

Effects of Compassion-Focused Therapy and Dialectical Behaviour Therapy on Aggression among Adolescents with Substance-Abusing Parents in Lagos State, Nigeria

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Abstract

Parental substance abuse can severely compromise a child's access to essential physical, emotional, social, and mental support, leaving them susceptible to adverse experiences and potential psychosocial challenges like aggression, anxiety, low self-esteem, and shame, among other emotions and behaviours. Addressing these issues is crucial for the child's overall well-being and development. This study examined the effectiveness of Compassion-Focused Therapy (CFT) and Dialectical Behaviour Therapy (DBT) on aggression among adolescents with substance-abusing parents. The study was anchored on Attachment and Family Systems Theories. Two objectives and two research questions were raised, and two corresponding hypotheses were tested at a 0.05 level of significance. Using a quasi-experimental pretest-posttest control design, the study sampled 101 adolescents (39 males, 62 females) from three Education Districts in Lagos State based on their response to the Children with Substance-Abusing Parents Identification Questionnaire (CSPIQ). The data collection instrument used for this study was the Aggression Questionnaire for Adolescents (AQA) with a reliability index of 0.70. All hypotheses were tested at a 0.05 level of significance. The results showed a significant reduction in aggression levels among participants exposed to both CFT and DBT. The findings also revealed that CFT showed a more significant reduction in aggression levels than DBT. The study recommends utilising both therapies to manage adolescents with poor psychosocial adjustment. This research highlighted the potential of Compassion-Focused and Dialectical Behaviour therapies in addressing the aggressive behaviours faced by adolescents with substance-abusing parents. The findings offer important implications for counsellors in Lagos State and comparable settings. Based on the results, it is recommended that DBT and CFT be utilised in managing and reducing aggressive behaviours among adolescents affected by parental substance abuse.

Keywords: Adolescents, Aggression, Compassion-focused therapy, Dialectical behaviour therapy, Substance-abusing parents

Introduction

The family is expected to be the cornerstone of a person's emotional and social development, offering a nurturing environment that fosters attachment, love, and growth. It should provide a foundation for a child. In a typical family setting, children are valued, respected, and esteemed. However, when parents abuse substances, these expectations are often unmet, creating a potentially hazardous environment for their children (Berg, Kuja-Halkola, D'Onofrio, Lichtenstein & Latvala, 2021). When parents struggle with substance abuse, it can compromise their capacity to provide for their children's overall well-being, leaving them vulnerable to adverse experiences that affect their emotional and social development. As a result, these children may grapple with a range of difficult emotions, including anxiety, aggression, fear, sadness, self-blame, shame, isolation, uncertainty, and frustration. The negative effects of parental substance use disorders on families include disrupted attachment, rituals, roles, routines, communication, social life, and finances. Effective parenting requires a stable mental state, free from substance abuse, to minimise the risk of poor developmental, psychological, and social outcomes. Children raised in substance-abusing homes are at a higher risk of experiencing psychosocial and emotional distress, such as aggression, shame, anxiety, and low self-esteem, due to stress (Lander, Howsare & Byrne, 2013). Children living with addicted parents often engage in risky behaviours, including aggression, vandalism, and truancy (Douglas-Siegel & Ryan, 2013), and parental substance abuse can have long-lasting and disastrous impacts on children's health and well-being (Kuppens, Moore, Gross, Lowthian & Siddaway, 2020).

In Nigeria, drug abuse is a growing public health concern, with an estimated 14.3 million people using drugs, accounting for approximately 14.4% of the population aged 15-64 (United Nations Office on Drugs and Crime [UNDOC], 2018). This nearly triples the global prevalence of drug use, estimated at 5.6% (UNODC, 2015). According to UNODC (2018), data from the National Survey on Drug Use and Health, revealed that the south-west zone had the highest prevalence (22.4%), with Lagos State being significantly affected, while the highest levels of any past-year drug use were found among adults and older people, but adolescents are also vulnerable, especially when their parents or guardians abuse substances. Adolescence is defined by the World Health Organization (2017) as the stage between childhood and adulthood

(ages 10-19). It is a critical period of rapid physical, cognitive, and psychosocial growth. During this stage, adolescents face numerous challenges, and parental substance abuse can exacerbate these difficulties. The uncertainty and ambiguity of adolescence can lead to conflicts, and substance abuse by parents can make this period even more challenging to navigate. Research evidence shows that children of parents with substance abuse issues are more likely to exhibit aggressive behaviour, engage in risky behaviours, and develop conduct disorders (Babicka-Wirkus, Kozłowski, Wirkus & Stasiak, 2023).

