

## **The Effect of Cognitive Restructuring on School Adjustment of Maladjusted In-School Adolescents in Onitsha Urban Education Zone of Nigeria**

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**Abstract:** This study investigated the effect of cognitive restructuring on school adjustment of maladjusted in-school adolescents in Onitsha Urban Education Zone, Anambra State, Nigeria. The study adopted a quasi-experimental design to achieve its objectives. Through a purposive sampling technique, a sample of 14 maladjusted students was used as experimental group while 16 maladjusted students was used as control group. Two null hypotheses guided the study. In the analysis of the data for the study, mean and standard deviation were used to answer the research questions whereas Analysis of Covariance (ANCOVA) was used to test the null hypotheses. Results show that there is a significant difference in the mean academic adjustment of maladjusted adolescent students exposed to cognitive restructuring and those of conventional counselling and significant differences in the mean social adjustment scores of maladjusted adolescent students exposed to cognitive restructuring and those in conventional group. The researchers recommend among others that counsellors and school teachers should adopt cognitive restructuring approaches in addressing the problem of maladjusted in-school adolescents.

**Key words:** Cognitive restructuring, in-school adolescent, maladjusted students, school, adjustment

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### **INTRODUCTION**

Education in its broadest sense is any act or experience that has formative effect in the mind, character and physical ability of an individual; hence it is a fundamental right of every child. However, some adolescents cannot benefit maximally from this basic and very important developmental process due to some maladjustment. A maladjusted adolescent is defined as one whose behavioural and emotional difficulties however caused or have prevented the adolescent from benefitting from the ordinary social and educational experiences of home and school and whose difficulties will persist unless help is given by those with appropriate skills (Robert, 2007). Adjustment in school means the capacity of a person to respond to activities in the school environment such as curricular and extra-curricular activities. School adjustment as viewed by Ladd *et al.* (1997) refers to the degree which a child becomes interested, engages comfortably and achieving successfully in his school environment. Justifying the above assertion, Sarbjit sees school adjustment as that behaviour that permits an individual to meet effectively with the demands of the school environment and process of effectively and adequately adapting to the role of being a student in the various aspects and demands of the

school environment. School adjustment is reflected in the degree to which the child develops positive or negative perceptions of school, feels comfortable or distressed in new classroom, become involved or avoids school and school related activities.

The degree to which the child participates in relationships and experiences that prepare and support him in dealing with the demands of school related activities is important in determining the extent of adjustment achieved. Perry and Weinstein (1998) opines that students' adjustment in school occurs primarily in three domains: academic (academic achievement and academic motivation), social (quality of peer and adult relationship) and emotional (externalized and internalized distress). A maladjusted adolescent is ineffective in immediate home, school environment or other social settings. In the context of this study, maladjusted adolescent can be perceived as an individual whose behavioural and emotional state obstructed and inhibited from exploring his potentials except that assistance from a person with requisite skills and knowledge of behaviour modification techniques such as cognitive restructuring are employed for helping relationship. The manifestation of adjustment problems may include withdrawal, depression or self-injuries, obsessions, school rejection, drug and substance abuse, destructive, uncooperative

and violent behaviours. The common characteristics of maladjusted adolescents are reflected in the different aspects of life such as the family, school learning environment and social settings. Such characteristics include inability to adjust to classroom or handle class tasks effectively, inability to adjust to the home environment and inability to associate with peers in a non threatening manner among others. Students suffering from maladjustment, thus, need cognitive restructuring.

