

# Effects of Peer Tutoring and Cognitive-Behaviour Therapy in Reducing Delinquent Behaviour among Secondary School Adolescents in Bayelsa State

<sup>1</sup>Asangolo, Stella, PhD

Department of Educational Psychology, Guidance and Counselling,  
Isaac Jasper Boro College of Education Sagbama, Bayelsa State

<sup>2</sup>Dennis, Emmanuel Akpoebi, PhD

Department of Educational Psychology, Guidance and Counselling,  
Isaac Jasper Boro College of Education Sagbama, Bayelsa State

**Abstract-** The objective of this study was to determine the differential effects of Peer tutoring (PT) and Cognitive-Behaviour Therapy (CBT) in reduction of delinquent behaviour among secondary school adolescents in Bayelsa State. One research question and one hypothesis guided the study. Quasi-experimental research design was used for the study. A sample of sixty-seven (67) students in senior secondary school (SS1 and 11) was identified as delinquent (drug addiction) using the Delinquent Behaviour Scale (DBS). They were randomized into four non-equivalent groups, three experimental and one control group. The experimental groups were treated with peer tutoring, cognitive behaviour therapy and a combination of peer tutoring and cognitive behaviour therapy for six weeks while the control group received no treatment. The instrument for data collection which was adapted and used for the study was the Leed Dependency Questionnaire developed by Raistrick, Bradshaw, and Tober (1994). The instrument was validated by test experts and the reliability was established using Cronbach alpha with 0.89 for DBS and 0.84 for Addiction subscale (AS). Data collected were analyzed with mean, standard deviation, and two-way analysis of variance. Results revealed that female students in the group taught with PT had a reduced drug addiction based on their posttest mean scores, Also, male students in the group taught with CBT had a reduced drug addiction. Based on the findings, it was recommended that the National Drug Law Enforcement Agency (NDLEA) should intensify its anti-drug campaigns using peer tutoring and cognitive behaviour strategies to ensure a drug addiction-free society with a special focus on the students because they are our future leaders.

**Keywords:** Peer tutoring, Cognitive behaviour therapy, delinquent behaviour; drug addiction.

## Introduction

As a society develops, many changes take place technologically, economically, socially, politically, morally, and culturally. The outcome of these changes may be negative or positive. In the case of social change, adolescents' delinquency seems to be among the most unfortunate outcomes. When adolescents are exposed to different cultures, new norms and values resulting from the sophistication, disorganization and re-organization of society, these tend to push them into engaging in delinquent acts. Nwankwo, Kemjika, and Ekeh (2006) state that delinquent act is a deviation from the social codes of a group or society.

Delinquency can be regarded as any form of behaviour among children in late childhood or adolescence that society does not approve and accept, or acts that run contrary to set standards, values, norms, beliefs and ideologies (Ekeh, 2014). It is therefore any form of behaviour that disrupts social norms, sometimes criminal in nature and penalized under the law. Cases abound where students hack other students to death or cause injury while some use dangerous weapons at the least provocation. Secondary schools supposedly should accommodate young ones within the age range of 11 and 17 and this age bracket falls within a particular group known as adolescents (Nwolisa & Olusakin 2013). Students with delinquent behavioural problems are of particular concern in secondary schools, where adolescents who are not well prepared for secondary school life are prone to delinquent influences. These influences may escalate to more criminal tendencies and other terrible social vices if not checked or stopped. A good number of the delinquent acts that are carried out by adolescents which would be a focal point for discussion in this research study is drug addiction. Bryant and Zimmerman (2002) confirm that over one million adolescents abuse alcohol which constitutes 3-4% of teenagers in America. Therefore, alcohol abuse among adolescents is a societal problem. The religious prohibition of intoxicants covers all kinds of drinks and drugs which change a person's rational state. It includes wine, beer, and other forms of alcoholic drinks. Others include opium and cocaine which are among the causes of delinquency.

