



INFLUENCE OF FAMILY TYPE, ADVERSE CHILDHOOD EXPERIENCE AND LOCUS OF CONTROL ON CONDUCT DISORDER AMONG JUVENILES IN CORRECTIONAL INSTITUTIONS

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Abstract

Behaviour problem among youths has place a large psychological and economic burden on parents, criminal justice agencies and the entire society. This study examined the influence of types of family, adverse childhood experience and locus of control on conduct disorder (CD) among juveniles in correctional institutions in Nigeria. It adopted a survey method utilizing ex-post facto design. The independent variables are family type, childhood adversity and locus of control while dependent variable is conduct disorder. 386 juveniles were sampled in correctional institutions in south-western and northern Nigeria purposively. A structured questionnaire which focused on demographics (age, gender and family type); Brief Propensity Index of Conduct Disorder (BPI-CD), Adverse Childhood Experience Questionnaire and Locus of Control Scale were administered. t-test of independent sample and 2x2 ANOVA were used. The age of respondents was 11.5 ± 18.7 years; 81.30% were males. result showed a significant different between family type of respondents on CD $t(384)=10.95$; $p<.01$); Juveniles from nuclear family scored significantly different ($M=35.90$, $S. D= 9.56$) on CD compare to those from extended family ($M=46.21$, $S.D =4.75$). Adverse Childhood Experience significantly influenced CD ($F(1, 381)=19.00$, $p<.01$; $\eta_p^2=.048$). The phi-eta coefficient revealed that 48% of the variance observed in CD was strictly accounted for by adverse childhood experience. External locus of control ($\bar{X} =49.92$; $SD = 11.26$) predisposed participants to CD. Therefore, authorities of correctional services should provide psychological programmes that will cater for external locus of control trait and adverse childhood experience (ACE) among juveniles to enhance a better behavioural modification.

Keywords: *family type, locus of control, childhood adversity, conduct disorder, juveniles, correctional institutions*

Introduction

Conduct disorders in childhood and adolescence are becoming more frequent in the world today and it place a large personal and economic burden on individuals and society (British Psychological Society, 2013). Conduct disorder is a very serious mental health concern that

is associated with substantial risk of both current and future impairments. First, it often involves aggression, it is highly related to criminal behaviour, and it is associated with a host of other social, emotional, and academic problems (Frick, Stickle, Dandreaux, Farrell, & Kimonis, 2005). For example, the behaviours associated with CD often make a child to be rejected by his or her peers as well as being suspended or expelled from school (Frick, 2012).

Conduct disorder (CD) is a complicated behavioural and emotional problems in children and adolescents that can pose serious concerns to parents, home and the society. It is characterized by recurrent and a persistent behavioural disorder that occurs during childhood and adolescence stage, in which the basic rights of others or major age-appropriate societal norms or rules are violated. According to American Psychological Association (APA) (2013), conduct disorder is a repetitive and persistent pattern of behaviour which involved; being aggressive to human and animals, deceptive, and destructive behaviour that usually begins in childhood or adolescence. It is behaviours that violate the basic rights of others with disorderliness, rebelliousness and deceitfulness and unaccepted societal rules (Adeusi, Gesinde, Alao, Adejumo & Adekeye, 2015). According to APA (2013) CD is classified into three types; Childhood Onset (symptom begins before age 10) and Adolescence onset (it occurs at teenage years) and unspecified onset (unknown age), however this current study concentrated on adolescence onset alone, this is because of the ravaging issues on youth unrest and higher numbers of young offenders in Nigeria (Ibrahim & Ibrahim, 2012). DSM-5 criteria grouped adolescent onset of CD as mild, moderate and severe. Mild conduct disorder will exhibit few symptoms and cause little harm to others. One with moderate CD will elicit half of the symptoms and cause no harm to others, for examples stealing without confronting the victim or vandalism. While the CD will show excess symptoms (in the previous twelve months or more than one) and will cause much harm to others through their actions or the consequences of their actions (Meyer, 2004).