Given the prevalence of substance abuse in Nigeria, particularly in Lagos State, it's crucial to examine the ripple effects on adolescents who are already navigating the challenges of this critical developmental stage, as well as how it affects both male and female adolescents with substance-abusing parents. According to Babicka-Wirkus et al. (2023), the relationship between gender and parental substance abuse is complex, with boys and girls being affected differently. They posit that boys are more likely to exhibit externalising behaviours, such as aggression and delinquency, while girls are more likely to exhibit internalising behaviours, such as anxiety and depression. The impact of parental substance abuse varies depending on several factors, including age, developmental stage, type and severity of substance abuse, family dynamics, and individual child characteristics. Parental substance abuse can have devastating effects on children's well-being, making targeted interventions crucial. This study explored the effectiveness of two therapeutic approaches: Compassion-Focused Therapy (CFT) and Dialectical Behaviour Therapy (DBT), in addressing psychosocial challenges such as aggression, anxiety, self-esteem, and shame among children of substance abusers. CFT fosters emotional healing through compassion and self-compassion, while DBT combines cognitive-behavioural techniques with mindfulness and acceptance-based strategies to manage emotions and behaviours. By utilising CFT and DBT, this study aimed to promote resilience and recovery among these vulnerable children.

Statement of the Problem

Parental substance abuse is a widespread issue that significantly destabilises family relationships, negatively affecting children's emotional, psychological, and developmental health. Despite awareness of the harmful consequences, the misuse of substances such as alcohol, tobacco, marijuana, heroin, cocaine,

and methamphetamine remains alarmingly common among parents and caregivers. This behaviour often leads to unpredictable and chaotic lifestyles, compromising parents' ability to provide for their children's physical, emotional, and safety needs. As a result, children may experience neglect, trauma, and difficulties in forming healthy relationships due to harsh and unstable home environments. Growing up in such conditions can impede children's development of essential life skills, such as communication, problem-solving, and conflict resolution, ultimately impacting their psychosocial well-being. Effective parenting requires a clear and stable mindset, free from substance abuse, to minimise the risk of adverse developmental, psychological, and social outcomes.

Children of substance abusers often face numerous psychosocial challenges, including aggression, anxiety, depression, shame, low self-esteem, and stress, which can have long-lasting consequences on their emotional, social, and cognitive development. Exposure to their parents' substance-induced behaviours, such as domestic violence, harsh discipline, or abandonment, can further exacerbate these challenges. Additionally, the stigma associated with having substance-abusing parents can profoundly affect these children, intensifying feelings of shame, guilt, isolation, and anxiety, making it even more challenging for them to cope. Moreover, children who grow up witnessing parental substance abuse are more likely to initiate early substance use themselves. Early substance use can disrupt brain development, impair academic and social functioning, and increase the risk of addiction and dependency later in life.

Despite the growing need for effective interventions for children of substance abusers, there are few studies available to tackle the psychosocial issues affecting adolescents with substance-abusing parents in Nigeria. Most studies, however, have been conducted abroad and cannot be generalised locally. Recognising this significant gap highlights the need for relevant studies to assess and manage psychosocial challenges and prevent maladjustment among adolescents with substance-abusing parents in Lagos State, Nigeria. This study investigated the effectiveness of Compassion-Focused Therapy (CFT) and Dialectical Behaviour Therapy (DBT) in enhancing psychosocial adjustment, mitigating the negative effects of parental substance abuse, and promoting the overall well-being of adolescents with substance-abusing parents in Lagos State, Nigeria.

