisocial behavior (T2, T3). However, the multivariate predictors demonstrated that prior depressive symptoms (IRR = 1.06), alcohol use (IRR = 1.13), family conflict (IRR = 1.13), antisocial peers (IRR = 1.08) and bullying victimization (IRR = 1.06) predict antisocial behavior [46]. In the same vein, Reising and Ttofi [48] investigated the relationship between depression and criminal behaviour. The finding suggested that there was no direct relationship between any offending up to age 32 and depression measured at age 48. The findings also, however, caution against assuming any direct relationship between these symptoms and crime, regardless of direction.

Hypothesis Three: There will be a joint influence of childhood trauma and depression on anti-social behaviour

among adolescents in Keffi, Nasarawa State, Nigeria. The hypothesis was tested using multiple regression analysis to analyze the joint influence and the result showed a statistically significant combined influence of childhood trauma and depression on anti-social behaviour among adolescents in Keffi, Nasarawa State [$F(2, 143) = 68.25$, $p < .05$], Nigeria. Childhood trauma was found to significantly influence anti-social behaviour among adolescents Keffi, Nasarawa State ($\beta = 0.501$, $t = 6.85$, $p < .05$, 95% CI [0.349, 0.622]). Also, depression has influence on anti-social behaviour among adolescents in Keffi, Nasarawa State ($\beta = 0.327$, $t = 4.00$, $p < .05$, 95% CI [0.181, 0.546]), indicating that depression is associated with poor anti-social behaviours.

The finding of hypothesis 3 is supported by the recent study conducted that examined childhood trauma, rumination, emotional avoidance, social isolation, and psychological inflexibility as predictors of Post-Traumatic Stress Disorder (PTSD) symptoms among trauma survivors in Onitsha, Anambra State, Nigeria. Results revealed a significant positive relationship between childhood trauma ($r = 0.68$), social isolation ($r = 0.62$), and vulnerabilities to psychological inflexibility to crime ($r = 0.66$) [48]. In addition, another study investigated to know whether adverse childhood experiences relate to risk of anxiety and antisocial behavior in adulthood [36]. Their findings demonstrated that greater exposure to childhood maltreatment was associated with a greater experience of anxiety/depressive symptoms and greater antisocial behavior, including physical aggression, social aggression, and rule breaking (with medium effect sizes). Mediation models further showed that anxiety symptoms mediated associations between childhood maltreatment and antisocial behavior (explaining 15%–27% of the association). These findings provide evidence that adverse childhood experiences have an important role in antisocial behavior, and that anxiety has an important connection to this association.

In the same vein, a bidirectional analysis of the effects of antisocial behavior, anxiety, and trauma exposure. From the findings, using longitudinal parallel mediation models, antisocial and aggressive behavior largely accounted for the predictive association between callous-unemotional CU traits and anxiety and CU traits and victimization [49]. This implies that the higher rates of anxiety and trauma exposure in some youth with elevated CU traits are largely a consequence of their higher levels of antisocial behavior. A review of literature of various types of childhood trauma, experiences disrupt emotional regulation and antisocial tendencies and delinquency explored the efficacy of evidence-based therapeutic interventions like Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), Eye Movement Desensitization and Reprocessing (EMDR), Cognitive Behavioral Writing Therapy (CBWT) and Family-Based Treatment (TBF) [40]. These therapies demonstrate significant potential in mitigating trauma symptoms, enhancing emotional regulation, and reducing criminal tendencies.

Another systematic review from ninety-eight studies examined the association between Adverse childhood experiences (ACEs) and abnormal behaviour, emphasizing

internalizing outcomes such as depression, anxiety, and post-traumatic stress, alongside externalizing outcomes including aggression, hyperactivity, and antisocial tendencies [50]. Findings consistently indicate that the number and severity of ACEs are strongly linked with the emergence of abnormal behavioral patterns, with females exhibiting higher internalizing outcomes like trauma and males displaying more externalizing behaviour like antisocial behaviours. Similarly, Proença and Almeida [51] examine how the impact of adverse childhood experiences and positive thoughts in depression, anxiety, and stress can influence antisocial behaviour from convicted sex offenders. The study finding established a strong association between ACE, depression, and antisocial behaviour among people convicted of sex offenses. This implies that people convicted of sex offenses have higher tendencies of experiencing childhood trauma and tendencies of scoring high on depression, anxiety and stress.

10. Conclusion and Recommendations

Based on the findings of the study, it is concluded that childhood trauma and depression are significant predictors of anti-social behaviour among adolescents in Keffi, Nasarawa State, Nigeria. Adolescents' greater exposure to adverse childhood trauma has a stronger influence on anti-social behaviour than depression, indicating the long-term impact of early adverse experiences on adolescent development. The study also concludes that both childhood trauma and depression jointly contribute significantly to anti-social behaviour, showing that behavioural problems are influenced by multiple interacting psychological factors rather than a single cause. Practitioners, parents and guardians should tailored towards advocating for stable, supportive, and non-violent home environments to reduce exposure to childhood trauma. Mental health professionals working with adolescents who have experience adverse childhood trauma should collaborate with the government and other mental health agencies to implement awareness programmes aimed at educating communities on the effects of childhood trauma and depression on antisocial behaviour among adolescents and young adults. We recommend further that schools should establish functional guidance and counselling units to identify and support adolescents experiencing emotional and behavioural difficulties.

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