

Effects of Peer Tutoring and Cognitive-Behaviour Therapies in the Dipping Delinquent Behaviour among Secondary School Adolescents in Bayelsa State

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Abstract

The study investigated the effects of Peer tutoring (PT) and Cognitive-Behaviour Therapies (CBT) in delinquent behaviour reduction among secondary school adolescents in Bayelsa State. One research question and one hypothesis guided the study. The quasi-experimental research design was used for the study and a sample of sixty-seven (67) students in senior secondary school (SS 1 and SS 2) were identified as delinquent (aggressiveness) using the Delinquent Behaviour Scale (DBS). Participants were randomized into groups. The experimental groups were treated with peer tutoring and cognitive behaviour therapies for six weeks while the control group received no treatment. The instrument was validated by test experts and the reliability was established using Cronbach alpha, Construct validity on Aggressiveness was calculated to be 0.79. Data collected were analyzed with mean, standard deviation and paired t-test. Results showed that peer tutoring (PT) and Cognitive behaviour therapy (CBT) significantly reduced aggressiveness based on their pre-test and post-test mean scores. Based on the results recommendations were made including that students should be equipped with the understanding and skills needed to positively reduce their aggressive behaviour would help them learn non-violent options for dealing with situations.

Keywords: Peer Tutoring, Cognitive-Behaviour Therapy, Delinquency, Aggressiveness

Introduction

Delinquency is the act of an adolescent violating the principles and rules of a society or departing from the acceptable norms and values that bind a society together. Delinquent behaviours are unruly acts characterized by covert and overt hostility and intentional aggression toward others.

Delinquency is a problem characterized by a consistent pattern of harming others or property, or breaking major acceptable rules or standards of behaviour. Delinquency can be regarded as any form of behaviour among children of late childhood or adolescence that the 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 are hacking other students to death or causing injury while some use dangerous weapons at the least provocation. Secondary schools supposedly should accommodate young ones within the age range of eleven and seventeen and this age bracket falls within a particular group known as adolescents (Nwolisa, Olusakin & ;Fashina, 2013). Delinquent action displayed by adolescents which would be the main point for discussions in this research was aggression.

Aggression has been broadly defined as a behaviour or disposition that is forceful, hostile or attacking. This behaviour may occur as a form of revenge or may even occur without aggravation. Aggression may be displayed in various forms such as verbal communication through yelling at another individual, or physically by engaging in some type of physical violence. Aggression can be direct behaviours such as hitting, kicking, biting, and pushing to mention a few. Additionally, aggression can take on an indirect form like teasing, bullying, spreading rumours, name-calling, or ignoring someone (Lakeland Behavioural Health System, 2017).

On the grounds of psychology, aggression or interpersonal violence is defined as actions taken deliberately by humans (e.g. specific behaviour, arranging certain situations, etc.), posing a threat or causing harm to the physical, mental, and social well-being of other persons, i.e. causing pain, suffering, destruction, leading to the loss of cherished values (Fraczek & Pufal, 1996). While differentiating between the notion of aggression and violence among adolescents, they claim that aggression in children and youngsters will be encountered when they express their anger, rebellion, hostility, frustration, or the desire to destroy, thus inflicting harm (loss, pain) to persons or objects, and acting in a way that does not fit the rules and social norms. Violence, on the other hand, will address such situations in which a child or adolescent uses their advantage - strength, speed, agility or even age or sex - in order to obtain certain benefits. Aggression is related with extreme cruelty and usually gives rise to disgust, revulsion, fear and even terror. Aggression is said to be a prevalent delinquent behaviour affecting man on a daily basis. It is a dangerous stimulus to another person with the intent of hurting that person and in the expectation that the aversive stimulus will reach its destination (Geen, 2001). Not minding the reasons that may be given for this maladaptive behaviour, it is a social risk that should not be tolerated in any sphere of life. Towards this, appropriate steps must be taken instantly and determinedly to stem the hazard. Buttressing points on behavioural modification, Omoegun (2005) argued that there is a need to provide role models for

youngsters so as to re-direct their energies towards the right channel that would produce rewarding and satisfactory behaviour. Odebunmi (2007) upholds that creating peer tutoring programs would help the adolescents to work on their behavioural deficiencies. These tutors would help to protect and guide these students to remain focused and avoid the pitfalls of negative influence. In the school organization, tutoring can be seen as a developmental, caring, sharing and helping relationship where one person invests time, know-how and energy to enhance some other person's knowledge, growth, and skills. The tutor responds to critical needs in the life of the tutee so as to help prepare him for greater achievement in life.

In having a deeper understanding of the student's behavioural pattern, Nwadinigwe and Longe (2008) asserted that the environment is the culture in which socialization takes place with all its myths and rituals, exerting great impact on an individual's social and psychological development which can be managed by reorganizing their perception through the use of Cognitive behaviour therapy.

