

Training in Managing Mental Health Challenges among Substance Abuse Adolescents in Port-Harcourt Metropolis

By

KIENKA, RITA OKORITE

ritakienka@gmail.com

PROF. NGOZI OSARENREN

Department of Educational Foundations, University of Lagos, Akoka
07031351715

&

PROF. 1. P. NWADINIGWE

Department of Educational Foundations, University of Lagos, Akoka

Abstract

Substance use is one of the rapidly growing global problems linked to mental health with significant threat to the psychosocial challenges faced by some adolescents in Nigeria. This study examined the effects of “Dialectic Behaviour Therapy (DBT) and Assertiveness Training (AT)” on mental health challenges among levels of depressed adolescent students who abuse substances in Port-Harcourt metropolis. Quasi experimental pre-test, post-test research design which consisted of two treatment groups and one control group was adopted. Group one was exposed to DBT and group two to AT, the Control group had no treatment. A sample of 75 Senior Secondary School Two (SS 2) students consisting of 37 male and 38 female were selected for the study using multistage sampling process. The instruments used for collecting data were: CRAFFT, WEMWBS, DASS, SPI, VBQ and VAQ. Two research questions and two hypotheses were tested at 0.05 level of significance. Data collected were analyzed using Analysis of Covariance (ANCOVA). The findings revealed significant difference in psychosocial problems of adolescent as a result of the interventions. It also revealed that DBT made impact in the reduction of adolescents’ level of depression than AT despite the two treatment having significant impact in their reduction. However, both male and female adolescents exhibited similar reactions in their level of depression as a result of the experimental conditions. It is recommended that there is the need to identify and manage students who significantly exhibit levels of depression with the four components of DBT.

Keywords: Mental Health, Substance Abuse, Dialectic Behaviour Therapy, Assertiveness Training

Introduction

Mental health includes an individual’s emotional, psychological, and social well-being. It affects how an individual thinks, feels, and acts. It is a state of wellbeing in which everyone including the adolescent student lives at peace with others, copes with stress and can work

productively with others. It is different from mental illness. Macleod and Davey Smith (2003) opined that it is a state of mental, emotional, social, and spiritual well-being. Mental health helps to determine how individuals handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through to adulthood. It encompasses the psychosocial health of every individual.

The challenges caused by substance abuse among adolescents has become a worldwide concern and one of the group of people affected are the Senior Secondary School two students who are most likely adolescents. This abuse has become associated with a myriad of medical, psychiatric, social, family and legal problem internationally (Sewell, 2015). The economic hardship, climate change and political instability has caused a lot of psychosocial problems in many Nigerian homes where these adolescent students belong (Njoku & Obogo 2017) and the home and school environment the student grows is the first place that provide the stability needed to have a sound mental health.

Adolescent students who are in the age of curiosity may be prone to substance abuse which may result to various levels of depression and they may not be able to optimize their learning capabilities. Ultimately, this could lead to various mental health challenges. Some may eventually become miscreants roaming the streets, pick pockets especially around crowded areas, in schools and motor parks.

Feinstein, Richter and Foster (2012) found that these adolescents without proper knowledge of the effects, depend on one form of substance or the other for their various daily social, educational and moral activities. It has become a problem threatening the health, safety and success of some adolescents in various populations. These drugs often taken by these students are also categorized into various types like stimulants, hallucinogens, narcotics, sedative, and tranquilizers (Fareo, 2012). Ekpenyong (2012) had observed that drug abuse has a negative impact on the education of secondary school students, such that the overall health of the user is affected negatively and it predisposes the abuser to crime and contagious diseases. The indiscriminate use of substances definitely will have negative effects on the mental health of the adolescent because available studies show that substance use and mental health problems are often related (Diraditsile & Rasesigo, 2018). Drug abuse in adolescence constitute one of the deadliest menaces Nigeria is faced with today. It has been identified as a social vice leading to depression (Oboh & Oboh 2020).

Hooker, Sherman, Lonergan-Cullum, Sattler, Liese, Justesen, (2020) affirmed that substance use interferes with the adolescent's brain development, and they are at an increased risk of developing long-term consequences. Proper development of the adolescent is critical in the senior secondary school age because it is the foundation to a successful life for the student.

