
**EFFECTS OF COGNITIVE AND RATIONAL EMOTIVE BEHAVIOUR
THERAPIES ON DRUG ABUSE OF SENIOR SECONDARY SCHOOL STUDENTS
IN IBADAN**

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ABSTRACT: *This study investigated the effects of cognitive behaviour therapy and rational emotive behaviour therapy on drug abuse of senior secondary school students in Ibadan, Nigeria. The study adopted a pretest-posttest, control group Quasi-experimental design. Multi-stage sampling technique was used to select 120 participants from three randomly selected secondary schools in Ibadan. The participants were randomly assigned to treatment and control groups. The two treatment groups were exposed to eight-week training in cognitive behaviour and rational emotive behaviour therapies, while participants in the control group received no training. One validated instrument: School Drug Abuse Rating Scale (DARS) as used and four hypotheses were tested at 0.05 level of significance. Data were analysed using Analysis of Covariance and MCA. The results of the study revealed that there was significant main effect of treatment on the ability of student's to overcome their drug abuse challenges ($F(3,116) = 6.613, p < .05$). Also, the findings indicated that Cognitive Behaviour and Rational Emotive Behaviour Therapies were effective in effecting a behavioural change in students with challenges of drug abuse. Likewise, the result further revealed that there was no significant difference in the main effect of age between (younger and older); gender (male and female) on the drug abuse act of student participants. Also, the three way interaction effect of treatment with age and gender was not significant. Therefore, school authorities should adopt the two interventions as to effectively manage the challenging issue of drug abuse among secondary school students' in school.*

KEYWORDS: School, Student, Drug abuse, Cognitive behaviour therapy, rational emotive behaviour therapy, Gender, Age, and Ibadan.

INTRODUCTION

The negative consequences of drug abuse on the well-being of Nigerian youths in all ramifications, has necessitated a clarion call for the Nigerian society to live up to its responsibility. Presently, youths vividly express high level of morally bankruptcy, decadent and helplessness detrimental to their growth and national development. The Nigerian youths, considering the high level of competitiveness among nations of the world due to globalization are supposed to serve as the nexus of development and technological advancement. However, this expectation could be a mirage if the Nigerian youths with their challenge of drug abuse are not helped, re-orientated, revitalized and collectively salvaged together in order to prevent the total degeneration and loss of our societal values and ideals and a potential human capital developmental disaster.

This is premised on the fact that the menace of drug abuse has eaten very deep into the fabrics of our society. Majority of the Nigerian youths ignorantly without being aware of the consequences depend on one form of drug or the other for their various daily activities - social, educational, political, moral, etc. However, the consequences of drug abuse are so devastating and very shameful to the extent that both national and international organizations are also worried about the spread of this scourge among the Nigerian youths resulting to social violence among youths, armed robbery, mental disorders, 419 syndrome, social miscreants (Area boys and girls), school dropout, lawlessness, lack of respect for elders, rape, and many more of the social evils.

Therefore, the growing concern is that youths in Nigeria are highly involved in illicit drug use at an alarming rate. For young people, alcohol and drug abuse interferes with their cognitive and emotional development, increases the chance of accidental injury and death, and magnifies the likelihood of drug dependency. Drug abuse is a major gateway to crime and this undermines development by eroding social and human capital development. This degrades quality of life and has negative impact on the functioning and productive ability of youths. In the case of Nigeria, Substance abuse and addiction is becoming increasingly widespread and various reports of rapid situation assessments of drug abuse and addiction in the country show a picture of widespread consumption of cannabis (10.8%), followed by psychotropic substances (mainly the benzodiazepines and amphetamine-type stimulants) 10.6% and to a lesser extent heroin (1.6%) and cocaine (1.4%) in both the urban and rural areas. The use of volatile organic solvents (.053%) is reported to be becoming popular, especially among the street children, in-school youth and women. Thus, a concern for the control of drug abuse and addiction is not only necessary but germane to ensuring peaceful societal social co-existence and national development (Makanjuola, Daramola & Obembe, 2007).

