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Differential Effect of Behavioural Strategies on the Management of Conduct Disorder among Adolescents in Correctional Centres in Lagos State, Nigeria

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Abstract

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 x 3 x 3 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.

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Keywords: 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, Carlson & Buskist, 2007). Gutgesell & 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). 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. 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 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. The symptoms of the disorder fall into four main subscales or dimensions: aggression to people and animals, destruction of property, deceitfulness, and serious violation of rules (Frick & Nigg, 2012). The prevalence rate of conduct disorder worldwide is estimated between 2% to 6% among adolescents, with boys showing a higher rate of conduct disorder than girls. Gidden (2004) and Agnew (2005) account that the prevalence of conduct disorder is estimated at about 2% for girls and 9% in boys. APA (2000), reports that conduct disorder is more common in boys (6-16%) compared to girls (2-9%). Thus, conduct disorder likely 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) explores three types of family dysfunction as well as implications for studying models that depict family causal relationships with conduct disorder. Parental adjustment, marital situation, and socialization processes are shown as influential. Parental adjustment is 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.

Problem Statement

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 & 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 no 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 no significant difference in conduct disorder of participants exposed to cognitive restructuring and behavioural rehearsal.

Methods

The design utilized is a 3 x 2 x 3 x 3 factorial design. The population for this study was one hundred and eighty six (186). The sample size employed for this study is 90 adolescents. Purposive sampling was utilized as there are few correctional centres 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 following instruments were employed for data collection:

(i) **Conduct Disorder Scale (CDS)** by James E. Gilliam in 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.

(ii) **Socio-Economic Scale (SES)**: This Scale was used by Dada (2004) to measure the socio-economic status of individuals through their parent's profession, educational level, residence and type of equipment in the house. The scale comprise twelve (12) items in this order: Items 1-4 focuses on participants' bio-data, with Items 5-12 focusing on the parent's occupation, educational level, residence and types of equipment in the house. The Scale has a reliability coefficient of 0.73.

(iii) **Parenting Style Scale**: This scale was developed by Adeusi (2013) in order to determine each parent's rearing style. The scale is divided into three sections namely authoritative, authoritarian and permissive parenting styles which are in alignment with Baumrind (1991) and Mckay (2006). Each section is made up of fifteen (15) items with a response scale from Never (1) to Always (5).

The researchers visited the two special correctional centres in Lagos State (special correctional centre for boys, Oregon and special correctional centre for girls, Idi-Araba) after which a letter of introduction and an application to the Permanent Secretary, Ministry of Youth and Social Development, Alausa Secretariat, Lagos State were submitted. 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). In all, there were eight sessions for the participants. This was principally to expose the two counselling interventions (Cognitive Restructuring & Behavioural Rehearsal) to the participants. 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 modelling opportunities and also provides a safe way to "try on" a newly learned approach (Baker & Scarth, 2002). The treatment plans here include orientation, problem definition, role playing or initial enactment, role-reversal, coaching, practice, self monitoring and follow-up.

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: 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	0.000
Within Groups	4354.333	87	50.050			
Total	9021.156	89				

Table 1 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 participants' in the control group ($F_{(2, 87)} = 46.622$, $p < 0.05$). The hypothesis was rejected because the F value was greater than the F critical.

Table 2: 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 Restructuring	30	66.0333	7.02941	58	0.313	2.00	0.756
Behavioural Rehearsal	30	65.4333	7.81988				

Table 2 above 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 were exposed to the cognitive restructuring and behavioural rehearsal groups ($t = 0.313$, $df = 58$, $p = 0.756$ two tailed).

Discussion

The first 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 & Hassan (2011) that cognitive restructuring is an effective intervention in the treatment of all forms of antisocial behaviours such as cigarette smoking, stealing, rebelliousness, and socially undesirable behaviours among others.

Although the result of the second hypothesis was not significant, the mean scores indicated that the participants in cognitive restructuring group displayed a higher conduct disorder level after exposure to the technique compared to the participants in the behavioural rehearsal group. The mean scores for the cognitive restructuring group was 66.033 and the mean scores for the behavioural rehearsal group was 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 & Scarth, 2002; Aderanti & Hassan, 2011).

Conclusion and Recommendation

This study investigated the efficacy of cognitive restructuring and behavioural rehearsal on conduct disorder in adolescents in Special Correctional Centres. 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.

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