In effect, using behaviour modification procedure which may include peer tutoring and Cognitive-behaviour therapy in schools would tackle adolescents' delinquent problems such as aggressiveness. It is against this background that this study examined the effects of peer tutoring and Cognitive behaviour therapy in delinquent behaviour reduction among secondary school adolescents in Bayelsa State, Nigeria.

The concept of peer tutoring is as old as the history of mankind. People of various classes participate in peer tutoring knowingly or unknowingly, when they do jobs of helping their peers in one way or the other, whether in domestic, classroom, professional, or academics. For instance, a newly married wife approaches another wife to ask for a practical demonstration on how to prepare a particular dish; if the other wife gives a helping hand to her, she is engaging in peer tutoring. Also, a classmate that decides to teach another or other classmates who were not around during the teaching/lecture period, or are experiencing difficulties in one or more areas of the subject is engaging in peer tutoring (Okoroma, 2013).

The term cognitive behaviour therapy (CBT) is used to cover a wide range of interventions in children and adolescent mental health, including (in no particular order) psychoeducation, anger management, anxiety management, behavioural operant methods, behavioural exposure methods, self-instruction methods, graded exercise, relaxation, social skills training, some kind of parenttraining and cognitive restructuring in the style of adult CBT (Graham cited in Toruebeli, 2010).

The behavioural emphasis on good quality research design was combined with the cognitive focus on content and meaning. Cognitive and behavioural psychotherapies are a variety of therapies based on concepts and principles originated from psychological models of human emotion and behaviour. They include a variety of treatment approaches for emotional disorders, along a continuum from structured individual psychotherapy of self-help material (Kendal, 1993 cited in Torubelli, 2010). Ubangha, Nwadinigwe and Omazagba (2014), in their study, investigated the effectiveness of Mentoring and cognitive restructuring in the modification of adolescent aggression among selected senior secondary school students in Lagos State. Their findings revealed that mentoring was more effective than cognitive restructuring in the modification of aggressiveness in adolescent students.

Eskay, Onu, and Obidoa (2012) in a study 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 the use 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 the anti-social behaviour of schooling adolescents.

Nwolisa, Olusakin and Fashina (2013) investigated the effects of Cognitive Behaviour Therapy and Social Learning Therapy on managing adolescents' aggressiveness among senior secondary school students in Lagos Metropolis. A sample of 154 students was randomly selected from two senior secondary schools. Data was collected using the verbal aggressiveness scale. The hypothesis was tested using the analysis of Covariance (ANCOVA). After exposure to intervention therapies, the results revealed that both treatments were efficacious in reducing participants' aggressiveness.

Torubeli (2010) conducted research on aggression replacement training and cognitive behaviour therapy in anger management among in-school adolescents in Bayelsa State, Nigeria. A sample of 90 students was randomly selected from two public schools and one private school. Anger response and emotional intelligence questionnaires were used for the study. Data were analyzed using ANCOVA and t-test statistics. Results showed that aggression replacement training and cognitive behaviour therapy strategies were effective in anger management of in-school adolescents. It is in light of this, that this study was focused on the effect of peer tutoring and cognitive behaviour therapy in reduction on the reduction of aggressiveness among secondary school adolescents.

Research Questions

One research question was answered in this study.

1. What is the difference in the level of aggressiveness reduction amongst students' peer tutoring, cognitive behaviour therapy, peer tutoring, and cognitive behaviour therapy and control groups?

Hypothesis

The following null hypothesis was tested at a 0.05 level of significance of

1. There is no significant difference in the level of aggressiveness reduction among students in Peer Tutoring, Cognitive Behaviour Therapy, and Peer Tutoring and Cognitive Behaviour Therapy and Control group based on their pre-test and post-test mean scores.

Methodology

A quasi-experimental design was adopted for this study. According to Levy and Ellis (2011), Leedy and Omrodi (2010), and Kpolovie (2010), stated that quasi-experimental design is an experimental design in which the researcher had limited leverage and coverage over the participants in the study. Akinade and Owolabi (2011) stated that quasi-experimental design is a design that resembles experimental design but differs from true experimental design because members are randomly not

allotted to groups. The population of the study consists of all ss 1, and ss 2 senior secondary school students in all the government-owned secondary schools in Yenagoa local government area of Bayelsa state. The total population of 15,584 SS 1 and SS 2 students in, the 2015/2016 academic session, in all the 34 government schools in Yenagoa local government (Research statistics and documentation, Bayelsa state senior secondary schools board). The researcher administered a delinquent behaviour scale on all the students in ss1 and ss2 with a total population of 305 out of which 67 were identified as delinquent. Those with mean scores above 25 were regarded as delinquents and were conscripted for the study.