This brings to bear the fact that though drug abuse is a major public health problem all over the world (UNODC, 2005). The use and abuse of drugs have become one of the most disturbing health related phenomena in Nigeria and other parts of the world. NAFDAC (2000) as cited by Haladu (2003) explained the term drug abuse as excessive and persistent self-administration of a drug without regard to the medically or culturally accepted patterns. It could also be viewed as the use of a drug to the extent that it interferes with the health and social function of an individual. World Book Encyclopedia (2004) defined drug abuse as the non-medical use of a drug that interferes with a healthy and productive life.

Manbe (2008) defined drug abuse as the excessive, maladaptive or addictive use of drugs for non-medical purpose. Abdulahi (2009) viewed drug abuse as the use of drugs to the extent that it interferes with the health and social function of an individual. In essence, drug abuse may be defined as the arbitrary overdependence or mis-use of one particular drug with or without a prior medical diagnosis from qualified health practitioners. It can also be viewed as the unlawful overdose in the use of drug(s). Odejide (2000) warned that drug abusers who exhibit symptoms of stress, anxiety, depression, behaviour changes, fatigue and loss or increase in appetite should be treated by medical experts and counselling psychologist to save them from abnormality.

Majority of Nigerian youths ignorantly depend on one form of drug or the other for their various daily activities – social, educational, political, moral etc. Such drugs include: Tobacco, Indian hemp, cocaine, morphine, Heroin, Alcohol, ephedrine, Madras, Caffeine,

Glue, Barbiturates, Amphetamines, etc. Oshikoya and Alli (2006) in their studies on perception of Drug Abuse amongst Nigerian undergraduates identified dependence and addiction as one of the major consequence of drug abuse, characterized by compulsive drug craving seeking behaviours that persist even in the face of negative consequences. These changes are maladaptive and inappropriate to the social or environmental setting and could place the individual at risk of harm. In view of this context therefore, drug use among young people should be a matter of concern to all Nigerians, especially the government, parents, school heads, the leaders of religious groups and other NGOs.

LITERATURE REVIEW

Falco (1988) as cited by Sambo (2008) states that “chronic use of substances can cause serious, sometimes irreversible damage to adolescent’s physical and psychological development; also the use of drugs could be beneficial or harmful depending on the mode of use. A drug refers to a substance that could bring about a change in the biological function through its chemical actions (Okoye, 2001). It is also considered as a substance that modifies perceptions, cognition, mood, behaviour and general body functions (Balogun, 2006). They could thus, be considered as chemical modifiers of the living tissues that could bring about physiological and behavioural changes (Nnachi, 2007). Drug abuse is a major public health problem all over the world (UNODC) (2005). The use and abuse of drugs by adolescents have become one of the most disturbing health related phenomena in Nigeria and other parts of the world (NDLEA; 1997). Several school going adolescents experience mental health programme, either temporarily or for a long period of time. Some become insane, maladjusted to school situations and eventually drop out of school.

Students, especially those in secondary school tend to see the drug user as one who is tough, bold and strong. Many youngsters have been known to use drugs at the instance of peers, elders or siblings. Students who usually feel inadequate have been known to use drugs to achieve social acceptance. Esen (1979) stated that Nigerian secondary school adolescents under the influence of Indian hemp shed all inhibitions and produce behaviour that is inconsistent with school discipline. He went further to observe that the increasing incidence of drug abuse among secondary school students is a contributory factor in the ugly confrontation between school administration and students.

Fayombo and Aremu (2000) in their research on the effect of drug abuse on educational performance of some adolescent drug abusers in Ibadan found that the misuse of marijuana had reached an epidemic level in the present Nigeria society, and that drug abuse could lead to reduce academic achievement or even halt one’s entire academic process. Adesina, (1975); Ekpo, (1981); and Orubu, (1983) in their studies dwelled extensively on reasons students use drugs include success in examination, social acceptance and initiation of peers.