Merz, (2018), states that 14.3 million people between 15 and 64 years of age had used drugs in 2017. The World Health Organization (WHO) in 2008 stated that by the year 2020 mental health and substance use disorders will surpass all physical diseases as a major cause of disability worldwide. One of the causes of depression is abuse of psychoactive substances, which results in medical problems and mental disorders. Depression is a disease of global burden affecting 350 million people worldwide (Andualem, Dagmawi, & Alemayehu 2016). Mood disorder is however greatly associated with consumption of substances among adolescents which affects the mental health of the student and could lead to very severe consequences if not quickly managed (Espada, Sussman, Huedo-Medina, & Alfonso, 2011).

This study investigated the effects of Dialectical Behaviour Therapy and Assertiveness training in managing mental health challenges among levels of depressed adolescent students who abuse substances in Port Harcourt metropolis. The choice of these two treatments was based on the premise that they could effectively be used to manage the mental health problems of adolescents who abuse substances. Dialectical Behaviour Therapy is a Cognitive Behaviour approach that emphasizes the psychosocial aspects of treatment. Its main goal is to teach the clients skills to cope with stress, regulate emotions and improve relations with others. It teaches individuals how to bring about change through persuasion and to make strategic use of oppositions that emerge within therapy. Assertiveness training is a type of behaviour therapy focused on increasing assertive, self-assured behaviour in individuals and teaching a more confident, effective communication style. Assertiveness training places emphasis on respecting the wants and needs of both parties in a conversational exchange through effecting changes in both verbal and nonverbal assertive behavior (Larsen & Jordan 2017). Assertiveness involves the power to say no, individuals standing up for themselves without fear, anxiety and expressing their feelings directly, honestly and comfortably.

Problem of the study

There are lots of debates, comments and discussions in Port Harcourt and her environs of the increasing level of substance abuse and mental health issue like level of depression

among adolescent students. It seems to be one of the most serious social problems confronting Senior Secondary school students in the Metropolis. This problem has the potential for massive negative impact on the future mental well-being of many youths if not managed in the society. Level of depression in mental health could culminate into various negative activities which may include, mood swings and inappropriate behaviour of various magnitude in and out of the school.

It is also unfortunate that despite various measures adopted to prevent substance abuse among the youths, there seems to be an increasing number of students getting involved in it. Many studies have been conducted but did not interrogate the level of depression challenge the adolescents in Public schools are faced with. There was therefore the need to carry out a research on the factors behind the drive to abuse substances which were resulting into depressive mental health challenges. The focus of this study therefore was to determine the effects of Dialectic Behaviour Therapy and Assertiveness Training in managing mental health challenges among levels of depressed adolescents in Port Harcourt Metropolis, Rivers State.

Research Questions

The study was guided by the following research questions:

1. To what extent would there be any difference in level of Depression among adolescents with mental health challenges who abuse substances exposed to Dialectic Behaviour Therapy, Assertiveness Training and the control group?
2. What is the difference in the post-test mean scores of level of depression among adolescent students with mental health challenges who abuse substances in the three experimental groups due to gender

Research Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. Level of Depression does not significantly differ among adolescents with mental health challenges who abuse substances exposed to DBT, AT and the control group.
2. There is no significant difference in the level of depression in mental health challenges among adolescents who abuse substances in the three experimental groups due to gender.

Research Methods

Research Design

The research design used for this study was the quasi-experimental, pre- test, post- test control group design. The quasi- experimental design was adopted for the study because it involved human behaviour where proper randomization of subjects was not permitted (Ilogu, 2005, Nwadinigwe, 2005). There were three experimental groups for the study. Two treatment groups and one control group. One group was exposed to Dialectical Behaviour Therapy while group two was exposed to Assertiveness Training. The control group was not exposed to any treatment.

The research was carried out in Port Harcourt Metropolis, Rivers State Nigeria. The targeted population for the study were all senior secondary school two (SS II) students from the seventeen (17) public senior secondary schools for both high and low Socio- economic classes. The SS 2 students were used for this study because they were a stable class for this research and were considered to be free from the pressure of the Senior Secondary School Certificate Examination.

