

# **DIALECTIC BEHAVIOUR THERAPY AND ASSERTIVENESS TRAINING IN MANAGING CHALLENGES OF MENTAL HEALTH AMONG ADOLESCENTS WHO ABUSE SUBSTANCES IN PORT-HARCOURT METROPOLIS**

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## **Abstract**

*One of the rapidly growing global concerns today is the abuse of various substances that are linked with mental health with significant threat to the psychosocial challenges common in Nigeria. One of the pertinent problems is the occurrence among adolescents in Senior Secondary School Two (2) in Port Harcourt Metropolis. Assertiveness Training and Dialectic behaviour therapy in managing challenges of mental health among adolescents who abuse substances and are verbally aggressive in the Port-Harcourt metropolis, was examined in this study. Quasi-experimental pre-test and post-test designs were adopted. There were two treatment groups and one control group. Dialectic behaviour therapy was assigned to group one, group two was assigned to assertiveness training while the third group which was not assigned to treatment was the control group. The sample size was 75 students, 38 females and 37 males, selected using a multistage sampling technique. The verbal aggression questionnaire, Warwick Edinburg Mental Well-being Scale (WEMWBS) and Car, relax, alone, forget, family/friends trouble (CRAFT) instruments were used to collect relevant data. Two research questions and corresponding two hypotheses guided the study. Data collected were analysed using Mean, Standard Deviation, Mean Difference and Analysis of Covariance (ANCOVA). The study observed that significant differences exist in the psychosocial problems of adolescents as a result of the interventions. Assertiveness Training made more impact in the reduction of verbal aggression of adolescents' than DBT despite the treatment having a significant impact on their reduction. Both genders showed similar reductions in their verbal aggression, as a result of the experimental conditions. One of the recommendations provided was that all adolescent secondary school students should be exposed to assertiveness training as part of class learning.*

**Keywords:** Mental health, substance abuse, dialectic behaviour therapy, assertiveness

## **Introduction**

The challenges of substance abuse and the development of mental health problem among adolescents is a concern around the world. One population prone to this problem are the adolescents

in secondary schools. Sewell (2015) opined that it has been associated with many families, social legal, psychiatric and medical concerns in the world. There seems to be a high level of social and educational dependence on the various form of substances by adolescents who may not have proper knowledge of the effects. Dependence is now a critical subject that threatens the health, safety and progress of adolescents in societies in the world. The substances that are consumed according to Fareo, (2012) can be categorized into sedatives, tranquillizers, stimulants, narcotics and hallucinogens.

Improper use of alcohol already existed in Nigeria in the early times before other drugs known as cannabis or marijuana were introduced (Odejide 2009). In the 1960s, vast farmland cultivated with cannabis was discovered: consequently, there was a rapid increase in the consumption of drugs which reportedly started affecting the health of adolescents and became a problem for the society by the 1980s when cocaine and heroin were introduced (Obot, 2004; Nwannennaya & Abiodun, 2017). There is a paucity of database for adolescent secondary school students in Port Harcourt, Alex-Hart, Opara and Okagua (2015) concluded that this factor may be a serious hindrance to the successful development of intervention processes.

The abuse of substances leads to effects that harm educational systems, especially the secondary school students, with consequences that may include their mental health, contagious diseases and crime (Ekpenyong 2012). When adolescent students indiscriminately abuse substances, it will have negative consequences on their mental health, because studies have affirmed that mental health problems are often intertwined with substance abuse (Diraditsile & Rasesigo, 2018). The association of mental health conditions has equally been confirmed by WHO (2019). The mental health of any individual comprises the psychological, emotional and social well-being of the person. It includes the thought pattern, the feelings, the choices people make, and attitudes and could determine how the individual manages stressful conditions and relates to other people within the society. It is a general behavioural pattern that is very vital at every stage of life, beginning from childhood to adulthood.

Mental health is a state of well-being in which an individual realises his or her abilities, can cope with the normal stresses of life, can work productively and can make a contribution to his or her community (World Health Organisation 2018). The gravity of mental health problems includes emotional and spiritual thought processes that could be greater than just reacting to stressful situations and the display of the general behaviour of individuals, Macleod and Smith (2003) affirmed. Another study carried out by Hooker, Sherman, Lonergan-Cullum, Sattler, Liese, and Justesen (2020) affirmed that the development of the brain of the adolescent could be interfered with as a result of long-term substance abuse.

