Research Article

© 2019 Ohanaka Blessing Ijeoma and Adeleke Ismaila Oladipo.
This is an open access article licensed under the Creative Commons
Attribution-NonCommercial-NoDerivs License
(<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

Efficacy of Systematic Desensitization Therapy on Academic Boredom among Adolescents in Edo State Secondary Schools

Dr. (Mrs.) Ohanaka Blessing Ijeoma

*Department of Educational Evaluation and Counselling Psychology
Faculty of Education, University of Benin*

Dr. Adeleke Ismaila Oladipo

*Department of Educational Evaluation and Counselling Psychology
Faculty of Education, University of Benin*

Doi: 10.2478/jesr-2019-0016

Abstract

An individual experiences boredom when an activity is neither entertaining nor conducive. Academic boredom and its negative influences include dissatisfaction and low arousal in school activities, depression, high school dropout, lack of academic goal orientation, abusive behaviours as well as poor academic performances among students. The study sought to investigate the efficacy of Systematic desensitization on academic boredom among students in Edo State Secondary Schools. The research used quasi experimental design adopting the pretest-posttest non-equivalent control group experiment. The population for the study consisted of One thousand, five hundred and eighty-two (1,582) SS2 students from Seven (7) public schools in Oredo Local Government Area of Edo State. The sample for the study was made up of two intact classes comprising of 91 (Ninety-one) SS2 students. The instruments used for the study is Boredom Proneness Scale (BPS), developed by Farmer and Sunberg, adapted from Obisanya with a test retest reliability co-efficient of 0.792. The findings of this study showed that Systematic desensitization was effective in reducing academic boredom. It was also more effective than the control group (non-attention). It is therefore recommended that reciprocal inhibition can be used to desensitize the students by counsellors. In the classroom, the teacher should note individual differences, engage students in classroom activities, use real life situations and also make learning interesting.

Keywords: Academic boredom, Systematic desensitization, Secondary school adolescents

1. Introduction

Education is a tool for national development and a dynamic instrument of change. It is essential for the development of the society and the more educated the people, the more civilized and well-disciplined the society would be. As a result, the importance placed on education in this modern society cannot be overemphasised. Education is a form of learning in which the beliefs, skills, knowledge, values, and habits of a group of people can be transferred from one generation to another through discussion, story-telling, teaching, research and or training among others. Education is also considered as the process of obtaining knowledge, skills, interest, abilities, competences and the cultural norms of a society by people. In Nigerian educational system, there have been different efforts and activities of how education can be improved. Top most, in achieving this task is to eradicate academic boredom among students for the purpose of sustaining student's interest and thus enhancing their academic performance. Boredom has been described and

explained in several ways. Academic boredom as an odd affective state that is characterized by non interest as well as difficulty in understanding the current process. It is concluded that when individual experiences boredom when an activity is neither entertaining nor conducive. It is a level/state of low arousal and dissatisfaction of a student due to inadequacy of external stimulation and the prolonged exposure to the monotonous/same stimulation (Todman, 2013)

Barbalet (1999) marked academic boredom by student's search for excitement in the learning process in order to avoid boredom while engaging in classroom activities. The numerous negative, physical and psychological consequences on academic boredom includes dissatisfaction and low arousal in school activities, depression, loneliness, lack of academic goal orientation, abusive behaviours as well as poor academic performance among students. In addition, Pekrun, Reinhard, Hall, Nathan, Goetz, Thomas, Perry, Raymond (2014) suggested that students' academic boredom is a result of perceiving academic activities as uninteresting and meaningless. Beggs (2007) found that academic boredom has numerous negative, physical and psychological consequences among students. Again, academic boredom has also been connected with a host of negative behaviours such as drug abuse among students, dissatisfaction and low arousal in school activities, depression, loneliness, lack of academic goal orientation, abusive behaviours as well poor academic performance among students. Studies from Pekrun (2006) and Obisanya (2014) showed the negative influence of academic boredom on academic performance of secondary school students. Statistics evidence from general examinations like West Africa Examination Council (WAEC) and National Examination Council (NECO) showed that between 2007 and 2013, an average of 30% of the students who enrolled were able to attain five credits including Mathematics and English.