Today, many Nigerian youths are becoming addicted to drugs such as alcohol and cigarette smoking, while Nigeria gradually journeys from the position of a drug-consuming nation to that of a drug-producing one. Countless youngsters are identifying with miscreants who practice the use of substances like smoking marijuana, drinking alcohol, taking heroin and cocaine. Other substances like Indian hemp and alcohol which are locally produced in Nigeria and some other ones like Methamphetamine and tablets with codeine which can intoxicate are mostly found in schools (Staff, 2012).

Behaviour can be shaped or modified through appropriate psychotherapeutic interventions. In effect, using behaviour modification procedures which may include peer tutoring and Cognitive behaviour therapy in schools would tackle adolescent delinquent problems such as drug addiction. It is against this background that this study seeks to examine the differential effects of peer tutoring and Cognitive behaviour therapy in managing delinquent behaviour among secondary school adolescents in Bayelsa State, Nigeria.

Peer tutoring can be defined as an instructional system which allows students to teach their fellow students (Harris, 2002). It is the procedure by which a proficient pupil with minimal training and guidance from teachers helps one or more students at the same grade level to learn a skill or concept (Thomas, 2000). Peer tutoring is a procedure which has to do with an instructional strategy where students are taught by their peers, who had been trained and supervised by the classroom teacher. It involves having students work in pairs with another student of the same age or grade. It can be used to aid in the instruction of a few specific students or on a class-wide basis. The approach is used as a supplement to teacher-directed instruction in the classroom. It has been exceedingly powerful as a way of improving students' academic, social, and behavioural operative which goes beyond typical teacher-directed instruction. When implemented in addition to teacher-directed instruction, among other things, it helps to minimize and/or prevent delinquent behaviour more than only teacher-directed instruction (Centre for Promoting Research to Practice, as cited in Eskay, Onu, Obiyo & Obidoa, (2012). Eskay, Onu, Obiyo and Obidoa (2012) investigated the use of peer tutoring, cooperative learning and collaborative learning as strategies to reduce anti-social behaviour among adolescents. A sample of 200 teachers was randomly selected from four secondary schools. The questionnaire was designed by the researchers for data collection. The data were analyzed by means of mean and standard deviation. The major findings of the study revealed that teachers are aware of peer tutoring, cooperative learning and collaborative teaching as strategies for reducing anti-social behaviour of schooling adolescents.

According to Aderanti and Hassan (2011), Cognitive behaviour therapy is aimed at correcting faulty information processing. The trainer does not tell the aggressive youngster that his belief is wrong but rather asks thought-provoking questions to draw out the meaning, function, usefulness and consequences of the aggressor's beliefs. Cognitive behaviour therapy can thus be defined as the process of learning to refute cognitive distortions, or fundamental "faulty thinking" with the aim of replacing one's irrational counter-factual beliefs with more accurate and beneficial ones. Self-belief has a great effect on how an individual goes through life. It influences life since negative self-belief will lead to poor success (Nwadinigwe & Longe, 2007). In effect, Cognitive-behavioural therapy is a systematic psychological intervention usually employed in adjusting human behaviour and attitudes. In line with this, Omoegun (2003) asserted that Cognitive behaviour therapy can be used by counsellors and psychologists to effect changes in clients' behaviour from illogical thoughts to logical thinking. Yahaya (2006), who worked with 50 secondary school students ages 14-20 years in Ilorin, Nigeria, using Cognitive Restructuring training package, succeeded in producing a change in the thinking pattern of the respondents. Ellis (1998) proposed that Cognitive Restructuring Theory is based on the notion that individuals have a predisposition to hold certain beliefs about themselves, others and the external environment. These beliefs can influence feelings and behaviour, therefore leading either to positive or negative behavioural patterns.