The aggression questionnaire was the researchers modified scale adopted from Buss and Perry (1992) and modified for usage in this study (2018). The scale has 22 items on a 4-point Likert scale of strongly Agree (SA) 4 points, Agree (A) 3 points, Disagree (D) 2 points, and Strongly Disagree (SD) 1 point. The instrument was validated by the researchers' supervisors and three other lecturers from measurement and evaluation through the face and content validity. The internal reliability method using Cronbach alpha was used because it measures inter-item correlation. The reliability process involves one-time administration of the questionnaire. Construct validity on Aggressiveness was calculated to be 0.79.

Preceding treatment, delinquent behaviour (aggressiveness) was first diagnosed on the learners through the use of the delinquent behaviour scale (DBS). The sample was randomly assigned into four groups, which consist of the experimental groups and the control group. The subjects were assigned to various groups through balloting. The groups include (A, B, C, D), A group received peer tutoring treatment (PT), group B received cognitive behaviour therapy (CBT), C group received peer tutoring and cognitive behaviour therapy (PT and CBT combined), while group D received no treatment, (control group). The treatment plan was administered to the subjects in 8 sessions that spread across a period of 6 weeks. DBS was re-administered to the groups after 6 weeks of treatment. For the purpose of this article, data collected were analyzed using mean, standard deviation, and analysis of covariance (ANCOVA),

Presentation of results

Research question one: What is the difference in the level of aggressiveness reduction amongst students' peer tutoring, cognitive behaviour therapy, peer tutoring and cognitive behaviour therapy, and control groups?

Table 1. Mean and standard deviation on the level

Group	N	pre-test Mean	SD	post-test mean	SD	Reduction Mean	
PT	19	28.58	3.85	12.21	2.27	-16.37	-
		1.57					
CBT	19	35.05	2.95	13.73	2.42	-21.32	-
		0.53					
PT and CBT	18	34.89	3.76	13.00	2.49	-21.89	-
		0.27					
CONTROL	11	36.24	2.17	32.24	4.93	-3.99	
		-0.27					

Table 1.1a finding exposed that the group trained with PT and CBT have the Highest drug addiction reduction of -21.89, followed by the CBT group with a mean reduction of -21.32, PT with a mean value of -16.37, and finally, the C group with a mean reduction of -3.99 respectively. It, therefore, implied that the combination of PT and CBT is more effective Followed by CBT on drug addiction.

In other to decide if the mean differences in the groups are significant in the Pre-test and post-test, the ANCOVA statistics were employed for the analysis.

Hypothesis one

There is no significant difference in the level of aggressiveness reduction among Students in PT, CBT, PT and CBT and control groups based on their pre-test and post-test Mean score.

TABLE 1, 1B: ANCOVA on the effect of PT, CBT, PT and CBT and C group on
The reduction of aggressiveness.

Source	Type III sum of squares	Df	Mean square	F	Sig.	Partial Eta squared
Corrected model	7289.08a	1	1822.27	121.59	.000	.88
Intercept						
Pretest	762.49	1	762.49	50.88	.00	.43
Groups	4.44	1	4.44	.29	.59	.00
Error	7143.37	3	2381.12	158.88	.00	.88
Total	1019.14	62	14.99			
Corrected Total	90333.00	67				
Total	8308.22	66				

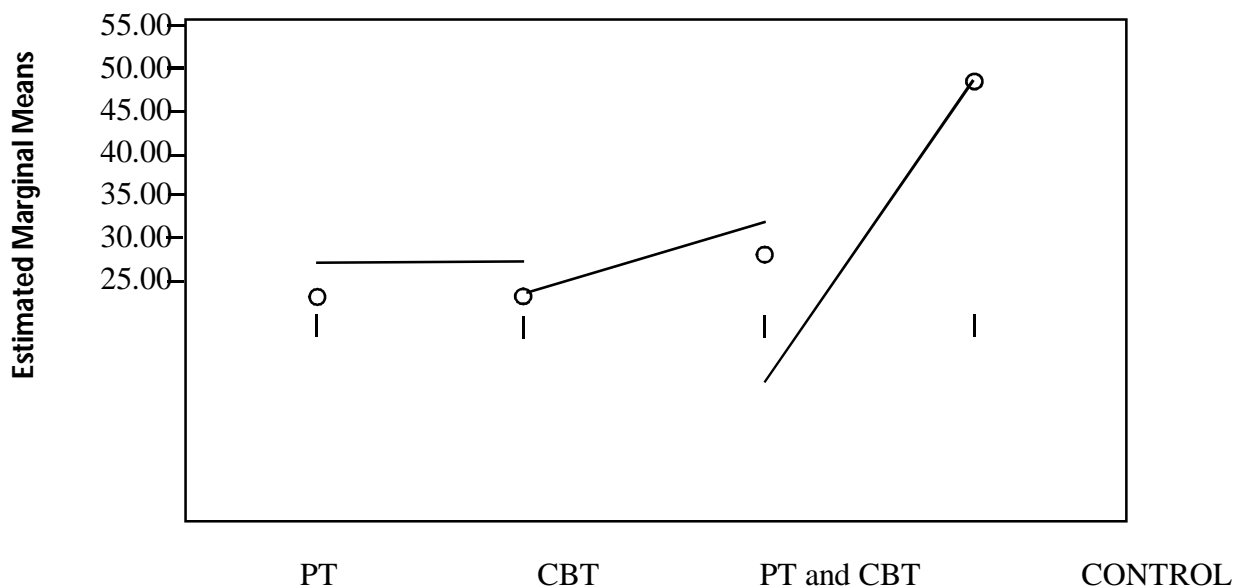
a. R square =.88 (Adjusted R square =.87)