Objectives of the Study

The purpose of this study was to examine the effects of compassion-focused therapy and dialectical behaviour therapy on aggression among adolescents with substance-abusing parents in Lagos State, Nigeria. Specifically, this study was designed to meet the following objectives:

1. Examine the difference in the post-test mean scores on the levels of aggression among adolescents who perceive their parents as substance abusers exposed to compassion-focused therapy, dialectical behaviour therapy, and the control group.
2. Examine the gender difference in the post-test mean score on the levels of aggression among adolescents with substance-abusing parents exposed to compassion-focused therapy, dialectical behaviour therapy, and the control group.

Research Questions

In line with the stated objectives of this study, the following research questions were raised and answered during the study:

1. 1. What is the difference in the post-test mean scores on the level of aggression among adolescents with substance-abusing parents in the three experimental conditions (Compassion-Focused Therapy, Dialectical Behaviour Therapy, and the Control Group)?
2. 2. To what extent is there a gender difference in the post-test mean scores on the level of aggression among adolescents with substance-abusing parents across the treatment and control groups?

Research Hypotheses

Based on the research questions, the following hypotheses were formulated and tested at a 0.05 level of significance.

1. There is no significant difference in the post-test mean scores on the level of aggression among adolescents with substance-abusing parents in the three experimental conditions (Compassion-Focused Therapy, Dialectical Behaviour Therapy, and the Control Group).
2. There is no significant difference in the post-test mean scores on the level of aggression among adolescents with substance-abusing parents

in the three experimental conditions (Compassion-Focused Therapy, Dialectical Behaviour Therapy, and the Control Group).

Methodology

This study employed a quasi-experimental, pre-test, post-test control group design. The study consisted of three experimental groups: two treatment groups and one control group. One group received Compassion-Focused Therapy (CFT), while the second group received Dialectical Behaviour Therapy (DBT). The third group served as the control group and did not receive any treatment during the study. Pre-tests and post-tests were administered to all three groups.

The design is presented as follows:

First experimental group **R** **O₁** **X₁** **O₂** = (Compassion-focused Therapy)

Second experimental group **R** **O₃** **X₂** **O₄** = (Dialectical Behaviour Therapy)

Third experimental group **R** **O₅** **C** **O₆**

R- Stands for randomization

O₁ O₃ O₅ are pre-test scores

O₂ O₄ O₆ are post-test scores

X₁ = represents treatment 1- Compassion-focused Therapy

X₂ = represents treatment 2- Dialectical Behaviour Therapy

C = represents the control group

Independent Variables: Compassion-focused Therapy and Dialectical Behaviour Therapy

Dependent Variables: Aggression

Moderating Variable: The moderating variable is gender (male and female).

Sample and Sampling Technique

The study employed a multi-stage sampling process to select participants. A total of 101 adolescents comprising of 39 males and 62 females were used for the study. The study covered six Education Districts in Lagos State. In the first stage, a simple sampling was used to select three out of the six Educational Districts in Lagos State, namely Educational District 1 (Agege), Educational District 2 (Maryland) and Educational District VI (Oshodi) with a total number of 124 schools and a combined population of 44,591 Senior Secondary Two (SS2) students, of which 21,595 were males and 22,997 were females.

In the second stage, a simple random sampling (Rand Between) was used to select one school from each of the three Districts. School A had a population of 361 SS2 students (174 males and 187 females), School B had a total population of 262 students (110 males and 152 females) while School C had a total population of 221 SS2 students (97 males and 124 females), totalling 844 SS2 students (381 males and 463 females) from the three schools.

In the third stage, a Baseline Questionnaire, the "Children with Substance-Abusing Parents Identification Questionnaire" (CSPIQ), was administered to the entire 844 students in the three selected schools to identify adolescents whose parents abuse psychoactive substances.