The researcher used multi-stage sampling process to select the students who participated in the study. Stage one was the selection of three zones from the 13 zones in Port Harcourt Metropolis using simple random sampling. Stage involved selection of one Senior Public Secondary School each from the three zones using simple random sampling technique. The third stage involved the identification of adolescents who abuse substances from the selected Senior Secondary School Two (SS2) students using the Caf, Relax, Alone, Forget, Family/Friends Trouble (CRAFT) on 1680 students from the three schools selected.

A total of 205 students were identified as adolescents who abused substances. The Warwick Edinburg Mental well-being scale (WEMWBS) was administered on them to establish the fact that they had mental health problems.

A total of 75 students scored above average in the two instruments administered and they were assigned to treatment through simple random sampling. 25 students (14 females, 11 males) were assigned to Dialectic Behaviour Therapy treatment. 26 (12 females, 14 males) were assigned to Assertiveness Training and 24 students (12 females and 12) males were in the control group who were given the better of the two treatments only after the other two treatment groups had concluded. The treatment groups met once a week for six week. At the

end of the intervention, the research instruments was re-administered as post-test to both the treatment and control groups.

Treatment Procedure

Dialectical Behaviour Therapy (DBT)

The goal of DBT is to teach adolescents who abused substances techniques to help them understand their emotions without judgment and also to equip them with skills and techniques to manage those emotions in other to change their behaviour in ways that will make their lives better and eliminate life threatening behaviour.

The baseline instruments was administered to enable the researcher screen out respondents who were not meant for the therapy during the next session. Pre-test instruments were administered before the start of the next session. The goal for DBT which is to manage behavioural and emotional change, remove problem behaviour with skillful behaviour, change thoughts and interpersonal patterns associated with adolescents who abused substances was presented to the participants. They were presented with the four core modules in DBT during the first session.

Mindfulness; the ability to take charge of oneself in different way was emphasized emotion regulation skills, interpersonal relationship and distress tolerance was taught. There were interactive sessions and worksheets were given for homework. During the seventh week all previous sessions were reviewed. The participants were encouraged to reflect on the changes they had made and the understanding they had gained from the intervention. Questions on the four basic modules of DBT was entertained. She re-administered the questionnaire on depression.

Assertiveness Training (AT)

Assertiveness Training is a combination of behavioural techniques or skills (e.g., instruction, discussion, modelling, behaviour rehearsal and role playing) employed to teach adolescent students who abused substances how to modify their self-concept, interpersonal and mental health challenges.

The researcher established rapport with all the participants and administered the baseline instruments to enable her screen out respondents who were not meant for the therapy during the next session. Afterwards, the researcher encouraged the participants to share notion and thoughts and concerns as depression. Pre-test instruments were administered before the

start of the session. The participants were acquainted with the goal of assertiveness and non-assertiveness. The benefits of assertiveness were discussed and examples of assertive statements were given. The students were asked to identify specific situations they had problems expressing their feelings; and the researcher modelled assertiveness to the students showing possible responses that may be necessary in situations when requests are made on them or how to carry out rejection of unfavourable offers. In the next session the participants were helped to develop specific goals during the treatment. The ability to socialize comfortably with their mates and to relate well with the significant others were taught. The previous session were always reviewed in the next session. The skills the participants were focusing on such as saying “Yes” and “No” was demonstrated as a style of assertiveness skills and body language. The participants were encouraged to practice the skills they learnt. Homework was given to the participants. Among the take home questions were the following:

1. How would you respond when someone tries to give you what you really do not like?
2. How would you make your friends understand that they cannot force you to do what you do not want to do?

Role play of the skills was modelled by the participants. They were encouraged to practice rehearsal skills over and over again. The researcher gave feedback to the participants to help them evaluate their strengths and weaknesses. There were discussions on enactment with feelings suppressed and non-assertive behaviour, then re-enactment with feelings expressed and assertive behaviour. Appropriate assertive strategies/skills for handling, depression were demonstrated by rehearsal and role-play. Questions and answers were taken. The researcher re-administered the depression (DASS) questionnaire as post-test. The participants in group three were not exposed to any treatment during the study but were given the treatment that worked better after the study to enable them benefit from the study.

Data Analysis

The two formulated hypothesis in this study were analyzed using mean, standard deviation, mean difference and Analysis of Covariance (ANCOVA).

