academicJournals

Vol. 7(4), pp. 63-68, May, 2015
DOI: 10.5897/IJPC2015.0304
Article Number: F3428DC52965
ISSN 1996-0816

http://www.academicjournals.org/IJPC

International Journal of Psychology and Counselling

*Full Length Research Paper*

# Differential effect of behavioural strategies on the management of conduct disorder among adolescents in correctional centres in Lagos State, Nigeria

**Sussan O Adeusi*, Abiodun M Gesinde, Amos A Alao, Gbadebo O Adejumo and Olujide A Adekeye**

Department of Psychology, Covenant University, Ota, Ogun State, Nigeria.

Received 3 February 2015; Accepted 9 April, 2015

**Adolescent period is a significant phase in human development. Empirical evidences from diverse nations revealed that the period is characterized by a number of misbehaviours of which conduct disorder is paramount. Conduct disorder is a repetitive behaviour that violates the rights of others. It entails rule violation, aggression, hostility, and deceitfulness. There are adolescents in correctional centres in several nations of the world because of their engagement in conduct disorder. Several behavioural techniques have been adopted to ensure that conduct disorder is overcome. It, however, appears from literature that concentrated attempts have not been made to treat or determine the efficacy of behavioural techniques. This study examined the efficacy of two behavioural strategies to manage maladjusted behaviour in correctional centres in Lagos State, Nigeria. Participants for the study were 90 adolescents purposively selected from two special correctional centres in Lagos State. The research design utilized for the study was 3 x 2 factorial design. Conduct Disorder Scale by Gilliam was used to generate data. The result of the two hypotheses showed that significant difference existed between participants exposed to cognitive restructuring, behavioural rehearsal and control group ($F(2, 87) = 46.622$, $p < 0.05$) while there was no significant difference between participants exposed to cognitive restructuring and behavioural rehearsal groups ($t = 0.313$, $df = 58$, $p = 0.756$). From the study, the two behavioural methods could be employed to manage conduct disorder. Consequently, they are recommended as techniques for handling adolescents' conduct disorder.**

**Key words:** Cognitive restructuring, behavioural rehearsal, adolescent, conduct disorder, correctional centres, Nigeria.

## INTRODUCTION

The word "adolescence" comes from a Latin word "adolescere" which means to grow or to grow to maturity (Martins et al., 2007; Mosby's Dental Dictionary, 2008). Gutgesell and Payne (2004) describe adolescence period as a prolonged developmental stage that lasts approximately ten (10) years, nominally described as between the ages of eleven (11) and twenty-one (21). Adolescence is the period of life between childhood

*Corresponding author. E-mail: funmiswayas@yahoo.com

and adulthood; it is sometimes called the period of teenage and is marked by changes in the body, mind and social relationships that is, the transition is as much social as it is biological. Adolescence is the time between the beginning of sexual maturation (puberty) and adulthood. It is a time of psychological maturation during which a person becomes "adult-like" in behaviour.

The future of any nation is largely determined by the well-being of adolescents. Dealing with adolescents has always been a challenge for both parents and helping professionals. Behavioural disorders typically develop in childhood and adolescence and according to Henderson (2009) and American Academy of Child and Adolescent Psychiatry (2010), the specific cause of behavioural disorder such as conduct disorder is not known but a number of factors such as genetic or biological factors, family, parental, child abuse, peer pressure, socio-economic status, lack of supervision, inconsistent discipline and environmental factors may contribute to its development. According to American Psychiatric Association (APA, 2000), conduct disorder is defined as a repetitive and persistent pattern of behaviour that violates the rights of others or in which major age-appropriate societal norms or rules are violated. Dodge (2000) and Adeusi (2013) noted that conduct disorder is a long-term recurrent pattern of behavioural disorder that violates the basic rights of people and shows no care for others' property. It was also established that terms like disorderliness, rebelliousness and deceitfulness are strongly related to conduct disorder.