One very significant period in the life of Senior Secondary School students is the age when a positive foundation is laid in the period of adolescence. It may be one's best or very troublesome years. In Nigeria, it is most likely between 14 and 17 years. They have a burning feeling to be independent, which often leads to interference by parents and teachers in their social life (Osarenren 2002). According to the World Health Organisation report in 2008, the effects of substance abuse and mental health disorder will be greater than all physical diseases that cause disability around the world by 2020. In his conclusion, Merz (2018) reported that people between the ages of 15 and 64 years of age, who had used drugs were estimated to have reached 14.3 million. Mood disorder is,

however, also greatly associated with the consumption of substances among adolescents, which could lead to very severe consequences if not quickly managed (Espada, Sussman, Huedo-Medina & Alfonso, 2011).

Significantly related to early substance abuse, is adolescent verbal aggression. It is any behaviour that is carried out to harm another individual that does not wish to be hurt. Verbal aggression could be in form of teasing, intimidating and engaging in name-calling (Onukwuor 2013). It can also be a type of behaviour that causes mental harm. It could be psychological, emotional and psychiatric disorders. Verbal aggression is often associated with acts such as foul language, display of anger, and threats, to cause emotional and psychological pain (Babu, 2007). The overall normative brain maturation and social processes during adolescence, are associated with increased impulsivity, which in turn increases the risk for both aggression and substance use. These risks are compounded by substance use during adolescence (Fauziah, Mohamad, Chong & Azmi, 2012). Involvement in substance use is also a critical factor in the assessment and treatment of youth aggression and delinquency according to Luczak, Koutsenok and Brown (2012). Students may become more verbally aggressive, after smoking and having a sense of pleasure (Elmasry, Fouad, Khalil & Khalid, 2016).

This research was undertaken to investigate the effects of assertiveness training and dialectic behaviour therapy in managing challenges to the mental health of adolescent students, who abuse substances and are verbally aggressive, in the Port Harcourt metropolis. These therapeutic methods were chosen on the premise that such cases among adolescents could be managed by them. Dialectic behaviour therapy relates to conscious intellectual activity that is based on a psychosocial pattern of treatment. The major goals are to manage feelings, moods or relationships with others, to teach the client methods to cope with stressful situations and improve interpersonal relationships. Dialectic behaviour therapy also motivates changes by encouraging clients to make strategic use of opposition, which occurs during the therapy sessions. While assertiveness training is training on reactions to stimuli that focuses on increasing assertive, self-assured behaviour that increases confidence and better communication style in individuals. It is a type of training to emphasise respect for every individual's needs during conversations verbally and non-verbally (Larsen & Jordan 2017). It improves the ability to say "No" and trains people to stand up for themselves, without displaying feelings of anxiety and fear, truthfully and comfortably.

### **Problem Statement**

Concerns about abusing substances which culminates into mental health challenges among adolescent Senior Secondary School students in Port Harcourt metropolis is a serious source of concern. It has generated comments and discussion across the populace. One of the most serious consequences of the abuse of substances, is the problem of emerging adolescents that are verbally aggressive and this development, if not checked, can produce massive negative effects on the mental well-being of the youth. Most worrisome is the fact that adolescent verbal aggression could easily be meted on fellow students, and the consequences are numerous. Measures have been adopted, and more are in progress to prevent the increase in the abuse of substances but there seems to be an increase in the number of students getting involved. Research has been carried out on the prevalence of abusing substances and other drugs that are being consumed but the consequences of such consumption have not been seriously dealt with. It is on this premise that this study is investigating the effect of Dialectic behaviour therapy and assertiveness training in managing challenges of

mental health of adolescent Senior Secondary School 2 students who abuse substances in Port Harcourt metropolis.