Yunusa, Abdullahi, Oliagba, Sani, and Umma (2014), in their study, investigated the effect of cognitive restructuring intervention on tobacco smoking among adolescents in senior secondary schools in Zaria, Kaduna State, Nigeria. This study employs a quasi-experiment, non-equivalent control group, and pretest-posttest design. The sample was 129 (71 male and 58 female) schooling adolescents drawn from four schools in Zaria Educational zone. An instruction-tagged Cognitive Behaviour Intervention Scale (CBIS) was adopted and used for the study. Data were analyzed using means t-test and analysis of covariance (ANCOVA). Findings indicate that cognitive restructuring intervention programme (CRIP) significantly affects tobacco use cessation.

Considering the high involvement of adolescents in the use of drugs, violence, and unprotected sex and its hampering effects on them, their families and inadvertently the Nigerian economy, it becomes pertinent to determine measures to help adolescents with delinquent behaviours. It is in light of this that this research study focuses on the effect of peer tutoring and Cognitive behaviour therapy as means through which delinquent behaviours of secondary school adolescents would be managed or reduced.

## Statement of the Problem

Adolescence is often a period during which individuals try new attitudes, roles and behaviours. Some adolescents may choose to engage in delinquent behaviours, for some, the experience will be one of experimentation or a passing phase. For others, it will be the dawn of a path to problems that follow them into adulthood.

## Research Questions

The following research questions are answered in this study

1. What is the interaction effect of PT, CBT, PT & CBT and Control group based on gender in the reduction of drug addiction as determined by their post-test mean scores?

## Hypotheses

1. There is no significant interaction effect of treatment PT, CBT, PT & CBT and Control group based on gender in the reduction of drug addiction among participants as determined by their posttest mean scores.

## Research Methodology

The research design adopted in this study is quasi-experimental. Quasi-experimental research design according to Levy and Ellis (2011), Leedy and Omrod (2010), and Okpolovie (2010), is a type of experimental design in which the researcher had limited leverage and coverage over the selection of the study participants. They also asserted that in quasi-experimental research, the researcher does not have the ability to ensure the sample selected is as homogenous as desirable. Furthermore, Akinade and Owolabi (2011) defined quasi-experimental design as that which resembles experimental design but differs from true experimental design because subjects are not randomly assigned to groups (experimental and control).

The instrument Delinquent Behaviour Scale was administered by the researchers to all the students in SS1 and SS2 with a total population of 305, out of which 67 were identified as delinquents, those whose mean scores were above 25 were regarded as delinquent and so were conscripted into the research. The researchers adapted the Leed Dependency Questionnaire (LDQ) that was developed by (Raistrick, Bradshaw & Tober 1994). The instrument was modified and adapted to Nigeria's situation. The scale consists of 10 items for the assessment of drug dependency /addiction in both the pre-test and post-test on adolescents. The items on the questionnaire were responded to on a four-point Likert scale ranging from (1) never, (2) sometimes, (3) often and (4) nearly always. The reliability process involved one-time administration of the instrument. Thirty copies of the instruments were given to thirty students who were within the population but not part of the sample size. The delinquent Behaviour Scale (DBS) reliability coefficient was calculated to be 0.89, and 0.84 for Addiction Subscale (AS).

## Treatment Procedure / Format

The research lasted six weeks with eight sessions during which there was a researcher, peer tutor and participant interaction. This was done in five stages: recruitment, pretest, treatment, post-treatment and evaluation. Prior to treatment, delinquent behaviour (drug addiction) was first diagnosed in the students through the use of the Delinquent Behaviour Scale (DBS). The subjects were randomly assigned into experimental groups and a control group. In doing this, balloting was used to assign subjects into experimental and control groups (A, B, C, D) in which the A group received Peer tutoring treatment (PTT), the B group received Cognitive Behaviour Therapy (CBT) and C group also received Peer Tutoring and Cognitive Behaviour Therapy (PT and CBT combined) and the D group received no treatment, (Control group). Two adapted instruments were used for the study: Leed Dependency Questionnaire (LDQ) that was developed by Raistrick, Bradshaw, & Tober 1994)

The data generated from the groups were used as they were relevant to the objectives of this study. The data collected were analyzed using mean and standard deviation, while the hypotheses were answered using a two-way analysis of variance.

