

Effectiveness of Relaxation and Self Control Techniques in the Management of Anger Behaviour Among Pupils

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Abstract

The study investigated the effectiveness of the relaxation therapy (RT) and self-control (SC) therapies in the management of anger among pupils. The treatment is a quasi experimental type that adopted a pretest, post test treatment control group using a 3×2 factorial design, with the treatment conditions in the rows and gender in columns. There were three experimental groups comprising of 30 pupils who were randomly selected from a purposively chosen school in Owerri West Local Government Area of Imo State and randomly assigned to the experimental conditions. Different types of researchers' developed and validated test instruments were used at the pretest, post test and follow-up periods for identifying the angered pupils and testing the effectiveness and retention of the treatments. Two null hypotheses tested at 0.05 level of significance guided the study. Data collected were analyzed with ANCOVA and Scheffe test. The results revealed among others that relaxation (RT) and self-control (SC) were effective in the management of anger pupils.

Key words: Relaxation; Self control; Anger Management; Techniques

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INTRODUCTION

Anger is a universal emotion that is exhibited in varying proportion by individuals. It is a mental state that manifests reactions over situations and events which cause pains, hurts and discomfort. This emotion is seen both in adult and children, at home, in school, work place and on the streets. Anger is an emotional state that varies from mild irritation to intense furry or rage that is accompanied by a feeling of displeasure or hostility. Omogui (2008) noted that when one is angry and resentful toward the perceived offender, ones vision and reason tend to be clouded and one directs such anger towards the offender.

Zachery (2009) noted that when anger is bottled up, violent thoughts or nightmares or even physical symptoms such as headaches, ulcers or hypertension develop in a person. Apart from heightening many mental health problems, anger can trigger off depression which makes a person feel as if he or she is in a cyst of dark cloud for a very long time. Such a person engages in self destructive activities such as too much drinking, drug use and abuse, smoking, overeating, taking risks and not watching his or her finances (Iroegbu, Nkwocha, & Onyemerekeya, 2002).

The manifestation of anger traits is expressed among all ages of human existence. The way we react to anger depends on what we learn from other family members, friends, community and media. Anger is associated with certain characteristics such as voices rising to a shrill height which includes yells, shouts, cries of pains, emotions then take over and focus is more on the other person. There is also the outpouring of verbal attacks, clinched fist are raised, eyes turn red and feeling of hostility take over, such as witting and punching.

The consequences of anger are numerous and have implications for both the person being offended, their victims, the school, families, communities, educational

system and the society at large. Akinade (2009) remarked that anger places middle aged adults at risk for coronary heart disease and death. It is a potential provocator of domestic violence and substance abuse disorders. Anger has also been proposed to co-occur with type A behavior as well as aggressive and risky behaviours (Tafrate, Kassinove, & Dundin, 2002). The victims of active anger usually experience long-lasting social, emotional, psychological and academic problems ranging from low self esteem, intolerance, feeling emotionally spent or dried up, inability to engage in activities of interest, general low motivating, absence of peace of mind, being unfriendly, fear, misplaced aggression, lack of concentration and focus, change of school to even dropping out of school in severe cases.

In the light of all these highlighted issues surrounding the emission of anger, there is an urgent need to arrest (change or control) this ugly situation. For this purpose, the present study is focused on ascertaining the effectiveness of Relaxation Therapy (RT) and Self-Control (SC) techniques in reducing anger among pupils. These techniques have been proven effective in the management of different maladaptive behaviours among children, adolescents, adults and even mentally challenged persons (Chima, Otta, & Odoemelam, 2005).

Relaxation training is any method, process, procedure or activity that helps a person to relax, to attain a state of increased calmness or otherwise reduce levels of anxiety, stress or anger management programme and can decrease muscle tension (Iwuama, Nwachukwu, & Obimba, 2000). Relaxation is one of the most effective self activities for mental health and effective treatment measure to prevent the development of anxiety.

Self-Control (SC) is a programme aimed at helping the individual exert control over his/her behaviour. It is a programme whereby an individual is scientifically trained on the skills of directing, relating and guiding ones behavior towards selecting desired positive consequences. It uses skills such as self study, self instruction, self monitoring, self reinforcement and thought stopping (Nnachi, 2003). It has effectively been used in the treatment of smoking, bullying, depression and study behavior. Chima, Otta and Odoemelam (2005) used it to control bullying behavior among primary school children. More so, Chima and Nnodum (2006) through its application reduced late-coming behaviour among secondary school students.

1. PURPOSE OF THE STUDY

The study mainly focused on ascertaining the effectiveness of Relaxation and Self Control therapies in the reduction of anger among pupils.