Academic boredom could also lead students to disengage academically, display disruptive behaviour, cut-classes and dropout of school. Researchers like Todman (2013) also concluded that boredom causes increased aggression, anger sensation seeking and risk taking. According to Kanevsky and Keighlley (2003) in their educational sciences research, academic boredom is majorly caused by external situational attributes.

The behaviour modification strategies that was used in this study to reduce academic boredom is Systematic desensitization (SD), also recognized as relaxation therapy is a type of behaviour therapy used to efficiently overcome fears, boredom and anxiety conditions. This process presumes on the ground that two contradictory feelings of equal intensity cannot stand side by side at the same time. The goal of this therapy is to get the feelings of relaxation to dominate over the feeling of boredom or anxiety in an individuals' life. It is a kind of counter breaking in process where already recognised practise is destabilised or removed by learning something different.

1.1 Method of Treatment

According to Egbochuku and Obodo (2006), the counselling therapy requires thorough competence from the counsellor and accuracy in the timing of reinforcement if the desired effects are to be achieved. The following methods can also be used:

1. Training in deep muscle relaxation.

Makinde (2000), discussing deep muscle relaxation in his study outlined some few important exercises for relaxation technique. These are:

- a. Breath in and out deeply and maintain steady breathing rhythm
- b. Sit upright like a king, no sideways slouch and no cross-legged perch
- c. Relax the face, clench the teeth at the same time
- d. While standing raise both arms, drop them simultaneously by your side
- e. At home, lie flat with your back on the floor and look straight above
- f. Relax all muscles of the body at the same time using like "relax", "cool" and taking three deep breaths.

The following steps were also outlined by Makinde (2000) which has been modified by the researcher was also used in the desensitization training in order to reduce academic boredom among adolescents. These are as follows;

- a. Teach children to always smile and see benefits in all academic activities
- b. Teach them to like everybody around them

- c. Teach them to always ask questions or contribute to learning activities
- d. Teach them to be desensitized in peculiar academic situations
- e. Develop in them a good sense of humour
- f. If the fear is in coming to school, the parents can encourage interest in schooling through the use of incentives like snacks and buying of favourite gifts, e.g packs of sweets.
- g. If the fear is in specific learning subjects, reciprocal inhibition can be used to desensitize the students. In the classroom, the teacher should note individual differences, engage students in classroom activities, use real life situations and also make learning interesting. In addition, utilizing learning aids teach from simple to complex and use positive and negative reinforcement judiciously. Teachers must be competent and make their lesson interesting.

According to Wolpe, relaxation method is a major part of his systematic desensitization technique. Relaxation method is effective in complete or partial behavioural treatment approach to problems such as headaches, insomnia and general feelings of tension. In achieving this, the counsellor's office must be conducive for relaxation

- a. No disruptive noise
- b. Interior decoration that is restful
- c. Lighting which may be dimmed
- d. Clients taught to relax in recline chairs, on mattresses or at the very least, in comfortable upright chairs with headrests.
- e. Requires time and effort to learn relaxation.

The question therefore is, could this behavioural strategy be used to reduce academic boredom experiences?

1.2 Rationale for the Study

Academic boredom has been seen as an unpleasant, transient, affective state in students that is characterised by lack of interest as well as difficulty in concentrating on the current activity in the environment (Fisher, 1993). Studies have shown that students in secondary schools exhibit high level of academic boredom with its numerous negative, physical and psychological consequences on students. They include dissatisfaction and low arousal in school activities, depression and loneliness, lack of academic goal orientation, as well as poor performance, among others (Obisanya, 2014; Todman, 2013 and Beggs 2007). Could behaviour modification strategy be used to reduce this negative experience? This study adopted systematic desensitization in the reduction of academic boredom. This therapy has been effectively used to overcome fear and other anxiety disorders. Could this therapy be effective in the reduction of academic boredom among adolescents in secondary schools?

1.3 Research Question

1. Is there any difference in the efficacy of the Systematic Desensitisation Therapy and the control group in the reduction of academic boredom among adolescents in selected secondary schools?

1.4 Hypothesis

Ho₁. There is no significant difference in the efficacy of Systematic Desensitisation therapy and control group in the reduction of academic boredom among adolescents in selected secondary schools.

1.5 Objective of the Study

The objective of this study was to determine the efficacy of systematic desensitization in the reduction of academic boredom among adolescents in secondary schools in Edo State.

2. Treatment Procedure

A treatment manual containing the treatments and procedure was developed by the researchers.