## Research Question

What is the interaction effect of PT, CBT, PT & CBT and Control and gender on the reduction of drug addiction based on their post-test mean scores?

## Hypothesis One

There is no significant interaction effect between the groups (PT, CBT, PT & CBT Control and gender) on the reduction of drug addiction based on their post-test mean scores of the students.

**Table 1.a: Mean and standard deviation scores of the groups and gender based on their posttest mean scores.**

Groups	Gender	Mean	Std. deviation	N
PT	Male	12.5385	2.56955	13
	Female	11.5000	1.37840	6
	Total	24.0385	3.94795	19
CBT	Male	13.6364	2.76668	11
	Female	13.8750	2.03101	8
	Total	27.5114	4.79769	19
PT& CBT	Male	12.4444	2.65100	9
	Female	13.5556	2.35112	9
	Total	26.0000	5.00212	18
CONTROL	Male	28.8000	6.14003	5
	Female	33.6667	3.74975	6
	Total	61.6667	9.88978	11
Total	Male	56.6193	6.30952	38
	Female	72.5973	10.26841	29
	Total	129.2166	16.57793	67

Table 1.a revealed that female students in the group taught with PT had a reduced drug addiction with a mean value of 11.500 compared to their male counterparts with a mean value of 12.539 in the group taught with PT. Also, male students in the group taught with CBT had a reduced drug addiction with a mean value of 13.636 compared to their female counterparts with a mean value of 13.875 in the group taught CBT. Female student in the group taught with the combination of PT & CBT had a reduced drug addiction with a mean value of 13.556 more than their male counterparts with a mean value of 12.444 in the group taught with PT&CBT. The control group still retained a high level of drug addiction with the female having more drug addiction than the male student

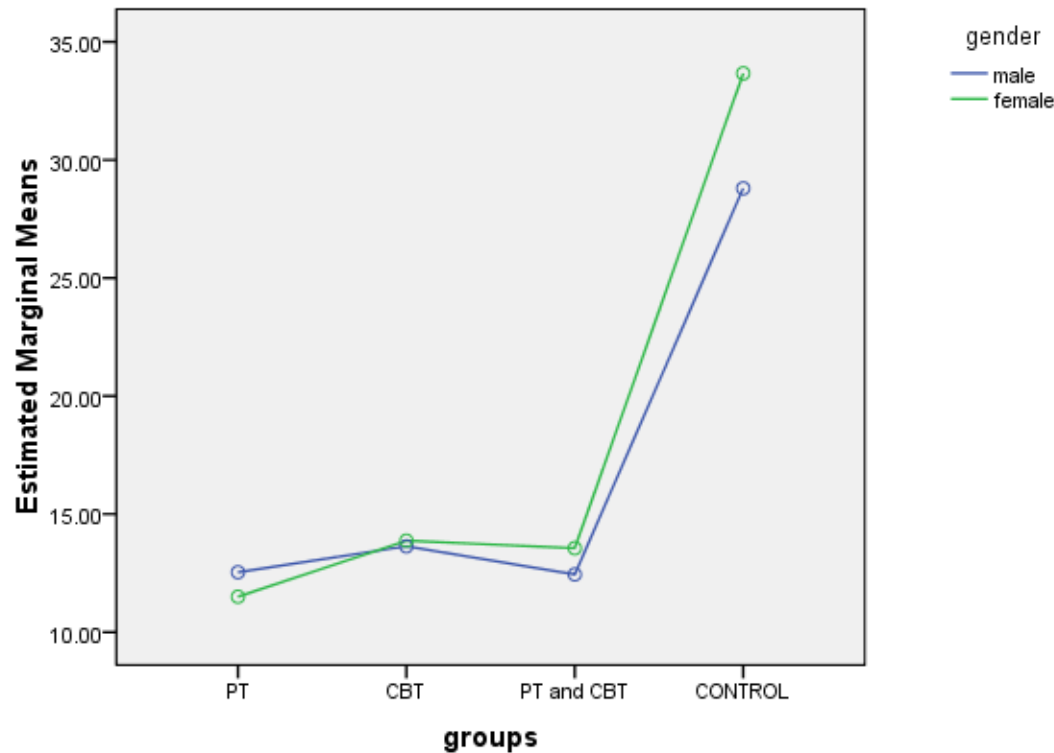
**Table 1.b: Two-way analysis of variance on the interaction of groups and gender on students' drug addiction reduction**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	4950.102 <sup>a</sup>	1	707.157	76.601	.000	.892
Intercept	20314.521	1	20314.521	2200.511	.000	.971
Groups	3747.936	1	1249.312	135.328	.000	.862
Gender	27.782	1	27.782	3.009	.088	.044
groups * gender	72.265	3	24.088	2.609	.059	.107
Error	600.062	62	9.232			
Total	27819.000	67				
Corrected Total	5550.164	66				