According to some studies conducted within and outside Nigeria, roughly 64.2% of adolescents between age 14 to 21 years in correctional home displayed some traits of CD

and at the same time at the risks of psychiatric problems like; suicide, depression, somatic illness, anxiety and psychosis (Ajiboye, Yusuf, Issa, Adegunloye & Buhari, 2009). Adverse childhood experience (ACE) otherwise called are traumatic events that children are exposed to, before attaining adulthood; it involves events such as; mother's ill health, poor nutrition and stress; also being the product of an unwanted pregnancy; early loss of parents; witnessing inter-parental violence; dysfunctional parenting; parental substance abuse, mental health problems and criminal behaviour; abuse sexual, physical and emotional abuse; childhood emotional or physical neglect; bullying; medical illness; and war trauma (Kessler, McLaughlin, Gruber, Sampson, & Zaslavsky, 2010). Similarly, Bowlby in Maughan & McCarthy (2013) argued that maternal deprivation in childhood brought about psychological challenges. Some juveniles believe that they lack personal control over hardship and negative experienced of life; this belief triggers conduct disorder (Matricardi, 2006). The experience of a child in his environs influences his ways of thinking, perception and interpretation of events later in life such as locus of control traits (Ryle & Kerr, 2002).

Rotter in Matricardi (2006) sees "locus of control" (LOC) as the degree to which individuals believe the things that what happened to them are due to internal versus external factors". In addition, it is the reinforcements that an individual is holding as beliefs about the cause of their actions, and these beliefs guide the kind of attitudes and behaviours such individual can display in life event (Kazdin, 2000). Individuals with an internal locus of control can manage stressful situations effectively by using problem-solving strategies than individuals with external locus of control, they tend to perceive their behaviour as a result of external forces or blaming their shortcoming on situations and such individual are vulnerable to behaviour like CD (Kazdin, 2000).

Globally, studies have shown that exposure to ACE triggers adolescents onset type of CD which makes them susceptible to a lot of risky behaviours such as; unprotected sex, rape, smoking, drug abuse, suicide bombing, destruction of lives and properties, violation of the right of others and killings (Matricardi, 2005). This risky behaviour has detrimental effect on the adolescents as such is prone to; unwanted pregnancy, STDs and HIV infections, unstable education, home escapism and other social vices (Ibrahim et al., 2012). A

systematic review and meta-regression analysis of 25 surveys across Europe and America also revealed conduct behavioural problems prevalence rate of 52.8 % (Fazel, Doll, & Långström, 2008). In the United Arab Emirates, a prevalence of 24.7 % was reported among 72 incarcerated offenders compared to the 7 % found among school children (Eapen, Al-Sabosy Saeed & Sabri, 2004), whereas, in Brazil, 77 % prevalence rate was reported among 116 juvenile delinquents (Eapen et al., 2004). Although, data from Africa are still very scanty, a study by Ajiboye, Issa & Buhari, (2010) reported a 60 % prevalence rate among 58 incarcerated juveniles in the North-central part of Nigeria, compared to 15.8 % prevalence rate reported among a sample of Nigerian school children. Despite these prevalence studies in schools, there is dearth of studies on the prevalence of conduct behaviour in forensic settings.

A study conducted in southern Nigeria show that adolescents of 15.82% between 9 to 18years are with conduct disorder (Frank-Briggs & Alikor, 2008). Such study needed to be expanded by involving a wider population of regions like northern and western Nigeria, hence the need for study like this arise. Behavioural problems had been reported to be very high in correctional homes globally compared to the general population (Gubhaju, McNamara, Banks, Joshy, Raphael, Williamson & Eades, 2013) whereas there is paucity of literature in this area in Africa especially in Nigeria. Also, it has now become a common day child psychiatry diagnosis in the western world (Olashore, Ogunwale & Adebowale, 2016), while there are scanty researches on the psychological implications of incarcerated juveniles in Nigeria. In this study, stage of adolescence is referred to as the transitional ages between childhood and adulthood of the participants at the time of conducting the study (WHO, 2013). Also, juveniles are adolescents, youth or children between age 11 to 21 years living in correctional institution for rehabilitation. These research questions will be used to guide the objectives of this study thus:

- i. To what extent does individual Juveniles' family type contribute to conduct disorder behaviours?
- ii. How does adverse childhood adversity experience and locus of control traits contribute to conduct disorder among juveniles?