The symptoms of conduct disorder fall into four main subscales or dimensions: aggression to people and animals, destruction of property, deceitfulness, and serious violation of rules (Frick and Nigg, 2012). The term aggression refers to a range of behaviours that can result in both physical and psychological harm to oneself, others or objects in the environment (Kendra, 2013). Aggression can also be defined as the physical or verbal behaviour intended to harm. It may occur either in retaliation or without provocation that is either directed outwardly towards another person or directed inwardly by self mutilation. The types of aggressive behaviours includes name calling gossiping, mockery, shouting, swearing, abusive phone calls, racial or sexual comments, harassment, emotional abuse, hitting, kicking, threatening gestures among others. Destruction of property is often used interchangeably with vandalism and this is an act of hostility directed at a victim. George (2013) defines vandalism as the intentional and malicious destruction of or damage to the property of another. Vandalism takes on many forms; it can include slashing someone's tires, salting lawns, cutting trees without permission, egg throwing, spray painting on the side of commercial trucks or buses, as well as spraying graffiti on the walls or signs on a freeway. The pain of destruction of property or vandalism is usually felt by everybody in the society. To repair or replace items or facilities destroyed cost something to individuals whose property got damaged or the society as the case may be.

Deceitfulness or theft is a common anti-social behaviour in adolescents. Being deceitful means having a tendency or disposition to deceive, that is not being truthful or being crafty while theft is the act of stealing. According to Morrison (1995), the characteristics of deceitfulness include: having broken into building, car or house belonging of someone else, frequent lies or promises for gain or to avoid obligations and having stolen valuables without confrontation (burglary, forgery, shoplifting). The last but not the least of the symptoms of conduct disorder is serious rule violation. Violation of rule simply means an act of disobeying authoritative principles set forth to guide behaviour or action. APA (2000) describes serious rule violations to include: frequently staying out at night against parents' wishes beginning before age 13, running away from parents overnight twice or more or once if for an extended period and engaging in frequent truancy beginning before the age of 13. The prevalence of conduct disorder worldwide is estimated between 2% to 6% among adolescents, with boys showing a higher rate of conduct disorder than girls. Giddens (2004) and Agnew (2005) estimated the prevalence of conduct disorder at about 2% for girls and 9% in boys. This is consistent with the report from APA (2000) which shows that conduct disorder is more common in boys (6-16%) compared to girls (2-9%). Thus, conduct disorder is likely to occur 3 or 4 times more in boys than girls.

Various types of family dysfunction contribute to the formation of conduct disorders in children. Frick (1993) explored three types of family dysfunction as well as implications for studying models that depict family causal relationships with conduct disorder. Parental adjustment, marital situation (divorce or single parenting), and socialization processes are shown as influential. Parental adjustment was examined over three domains: depression, substance abuse and antisocial behaviour. Although not directly related, parental depression may contribute to adjustment problems in children, which may lead to behaviour difficulties. Previous research assumed that disruptive disorders in general and conduct disorders in particular are learned behaviours. However, Comings (1997) provides empirical support, which suggests that there may be genetic influences that are responsible for this behaviour. Evidence abounds that this childhood behaviour as well as other disruptive disorders have a strong genetic component, that are inherited by both parents, and share a number of genes in common that affect certain levels of dopamine in the brain. Adolescents diagnosed with conduct disorder also appear more susceptible to alcohol and substance abuse. Dodge (2000) describes some risk factors for the onset of conduct disorder. These risk factors include biological factors, socio-cultural contexts, and life experiences. Risk factors according to Shamsie (2001)

include family factors, such as psychiatric problems in parents, criminal behaviour in fathers, family dysfunction, and inconsistent parenting; child factors such as male gender, biological vulnerability, difficult temperament, early behavioural problems, low IQ and school failure and community factors such as socioeconomic disadvantage, delinquent peers, and poor school environment.