### Research Questions

The following research questions guided the study:

1. To what extent would the post-test mean scores of verbal aggression differ as a result of exposing adolescents who due to abuse substances to Dialectic Behaviour Therapy, Assertiveness Therapy and the Control group?
2. What is the difference in the post-test mean scores of verbal aggression among male and female adolescents who abuse substances in the three experimental groups?

### Hypotheses:

The following null hypotheses were tested.

1. Verbal aggression will not significantly differ among adolescents who abuse substances exposed to Dialectic Behaviour Therapy, Assertiveness Training and the control group.
2. There is no significant difference in the mean scores of verbal aggression among adolescents who abuse substances in the three experimental groups, due to gender.

### Research Design Method

Quasi-experimental pre-test and post-test control group research designs were used for the study. There were two treatment groups and a control group. One group was exposed to dialectic behaviour therapy and the second to assertiveness therapy. No treatment was given to the control group.

The population is comprised of Public Senior Secondary Schools Two (2) students in Port Harcourt metropolis. They were used for the study because they were most stable and without external examination interferences.

### Sample and Sampling Technique

The sampling process adopted the multistage approach to select senior Secondary School Two (SS2) students for the study.

**Stage One:** Simple random sampling using a hat and draw method, was used to select three zones out of the 13 zones in the Port Harcourt metropolis. Zone C (Amadi Ama), Zone G (Oroworukwo) and Zone J (Rumuepirikom).

**Stage two:** A Senior Secondary School 2 was randomly selected from the three zones, using a simple random sampling technique.

**Stage three:** To determine the baseline, the CRAFFT questionnaire was administered to 1680 students. A total of 205 students were identified as adolescents who abused substances.

**Stage four:** The second baseline scale Warwick Edinburg Mental Well-being Scale (WEMWBS) was administered to 205 students to determine the number of students who had mental health concerns. 75 students scored above average which with a score of 40 and above out of the total sum of 70 points.

**Stage five:** The three schools were randomly assigned to treatment groups. Zone C was assigned to DBT treatment. Zone G was assigned to Assertiveness Training. Zone J was the Control group that was not assigned to treatment.

### Research Instrument

Three research instruments were used to obtain relevant data for the study:

1. Car, Relax, Alone, Forget, Family/Friends Trouble (CRAFTT)
2. Warwick Edinburg Mental Well-being Scale (WEMWBS)
3. Verbal Aggression Questionnaire (VAQ)

CRAFTT and WEMWBS instruments were adopted, while VAQ was developed by the researcher for this study.

**Table 1. CAR, RELAX, ALONE, FORGET, FAMILY/FRIENDS TROUBLE (CRAFTT)**  
**During the past six months, how many days did you ----**

		None	# of days
1	Drink more than a few sips of beer, weed, gin or any other drink containing alcohol? Put "0" if none		
2	Use any marijuana (weed, oil or hash by smoking, vaping or in food)? Put "0" if none		
		Yes	No
3	Do you ever use alcohol or drugs in any way to relax or feel better about yourself?		

**Table 2. Warwick Edinburg Mental Well-being Scale (WEMWBS)**

S/N	Items	None of the time	Rarely	Some of the time	Often	All of the time
1	I've been feeling optimistic about the future					
2	I've been feeling good about myself					

**Table 3: Verbal Aggression Questionnaire (VAQ)**

	ITEMS	1	2	3	4	5
1	I often find myself starting an argument with people.					
2	I can say anything to my friends openly when I disagree with them.					
3	I have threatened people I know with my words.					

### Treatment Procedure

#### Group One: Dialectical Behaviour Therapy (DBT)

One of the teachings of DBT was to expose adolescents involved in substance abuse to various techniques that could help them understand their feelings without judging themselves. It could also equip them with methods and guidelines to manage their feelings that would result in a change of

attitude and remove frightening behaviour.

**Session 1:** The students were warmly welcome and acquainted. Confidentiality guidelines were discussed and the purpose of the therapy was introduced. The researcher administered the baseline instruments for screening out students not meant for the therapy sessions. Students were encouraged to share their feelings and beliefs about aggression.

**Session 2:** The verbal aggression instrument was administered and the main four concepts (modules) of DBT were introduced to the clients.