In the fourth stage, 312 were selected from the three schools in the three Educational Districts. Of the 312 students, 101 participants (39 males and 62 females) who scored 50 or above in the Children of Substance-Abusers Questionnaire were purposively selected for the study based on their responses. These participants were then randomly assigned to one of three treatment groups: School A: Compassion-Focused Therapy, School B: Dialectical Behaviour Therapy, and School C (the Control Group), which did not receive any intervention.

The following research instruments were used to obtain data for this study

1. Children with substance-abusing Parents Identification Questionnaire (CSPIQ) by Maria Ilugbuhi (2025).
2. This instrument, designed and developed by the researcher, consists of two parts: Section A and Section B. Section A gathered demographic information, such as age, gender, class, and family type. Section B is a

20-item baseline questionnaire to assess students' perception and awareness of their parents' substance abuse. Participants rate their perceptions and awareness using a 4-point scale: 4 (Strongly Agree), 3 (Agree), 2 (Disagree), and 1 (Strongly Disagree). The total score ranges from 20 to 80, with higher scores indicating stronger perceptions of parental substance abuse. Participants scoring 50 or above were selected for the study. This instrument was a researcher made instrument with a 0.89 validity for the current study

The Aggression Questionnaire for Adolescents (AQA) by Pamela Orpinas & Raph Frankowski (2001)

This 11-item instrument, adopted for this study, measures behaviours that may result in psychological or physical harm to other students. Responses to each item range from 0 times to 6 or more times, with additive scoring, yielding a total score of 0 to 66 points. The instrument has an internal consistency of 0.67 for the current study.

Results

Hypothesis One: There is no significant difference in the post-test mean scores on the level of aggression among adolescents with substance-abusing parents in the three experimental conditions (Compassion-Focused Therapy, Dialectical Behaviour Therapy, and the Control Group).

Table 1: Descriptive Analysis of Level of Aggression based on the Experimental Groups

Experimental Group	N	Pre-Test		Post-Test		Mean Difference
		Mean	Std. Deviation	Mean	Std. Deviation	
Compassion-focused Therapy	34	30.29	9.49	19.03	5.98	11.26
Dialectical Behaviour Therapy	36	31.31	7.22	20.92	6.29	10.39
Control Group	31	30.87	7.10	29.52	8.98	1.35
Total	101	30.82	7.94	23.16	7.08	7.66

Descriptive analysis from Table 1 shows that the pre-test mean scores on aggression for CFT, DBT, and CG were 30.29, 31.31, and 30.87, respectively. At post-test, the mean score reduced to 19.03, 20.92, and 29.52 for CFT, DBT, and CG, respectively. CFT had the highest decrease in aggression levels, as displayed in the mean differences with 11.26, followed by DBT with 10.39,

and the CG with 1.35. Analysis of Covariance was conducted to determine the significance of the difference in means, and the result of the analysis is presented in Table 2.

Table 2: ANCOVA Result for Aggression based on the Experimental Conditions

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2874.780 ^a	3	958.260	30.147	.000*
Intercept	221.494	1	221.494	24.968	.000*
Covariate	1900.234	1	1900.243	59.783	.010*
Group	1414.780	2	707.390	22.255	.000*
Error	3083.220	97	31.786		
Corrected Total	5958.000	100			

*Significant, $P < 0.05$; F-critical at 0.05 (2, 97) = 3.07 < 22.255; F-critical at 0.05(1, 97) = 3.92 < 59.783; F-critical at 0.05(3, 97) = 2.68 < 30.147

The result of the ANCOVA presented in Table 2 shows that an F-calculated value of 22.255 was derived as the difference in the mean scores of the participants in the respective groups. The value was observed to be greater than the critical value of 3.07, given 2 and 97 degrees of freedom at a 0.05 level of significance. Consequently, the null hypothesis was rejected. It was concluded that there exists a significant difference in the post-test mean score of self-esteem among adolescents who perceive their parents as substance abusers exposed to CFT, DBT, and the Control Group. In order to identify the pair that is significant, a multiple comparison was done and is presented in Table 3.