## Statement of problem

In recent times, there is an increase in insurgency in Nigeria. Boko Haram militants use adolescents (male and female bombers) to destroy lives and properties which is a display of conduct disorder (because they aggressively get away with peoples properties, and violate the right of others to live which is against the societal norms). Parents, caregivers and society at large report cases of adolescent behaviour or conduct disorder to juvenile courts, remand or correctional homes or centres. The Nigerian government established Remand Homes (now Special Correctional Centres), Approved Schools and Juvenile Courts to address these behavioural disorders in adolescents but mere admission of the latter is not sufficient to reduce or eradicate the conduct disorder. Various behavioural modification techniques like cognitive restructuring, self management and token economy among others have been used to treat rebelliousness, disorderliness, depression, anxiety, gambling, attention deficit hyperactivity disorder and other disruptive behaviours (Pull, 2007; Aderanti and Hassan, 2011) but the efficacy of most of these techniques on conduct disorder especially for adolescents in correctional centres is yet to be empirically established in Nigeria. This study sought to examine the efficacy of cognitive restructuring and behavioural rehearsal in the treatment of adolescents' conduct disorder in Special Correctional Centres in Lagos State.

## Research hypotheses

(1). There is a significant difference in the treatment of conduct disorder of the participants exposed to cognitive restructuring and behavioural rehearsal when compared with participants in the control groups.
(2). There is a significant difference in conduct disorder of participants exposed to cognitive restructuring and behavioural rehearsal.

## METHODS

The design utilized is a 3 x 2 factorial design. The population for this study was one hundred and eighty six (186). The sample size employed for this study is 90 adolescents. Two correctional centres (male only and female only) were purposively selected because they have similar features where adolescents that meet the research diagnostic criteria for conduct disorder are found. Among the 90 participants, 15 were randomly assigned into each of the two experimental groups (Cognitive Restructuring and Behavioural Rehearsal) and the control group. A sum total of 45 participants were involved at each of the Special Correctional Centres.

The descriptions of participants are as follows: 45 girls and 45 boys; the age range is between 10 to 17years (10-13 years was 35 constituting 38.9% while participants between 14-17 years were 55 constituting 61.1% of the sample; Christian participants were 65 which is 72.2%, while Muslim participants were 25 constituting 27.8%; 63 of the participants were in Primary School which makes up 70%, 19 were in Junior Secondary School representing 21.1% and a total of 8 were in Senior Secondary School which resulting into 8.9%; 48 of the participants (53.3%) were Yoruba, 2 Hausas or 2.2%, 16 Igbos or 17.8% and other tribes apart from the three major tribes in Nigeria being 24 or 26.7%; participants in order of birth reveals that the first born were 28 or 31.1%, second born were 18 or 20%, third born were 16 or 17.8%, fourth born were 13 or 14.4% with fifth or later births being 15 or 16.7%; participants' length of stay at the Special Correctional Centres between 1 - 6 months was 28 or 31.1%, 7-12 months were 24 or 26.7% and over one year were 38 or 42.2%.

### Instrument

The instrument employed for data collection was:

**Conduct Disorder Scale (CDS)** by Gilliam (2002). The 40 items that are on the CDS depicts the specific diagnostic behaviours that are characteristic of persons with Conduct Disorder. These items comprise four subscales representing the core symptom clusters that are necessary for the diagnosis of Conduct Disorder which include: Aggressive Conduct, Hostility, Deceitfulness and Theft, and Rule Violations. The subscales have the reliability coefficient of: Aggressive Conduct – 0.94, Hostility – 0.91, Deceitfulness and Theft – 0.79, and Rule Violations – 0.74. The overall reliability coefficient for the whole scale (CDS) is 0.96.

### Procedure

This study was carried out in three phases:

1. Phase one: visit to the correctional centres and administration of pre-test
2. Phase two: Treatment
3. Phase three: Post-test for the evaluation of the treatment.

The Conduct Disorder scale was handed over to members of staff who know the participants at the two correctional centres. A pre-test was carried out across the three groups (Cognitive Restructuring group, Behavioural Rehearsal group and Control group) before the commencement of treatment package after which the post-test was done also in the three groups. The pre-test and post-test were scored and compared to know the effectiveness of the two interventions (Cognitive Restructuring group and Behavioural Rehearsal). .