The term cognitive restructuring technique was pioneered by Beck (2006) and Ellis (1989) among others. Cognitive restructuring adopts approach that recognizes inter-relationship between one's thinking, emotion and attitude interacting within a given environmental context. Cognitive restructuring according to Talor and Anderson is a psychotherapeutic process of learning to identify and dispute irrational or maladaptive thoughts which are commonly associated with many confused and mental disorders. Highlighting further, the researcher postulate that it involves paying attention to thoughts, recognizing when they are irrational thoughts, challenging them and learning replacement thoughts and behaviours. Cognitive restructuring is a psychotherapeutic process of learning to identify and dispute irrational or maladaptive thoughts such as all-or-not thinking (splitting), magical thinking and emotional reasoning which are commonly associated with many mental health disorders (Martin and Dahlen, 2005). This study thus investigates the effect of cognitive restructuring on school adjustment of maladjusted in school adolescents in Onitsha Urban Education Zone. The term "Cognitive" refers to the psychological processes and resulting thoughts or images that are relevant in our way of perceiving and reacting to life events. Cognitive restructuring is often used with people with problems of negative self-schemas revolving around assumption of inadequacy, failure, losses and worthlessness which this study addressed with maladjusted adolescents. Cognitive and behavioural contents could vary among the different therapies but all come under the umbrella term "cognitive therapy". Cognitive Therapy (CT) has undergone scientific trials in many areas of human endeavours, and has been applied to a wide variety of psychological problems. Cognitive restructuring (cognitive therapy) is often based on a theory that it is not events themselves that upset people but the meaning given to the events. Some beliefs can block one from seeing things that do not fit with what one should agree to. In other words, one could continue to hold on to or analyze an issue through old perception and fails to learn anything new.

Several studies have confirmed the efficacy of cognitive restructuring in the resolution of problem behaviours (Niloofar and Hossen, 2010). Cognitive restructuring is a holistic approach to each unique individual, recognizing the inter-relationship between our thinking, behaviour, emotions and physiology as they interact with a given environmental context. The primary emphasis in cognitive restructuring is on identifying, evaluating and changing dysfunctional patterns of thinking and relevant underlying belief (that is cognition) that are causing or maintaining anxiety, fear, depression or other emotional problems. Generally, one's cognition represents the way one views the self, people and the world in one's day-to-day living. It involves the unique meaning one give to things or one's experience. Cognitive restructuring is any form of mental modification that could affect behaviour in which client is encouraged and helped to adopt more rational and constructive ways of thinking about their problem. Cognitive restructuring as an aspect of cognitive therapy is a form of psychotherapy based on behaviour modification in which clients or patients learn to replace dysfunctional self-speech, perception and various thinking skills other than mere emotion. Its application includes; anger control, management of stress and low self-esteem, coping with frustrations and developing social skills (Coleman, 2003).

Maladjustment is a serious behavioural, emotional and social disorder that can occur in adolescents. Adolescent with this disorder displays a pattern of disruptive and violent behaviour and have problems following rules and as such violates the rights of others. In-school adolescent with maladjusted behaviour engage in deviant behaviours such as peer cruelty, substance abuse, aggression, loitering, fighting, bullying or threatening others, rioting, stealing, truancy, raping, smoking, lateness, violation of rules and regulations, destruction of school properties among others. It is believed that this lowers the maladjusted adolescent's ego and influences their self-conception negatively. School adjustment is riddled with a lot of risks which include academic, social and emotional risks. These experiences result to sad trend whereby the maladjusted adolescents often take to dropout or indulge in one crime or the other in the society as mentioned above.

Consequently, serious questions have been raised as to whether these adolescents are still the future leaders of the great country, Nigeria. Could it be that researchers and significant others may not have given the desired attention to find solutions to the adjustment problems and its implication among the maladjusted adolescents? In the face of this problem, the effect of cognitive restructuring,

which is often used with people with problems of negative self-schemas revolving around assumption of inadequacy, failure, losses and worthlessness, on school adjustment of maladjusted in school Adolescence is not clear. Therefore, the problem of this study posed as a question is: what is the effect of cognitive restructuring on school adjustment of maladjusted in school adolescence in Onitsha Urban Education Zone?

**Purpose of the study:** This study sought to achieve the following:

- To determine the effect of cognitive restructuring as compared to conventional counselling on academic adjustment of maladjusted adolescent students
- To determine the effect of cognitive restructuring as compared to conventional counselling on social adjustment of maladjusted adolescent students

**Research questions:** This study seeks answers to the following questions:

- What are the mean academic adjustment scores of maladjusted students exposed to cognitive restructuring as compared to conventional counselling?
- What are the mean social adjustment scores of maladjusted students exposed to cognitive restructuring as compared to conventional counselling?