According to Carroll, Rounsaville, Nich, Gordon, Wirtz and Gawin (2011) cognitive-behavioral strategies are based on the theory that learning processes play a critical role in the development of maladaptive behavioral patterns. Individuals learn to identify and correct problematic behaviors by applying a range of different skills that can be used to stop drug abuse and to address a range of other problems that often co-occur with it. Cognitive-behavioral therapy generally consists of a collection of strategies intended to enhance self-control. Specific techniques include exploring the positive and negative consequences of

continued use, self-monitoring to recognize drug cravings early on and to identify high-risk situations for use, and developing strategies for coping with and avoiding high-risk situations and the desire to use. A central element of this treatment is anticipating likely problems and helping patients develop effective coping strategies. Research indicates that the skills individuals learn through cognitive-behavioral approaches remain after the completion of treatment. In several studies, most people receiving a cognitive-behavioral approach maintained the gains they made in treatment throughout the following year (Carroll, et al. 2011).

Furthermore, Carroll, et al. (2011) affirm that CBT, is based on the idea that people exercise learned patterns of thought in responding to external stimuli. Unhealthy, flawed, or irrational patterns of thought lead to negative outcomes such as depression, frustration, and anxiety, while healthy patterns of thinking lead to positive outcomes like feelings of peace, well-being, happiness, calm, and confidence. In essence, CBT teaches patients that external events do not determine mental health and happiness.

Rational Emotive Behavioural Therapy is a counseling technique that is sometimes offered to help people increase life satisfaction, to reduce the symptoms of disorders such as anxiety or panic, or to avoid negative emotions that increase the odds of addiction relapse. REBT strives to help people achieve greater happiness in life. It is used in addiction treatment to help people understand how they control their negative feelings. It teaches people new to recovery techniques to use in real-world situations that increase happiness and life satisfaction, and in doing so, reduces the odds of relapse. There has been some research carried out on the effectiveness of REBT with substance abuse. For example, Mas-Baga (2000) reports on a programme where REBT was used as the treatment of choice in a therapeutic community. In a review of the research into the effectiveness of REBT for alcohol problems, Terjesen et al. (2000) concluded that there was strong evidence for REBT's effectiveness.

Research on how gender influences substance use and substance-abuse-related problems has established clear differences between women and men in several important areas. Women typically consume less alcohol than men when they drink, drink alcohol less frequently, and are less likely to develop alcohol-related problems than men (Fillmore et al. 1997). Similarly, women are less likely than men to use illicit drugs and to develop drug-related problems (Greenfield et al. 2003a). Conversely, when women do develop substance abuse problems; they tend to develop them faster than men do. For example, although women tend to be older than men, on average, when they begin a pattern of regular drunkenness, women's drinking-related problems (e.g., loss of control over drinking, negative consequences of drinking) appear to progress more quickly than those of men (Randall et al. 1999).

This faster progression also means that women experience shorter intervals than men between onset of regular drunkenness and first encountering the negative consequences of drinking, which include physical problems, interpersonal difficulties, negative intrapersonal changes (such as in personality or self-esteem), poor impulse control, and reduced ability to maintain normal social roles and responsibilities. Women also experience shorter intervals between first loss of control over drinking and onset of their most severe drinking-related consequences, and shorter intervals between onset of regular drunkenness and treatment-seeking (Randall et al. 1999). Women report more severe problems and experience more health-related consequences from substance use (Bradley et al. 1998), and their substance-related problems interfere with functioning in more life domains compared with men

(Fillmore et al. 1997). Accurate figures for the prevalence of illicit drug use in general populations are difficult to identify due to the covert nature of the activity. However, in Great Britain, changes in the age of people taking illicit substances are monitored through the British Crime Survey (BCS). Against a backdrop of significant falls in the rate of last-year prevalence for the use of any illicit drug for the youngest age groups (13–19, 20–24 and 25–29 years) between 1998 and 2010/2011, the BCS shows that illicit drug use among those aged 15–40 years has remained relatively on the increase (Gossop & Moos 2012).

Theories of Drug Abuse

Theories of drug abuse indicate that some people truly depend on certain drugs for their survival due to a number of factors. The major emphasis of the theories is that people have their individual reasons for depending on one type of the drug or the other. Such reasons, according to Eze and Omeje (1999) are explained by the following theories. Personality theory of drug abuse, learning theory of drug abuse, biological theory of drug abuse and socio-cultural theories (a) Personality Theories of Drug Abuse: The main emphasis of the theories are that there are certain traits or characteristics in the individuals that abuse drugs. Such personality characteristics, according to Eze and Omeje (1999) are inability to delay gratification, low tolerance for frustration, poor impulse control, high emotional dependence on other people, poor coping ability and low self esteem. Individuals with these personality characteristics find it difficult to abstain from drug abuse. (b) Learning Theory of Drug Abuse: It maintains that dependence or abuse of drugs occurs as a result of learning. The learning could be by means of conditioning, instrumental learning or social learning. (c) Biological Theory of Drug Abuse: The theory maintains that drug abuse is determined by the individuals biological or genetic factors which make them vulnerable to drug addiction (d) Socio-cultural Theories of Drug Dependence/Abuse: The theories maintain that abuse is determined by socio-cultural values of the people.