The treatment package lasted for a period of eight weeks. Each session of the treatment programme lasted between one and two hours, twice a week (Tuesdays and Thursdays or Saturdays). This was principally to expose the participants to the two counselling interventions (Cognitive Restructuring and Behavioural Rehearsal). Cognitive restructuring as a treatment technique in this study was directed towards helping adolescents to restructure their thinking and behaviour. The treatment technique includes strategies such as: self talk, self monitoring, rational analysis, problem redefinition and cognitive home work. Behavioural rehearsal on the other hand, is a technique in which target behaviour(s) are role-played. Role playing provides a method for structuring and orchestrating

**Table 1.** Degree of severity of conduct disorder pre-test.

| Degree of severity (Pre-test) | Frequency | Percentage (%) |
|---|---|---|
| Mild | 39 | 43.3 |
| Moderate | 47 | 52.2 |
| Severe | 4 | 4.4 |
| Total | 90 | 100 |

**Table 2.** Degree of severity of conduct disorder post-test.

| Degree of severity (Post-test) | Frequency | Percentage (%) |
|---|---|---|
| Not applicable | 52 | 57.8 |
| Mild | 26 | 28.9 |
| Moderate | 12 | 13.3 |
| Total | 90 | 100 |

modelling opportunities and also provides a safe way to "try on" a newly learned approach (Baker and Scarth, 2002). The treatment plans here include orientation, problem definition, role playing or initial enactment, role-reversal, coaching, practice, self monitoring and follow-up.

Below is an example of a session or one week plan of each of the intervention as carried out in the study:

**Cognitive restructuring**

Session Four: Overcoming conduct disorder through the principle of cognitive restructuring.
Objectives: To empower participants with strategies of cognitive restructuring such as self awareness, self-regulation, re-construction of thoughts, self statement or self talk and self monitoring to combat conduct disorder.

The researcher started the session by welcoming participants. The last session was reviewed, and the assignment was collected and discussed.
The participants were occupied with the techniques of thought reconstruction, self talk and self monitoring among other strategies and were encouraged to practice the strategies. Once participants were able to identify their thought patterns and how these are linked to their feelings. Feelings are further linked to behaviours or actions, which inadvertently lead to their "trouble spots" (Baker and Scarth, 2002). For instance, in a case of aggression, participants would learn strategies for monitoring the build up of anger such as clenching of the fists and tightening of the shoulders. Thought restructuring and self talk helped the participants to slow down and carefully assess the situation as well as his or her reaction to it. Participants were made to learn thought stoppage exercise and changing negative thoughts to positive thoughts.
The session ended with appreciation of participants' participation and therapy assignment is given.

Home work: Make a list of some negative statement that you say to yourself.
Make a list of some positive statement that you say to yourself.
Make a list of some beneficial statements that can replace the negative and harmful thoughts that you think.

**Behavioural rehearsal**

Session Four: Therapeutic intervention of behavioural rehearsal
Objectives: To role play desirable behaviour(s) and create opportunities for real situations.

The researcher started the session by praising the participants for the high level of cooperation that they have exhibited so far. The previous session was reviewed, the take home assignment was collected, discussed and reinforcement was given.

Both the researcher and participants played good and bad behaviours. The participants also role played among themselves and constructive criticism of behaviour(s) was encouraged, while insisting that the person is not criticized. Members of the group were counseled to show consideration, respect, and due recognition of other persons. In the process of role playing, observers were asked to make suggestion(s) on verbal and nonverbal behaviours that were apparent.
The session ended with appreciating the participants as well as giving them a home work.
Home work: write out your goal(s) for the week and tick as each is attained.

**Data analysis**

Data collected from the study were analyzed using analysis of variance and t-test statistic. The hypotheses were tested at 0.05 level of significance.