Purpose of the Study

The general purpose of this study is to examine the influence of perceived childhood adversity and locus of control on conduct disorder among juveniles. Therefore, the study sets to:

1. Investigate whether individuals' family type will influence conduct disorder behaviours
2. examine whether childhood adversity experience and locus of control traits will influence conduct disorder

Research Hypotheses

1. Individual Juveniles from extended family will exhibit more conduct disorder behaviours significantly than juveniles from Nuclear family type
2. Individual Juveniles with high adverse childhood experience and external locus of control traits will report severe conduct disorder significantly than juveniles with low adverse childhood experience and internal locus of control traits

Methods

Design

This study used cross sectional survey utilizing ex-post facto design. The independent variables are; family type, childhood adversity and locus of control while the dependent variable is Conduct Disorder.

Sampling

Participants were selected purposively. This is because of the peculiar characteristics of conduct disorder. Individual children or adolescent admitted in correctional homes are often with behavioural problems like CD, as a result study purposively chose these individuals.

Setting

The study was conducted in Borstal Homes and Remand Homes in South-western and Northern Nigeria. It involved Borstal homes, in Ilorin, Abeokuta, and Kaduna also, Remand homes in Ibadan, and Juveniles Correctional home in Oregun and Idi-araba-Lagos, Nigeria. These are the major correctional homes in these three regions (North-central, North-West, South West) in Nigeria.

Participants

Three hundred and eighty-six (386) participants, who were in correctional homes in North-central, North-West, and South West were purposively selected to participate in this study. They are currently receiving rehabilitation in correctional settings. The age of respondents was 11.5 ± 18.7 years; 81.30% were males while females were 18.7%. The male respondents comprise of 314(81.30%), while females were 72(18.7%). Those from extended family were 300(77.7%) while those from nuclear were 86(22.3%). In addition, Yorubas were 88(22.3%), Igbos were 90(23.3%), Hausas were 116(30.6%) and others from minority groups were 92(23.8%).

Inclusion-exclusion criteria:

The study involved; Juveniles living in correctional home, can speak, read and understand English language, and are willing to participate. Those young offenders who are outside correctional homes, who are also not psychologically stable, and/or refused to sign inform consent were excluded from this study.

Instruments

Three instruments were used in the study, namely: Brief Propensity Index of Conduct Disorder (BPI-CD, Oguntayo & Osinowo, 2019); Revised Inventory of Adverse Childhood Experiences Questionnaires (ACE) (WHO, 2009), adapted by Shattucka, Turner & Hamby (2015) and Locus of Control Scale (LOCS, Levenson, 1981) with section A, consists of socio-demographic information of the participants, such as age, gender, religion, tribe, type of family and type of correctional institutions.

Brief Propensity Index of Conduct Disorder BPI-CD

This 20-item was developed to assess conduct disorder. It is a 20-item scale; classified into four subscales with Likert format; None of the time=0, A little of the time (once or twice) =1, Occasionally (3times or more) =3 and Most of the time=4. The items reveal the behaviours that represent the main symptoms clusters that capture the diagnosis of Conduct Disorder which include: Aggressive Conduct, Destruction of property, Deceitfulness and Theft, and Rule Violations. The subscales recorded a reliability coefficient of: 0.84 for Aggressive behaviour, and Hostility was 0.71, Theft and

Deceitfulness was 0.79, and Rule Violations was 0.74. The overall reliability coefficient for the whole scale (CDS) was 0.72. The scale is scored thus; items 1,3, 4, 5, 7, 9, 10, 11, 13, 14, 15, 16 and 17 are directly scored while other items are reversely scored, individual who scored 40 and above is considered high on conduct disorder.