2. RESEARCH HYPOTHESES

The following hypotheses tested at 0.05 level of significance were formulated to guide the study:

- i. There is no significant difference in the mean anger behaviour scores of participants in the experimental groups (RT, SC and Control) at post treatment period.
- ii. There is no significance difference in the mean anger behavior score of participants in the experimental groups (RT, SC and Control) at follow-up assessment period.

3. METHOD

The study is an experimental research that adopted a pretest, post-test and control group design. The study has three experimental groups comprising of two treatment groups of Relaxation Therapy (RT) and Self Control (SC) and a no treatment control (C) group. Each of the three groups was further splitting into two sub-groups on the basis of gender. Thus, the study adopted a 3×2 factorial design. The subdivision gave rise to 6 cells. The experimental groups formed the rows while gender males and females formed the columns.

The study was delimited to all the 44 public primary schools in Owerri West L. G. A of Imo State. The population consisted of all primary five pupils(grades) in these schools which totaled twenty seven thousand, four hundred and sixty seven pupils (27, 467) (SUBEB, 2015). For easier manageability and with due regards to certain extraneous variables, a school was purposively chosen. The chosen school has a total population of 144 pupils and three teachers in primary 5. Out of this, 47 pupils (19 males and 28 females) were identified as emitting anger behaviour according to Pupils Anger Behaviour Questionnaire for Teacher Nomination (PABQTN) which was further confirmed according to Pupils Anger Behaviour Identification Questionnaire (PABIQ).

The number of the identified anger-children was trimmed down to 30 comprising of 15 males and 15 females through randomization and clustering along gender line, thus making the group gender equitable. Through the simple random sampling technique, equal number of anger children were put into three experimental groups and further into six sub-groups of five participants in each group.

In identifying the potent subjects for the study, ascertaining the effectiveness of the different treatment packages in reducing anger and collecting data for the study, different types of designed questionnaires for researchers which were psychometrically validated were used. These questionnaires included Pupils Anger Behaviour Identification Questionnaire (PABIQ), Anger

Behaviour Questionnaire (ABQ), Pupils Anger Behaviour Questionnaire A and B (PABQ A and PABQ B) and Pupils Anger Behaviour Questionnaire for Teacher Nomination (PABQTN). Anger Behaviour Questionnaire (ABQ) was used by the subjects as a guide during self-monitoring sessions in both treatment packages (Relaxation Therapy and Self-Control). Pupils Anger Behaviour Questionnaire A and B (PABQ A and PABQ B) were used to confirm anger behaviour traits inherent in the subjects. The Pupils Anger Behaviour Questionnaire for Teacher Nomination (PABQTN) and PABIQ were used at pretest for identification purposes while PABQ-A and PABQ-B were used for testing the effectiveness of the treatment at the post test and follow-up assessment periods respectively. Score from PABIQ formed the pretest and the baseline score.

Each of the above listed assessment instruments, with the exception of ABI is made up of two sections titled A and B. Section A elicited information on the bio-data of the participants while section B is structured to determine the anger behavior traits possessed by the participants. Equal number of items totaling 20 are contained in the instrument which were derived from the characteristics of anger as lifted from literature. Ten of the items were positively framed while the other ten were negatively framed. The response system was a three point likert scale of “Not At All”, “Sometimes” and “Always” quantified as 1, 2, and 3 respectively for positive items and reserved for negative items. A high score of 31 and above indicates possession of anger traits while any score from 30 downwards depicts low anger traits. ABI has 20 items that reflected various aspect of anger. It was given to the participants to use in monitoring and recording their refrains from anger displays during the course of the treatment.

The psychometric properties of these assessment instruments were established. Their content validity was determined through the assistance of three specialists of not less than senior lecturer cadre in Measurement and Evaluation. Their construct validity were ascertained by correlating their scores with scores obtained from pupils’ Behaviour Problem Inventory (PBPI) and yielded 0.75, 0.77, 0.75 and 0.78 for PABQTN, PABTN, PABIQ, ABI, PABQ A respectively using Spearman-Brown Rank Order

Correlation. Their reliability were determined through a test retest method and they yielded 0.81, 0.80, 0.82 and 0.81 respectively using the Perason’s Product Moment Correlation Method. PABQ-B is a reshuffled version of PABQ-A as such it was not validated.

Data were collected in three phases of pre-treatment, post treatment and follow-up assessment period. The pre-treatment phase involved the collection of the baseline data on the anger behaviour tendencies possessed by the subjects using PABQTN and PABIQ. The treatment phase involved the manipulation of two of the experimental conditions using Relaxation and Self Control in order to reduce anger tendencies in the participants. The treatment was carried out over a period of five weeks for each of the treatment groups. The participants were post tested at the end of last session using PABQ-A. A follow- up assessment was carried out 6 weeks after the post-test. The control groups received no treatment but were involved in the pre-test, post test and follow-up assessment periods. The data collected were analyzed using Analysis of Covariance (ANCOVA) and Scheffe test.