Research Hypotheses

In this study the following hypotheses were tested at 0.05 level of significance:

1. There is no significant main effect of treatment on drug abuse of senior secondary school students.
2. There is no significant main effect of age on drug abuse of senior secondary school students.
3. There is no significant main effect of gender on drug abuse of senior secondary school students.
4. There is no significant interaction effect of treatment, age and gender on drug of senior secondary school students.

METHODOLOGY

Research Design

A 3x2x2 Quasi-experimental factorial matrix design was used for this study. The variables considered are (i.e. cognitive behaviour therapy, rational emotive behaviour therapy and control group); age (older and younger) and gender (male and female) secondary school students. This is highlighted below in table 1.

TABLE 1.

A 3x2x2 Factorial Matrix Design determining the effects cognitive behaviour therapy and rational emotive behaviour therapy on drug abuse of senior secondary school students.

Treatment	GENDER				
	Male		Female		Total
	Younger Students 14-16yrs	Older Students 17-20yrs	Younger Students 14-16yrs	Older Students 17-20yrs	
A1 Cognitive Beh Therapy	A1 B1n=11	A1 C1n=9	A1 B2n=12	A1C2n=8	40
A2 Rational Emotive Beh	A2 B1n=8	A2 C1n=12	A2 B2n=12	A2 C2n=8	40
A3 Control Group	A3 B1n=7	A3 C1n=13	A3 B2n=8	A3 C2n=12	40
Total	26	34	32	28	120

Population The population consists of all senior secondary school students in Ibadan.

Sample The sample for this study consists of one hundred and twenty (120) (male and female) (SSS III) senior secondary school students in Ibadan.

Sampling Technique The multi-stage sampling technique was used to select hundred and twenty (120) (male and female) (SSS III) senior secondary school students, from three randomly selected secondary schools in Ibadan used for the study.

Instrumentation: Drug Abuse Rating Scale (DARS): Animasahun, R.A., (2009) This was developed and validated by the researcher. It is a 20 item test measuring drug abuse behaviour of students. The items were developed on 5 point Likert format. Such items include: the instrument has proven high coefficient reliability.

Procedure of Data Collection

The researcher obtained permission from the school authorities used for the study. The consent of participants were equally sought and obtained. Having sought and obtained the consent of the participants, the researcher randomly assigned the participants into three groups. This consists of two experimental groups and one control group. The treatment groups were trained while the control group members were engaged with their normal school work. The training was conducted during their break time. The researcher conducted training sessions with the two experimental groups for a period of 8weeks and for thirty minutes. The participants and the researcher agreed on suitable days of the week when the training sessions were held. The days and time were (Tuesday and Wednesday between 1pm – 1.30pm).

Method of Data analysis

The following statistical designs were used in this study: ANCOVA (Analysis of Covariance) and MCA (Multiple Classification Analysis).

Hypothesis One

There is no significant main effect of treatment on drug abuse of senior secondary school students.

To test this hypothesis, Analysis of Covariance (ANCOVA) was employed to analyse the post test scores of drug abuse of senior secondary school students using the pre-test scores as covariates to find out if post experimental differences were significant. The result obtained was tested at 0.05 significant levels as presented in tables 2

Table 2: Summary of Analysis of Covariance (ANCOVA) of pre-post test of drug abuse of Senior Secondary School Students according to Treatment Groups, Age and Gender