A Revised Inventory of Adverse Childhood Experiences Questionnaires ACE

This scale adapted by Shattucka, Turner & Hamby (2015) to assess childhood adversity. The 14-item scale is an instrument developed to assess lifetime experience of traumatic and stress history like; emotional, sexual, physical abuse and neglect. Emotional abuse was measured with items 1, 4, 13, and 14 that inquired whether an individual had been boomed or threatened. Physical abuse was examined with items 2, 5, 6, 7, 8 and 11 that revealed hitting, spanking, kicking, slapping and hitting with anything. Sexual abuse was assessed utilising item 3 asking about unwanted sexual cuddling; touching someone sexually against one's will. Olalekan (2015) recorded .80 Cronbach alpha and good validity for Nigeria use and the scale has also been judged to be useful for assessing the predisposition of individuals to criminality in future; also, the present study recorded .82 Cronbach Alpha coefficient. The scale has 5 points Likert formats thus: (1) "Never," (2) "Once," (3) "I refuse to answer" (4) "A few times," and (5) "Many times." The questionnaire is summed together and the points are totalled for a score out of fourteen, which is known as the ACE score; a score above 42 indicate high childhood adversity.

Locus of Control Scale LOCS

This scale was developed to assess the locus of control among the research participants. It is a 24-item scale with a 6-points Likert scale, which ranges from -3=Strongly Disagree to +3=Strongly Agree. It has three subscales; Internality contains 8 items (items 1, 4, 5, 9, 18, 19, 21, 23) assessing the level of individual's belief in their ability to control the situation that happen to them in life. The Powerful Others consists of 8 items (items 2, 6, 7, 10, 12, 14, 16, 24), it examines the degree to which individuals feel that the course of life is geared by person affluent people who usually control the fate of the less privileged. The Chance subscale contains of 8 items (items 3, 8, 11, 13, 15, 17, 20, 22), examining the perceptions

that luck and fate determines individual's event of life, thus making them to have a limited control in all aspects of life. Recently some researchers discovered a better Cronbach's alpha scores above 0.70 for all LOC dimensions. Also, the mean square error of approximation (RMSEA), with the comparative fit index (CFI) as well as the goodness of fit index (GFI) values were 0.053, 0.951, and 0.937 respectively for the three dimensions. All the subscales are score by addition of all the responses of the examinees and summing it to a constancy of +24 to ameliorate the negative summations. As results, the respondents received three-score (each one ranging between 0 to 48) which indicate the highest one can go. Each of the subscales is scored on a 6-points Likert pattern ranging from minus (-) 3 to plus (+) 3. For example, the internal ELOC items include; 1, 4, 5, 9, 18, 19, 21 and 23 and, a participant who positively agreed with all the items could score a plus 24 while others who strongly disagreed would have a minus 24. While doing the addition and subtraction of the item ticked, it advisable to add 24 to the total overall scores to eliminate negative scores and to other subscales. The Internality has scorer ages from 30 to the low 40, with 35 seeing as the mode of the mean scores (while the SD values can be approximating 7). Also, the Powerful Others subdimension has mean scores ranging from 18 to 26, while 20 is the characteristic of college student participants (normal population) (SD 8.5). On the other hands, the Chance subdomain has mean scores ranging between 17 to 25, while the 18 is common mean scores among youth (SD=8). In this, the present study researcher recorded a Cronbach Alpha coefficient of .75.

Ethical Consideration

The study was presented for the authorities of correctional institutions' approval and participants inform consent was sought.

Procedure

In this study, participants were selected using a purposive sampling technique. The ACE Questionnaire, locus of control scale, BSI-CB were administered to the participants to assess the susceptibility of juveniles to those variables of interests.

Data Analysis

Descriptive (means, SD, Percentages, range, etc) and; Hypothesis 1 and 2 were tested using t-test of independent sample and 2x2 ANOVA.

RESULTS

Table 1 Showing the Descriptive Statistics of The Respondents in Correction Homes.