Results

Hypothesis one states that level of Depression does not significantly differ among adolescents with mental health challenges who abuse substances exposed to Dialectic Behaviour Therapy, Assertiveness Training and the control group.

Table 1

Descriptive Analysis of Level of Depression based on the Experimental Groups

Experimental Group	N	Pre-Test		Post-Test		Mean Difference
		Mean	Std. Deviation	Mean	Std. Deviation	
Dialectic Behaviour Therapy	25	74.60	3.08	55.04	5.45	-19.56
Assertiveness Training	26	72.50	3.97	55.50	5.45	-17.00
Control Group	24	72.71	3.71	72.50	5.45	-0.21
Total	75	73.27	3.69	60.79	5.45	-12.48

Analysis from Table 1 shows that at pre-test, level of depression mean value of 74.6 was derived for DBT, 72.5 for AST and 72.71 for Control Group. At post-test, the mean values dropped to 55.04, 55.5 and 72.5 for DBT, AT and Control Group respectively. DBT group (-19.56) had the highest reduction followed by the AT Group (-17) and the Control Group (-0.21). Further computation was carried out to determine the significance of the mean differences using Analysis of Covariance (ANCOVA). The result of the computation is presented in Table 11.

Table 2

ANCOVA Result for Level of Depression based on the Experimental Conditions

Source	Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	4868.254	3	1622.751	91.127	.000
Intercept	428.090	1	428.090	24.040	.000
Covariate	23.127	1	23.127	1.299	.258
Group	4859.149	2	2429.575	136.435	.000
Error	1264.333	71	17.808		
Total	283259.000	75			
Corrected Total	6132.587	74			

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

Figures from Table 2 show that an F-calculated value of 136.435 was derived as the difference across the experimental groups. The value was observed to be greater than the

critical value of 3.13, given 2 and 71 degrees of freedom at 0.05 level of significance. Consequently, the null hypothesis was rejected and it concluded that level of depression does not significantly differ among adolescents with mental health challenges who abuse substances when exposed to dialectic behaviour therapy, assertiveness training and the control group. Further analysis was carried out to identify the pair that was significance using the Least Significant Difference. The result of the analysis is presented in Table 12.

Table 3
Pair wise Comparison of Level of Depression based on the Experimental Groups

		Mean	
(I) Experimental Group	(J) Experimental Group	Difference (I-J)	Sig.
Dialectic Behaviour Therapy	Assertiveness Training	-.789	.519
	Control Group	-17.757*	.000
Assertiveness Training	Dialectic Behaviour Therapy	.789	.519
	Control Group	-16.967*	.000
Control Group	Dialectic Behaviour Therapy	17.757*	.000
	Assertiveness Training	16.967*	.000

Based on estimated marginal means

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

The outcome of the analysis in Table 4 shows that the pair Dialectic Behaviour Therapy and Control Group ($t = -17.757$; $p < 0.05$) was significant. In addition, the pair of Assertiveness Training and Control Group ($t = -16.967$; $p < 0.05$) was significant.

Table 4
Descriptive Analysis of Level of Depression based on Experimental Groups and Gender

Experimental Group	Gender	N	Pre-Test		Post-Test		Mean Difference
			Mean	Std. Deviation	Mean	Std. Deviation	
Dialectic Behaviour Therapy	Female	14	74.00	3.09	53.86	6.04	-20.14
	Male	11	75.36	3.04	56.55	4.41	-18.82
	Total	25	74.60	3.08	55.04	5.45	-19.56
Assertiveness Training	Female	12	73.08	3.75	56.50	3.40	-16.58
	Male	14	72.00	4.22	54.64	2.59	-17.36
	Total	26	72.50	3.97	55.50	3.08	-17.00
Control Group	Female	12	73.83	3.10	73.17	3.04	-0.67
	Male	12	71.58	4.06	71.83	4.53	0.25
	Total	24	72.71	3.71	72.50	3.83	-0.21
Total	Female	38	73.66	3.25	60.79	9.63	-12.87

Male	37	72.86	4.10	60.78	8.66	-12.08
Total	75	73.27	3.69	60.79	9.10	-12.48

Analysis from Table shows that at pre-test, female participants had level of depression mean values of 74, 73.08 and 73.83 for Dialectic Behaviour Therapy, Assertiveness Training and Control Group respectively. Their male counterpart had mean values of 75.36, 72 and 71.58 for Dialectic Behaviour Therapy, Assertiveness Training and Control Group respectively.