Source	Sum of Squares	DF	Mean Square	F	Sig.	Remark
Covariates	1.092	1	1.092	.284	.595	
Main effects	63.325	4	15.831	4.118	.004	
Treatment Groups	50.847	2	25.424	6.613	.002	Sig.
Age	8.796	1	8.796	2.288	.133	n.s.
Gender	3.682	1	3.682	.958	.330	n.s.
2-ways Interactions	28.274	5	5.655	1.471	.205	
Trt. groups x Age	16.400	2	8.200	2.133	.124	n.s.
Trt Groups x Gender	4.655	2	2.327	.605	.548	n.s.
Age x Gender	1.792	1	1.729	.450	.504	n.s.
Trt Groups x Age x Gender	3.919	2	1.960	.510	.602	n.s.
Explained	96.610	12	8.051	2.094	.023	
Residual	411.357	107	3.844			
Total	507.967	119	4.269			

The result in table 2 showed that there is significant main effect of treatment in the pre-post practice of drug abuse in the experimental and control groups ($F(3,116) = 6.613, p < .05$). This means that there is a significant main effect of treatment in the mean posttest practice of drug abuse scores of participants exposed to treatment and the control group. This also implies that students in the experimental groups benefited from the treatment package as it develop in them the ability to discontinue the practice of the abuse of drug better than students in the control groups who were not exposed to any treatment package Therefore; hypothesis 1 is rejected. In order to find out the magnitude of groups mean scores, Table 3 is presented.

Table 3:
Multiple Classification Analysis (MCA) showing the direction of the results in the Pre-Post Practice of Drug Abuse of Students According to Treatment Groups, Age and Gender

Grand Mean = 10.48

Variable Category	+	N	Unadjusted variation	Adjusted Mean Score	Eta	Adjusted for independent + covariates deviation	Beta
Grand Mean	=						10.48
Treatment Groups:							
Cognitive Beh		40	.98	11.46		.92	
Rational Emotive		40	.95	11.43		-.41	
Control		40	-.88	9.6		-.51	
					.32		.32
Age:							
Young		58	-.33	10.15		.24	
Old		62	-.32	10.16		-.24	
					.16		.12
Gender:							
Male		60	-.13	10.35		-.18	
Female		60	-.12	10.36		.18	
					.06		.09
Multiple squared Multiple R	R-						.127 .356

The MCA as observed in Table 3 with the performance of all the groups in practice of drug abuse. The Cognitive Behaviour group had the highest adjusted posttest mean score ($\bar{X} = 11.46$) followed by Rational Emotive Behaviour Therapy group with the adjusted mean score ($\bar{X} = 11.43$) while the Control group had the least adjusted posttest mean score ($\bar{X} = 9.6$). This indicated that the participants in the treatment groups had high positive attitude on their control of their practice of drug abuse while participants in the control group had low ability to control the practice of drug abuse. The MCA further revealed the differential-values of the pre and post treatment outcome and equally shows the effectiveness of the treatment package over the control (i.e. non-treatment group). These values were obtained by adding the grand mean ($\bar{X} = 10.48$) with the respective adjusted deviation. The table also indicated that treatment accounted for as much as 13 percent ($MR^2 = .13$) of the variance of the participants practice of drug abuse scores while the remaining 87 percent are due to other unexpected sampling errors.

Hypothesis Two

There is no significant main effect of age on drug abuse of senior secondary school students. Table 2 showed that there was no significant main effect of age in the pre-post practice of drug abuse scores of senior secondary school students. between young and old students ($F(2,117) = 2.560, P < .05$). Therefore the null hypothesis is not rejected. The MCA table 3 showed that the mean score for younger students is (10.15) while that of older students is (10.16). This shows that the mean difference in the practice of drug abuse scores between

younger and older students is not significant. This implies that their age difference has no significant effect on their practice of drug abuse.

Hypothesis Three

There is no significant main effect of gender on drug abuse of senior secondary school students. Table 2, showed that there was no significant main effect of gender in the pre-post scores of students' practice of drug abuse between male and female participants ($F(2,117) = 0.958, P > .05$). Therefore the null hypothesis is accepted. The MCA table 3 further revealed that the mean score for male is (10.35) while that of female is (10.36). This shows that the impact of the difference of gender on students' practice of drug abuse is not significant. This is attained by adding the grand mean to the unadjusted variation figure of male and female of participants.