Table 3: Fisher's Protected t-test on Difference in Aggression among the Experimental Groups

Groups	compassion-focused (34)	Dialectical Behaviour (36)	Control (31)
Compassion-focused	19.03	-1.01	-3.84*
Dialectical Behaviour	-1.89	20.92	-2.87*
Control	-7.49	-5.6	26.52

*Significant at 0.05; a = group mean are in diagonal, difference in interventions group means are below the diagonal while the protected t value are above the diagonal.

The results in Table 3 above reveal that participants exposed to CFT do not differ significantly in aggression level from those exposed to DBT ($t = 0.27$; $df = 68$; critical $t = 2.00$; $p > 0.05$). Participants exposed to CFT manifested a significant decrease in aggression level compared to those in the CG ($t = -5.45$; $df = 63$; critical $t = 2.00$; $p < 0.05$). Participants exposed to DBT also

manifested a significant reduction in aggression level compared to the CG ($t = 5.71$; $df = 65$; critical $t = 2.00$; $p < 0.05$). Both CFT and DBT were effective, with CFT showing a slightly greater effect in reducing aggression.

Hypothesis 2: There is no significant gender difference in the post-test mean scores on the level of aggression among adolescents with substance-abusing parents across the treatments and the control group.

Table 4: Descriptive Analysis of Aggression and Gender among the Experimental Groups

Experimental Groups	Gender	Pre-Test			Post Test			Mean Difference
		N	Mean	SD	N	Mean	SD	
Compassion Focus Therapy	Female	21	29.81	10.11	21	18.76	6.57	11.05
		13	31.08	8.73	13	19.46	5.11	-11.62
	Male							
	Total	34	30.29	9.49	34	19.03	5.98	-11.26
Dialectical Behaviour Therapy	Female	22	29.27	7.30	22	19.23	6.38	-10.04
	Male	14	34.50	6.01	14	23.57	5.32	-10.93
	Total	36	31.31	7.22	36	20.92	6.29	-10.39
Control Group	Female	19	32.47	5.863	19	32.32	5.437	2.27
	Male	12	29.58	4.582	12	27.92	5.567	-7.08
	Total	31	31.35	5.511	31	30.61	5.818	-1.35
Total	Female	62	30.44	7.995	62	23.08	8.675	-6.61
	Male	39	31.85	6.850	39	23.54	6.215	-9.98
	Total	101	30.98	7.570	101	23.26	7.787	-7.91

The results of the descriptive analysis presented in table 4 indicate that the mean score of aggression level of female participants at pre-test in CFT, DBT and CG are 29.81, 29.27 and 32.47 respectively. The males in CFT, DBT and CG had a mean score of 31.08, 34.50 and 29.58 respectively. Also, at post-test the females mean scores were 18.76, for CFT, 19.23 for DBT and 32.32 for CG, while the mean score for the males were 19.46 for CFT, 23.57 for DBT and 27.92 for CG.

This shows that in the CFT, females 11.05 had a better reduction in anxiety than males 11.62 similarly, in the DBT, the males 10.64 had a better reduction in the self-esteem than females 10.93 while in the control group, the self-esteem level of the females slightly reduced while in the males it increased. Furthermore, an Analysis of Covariance (ANCOVA) statistics was computed to determine the significance of the difference in mean and the result is presented in table 18.

Analysis of covariance on difference in the posttest mean score on the level of aggression among participants in the three experimental groups due to male and female

Table 5: ANCOVA result for Aggression and Gender Based on Experimental Conditions

Source of Variation	Sum of Squares	df	Mean Squares	F-cal	Sig. of F.
Model	4776.990	6	796.165	58.181	.000*
Intercept	114.414	1	114.414	8.361	.000*
Covariance	1987.037	1	1987.037	145.206	.000*
Experimental group	2039.060	2	1019.530	74.504	.000*
Gender	6.262	1	6.262	.458	.500 NS
Experimental/Gender	56.482	2	28.241	2.064	.133 NS
Error	1286.317	94	13.684		
Corrected Total	6063.307	100			