## RESULTS

Table 1 indicates the participants' degree of severity of conduct disorder at the pre-test exercise before the introduction of the intervention packages. Here, the participants at the mild severity category were 39 or 43.3%, the moderate degree was 47 or 52.2% and the severe group was 4 4.4%.
Table 2 reveals the post-test result of conduct disorder. After the intervention, 52 or 57.8% of the participants could no longer be tagged to have conduct disorder, a total of 26 or 28.9% of the participants fall into the mild category while 12 or 13.3% exhibited moderate conduct disorder.
Table 3 explicates that there was a significant difference in the treatment of conduct disorder of participants that were exposed to cognitive restructuring and behavioural rehearsal when compared with participant' in the control group ($F_{(2, 87)} = 46.622$, $p < 0.05$). Therefore, the hypothesis which states that there is a significant difference in the treatment of Conduct Disorder of participants exposed to cognitive restructuring and behavioural rehearsal when compared with participants in control group was accepted because the F value was greater than the F critical.

Table 4 presents the difference in the conduct disorder of participants that were exposed to the cognitive restructuring and behavioural rehearsal experimental groups. The result revealed that there was no significant difference in the conduct disorder of participants that

**Table 3.** Analysis of variance of participants exposed to cognitive restructuring and behavioural rehearsal compared to control groups.

| Source of variation | Sum of squares | df | Mean square | F Value | F Critical | Sig. |
|---|---|---|---|---|---|---|
| Between Groups | 4666.822 | 2 | 2333.411 | 46.622 | 3.10 | < 0.05 |
| Within Groups | 4354.333 | 87 | 50.050 | | | |
| Total | 9021.156 | 89 | | | | |

**Table 4.** Means, Standard deviations and t-values of participants in experimental groups.

| Groups | No. of Cases | Mean | Std Dev. | df | t - value | t-critical | Sig. |
|---|---|---|---|---|---|---|---|
| Cognitive | 30 | 66.0333 | 7.02941 | 58 | 0.313 | 2.00 | > |
| Restructuring behavioural rehearsal | 30 | 65.4333 | 7.81988 | | | | 0.05 |

were exposed to the cognitive restructuring and behavioural rehearsal groups (t = 0.313, df = 58, p > 0.05 two tailed). The hypothesis is therefore rejected.

## DISCUSSION

Hypothesis one which states that there is a significant difference in the treatment of conduct disorder of participants exposed to cognitive restructuring and behavioural rehearsal when compared with participants in the control groups was accepted because the result of the findings was significant. The hypothesis was tested using analysis of variance and the result of the analysis revealed F (2, 87) = 46.622, p < 0.05. The findings indicated that cognitive restructuring and behavioural rehearsal are both effective in the treatment of conduct disorder among adolescents. The reason for this result is as a result of the eight weeks exposure of the participants to their respective treatments. This study is in agreement with the findings of Shobola (2007) and Aderanti and Hassan (2011) that cognitive restructuring is an effective intervention in the treatment of all forms of antisocial behaviours such as stealing, rebelliousness, and socially undesirable behaviours among others.

Although the second hypothesis states that there is a significant difference in conduct disorder of participants exposed to cognitive restructuring and behavioural rehearsal, the result of the analysis was not significant; therefore, the hypothesis was rejected. The mean scores indicated that the participants in cognitive restructuring group displayed a higher conduct disorder level (66.033) after exposure to the technique compared to the participants in the behavioural rehearsal group (65.433). The result implies that both interventions were effective and again the result of the hypothesis is an affirmation of the theory and previous studies that are carried out on cognitive restructuring and behavioural rehearsal (Baker and Scarth, 2002; Aderanti and Hassan, 2011).

## Conclusion

This study investigated the efficacy of cognitive restructuring and behavioural rehearsal on conduct disorder in adolescents in Special Correctional Centres. There should be a regular exposure of adolescents to behavioural techniques as it can be employed to reduce the rate of adolescent participation in aggressive conduct, deceitfulness or theft, rule violation or and vandalism in Nigeria. The involvement of trained personnel or experts in the correctional centres will be of great impact towards proper behavioural modification for the wards at the correctional centre. To treat conduct disorder in our society, there is need to organize conferences, seminars, and workshops for counsellors, psychologists, and social workers at the Special Correctional Centres and elsewhere for them to be well informed of the efficacy of the two interventions used in this study and to encourage the applicability of same.