Hypothesis Four

There is no significant interaction effect of treatment, age and gender on drug abuse of senior secondary school students. Table 2 showed that in the 3-way interactions, no significant interaction was found ($F(12,107) = 0.510, P > .05$). This implies that the impact of the interaction of treatment, age and gender on the practice of drug abuse scores of participants was not high enough for it to be significant. Therefore the null hypothesis is accepted.

DISCUSSION

The result of the findings of hypothesis one revealed that there was significant main effect of treatment on the pretest/posttest drug abuse scores of senior secondary school students involve in act of drug use in the experimental and control groups. Therefore the hypothesis is rejected. This means that the cognitive behaviour and rational emotive behaviour therapies were effective in effecting a positive change of behaviour to drug use among students that participated in the intervention programme. The reason for this could be that these students were able to apply the principles learnt in the programme. This supports Odejide (2000) contestation that drug abusers who exhibit symptoms of stress, anxiety, depression, behaviour changes, fatigue and loss or increase in appetite should be treated by medical experts and counselling psychologist to save them from abnormality.

The results of hypothesis two showed that there was no significant main effect of age in the posttest drug abuse scores of students who practice drug use between younger and older senior secondary school students that participated in the intervention programme. Therefore the null hypothesis is accepted. This implies that there was no significant main effect of age on the drug abuse scores of younger and older student participants exposed to the treatment programmes. The reason could be adjourned fact that drug abuse is a major public health problem all over the world (UNODC, 2005). The use and abuse of drugs have become one of the most disturbing health related phenomena in Nigeria and other parts of the world.

The result of hypothesis three revealed that there was no significant main effect of gender in the posttest drug abuse scores of students who are involved in act of drug abuse between male and female participants. Therefore, the hypothesis is accepted. This implies that the issue of gender identity did not influence the response to change positively to the act of drug abuse among participants. The reason for this could be that in the case of Nigeria, Substance abuse and addiction is becoming increasingly widespread and various reports of rapid situation

assessments of drug abuse and addiction in the country show a picture of widespread consumption of cannabis (10.8%), followed by psychotropic substances (mainly the benzodiazepines and amphetamine-type stimulants) 10.6% and to a lesser extent heroin (1.6%) and cocaine (1.4%) in both the urban and rural areas. The use of volatile organic solvents (.053%) is reported to be becoming popular, especially among the street children, in-school youth and women. Thus, a concern for the control of drug abuse and addiction is not only necessary but germane to ensuring peaceful societal social co-existence and national development (Makanjuola, Daramola & Obembe, 2007).

The result of hypothesis four showed that there was no significant interactive effect in the interactions between treatment, age and gender on the posttest drug abuse scores of participants. This suggests that the interaction of treatment, age and gender did not influence the posttest drug abuse scores of senior secondary school student's participants. Therefore the null hypothesis is accepted. The reason for this could be that majority of Nigerian youths ignorantly depend on one form of drug or the other for their various daily activities – social, educational, political, moral etc. Such drugs include: Tobacco, Indian hemp, cocaine, morphine, Heroin, Alcohol, ephedrine, Madras, Caffeine, Glue, Barbiturates, Amphetamines, etc. Oshikoya and Alli (2006) in their studies on perception of Drug Abuse amongst Nigerian undergraduates identified dependence and addiction as one of the major consequence of drug abuse, characterized by compulsive drug craving seeking behaviours that persist even in the face of negative consequences. These changes are maladaptive and inappropriate to the social or environmental setting and could place the individual at risk of harm.

IMPLICATIONS OF THE STUDY

Using the appropriate psychological intervention, the act of drug abuse among students could be managed as to make them more functional and productive.

The study provides reasonable information that can be applied in the management of drug abuse related issues that impact negatively on the academic success of students in school.

The findings of the study highlight the fact that with the application of cognitive behaviour therapy and rational emotive behaviour therapy secondary school student's school involve in the act of drug abuse would change for the better.

CONCLUSION

Drug abuse is a problem that is causing serious concern to both individuals and government all over the world. The problem is prevalent among adolescents who in most cases are ignorant about the dangers inherent in drug abuse. Many of them engaged in drug abuse out of frustration, poverty, lack of parental supervision, peer influence and pleasure. However, with effective counselling and intervention programmes, the problems can be tackled.

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