a. R Squared = .892 (Adjusted R Squared = .880)

Table 1.1a revealed that the sum of squares and mean square of groups are 3747.936 and 1249.312 respectively with F value of 135.328 which is significant at 0.000 compared to 0.05 Alpha. Gender had the sum of squares and mean square of 27.782 and 27.782 with F ratio of 3.009 which is not significant at 0.088 when compared to 0.05 Alpha. Also, group and gender have a sum of squares and mean square of 72.265 and 24.088 which is not significant at 0.059 when compared to 0.05 alpha.

### Estimated Marginal Means of posttest



#### Summary of Findings

The findings of this study are summarized as follows

1. Results revealed that female students in the group taught with PT had a reduced drug addiction compared to their male counterparts. Also, male students in the group taught with CBT had a reduced drug addiction compared to their female counterparts. Female student in the group taught with the combination of PT & CBT had a reduced drug addiction than their male counterparts. The control group still retained a high level of drug addiction with the female having more drug addiction than the male student.

#### Discussion of findings

**The interaction effect between the groups (PT, CBT, PT& CBT, Control and Gender) on the reduction of drug addiction of students based on their posttest mean scores.**

The findings revealed that female students in the group taught with PT had a reduced drug addiction with a mean value of 11.500 compared to their male counterparts with a mean value of 12.539 in the group taught with PT. Also, male students in the group taught with CBT had a reduction in drug addiction with a mean value of -13.875. Whereas, male students in the group taught with PT&CBT had a reduced drug addiction with a mean value of 12.444 compared to their female counterparts with a mean value of 13.556. The control group still retained a high level of drug addiction with females having more drug addiction than male students. With the Adjusted R<sup>2</sup> of .880, the result showed that the sum of squares and mean square of groups were 3747.936 and 1249.312 with F ratio value of 135.328 which was significant. Gender had the sum of squares and mean square of 27.782 and 27.782 with F ratio of 3.009 which was not significant at 0.05 alpha. The interaction of groups and gender had the sum of squares and mean square of 72.265 and 24.088 with F ratio of 2.609 which was not significant at 0.05 alpha.

The implication of this result could be that male adolescents by nature are more rigid in their cognitive processes. On the other hand, females are known to be subtle, weaker vessels that very little explanation could reduce their addiction proneness. This result is also in line with Larson (as cited in Torubeli, 2010) who investigated a three-year follow-up of aggressive elementary school boys who showed a decrease in drug and alcohol involvement and improved self-esteem.

#### Conclusion

Based on the findings of the study, the researchers concluded as follows:



1. Adolescents who exhibited acute and chronic drug addiction could be helped through Peer tutoring and cognitive behaviour therapy.

The results of this study also indicated that the two therapeutic techniques for the management of drug addiction based on gender were all effective.

### Recommendations

Teachers, parents, and other adult members of society should be encouraged to maintain peaceful and healthy relationships with adolescents.

The National Drug Law Enforcement Agency (NDLEA) should intensify its anti-drug campaigns using peer tutoring and cognitive behaviour strategies to ensure a drug addiction-free society with a special focus on the students because they are our future leaders.

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