*Significant, $p < 0.05$; NS = Not Significant; F-critical at 0.05 (2, 94) = 3.07 < 74.504; F-critical at 0.05 (1, 94) = 3.92 > 0.458; F-critical at 0.05(6, 94) = 2.17 < 58.181; F-critical at 0.05 (1, 94) = 3.92 < 60.724; F-critical at 0.05 (2, 94) = 3.92 > 2.064

Figures from Table 5 shows the F-calculated value of 2.064 was derived as gender difference in the posttest mean scores on aggression among adolescents who perceive their parents as substance-abusers across the treatment and the Control Group. The value was observed to be less than the critical value of 3.07 given 2 and 94 degrees of freedom at 0.05 level of significant. As a result, the null hypothesis was upheld. It was concluded that there exists no gender difference in the posttest mean score of aggression levels among adolescents who perceive their parents as substance-abusers across the treatment and the Control Group.

Summary of Findings

1. The levels of aggression was significantly different in the post-test mean scores of adolescents with substance-abusing parents and were exposed to Compassion-Focused Therapy (CFT), Dialectical Behaviour Therapy (DBT) and the control group. Both CFT and DBT were effective, with DBT showing a slightly greater effect in reducing aggression.
2. There was no significant gender difference in the post-test mean scores on aggression levels among adolescents with substance-abusing parents and were exposed to Compassion-Focused Therapy, Dialectical Behaviour Therapy, and the control group.

Discussion

The findings from Hypothesis One revealed that aggression levels differed significantly in the post-test mean scores among adolescents with substance-abusing parents who were exposed to Compassion-Focused Therapy (CFT) and Dialectical Behaviour Therapy (DBT), leading to the rejection of the null hypothesis (it seems Hypothesis Two is mentioned in error since the context fits more with Hypothesis One being tested). This study found that DBT had a greater effect than CFT in reducing aggression among participants. This may be attributed to DBT's efficacious techniques, such as mindfulness, emotional regulation, distress tolerance, interpersonal effectiveness, radical acceptance, and validation. These findings are consistent with studies demonstrating DBT's effectiveness in reducing aggression (Kienka et al., 2022; Frazier & Vela, 2014). However, Ciesinski et al. (2023) found no significant reduction in aggressive behaviour. Regarding CFT, Abdolali et al. (2020) reported significant reductions in aggressive behaviour following CFT, although Henwood et al. (2015) found only moderate effects.

The results of Hypothesis Two showed no notable difference in post-test aggression levels between boys and girls with substance-abusing parents across the treatment groups, supporting the null hypothesis. Although boys were more likely to express problems outwardly, leading to behavioural issues and substance use, girls tended to internalise their struggles, resulting in anxiety and depression symptoms. This finding is consistent with research by Babicka-Wirkus et al. (2023), which indicated that both boys and girls struggle with emotional regulation due to parental substance use. In contrast, Lahey et al. (2000) found no gender differences in oppositional behaviour, but noted that status offenses were more prevalent among boys. The absence of gender differences in this study might be due to the fact that both interventions were equally effective for boys and girls.

Recommendations based on Findings

Based on the findings of this study, the following recommendations are proposed:

1. Counsellors consider integrating Compassion-Focused Therapy (CFT) and Dialectical Behaviour Therapy (DBT) into interventions

targeting more adolescents with substance-abusing parents, given their potential to reduce aggression.

2. Counsellors incorporate both CFT and DBT into their treatment plans for adolescents boys and girls struggling with psychosocial issues due to parental substance abuse, as both interventions yielded comparable benefits with no notable differences in effectiveness between genders.

Conclusion

This study highlights the profound impact of parental substance abuse on adolescents, leading to psychosocial difficulties such as anxiety and other emotional challenges. The results provide strong evidence for the efficacy of Compassion-Focused Therapy (CFT) and Dialectical Behaviour Therapy (DBT) in improving the psychosocial well-being of adolescents affected by parental substance abuse. Both interventions yielded significant improvements in psychosocial adjustment. The study's findings also suggested that DBT had a slightly greater effect than CFT in reducing aggression among participants, as mentioned earlier in the study. Furthermore, the study found that treatment outcomes were similarly beneficial for both boys and girls, with no significant gender differences observed.

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