**Hypotheses:** The following null hypotheses were formulated and tested at 0.05 level of significant:

- There is no significant difference in the mean academic adjustment scores of maladjusted adolescent students exposed to cognitive restructuring as compared to conventional counselling
- There is no significant difference in the mean social adjustment scores of maladjusted adolescent students exposed to cognitive restructuring as compared to conventional counselling

## **MATERIALS AND METHODS**

The study adopted a quasi-experimental design. Specifically, the non-equivalent control group design was used. The study used intact classes as such the groups were not equivalent in terms of number in the class and the type of treatment given. This design is used to ensure that there is a fair/uniform distribution of treatment given to the different groups.

The study was carried out in Onitsha Urban Education Zone in Anambra State of Nigeria. The population of the study comprised of all the maladjusted senior secondary year two (SS II) students in all the thirty public secondary schools in the Education zone. The SS II maladjusted students of the 2013/14 session numbering (235). The Post Primary School Commission (PPSC) has it that there are eleven co-educational schools in the Education Zone. These 11 schools sample was composed through purposive sampling techniques in which 2 co-educational schools with highest population of maladjusted students were selected for both experimental and control groups in Onitsha Urban Education Zone. Through a purposive sampling means, Army Day Secondary school with a population of 14 maladjusted students were used as experimental group while Prince Memorial Secondary school with a population of 16 maladjusted students were used as control group. The conduct of the study took place during the normal school lesson period. The normal time table of the two schools sampled for the study was followed. Counsellors in each of the schools were used in teaching the topics selected for the study.

**Procedure:** The study lasted for 6 weeks. On the 1st day, before the experiment commenced subjects in both treatment and control groups were given the questionnaire on school adjustment rating scale on Academic Adjustment (AA) and Social Adjustment (SA) and as pre-test. Thereafter, the proper teaching on cognitive restructuring commenced by using the prepared treatment package that was divided into 6 units. Each unit was covered within a week for the total period of 6 weeks. The last session was used for revision. During the treatment, the experimental group were taught with cognitive restructuring package while the control group were given the usual conventional method (lecture method).

At the end of the treatment that lasted for 6 weeks, the researcher administered the school adjustment questionnaire under academic adjustment and social adjustment as a post-test to the subjects in the two groups. The items on the instrument were reshuffled that is changing the positions of items but each statement was the same before using them as post-test.

Before the actual instruction, a training workshop was organized for the participating counsellors that taught the experimental groups. The training programme lasted for 4 days before the commencement of the instructional stage of the study. Counsellors were given detailed explanation on the use of cognitive restructuring as well as their usage. The two counsellors in the selected

schools were given the validated treatment package meant for each group. After 4 days training, a preliminary trial teaching was carried out by each of the participating counsellors involved in the study. Adequate discussions and necessary reviews were made on each of the counsellor's presentation. To ascertain the level of compliance to the treatment specifications as contained in the training programme. Mean scores and standard deviation were used to answer research questions. Analysis of Covariance (ANCOVA) was used in testing the hypotheses at 0.05 level of probability. The homogeneity of regression assumption that underlies the use of ANCOVA was tested in the study.

**RESULTS**

The result of this study is presented in accordance to the research questions as shown below:

**Research question one:** What are the mean academic adjustment scores of maladjusted adolescent students exposed to cognitive restructuring and conventional counselling on a measure of academic adjustment?

Results presented on Table 1 showed the mean academic adjustment pretest and posttest scores of maladjusted adolescents exposed to cognitive restructuring and conventional counselling. The data show that the maladjusted adolescents in the cognitive restructuring group had pretest mean score of 2.52 and standard deviation of 0.23 and a post-test mean score of 2.97 and a standard deviation of 0.48. The mean gain is 0.45. The maladjusted adolescent students in the conventional counselling group had a pretest mean score of 2 and standard deviation of 0.68 and post-test mean score of 2.19 and a standard deviation of 0.63. The mean gain is 0.19. The mean gain values suggest that the maladjusted adolescents exposed to cognitive restructuring (0.45) benefitted more from the intervention than those exposed to conventional counselling (0.19).