Variables	N	%
Gender		
Male	314	81.3
Female	72	18.7
Family type		
Extended	300	77.7
Nuclear	86	22.3
Tribe		
Yoruba	88	22.3
Igbo	90	23.3
Hausa	116	30.6
Other Tribes	92	23.8

From table 1 above, the male respondents comprise of 314(81.30%), while females were 72(18.7%). Those from extended family were 300(77.7%) while those from nuclear were 86(22.3%). In addition, Yorubas were 88(22.3%), Igbos were 90(23.3%), Hausas were 116(30.6%) and others from minority groups were 92(23.8%).

Table 2 Showing the significant difference of the conduct disorder behaviour of Juveniles from Nuclear Family and Extended Family in Nigeria

DV	IV	N	\bar{x}	SD	Df	T	P
Conduct Disorder	Extended	300	46.21	4.75	384	10.95	< .01
	Nuclear	86	35.90	9.56			

The result in table 2 shows that there was a significant difference in the score of conduct disorder reported by respondents from family extended and nuclear family $t(384) = 10.95$; $p < .01$). Juveniles from nuclear family scored lower ($M=35.90$, $S. D= 9.56$) significantly on the scores of conduct disorder compare to those from extended family ($M=46.21$, $S.D$

=4.75). This outcome was in support with the stated hypothesis one which stated that offenders from extended family will exhibit conduct disorder behaviour significantly than offenders from nuclear family. Therefore, the stated hypothesis one is accepted. The hypothesis was thus rejected.

Hypothesis one which stated that juveniles with high adverse childhood experience and external locus of control traits will report severe conduct disorder significantly than juveniles with low adverse childhood experience and internal locus of control traits was tested using 2 x 2 Analysis of variance (ANOVA) as presented in table 4.8.

Table 3a: Showing the significant influence of Adverse Childhood Experience and Locus of Control on Conduct Disorder among Juveniles in Correctional Homes in Nigeria

Source	SS	Df	MS	F	P	η_p^2
Adverse Childhood Experience (A)	999.12	1	999.12	19.00	< .01	.048
Locus of Control (B)	250.47	1	250.47	04.76	< .05	.012
A x B	21.08	1	21.08	0.40	< .05	.012
Error	20033.06	381	52.58			
Total	766317.0	385				
	0					

Result from table 4.5a showed that Adverse Childhood Experience significantly influence conduct disorder behaviour among juveniles in correctional homes in Nigeria ($F(1, 381) = 19.00, p < .01; \eta_p^2 = .048$). The phi eta coefficient revealed that 48% of the variance observed in conduct disorder among juveniles was strictly accounted for by adverse childhood experience. Furthermore, locus of control had significant influence on conduct disorders among juveniles in correctional homes in Nigeria ($F(1, 381) = 04.76, p < .05; \eta_p^2 = .012$). The phi eta coefficient revealed that 12% of the variance observed in conduct disorder of the juveniles was strictly accounted for by locus of control. Further results are shown in Table 4.8b shown below.

Table 3b, Showing the interaction influence of Adverse Childhood Experience and Locus of control on Conduct Disorder among Juveniles in Nigeria

ACE	Locus of Control	Interaction	N	\bar{x}	SD	Ranks
Low	Internal LoC	LI	226	44.39	06.97	4 th
	External LoC	LE	081	45.85	04.88	3 rd
High	Internal LoC	HI	041	49.66	08.11	2 nd
	External LoC	HE	037	49.92	11.26	1 st

Further analysis of rank descriptive statistic revealed that juveniles with high adverse childhood experience and external locus of control ($\bar{x} = 49.92$; $SD = 11.26$) had the chances of exhibiting conduct disorder when compared with juveniles with low adverse childhood experience and internal locus of control ($\bar{x} = 49.66$; $SD = 08.11$), juveniles with low adverse childhood experience and internal locus of control ($\bar{x} = 44.39$; $SD = 06.97$), and juveniles with high adverse childhood experience and external locus of control ($\bar{x} = 45.85$; $SD = 04.88$).

Therefore, the stated hypothesis two which stated that juveniles with high adverse childhood experience and external locus of control traits will report severe conduct disorder significantly than juveniles with low adverse childhood experience and internal locus of control traits was in support with the outcome of this findings, therefore, hypothesis three is accepted.