4. RESULTS

The results of the study were presented in tables based on the two hypotheses formulated in the study.

Hypothesis one: There is no significant difference in the mean anger behavior scores of participants in the experimental groups (RT, SC and Control) at post-test period. The results of hypothesis one is presented in Tables 1, 2 and 3.

Table 1
Pre-Test Adjusted Post Test Scores of RT, SC and Control on Reduction of Anger Among the Participants at Post Treatment Period

Experimental condition	Pre-test	Post-test		Post-test	
	No	Mean X	SD	Mean	SD
Relaxation (RT)	10	56.9	2.8	29.9	2.1
Self Control (SC)	10	58.1	3.1	27.4	2.4
Control (C)	10	57.4	2.6	58.9	2.2

Table 2
2 Way Analysis of Covariance for the Effects of the Treatment of Anger at Post-Test

Source of variation	Sum of squares	DF	Mean squares	F-value	Pr>f	Decision
Pre-test	14.043997	1	14.013997	1.27	0.2682(NS)	Accept
Treatment	6705.853216	2	3352.926608	303.20	<.0001 * (S)	Reject
Error	353.822669	26	11.058521			
Total	7145.038889	29				

Note. NS = Not Significant; S (*) = Significant at 5% level.

Table 3
Summary of Scheffe’s Test for Multiple Pair Wise Comparison of the Treatment Groups at Post-Test

Treatment	N	Mean	Scheffe’s grouping
Relaxation training	10	29.9	A
Self control	10	27.4	B
Control	10	58.9	C

Note. Alphas -0.05

The results as presented in table 1 show that the treatment groups (RT and SC) made significant reduction in their anger behavior tendencies than the control (c) group at post test period. Thus, the mean scores obtained at post-test with RT, SC and C conditions are 29.9, 27.4 and 58.9 respectively.

The result in Table 2 indicate a clear significant main effect for the treatment strategies. The results in the second row revealed that the *F*-calculated value (303.20) for the treatment effect has a significant probability of <0.0001, which is less than 0.05. It indicates that the treatment effect is significant at 5% level of significance.

The result of further analysis with Scheffe’s test as presented in Table 3 shows that RT with a mean anger score of 29.9 and Scheffe’s grouping letter B was the most effective followed by SC with a mean anger score of 27.4

Table 5
2-Way Analysis of Co-Variance for the Effects of the Treatment on Anger at Follow-Up Assessment Period

Source of variance	Sum squares	DF	Mean squares	F-value	Pr>F	Decision
Pre-test	27.664834	1	27.664834	3.84	0.0587	Accept
Treatment	8080.800773	2	4040.400386	561.12	<.0001	Reject
Error	230.418499	26	7.200578			
Total	8367.6388889	29				

Table 6
Summary of Scheffe’s Test of Multiple Pair Wise Comparison of the Experimental Groups at Follow-Up

Treatment conditions	N	Mean (X)	Scheffe’s grouping
Relaxation training	10	26.0	A
Self control	10	20.9	B
Control	10	57.4	C

The results presented in Table 4 for hypothesis 2 reflect further reduction in the mean score of participants treated with RT and SC at six week follow-up assessment period. The mean score obtained were 26.0, 20.9 and 57.4 for Relaxation Therapy, Self-Control and Control respectively. It means that the treatment strategies (RT and SC) were still effective and superior to the control group.

The results in Table 5 indicate a clear significant main effect for the treatment strategies. The results in the second row revealed that the *F*-calculated value for treatment effect was 561.12 with significant probability of <0.0001 which is less than 0.005. This shows that a

and Scheffe’s grouping letter B. The control condition experienced no treatment effect. It has a mean anger score of 58.9 and Scheffe’s grouping letter A. The variations in the Scheffes’s grouping letters possessed by the three experimental conditions indicate a significant difference among the three groups. On the basis of these results presented in Tables 1, 2 and 3, hypothesis one is rejected in favour of the alternative hypothesis.

Hypothesis Two: There is no significant difference between mean scores of participants in the experimental groups (RT, SC and Control) at follow-up assessment period.

The results of this hypotheses are presented in Tables 4, 5 and 6.

Table 4
Pre -Test and Adjusted Post-Test Scores of Relaxation, Self-Control and Control on the Reduction of Anger Among the Participants at Follow-Up Assessment Periods

Experimental condition	Pre-test			Post-test	
	No	Mean X	SD	Mean (X)	SD
Relaxation Therapy (RT)	10	56.9	2.8	26.0	1.4
Self-Control (SC)	10	58.1	3.1	20.9	1.9
Control (C)	10	57.4	2.6	57.4	2.00

significant difference exists in the anger scores of the participants in the experimental conditions for follow-up assessment period.