Table 1.1b: findings revealed that the sum of squares and the mean square for the pre-test was 4.44 and 4.44 with an F ratio value of .29 which is not significant at .59 when subjected to 0.05 alpha. $F(1 \text{ and } 62) = 0.29$. $p > 0.05$. the group interaction It was discovered that the sum of squares and mean squares was given as 7143.37 and 2381.12 With an F ratio of 158.88 that is significant at 0.00 at 0.05 alpha level. Hence, the null hypothesis is rejected. By implication, there is a statistically significant difference amid the groups (PT, CBT, PT, and control) on the level of aggressiveness reduction base on their pre-test and post-test mean scores.

Post-hoc group (PT, CBT PT, AND .35CBT) group on the level of aggressiveness reduction

(3) groups (J) groups	Mean differences (1-j)	Std. error	Sig.
PT CBT	-.35	1.26	.78
PT and CBT	.5.06*	1.27	.00
CBT CONTL	-26.69*	1.30	.00
CBT PT	.35	1.26	.78
PT and CBT	.5.41*	1.28	.00
CBT CONTROL	-25.04*	1.31	.00
PT and CBT PT	5.06*	1.27	.00
CBT	5.41*	1.28	.00
CONTROL	-19.63*	1.31	.00
CONTROL PT	24.69*	1.30	.00
CBT	25.05*	1.31	.00
PT and CBT	19.63*	1.31	.00

Table 4.1C findings that the relationship between PT and the combination of PT and CBT, PT, and Control, CBT and the combination of PT and CBT, and CBT and control has significant control on aggressiveness reduction amongst students.



Groups

Covariates appearing in the model are evaluated at the following values: pretest = 59.1370

What is the difference in the level of aggressiveness reduction amongst students in PT, CBT, PT and CBT, and C groups based on their pretest and posttest mean score?

In table 1 results shows that the difference amongst the group (PT, CBT, PT, and CBT and control) in aggressiveness reduction as related to the [retest and posttest mean scores is not noticeable. Results exposed that the group trained by CBT had the uppermost aggressiveness reduction with a mean reduction of -34.11, followed by the PT group with a mean reduction of -32.95, PT and CBT with a mean value of -27.28, and finally a control group with a mean reduction of -6.18 respectively. Likewise the Adj. R2 = .88, the sum of a square and mean square for pretest were 4.44 and 4.44 with an F ratio value of 0.297. the group interaction revealed that the sum of the square and mean square were given as 7143.37 and 2381.12 with an F ratio of 158.57 which is significant at 0.000 when subjected to 0.05 alpha.

Consequently, there was a rejection of the null hypothesis. Meaning that CBT is an effective therapy to reduce aggressiveness amongst secondary school adolescents. The significant reduction of aggressiveness among the experimental groups was an outcome of the treatment participants received compared to the control group that was not given treatment.

The result was indeed unexpected and not surprising because CBT aims to redirect individuals with negative thinking patterns and behaviours to better reasoning and behaviour methods. While those with aggressiveness, since treatment, was not given in that way to redirect their thinking and behaviour toward positive patterns that may aid them to reduce their aggressive behaviour. The outcome of this research work is supported by Fung, Gerstein, and Hutchison cited in Ugwu and Olatunbosuns (2016 p182) who found that CBT was operative in aggressive act reduction and bullying behaviours of learners in Hong Kong.

Conclusion

Based on the findings of this study, it is concluded that Peer Tutoring and Cognitive behaviour therapy combination is effective in the reduction of aggressiveness of participants. The results also showed that there is a significant reduction of the dual therapeutic techniques employed in the reduction of aggressiveness.

Recommendation

The findings of this study should be used as an empirical basis to prevent riots and student unrest. A school-based peer tutoring program should be comprised in the curriculum of secondary schools in Nigeria. Not being able to control anger and being assertive often lead to violence in schools. Therefore, equipping students with the understanding and skills needed to positively control anger would aid them to acquire non-violent alternatives in managing such situations.

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