Discussion

The study examined the influence of family ty, adverse childhood experience and locus of control on conduct disorder among juveniles in correctional homes in Nigeria. Study outcome revealed that juveniles from extended family exhibits more conduct disorder behaviours than juveniles from nuclear family thus, the hypothesis is confirmed. However, there is paucity of research in this area as regards conduct disorder. Despite that low or no study to back this result up, the reason for the outcome of this finding may not be too far-fetched because of the wives' unhealthy rivalry and possible negligence of fathers or both parents which increase the susceptibility of children in that kind of setting compare to nuclear family where one parent and one father are focusing on each other as well as the

children without any divided loyalty. Some men or husbands from sub-Saharan Africa bite more than they can chew in marrying multiple wives but lack ability to take up the required responsibilities which do most time bounce back on the children's immoral behaviour. This is a big challenge to Africa family settings.

The second hypothesis which stated that juveniles with high adverse childhood experience and external locus of control traits will report severe conduct disorder significantly than juveniles with low adverse childhood experience and internal locus of control traits. The result showed that Adverse Childhood Experience significantly influence conduct disorder behaviour among juveniles in correctional homes in Nigeria. This outcome is similar to the study of (Anda, Butchart, Felitti et al. 2010; Strine, Edwards & Dube, et al., 2012), they found that high adverse childhood experience is a strong predictor of criminality in young individuals. Some studies have supported that there is a negative relationship between internal locus of control and conduct disorder, and that rather than engage in crime, youth with an internal locus of control may be more likely to use pro-social coping skills as a means of dealing with aggressive situations while those with external locus of control are prone to behaviour problem and offending manners (Matricandi, 2006; Rotter, 1966 cited Ahlin, 2014).

Conclusion

This study explored the influence of childhood adversity and locus of control on conduct disorder among juveniles in correctional homes, Nigeria. It was revealed that juvenile offenders from extended family exhibited conduct disorder behaviour significantly than offenders from nuclear family. Adverse Childhood Experience significantly influence conduct disorder behaviour among juveniles in correctional homes in Nigeria. Furthermore, locus of control had significant influence on conduct disorders among juveniles in correctional homes in Nigeria. The Juveniles with high adverse childhood experience and external locus of control traits reported severe conduct disorder significantly than juveniles with low adverse childhood experience and internal locus of control traits in the current study. Considering the findings of this study, juveniles with high adverse childhood experience and external locus of control traits reported higher conduct disorder significantly than juveniles with low adverse childhood experience and external locus of control traits in the present study.

Implication and Recommendation

More research is needed in other geopolitical zones to complement the results of this study. Also, clinical practice may be less successful focusing on the forensic population alone and leaving out their parents who are mostly the cause of the problems considering their negligence and nonchalant attitude towards child rearing. More so, the problems discovered among juveniles in this study are more psychological than physical such as challenges of locus of control traits needed core psychological intervention instead of punitive measures and authority of correctional institutions in Nigeria need to note this. It is therefore recommended that:

- i.** Correctional institutions should build in psychological intervention in their programme to enhance internal locus of control traits in these young offenders.
- ii.** Assessment should be done periodically among juveniles in correctional homes and those positive on conduct disorder should be referred for psychological intervention and not punitive styles of correction.
- iii.** Equipping correctional homes with better social amenities, adequate medical facilities and care should be encouraged to aid effective and efficient treatment outcomes.
- iv.** Awareness on mass media should be done periodically to enlighten parents and guardians on how to avert traumatic childhood experience.

Limitations

The study mainly covered correctional centres for young offenders in Southwest, North West and North central Nigeria. However, the inability to include some other parts of geopolitical zones even though all major federal government juvenile institutions in Nigeria were explored make some of the features of the study to be limited on generalizability.

Conflict of Interest

The authors declare that this study has no conflict of interests in the publication of this manuscript. So also, the ethical issues were observed and informed consent of the participants were sought with plagiarism check.

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