## RECOMMENDATION

It has been observed that behavioural rehearsal is more effective than cognitive restructuring in the treatment of conduct disorder. Since cognitive restructuring and behavioural rehearsal are tested and found effective in the treatment of conduct disorder in adolescents, it is recommended that the use of these two interventions be encouraged to combat conduct disorder.

### REFERENCES

Aderanti RA, Hassan T (2011). Differential effectiveness of cognitive restructuring and self management in the treatment of adolescents.The Romanian Journal of Psychology, Psychotherapy and Neuroscience. 1(1): 193-217.

Adeusi SO (2013). Efficacy of cognitive restructuring and behavioural rehearsal on conduct disorder in adolescents in Special Correctional Centres in Lagos State. An Unpublished Ph.D thesis submitted to the

Department of Psychology, Covenant University, Ota, Ogun State, Nigeria.
Agnew R (2005). Juvenile delinquency: causes and control. (2nded.) Los Angeles: Roxbury Publishing Company.
American Academy of Child and Adolescent Psychiatry (2010).Your adolescent on conduct disorder. Retrieved from http://www.aacap.org/cs/root/publication_store/your_adolescent_conduct_disorders
American Psychiatric Association (APA, 2000). Diagnostic and statistical manual of mental disorders (4th ed.), (98-99). Washington, DC: American Psychiatric Association.
Baker LL, Scarth K (2002).Cognitive behavioural approach to treating children and adolescents with conduct disorder. Children's Mental Health Ontario.
Comings DE (1997). Genetic aspects of childhood disorders.Child Psychiatry and Human Development, 27(3): 139-150.
Dodge K (2000). Conduct Disorder. In A. J. Sameroff, M. Lewis, S. M. Miller (Eds.), Handbook of Developmental Psychopathology (2nded.) (pp.447-463). New York: Kluwer Academic/Plenum Publishers.
Frick P (1993). Childhood conduct problems in a family context.School Psychology, 22(3): 376-385.
Frick PJ, Nigg JT (2012). Current issues in the diagnosis of attention deficit hyperactivity disorder, oppositional defiant disorder and conduct disorder. Annual Review of Clinical Psychology.10.1146/annurev-clinpsy-032511-143150
George VV (2013). Explaining the consequences pertaining to vandalism. Retrieved from http://www.avvo.com/legal-guides/ugc/explaining-the-consequences-pertaining-to-vandalism
Giddens A (2004). Sociology (4th ed.). Great Britain: T.J. international ltd.
Gilliam J (2002). Conduct disorder scale. U.S.A.: Pro-ed Publisher.
Gutgesell ME, Payne N (2004). Issues of adolescent psychological development in the 21st century**.** Pediatrics in Review. *25(*3): 79-85
Henderson R (2009). National Institute for Clinical Excellence (NICE). Young minds: "statistics about children and young people". Retrieved fromhttp://www.webmd.boots.com/mental-health/mental-health-conduct-disorder.
Kendra C (2013). What is Aggression? Retrieved from http://psychology.about.com/od/aindex/g/aggression.htm
Martins GN, Carlson NR, Buskist W (2007).Psychology. (3rded.) England: Pearson.
Morrison J (1995). DSM-IV Made Easy: the clinician's guide to diagnosis. New York: The Guilford Press.
Mosby's Dental Dictionary. (2ndEd.). (2008). Elsevier, Inc. Retrieved from http://medical-dictionary.thefreedictionary.com/Adolecent.
Pull CB (2007). Combined pharmacotherapy and cognitive- behavioural therapy for anxiety disorders. Current Opinion in Psychiatry, 20: 30-35.
Shamsie J (2001). "Conduct disorder: a challenge to child psychiatry." Canadian Journal of Psychiatry 46 (7): 593-4.
Shobola AA (2007). The study of the effects of cognitive restructuring on cigarette smoking behaviour of undergraduate students.Ife Psychologia 16(1):187-197.