**Session 3:** Clients were taught how to focus on the present happenings, live in the moment, take charge of situations and not dwell in the past. They were encouraged to take note of barriers that obstruct their attitude from changing, how not to expose themselves to the possibility of being harmed emotionally, but to increase positive emotions.

**Session 4:** The previous session was reviewed and they were taught how to take note of situations, learn and make their feelings known so they could manage such feelings properly. Social coping methods were taught. The researcher role played how they could walk away from people that are smoking, rather than watch them. Walk away from arguments and fights, rather than observe them. A toll-free number was given to them for counselling.

**Session 5:** In this session, there was an overview of emotion regulation techniques. They were exposed to various ways to identify distressful situations and tolerate them. The ability not to accept all situations, which situation to accept and which not to accept. Crises survival skills could be used when applicable. They were given home assignments.

**Session 6:** Interpersonal, communication, verbal, non-verbal and listening skills were introduced. Clients were given worksheets for homework.

**Session 7:** The researcher reviewed all previous sessions. Participants were applauded for all the effort, and progress and she encouraged them to maintain the changes attained. Questions were welcomed.

**Session 8:** She re-administered the verbal aggression instrument, as a post-test and expressed her appreciation to all the participants for the therapy sessions.

### **Group Two: Assertiveness Training (AT)**

Individuals can express themselves in an appropriate, direct, open and honest conversation without violating the rights of others. Being able to assert one's thoughts, feelings and beliefs in a direct way, enhances self-confidence. Assertiveness training can also be applied to various individual, medical, school and job situations. Being assertive is different from being aggressive.

**Session 1:** A rapport was established with the clients, and confidentiality and warmth were created. The purpose of the therapy was established and the researcher administered the baseline instruments for screening out students not meant for the therapy sessions. Students were encouraged to share their feelings and beliefs about aggression.



**Session 2:** The clients were exposed to the need to develop assertiveness techniques. The consequences of non-assertiveness and aggressive attitude were discussed. Demonstrations of assertive and non-assertive characteristics were made. Clients and the researcher role played possible methods and situations assertiveness can be demonstrated or expressed.

**Session 3:** Individual client was made to develop personal goals during the therapy. They were taught how to relate positively and assertively with mates in the training. Previous sessions were reviewed.

**Session 4:** The last sessions were reviewed. Various skills, including role-playing of assertiveness skills were rehearsed. The researcher evaluated their ability and gave them feedback on their performances.

**Session 5:** Questions and answers were discussed relating to the effectiveness of training on assertiveness and its importance.

**Session 6:** Previous problems experienced as a result of the inability of participants to assert themselves, were widely discussed. Positive benefits of assertiveness acts since the therapy sessions started, were discussed and demonstrated by participants.

**Session 7:** Post-test verbal aggression instruments were re-administered to participants, they were appreciated by the researcher and the sessions were terminated.

### **Group Three- Control Group**

No treatment was given to participants in the control group.

## **RESULTS**

### **Hypothesis One**

Hypothesis 1 states that verbal aggression will not significantly differ among adolescents who abuse substances exposed to Dialectic Behaviour Therapy, Assertiveness Training and the control group.

**Table 4. Descriptive Analysis of Verbal Aggression based on the Experimental Groups**

Experimental Group	N	Pre -Test		Post -Test		Mean Difference
		Mean	SD	$\bar{X}$	SD	
Dialectic Behaviour Therapy	25	49.08	2.27	36.16	3.91	-12.92
Assertiveness Training	26	48.23	2.35	28.46	2.96	-19.77
Control Group	24	47.92	2.26	47.63	1.88	-0.29
Total	75	48.41	2.32	37.16	8.45	-11.25

The output from Table 4 shows that at the pre-test, the verbal aggression mean values of 49.08, 48.23 and 47.92 were derived for dialectic behaviour therapy, assertiveness training and control group respectively. However, at post-test, the mean values dropped to 36.16, 28.46 and 47.63 for dialectic behaviour therapy, assertiveness training and the control group respectively. This shows that the group with assertive training (-19.77) had the highest reduction followed by dialectic behaviour therapy (-12.92) and the control group (-0.29). An Analysis of Covariance (ANCOVA) was computed to determine the significance of the mean difference. The result was presented in Table 5.