This study further adopted the following steps below;

- i. Training of the school counsellors on Systematic Desensitization
The school counsellors for the experimental group were trained on the necessary steps they followed in Systematic Desensitization. In achieving this purpose, the researchers exposed them to the manual Systematic Desensitization.
- ii. Pre-Treatment Assessment (pre-test)
The pre-test session took place on the first day and first week of the research. The purpose of this session was to pre-test the students.
- iii. Treatment Programmes
There were two treatment programmes;
A. Systematic Desensitisation
B. Control Group
The students for Systematic Desensitization treatment group met for treatment twice a week (a free period on every Thursday and Friday afternoons) for six weeks and each contact lasting for forty minutes respectively. The control group is the non-attention control group.
- iv. Post-Treatment Programme (post-test)
Finally, after the students have been exposed to the various treatments, they were post-tested and their results compared with that of the pre-test.

3. Methodology

3.1 Design of the Study

The study adopted the pre-test- post- test non-equivalent quasi experimental design. The study consisted of two independent variables, that is, counselling therapies (Systematic Desensitization Therapy and the Control Group), the dependent variable was academic boredom.

In this study, the groups were randomly assigned to treatment and control conditions as depicted below.

Design over Variables

Groups	Design
Experimental Group	O_1 ----- X_1 ----- O_2
Control Group	O_1 ----- X_2 ----- O_2

Key:

O_1 pre-test

O_2 post-test

X_1 is used for Systematic Desensitisation Therapy

X_2 is used for Control Group

3.2 Population of the Study

The population for this study consists One thousand, five hundred and Eighty-two (1,582) senior secondary students of SS 2 including both males and females in the seven public co-educational senior secondary school in Oredo Local Government Area, Edo State, Nigeria. For this study, only the co-educational schools were used.

3.3 Sample and Sampling Procedure

The sample for this study consists of intact classes of 91 (Ninety-one) SS2 students drawn from the co-educational secondary schools used in Oredo Local Government. Two intact classes from the

co-educational secondary schools were used in Oredo Local Government. The schools were selected using the simple random sampling technique through balloting with replacement. From these two schools selected, school A was randomly assigned as experimental group while school B was the control group. School A was exposed to Systematic Desensitization while School B was the control which is Non attention group.

3.4 Instrument of the Study

The instrument used in this study was a questionnaire that was adapted. It's the Boredom Proneness Scale (BPS), developed by Farmer and Sunberg, adapted from Obisanya with test retest reliability co-efficient 0.792

The Descriptive and Inferential statistics were used to analyse the data collected and the null hypothesis tested at 0.05 level of significance.

4. Results

Before the treatment, the intact class used for the two groups were given a pre-test on academic boredom. The pre-test data were analysed using One-way ANOVA. Therefore, because the result was found significant, ANCOVA was then used at post-test using the pre-test scores as covariates.

Hypothesis one: There is no significant difference in the efficacy of Systematic Desensitisation Therapy and Control Group as regards reduction of academic boredom among adolescents in selected secondary schools.

Table 1: Descriptive Statistics of Systematic Desensitisation and the Control Group on Academic Boredom Reduction at Pre-test

Pre-test Academic Boredom	N	Mean	Std. Deviation
Systematic Desensitization	38	49.3158	5.31751
Control Group	61	56.9344	4.92568
Total	91	54.4676	7.40867

Table 1 shows the mean and standard deviation for the group under pre-test. The group with their respective numbers of respondent means and Standard Deviations are Systematic Desensitisation (n = 38, mean = 55.600, Standard Deviation = 9.66), Control group (n=61, mean=56.93, Standard Deviation=4.93).The results of the mean scores and Standard Deviation showed there are differences among the groups at the pre-test level.