At post-test, the female participants mean value for Dialectic Behaviour Therapy was 53.86, Assertiveness Training was 56.5 and Control Group was 73.17. Their male counterpart level of depression mean value was 56.55, 54.64 and 71.83 for DBT, AT and Control Group respectively.

The mean differences column showed that Female and Male participants in the DBT had the highest reduction when compared to other groups. Besides, an Analysis of Covariance was computed to determine the significance of the differences in mean. The result of the analysis is presented in Table 20.

Table 5
ANCOVA Result for Level of Depression based on the Experimental Conditions and Gender

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4932.487	6	822.081	46.581	.000
Intercept	470.543	1	470.543	26.662	.000
Covariate	9.889	1	9.889	.560	.457
Group	4746.563	2	2373.282	134.475	.000
Gender	.178	1	.178	.010	.920
Group * Gender	64.104	2	32.052	1.816	.170
Error	1200.100	68	17.649		
Total	283259.000	75			
Corrected Total	6132.587	74			

Figures from Table 5 shows that an F-calculated value of 1.816 was computed as the difference in the mean scores of level of depression on mental health challenges among adolescents who abuse substances in the three experimental groups due to gender. This value

was observed to be less than the critical value of 3.15, given 2 and 68 degree of freedom at 0.05 level of significance. Thus, the null hypothesis was upheld. It was concluded that there exist no significant difference in the mean scores of level of depression on mental health challenges among adolescents who abuse substances in the three experimental groups due to gender.

Discussion

Findings observed from hypothesis one (level of depression) have a noteworthy effect as a result of exposing adolescents with mental health challenges who abuse substances to Dialectic Behaviour Therapy, Assertiveness Training and the control group. The DBT group had the higher reduction, followed by AT group. Level of depression did not significantly differ among adolescents with mental health challenges who abuse substance exposed to DBT, AT and the control group. The findings revealed that the interventions had significant effect on levels of depression. It is also consistent with the results of the findings of Fuspita, Susanti and Putri (2018) which showed that assertiveness training significantly changed the level of depression from moderate to mild. Speed, Goldstein and Goldfried (2017), agrees that unassertiveness training was identified as key client characteristic in depression and substance abuse. Individuals recovered faster with the training on assertiveness. Danielson, Overholser and Butt (2003) findings agree with this research because their study revealed positive relation between depression levels and substance abuse. Adolescents who abuse substances and were psychiatric inpatients reported higher levels of depression. Vani, Bhat, Sobagaiah and Sri (2017) in their findings revealed that depression, alcohol and drugs were among the various mental health problems and they are the third leading causes of morbidity and disability.

The findings of hypothesis two indicated no significant difference in the level of depression on mental health challenges among adolescents who abuse substances in the three experimental groups due to gender. The findings from the research is consisted with the stated hypothesis, thus it is accepted. The findings is not consistent with the findings of Stoken et, al. (2014) where boys showed more consistence with substance abuse and symptoms of anxiety and depression than girls. It is also inconsistent with the findings of Eslami, Rabiei, Afzali, Hamidizadeh and Masoudi (2016) which showed that assertiveness training programme largely reduced stress and depression among female adolescents more significantly than the male counterparts.

Conclusion

The findings from the study concluded that level of depression have significant effect as a result of exposing adolescents with mental health challenges who abuse substances to Dialectic Behaviour Therapy, Assertiveness Training and the control group. It was however found that there is no

significant difference in the level of depression on mental health challenges among adolescents who abuse substances in the three experimental groups due to gender.

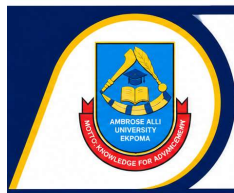
Recommendations

In the light of the findings from the study, the following recommendations were made:

1. The four core components of Dialectic behaviour therapy should be inculcated into the Junior Schools curriculum to develop in adolescents the ability to take responsibility of their actions.
2. Every adolescent needs to go through Assertiveness training as part of school learning to increase their ability to make personal decisions.
3. Gender prejudice should be ignored in the management of mental health challenges among adolescents with levels of depression. Thus, both male and female victims should be given equal treatment.

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