**Table 5. ANCOVA Result for Verbal Aggression based on the Conditions of Experiment**

Source	Sum of Squares	df	Mean Square	F	Sig.
Model Corrected	4626.482	3	1542.161	165.498	.000
Intercept	159.777	1	159.777	17.147	.000
Covariate	5.849	1	5.849	.628	.431
Group	4619.438	2	2309.719	247.870	.000
Error	661.598	71	9.318		
Total	108853.000	75			
Corrected Total	5288.080	74			

$P < 0.05$ ; critical value (2, 71) = 3.13

An F-calculated value of 247.87 mean difference was observed as a result of exposing participants to the experimental conditions. This value was greater than the critical value of 3.13, given degrees of freedom 2 and 71 at a 0.05 level of significance. This led to the rejection of the null hypothesis. Further computation was carried out to determine the pair with significance. Presented in Table 6 is the result of the computation.

**Table 6. Pair wise Comparison of Verbal Aggression based on the Experimental Groups**

(I) Experimental Group	(J) Experimental Group	Mean Difference (I -J)	Sig.
Dialectic Behaviour Therapy	DBT	7.593 *	.000
	Control Group	-11.609 *	.000
Assertiveness Training	AT	-7.593 *	.000
	Control Group	-19.202 *	.000
Control Group	DBT	11.609 *	.000
	AT	19.202 *	.000

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

Observation from Table 6 shows that the pairs of dialectic behaviour therapy and assertiveness training was significant ( $t = 7.593$ ;  $p < 0.05$ ), while dialectic behaviour training and control group was also significant ( $t = -11.609$ ;  $p < 0.05$ ). In addition, the pair of Assertiveness Training and control group ( $t = -19.202$ ;  $p < 0.05$ ) was also significant.



**Hypothesis 2:**

Hypothesis 2 states that there is no significant difference in the mean scores of verbal aggression among adolescents who abuse substances in the three experimental groups due to gender.

**Table 7. Descriptive Analysis of Verbal Aggression based on Experimental Groups and Gender**

Experimental Group	Gender	N	Pre-Test		Post-Test		Mean Difference
			$\bar{X}$	SD	$\bar{X}$	SD	
Dialectic Behaviour Therapy	Female	14	49.43	1.87	36.00	3.84	-13.43
	Male	11	48.64	2.73	36.36	4.18	-12.27
	Total	25	49.08	2.27	36.16	3.91	-12.92
Assertiveness Training	Female	12	48.50	2.47	27.58	3.37	-20.92
	Male	14	48.00	2.32	29.21	2.42	-18.79
	Total	26	48.23	2.35	28.46	2.96	-19.77
Control Group	Female	12	48.00	2.13	48.00	1.35	0.00
	Male	12	47.83	2.48	47.25	2.30	-0.58
	Total	24	47.92	2.26	47.63	1.88	-0.29
Total	Female	38	48.68	2.18	37.13	8.80	-11.55
	Male	37	48.14	2.45	37.19	8.20	-10.95
	Total	75	48.41	2.32	37.16	8.45	-11.25

The descriptive data in Table 7 shows that at pre-test, female participants had verbal aggression mean values of 49.43, 48.5 and 48 for dialectic behaviour therapy, assertiveness training and control group respectively. Their male counterpart had mean values of 48.64, 48.00 and 47.83 for DBT, AST and the control group respectively. For female participants, Post-test mean values for participants were 36.00 for dialectic behaviour therapy, 27.58 for assertiveness training and 48.00 for the control group. Their male counterpart had 36.36, 29.21 and 47.25 for dialectic behaviour therapy, assertiveness training and control group respectively.

The mean difference column showed that both female (-20.92) and male (-18.79) participants in the assertiveness training group had the highest reduction in verbal aggression. To determine the significance of the differences in mean, the analysis of covariance was calculated. The result of the analysis is presented in Table 8.