The maladjusted adolescents in the cognitive restructuring group benefitted more than those in the conventional group implying that they had better academic adjustment after the intervention.

**Research question two:** What are the mean social adjustment scores of maladjusted adolescent students exposed to cognitive restructuring and conventional counselling on a measure of social adjustment?

Results presented on Table 2 showed the mean social adjustment pretest and posttest scores of maladjusted adolescents exposed to cognitive restructuring and conventional counselling. The data showed that the maladjusted adolescents in the cognitive restructuring group had pretest mean score of 2.27 and standard deviation of 0.34 and a post test mean score of 3.14 and a standard deviation of 0.59. The mean gain is 0.87. The maladjusted adolescent students in the conventional counselling group had a pretest mean score of 2.22 and standard deviation of 0.38 and Post test mean score of 2.18 and a standard deviation of 0.30. The mean gain is -0.04. The mean gain values suggest that the maladjusted adolescents exposed to cognitive restructuring (0.87) benefitted more from the intervention than those exposed to conventional counselling (-0.04):

- $H_{01}$ : there is no significant difference in the mean academic adjustment scores of maladjusted adolescent students exposed to cognitive restructuring as compared to conventional counselling

Table 3 showed that there is no significant difference in the mean academic adjustment scores of maladjusted students exposed to cognitive restructuring and those exposed to assertive training as indicated by the mean difference of -0.06 which is significant at 0.96 but not significant at 0.05 level

Table 1: Mean scores and standard deviations on academic adjustment of maladjusted adolescent students exposed to cognitive restructuring and conventional counselling

Groups	Pre-test			Post-test			Mean Gain
	N	Mean	SD	N	Mean	SD	
Cognitive restructuring	14	2.52	0.23	14	2.97	0.48	0.45
Conventional counselling	16	2.00	0.68	16	2.19	0.63	0.19

N is the number of maladjusted students involved in each case

Table 2: Mean scores and standard deviations on social adjustment of maladjusted adolescent students exposed to cognitive restructuring and conventional counselling.

Groups	Pre-test			Post-test			Mean Gain
	N	Mean	SD	N	Mean	SD	
Cognitive restructuring	14	2.27	0.34	14	3.14	0.59	0.87
Conventional counselling	16	2.22	0.38	16	2.18	0.30	-0.04

Table 3: Significant difference in the mean academic adjustment scores of maladjusted adolescent students exposed to cognitive restructuring as compared to conventional counselling

Treatment groups (J)	Mean gain (1-J)	SE	Sig.
Cognitive restructuring	-0.06	0.23	0.96
Conventional counselling	0.78*	0.23	0.01

Table 4: Significant difference in the mean social adjustment scores of maladjusted adolescent students exposed to cognitive restructuring as compared to conventional counselling.

Treatment groups (J)	Mean gain (1-J)	SE	Sig.
Cognitive restructuring	0.53*	0.15	0.003
Conventional counselling	0.96*	0.15	0.003

of probability: difference of 0.53 which is significant at 0.003 and also significant at 0.05 level of probability.

### DISCUSSION

The findings of this study as shown in Table 1 revealed that the maladjusted adolescent students in the experimental group in the cognitive restructuring had a post-test mean score of 2.97, while those in the conventional counselling group had a Post-test mean score of 2.19. This difference is tested further using a null hypothesis. The result from the null hypothesis revealed that there is a significant difference in the mean academic adjustment of maladjusted adolescent students exposed to cognitive restructuring and conventional counselling. The maladjusted adolescent students exposed to cognitive restructuring are significantly better adjusted than those in the conventional group. This implies that those maladjusted adolescents in the cognitive restructuring group benefitted more than those in conventional group. The result of this study is in line with Niloofer and Hossen (2010) who reported that cognitive restructuring education increase internal, permanent and general attribution for positive events and decrease those attributions for negative events.