The result of further analysis with Scheffe’s test as presented in Table 6 revealed that Relaxation Therapy with a mean anger score of 26.0 and Scheffe’s grouping letter A remained the most effective followed by Self-Control with a mean anger score of 20.9 which is the score of Scheffe’s grouping letter B. The control condition did not experience any treatment effect. It has a mean score of 57.4 and Scheffe’s grouping letter C. The variation in the Scheffe’s grouping letter possessed by the three

experimental conditions reflect a significant difference among the three groups. Based on these highlighted results in Tables 4, 5 and 6, hypothesis two is rejected.

DISCUSSION

The major finding of this study is that the two treatment strategies (RT and SC) were very effective in the management of anger behaviour of participants. It shows that anger is amenable to psychological treatment such as RT and SC.

The results on hypothesis one as presented in Tables 1, 2 and 3 show a significant difference in the mean anger behavior scores of the participants in the three experimental groups at post test period. Hypothesis one was therefore rejected. The two treatment groups (RT and SC) experienced reduction in their anger behavior by recording mean anger scores of 29.9 and 27.4 respectively. They also recorded and F-calculated value of 303.20 with a significant probability of <0.0001 which is less than 0.05. The control group which did not receive any treatment did not experience any reduction in their anger behaviour. It has a mean anger behaviour score of 5, 8, 9 and Scheffer grouping letter C.

The study established the efficacy and superiority of the treatment conditions (RT and SC) over the control condition in reducing anger behaviour. It further revealed that RT was more effective than SC. These finding corroborates with that of Iwuama, NNwachukwu and Obimba (2000), Chima and Nnodum (2006) who effectively used Relaxation Training and Self Control therapies to control anxiety and late coming behavior among secondary school student.

The efficacy of Relaxation Therapy in reducing a problem behaviour such as anger corroborates the findings of Iwuama, Nwachukwu and Obimba (2000) and Agulanna and Nkwocha (2003) who successfully used Relaxation Therapy to improve anxiety disorder, academic, work performance and control the emission of different maladaptive behaviour among the subjects in their studies.

The effectiveness of Self Control recorded supports the findings of earlier researchers such as Eckhardt, Barbour and Stuart (2000), Eze (2003), Chima, Otta and Odoemealam (2005), Chima and Nnodum (2006) who effectively used it to manage respectively different behavior problems such as cigarette cessation, anger, bullying, aggression and late coming behavior in the participants of their studies.

Hypothesis two was used to ascertain the extent of permanence of the treatment effects on the participants at six weeks post counselling session. The results in respect of the hypothesis as presented in 4, 5 and 6 reflected significant differences among the three experimental groups (Relaxation Therapy, Self-Control and Control).

The two treatment groups (Relaxation Therapy and Self-Control) experienced further reduction in their anger behaviours while the control group experienced no change or reduction in their anger behavior. They recovered mean anger behavior scores of 26.0 20.9 and 57.4 respectively. The superiority of the two treatment conditions (Relaxation Therapy and Self-Control) over the Control (C) condition as recorded at post-test period were still maintained at the follow-up period. The Relaxation Therapy still remained more effective than self-Control having recorded mean scores of 26.0 and 20.9 respectively. The effective of the treatment conditions were still maintain at the follow up assessment period and supports the findings of Agulanna and Nkwocha (2003) and Chima, Ottaand Odoemelam (2005) who in their different studies found that the effectiveness of the treatment packages the used in modifying different behaviour problems were maintained at the follow-up assessment period.

The consistent superiority observed from the two treatment conditions (Relaxation Therapy and Self-Control) over the control both at post-test and follow-up periods, could be explained in terms of the content of the two treatment packages which were properly organized and systematically presented to the treatment groups. That Relaxation Therapy was consistently more effective than Self-Control at post-test and follow-up periods could be attributed to the type of training that were employed in relation to the age range of the participants which is between 10 and 12 years incidentally.

CONCLUSION

This study has specifically demonstrated that Relaxation Therapy and Self Control can effectively be used to control the manifesting of anger tendencies in primary school children. It has also revealed that anger is amenable to psychological treatments such as Relaxation Therapy and Self-Control.

RECOMMENDATIONS

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

- i) Early detection and remediation of anger tendencies and manifestations are necessary in school systems so as to create a conducive learning environment.
- ii) Since relaxation Therapy (RT) and Self Control Therapy (SC) have proved to be effective from this study, teachers, psychologists and counsellors should be taught on how to use these treatment packages in the management of anger behaviour among pupils.
- iii) Seminars and workshops should be organized for teachers, counsellors, administrators and parents on

regular basis with the intention of educating them on the negative implications of anger especially on the pupil's personality and academic development as well as methods of identifying such anger tendencies and the need to make adequate referrals on time.

- iv) Guardians and parents should be encouraged to monitor the various films and television programmes their children/wards watch to ensure that the films and television programmes they watch don't have a high dosage of anger contents.

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