**Table 8. ANCOVA Result for Verbal Aggression based on the Experimental Conditions and Gender**

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4649.638	6	774.940	82.538	.000
Intercept	148.418	1	148.418	15.808	.000
Covariate	7.627	1	7.627	.812	.371

Group	4637.298	2	2318.649	246.958	.000
Gender	4.312	1	4.312	.459	.500
Group * Gender	18.346	2	9.173	.977	.382
Error	638.442	68	9.389		
Total	108853.000	75			
Corrected Total	5288.080	74			

$P > 0.05$ ; critical value (2, 68) = 3.15

The result of the analysis in Table 16 shows that an F-calculated value of 0.977 was computed as the difference in the mean scores of verbal aggression on *mental health challenges among adolescents who abuse substances* in the three experimental groups due to gender. The F-calculated value was observed to be less than the critical value of 3.15, given 2 and 68 degrees of freedom at a 0.05 level of significance. Thus, the null hypothesis was upheld. It was concluded that there exists no significant difference in the mean scores of verbal aggression on challenges of mental health among adolescents who are substance abusers in the three experimental groups due to gender.

### Summary of Findings

The following is the summary of the findings:

The study revealed a significant effect of the two treatments in the reduction of mental challenges of verbal aggression among adolescent students in Port Harcourt metropolis.

There exist no significant differences in the mean scores of verbal aggression among adolescents who abuse substances in the three experimental groups due to gender.

### Discussion of Findings

The study revealed that verbal aggression differs among adolescent senior secondary school students involved in abuse substances when exposed to DBT, AT and the control conditions. The participants in the Assertiveness Training had a greater reduction in verbal aggression when compared with their counterparts in the Dialectic Behaviour Therapy. The sessions which included distress tolerance and emotion regulations, trained participants on focusing on avoiding pain, and difficult situations, walking away from situations that trigger aggression and learning crisis survival strategies like self-soothing skills, and accepting and tolerating present moments. In a similar study, Fauziah, Mohamad, Chong and Azmi (2012) agree that many adolescents who use drugs showed a significant relationship with various forms of aggressive behaviour. Assertiveness training was found to significantly reduce aggressive tendencies with training on interpersonal relationship skills, communication, listening, and verbal and non-verbal skills. Also, these findings are consistent with the findings of Nadimi and Pishgar (2015) where DBT increased the ability to manage distress, emotions and aggressive tendencies among substance abusers. The finding also agrees with the study of Wupperman, Colen, Haller, Flom, Litt and Rounsaville (2015) where training on mindfulness decreased alcohol/drug use, and physical and verbal aggression, thereby supporting the efficacy of unregulated behaviour.

Hypothesis two stated that there is no significant difference in the mean scores of verbal aggression among adolescents who abuse substances in the two experimental and control groups due to gender. The result, after it was analysed, was in line with the hypothesis earlier stated; therefore, the

hypothesis was accepted. These findings are, however, not consistent with the study of Amiri, Sadeghi, Sadeghi and Khosravi (2020) who observed that there is a negative relationship between assertion and addiction. It is also not consistent with the findings of Rounaghi, Pakseresht, Asiry and Rounshan (2018) who observed that aggressive people use drugs for pleasure and suppression of internal problems, which the male gender is most commonly prone to.

### **Contribution to Knowledge**

The study contributed to knowledge in the following ways:

1. The study demonstrated that dialectic behaviour therapy and assertiveness training are efficacious in reducing verbal aggression in the mental health challenges of adolescent students prone to abuse of substances.
2. The study revealed that gender difference is not a mental health problem among adolescents who are substance abusers.
3. The study established the effectiveness of Assertiveness Training as part of school learning training that could reduce mental health challenges among adolescents and improve personal decision-making.
4. The study demonstrated that lack of assertiveness skills and poor interpersonal relationship contribute to challenges to mental health among adolescents who abuse substances.

### **Recommendations based on findings**

The study provided the following recommendations:

1. All the basic teachings of dialectic behaviour therapy should be added to the secondary school syllabus to encourage students to be responsible for their actions. Emotion regulation skills where the focus should be removed from the pain that triggers aggression, should be taught.
2. The teaching of assertiveness training should be implemented in the secondary school curriculum.
3. Biases of gender should not be included when managing the mental health problems of adolescent secondary school students who abuse substances. All gender should be treated equally.

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