The findings of this study as shown in Table 2 revealed that maladjusted adolescent students in the experimental group of cognitive restructuring had a posttest mean score of 3.14, while those in the conventional counselling group had a Post-test mean score of 2.18. However, this difference was further tested using a null hypothesis. The result from the hypothesis revealed that there are significant differences in the mean social adjustment scores of maladjusted adolescent students exposed to cognitive restructuring and those in conventional group. This is a clear indication that the treatment of cognitive restructuring intervention facilitates positive social adjustment for maladjusted adolescent students in the experimental groups to perform significantly better than their counterparts in the conventional counselling.

The result is in line with the findings of some earlier research on the effectiveness of cognitive restructuring intervention on individuals who experienced maladjusted problem. The studies by Nwachukwu and Nnoli whose investigation was on effect of cognitive therapy on the level of stress and social adjustment of maladjusted adolescents. It was discovered that cognitive therapy has no significant difference in the pretestposttest level of stress and social adjustment of in-school maladjusted adolescents who received treatment and those that did not receive. It may not be surprising that those in the treatment group achieved better social adjustment considering the finding of this study which showed cognitive therapy as effective means in reducing maladjustment in adolescents.

Researches done outside Nigeria have confirmed these findings. Dereli believed that behavioural and cognitive therapies have comparable effects on the emotional and worry components of test anxiety than that of conventional counselling. Thus emotional reaction of maladjusted adolescent can be in form of fear, anger and stress, this occurs often when the maladjusted adolescent perceive any situation as harmful and frustrating.

### CONCLUSION

From the results obtained in the investigation on the effects of cognitive restructuring on school adjustment of maladjusted in-school adolescents was concluded that intervention using cognitive restructuring technique significantly reduced the school adjustment problem of maladjusted schooling adolescents. The maladjusted adolescent students exposed to cognitive restructuring manifested significantly better academic adjustment than those in the conventional group indicating the effectiveness of cognitive restructuring in reducing school adjustment problem of maladjusted adolescent students. The maladjusted adolescent students exposed to cognitive restructuring had significant better social adjustment than those in the conventional group.

### RECOMMENDATIONS

Based on the findings of this study, the following recommendations have been made:

- Educational psychologists, guidance counsellors and curriculum planners should plan programme of intervention based on principles of cognitive techniques for more enlightenment for students on academic and social adjustment

- The federal and state ministry of education and humanitarian organization should help by sponsoring workshops and seminars for educational psychologists, school guidance counsellors on the implementation of the recommendations of this study based on cognitive restructuring
- Other researchers should adopt different designs and replicate this study in other areas to find out if any difference will exist
- There is also the need for teachers and counsellors to adopt the cognitive restructuring in their daily interaction with students

#### **REFERENCES**

- Beck, J.S., 2006. Cognitive-behavioral therapy. *Prim. Psychiatry*, 13: 31-34.
- Coleman, A.M., 2003. *Oxford Dictionary of Psychology*. Oxford University Press, Oxford, United Kingdom, Pages: 876.
- Ellis, A., 1989. *Rational-Emotive Therapy*. FE Peacock Publishers, New York, USA., Pages: 243.
- Ladd, G.W., B.J. Kochenderfer and C.C. Coleman, 1997. Classroom peer acceptance, friendship and victimization: Distinct relation systems that contribute uniquely to children's school adjustment?. *Child Dev.*, 68: 1181-1197.
- Martin, R.C. and E.R. Dahlen, 2005. Cognitive emotion regulation in the prediction of depression, anxiety, stress and anger. *Personality Individual Differ.*, 39: 1249-1260.
- Niloofar, M. and Z. Hossen, 2010. The efficiency of cognitive restructuring teaching at students attribution style and academic performance. *Iran. Rehabil. J.*, 8: 67-85.
- Perry, K.E. and R.S. Weinstein, 1998. The social context of early schooling and children's school adjustment. *Educ. Psychol.*, 33: 177-194.
- Robert, L., 2007. Educating Maladjusted Children. *Br. J. Spec. Educ.*, 5: 33-43.