Table 2: One-Way ANOVA of Systematic Desensitisation and the Control Group on Academic Boredom Reduction at Pre-test

Groups	Sum of Squares	Df	Mean Square	F	Sig.
Between	1431.056	2	715.53		
Within	6143.484	89	45.17	15.840	.000
Total	7574.604	91			

Table 2 shows a One Way Analysis of variance with an F- ratio of 15.840 with a df= (2,91). Testing at an alpha level of .05, the p value .000 is lesser than p value 0.5, so there is a significant difference between the groups at pre-test. It therefore, means, that at the level of the groups at pretest, they were not the same. Therefore, because the pretest of academic boredom reduction was found to be significant, it was used as a Covariate on academic boredom reduction at posttest

Table 3: One-Way Analysis of Covariance on post-test Systematic Desensitisation and Control treatment conditions with pre-test Boredom as Covariate on Academic Boredom reduction

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	669.822	6	223.274	10.200	.000
Intercept	5471.007	1	5471.007	249.947	.000
Pre-test Boredom	.848	1	.848	.039	.844
Group	537.745	2	268.872	12.284	.000
Error	2954.969	89	21.889		
Total	385013.000	99			
Corrected Total	3624.791	99			

a. R Squared"=.185 ("Adjusted R Squared"=.167)

Keys:

SD= Systematic Desensitisation

Table 3 shows a Two-way Analysis of Covariance with an F-ratio of 12.28 with a df= (2,91). Testing at an alpha level of .05, the p value .000 is lesser than 0.05. Therefore, the null hypothesis which says that there is no significant difference in the efficacy of Systematic Desensitisation and Control Group as regards reduction of academic boredom among adolescents in selected secondary schools is rejected. It is concluded that there were differences in the efficacy of the therapy on the various groups.

Table 4: Bonferroni Pairwise multiple comparison of Academic Boredom Reduction at Post-test

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig.
Systematic Sensitization	Control Group	2.739 [*]	1.124	.048
		-2.492 [*]	.955	.030
Control Group	Systematic Sensitization	-2.739 [*]	1.124	.048
		-5.231 [*]	1.068	.000
		2.492 [*]	.955	.030
		5.231 [*]	1.068	.000

Table 4 shows Systematic Desensitization with a mean difference of 2.74 and significant at 0.048 and the Control Group with a mean difference of -2.49, not significant at 0.30., Systematic Desensitization and the control Group with a mean difference of -5.23, significant at .000. There was a reduction in the academic boredom of the various groups. However, SD (-2.739) were superior to the control groups (2.492).

5. Discussion of Results

The finding of the study indicated that Hypothesis one which stated that there is no significant difference in the efficacy of Systematic Desensitisation and the control as regards academic boredom reduction among adolescent in selected secondary schools in Benin metropolis was rejected. The basis for the rejection was that significant evidence of reduction of academic boredom subsisted within the groups. The counselling method of Systematic Desensitisation Therapy employed in the study showed its efficacy in reducing academic boredom among adolescent in selected secondary schools in Benin metropolis. The students exposed to Systematic Desensitisation Therapy and the control group in this study were used to make the students realize the results of the consequence of academic boredom on their academic performance and personal-social lives. Results from the study showed that participants exposed to the Systematic Desensitisation Therapy and the control had a significant reduction in their academic boredom. Hintze (2000) investigated the effect of Systematic Desensitization and contingency management on truant/school refusal adolescents. He found out that the subjects maintained full-time school maintenance attendance by post-test and at the six month follow up. The results corroborated those of Obodo (2006) and Egbochuku (1998) on the efficacy of Systematic Desensitization in the reduction of high test anxiety and truancy.

Kraft (1992) also gave a record of how effective Systematic Desensitization (SD) is in the reduction of performance anxiety; Egbochuku (1998) confirmed that there was significant improvement in the reduction of test anxiety when SD was used in the treatment. The study had three independent variables forming the treatment groups; they were Systematic Desensitization, Contingency Management and the Control group. The sample consists of 144 SS2 students in senior secondary public schools in Benin Metropolis comprising 72 males and 72 females. The results indicated a significant difference between the treatments groups and control in their truant behaviour reduction. The findings further showed that the students treated with Systematic Desensitisation showed a significant reduction in truancy when compared with untreated students ($F=118.101$ with $p<0.000$). Same results corroborates Egbochuku (2000).

6. Conclusion

The results showed that Systematic Desensitisation therapy could reduce academic boredom, it is therefore concluded that this behavioural therapy is effective in reducing academic boredom.

7. Recommendations and Implications for Counselling

It is therefore recommended that counsellors could use reciprocal inhibition to desensitize the students. Counsellors should be adequately trained for thorough competence on how to use systematic desensitisation therapy. Organisation of regular seminars, conferences and workshops can make this achievable. Counselling should be made interactive and interesting by relating client to real life situations and putting into consideration the individual differences of the students/ In the classroom, the teacher should note individual differences, engage students in classroom activities, use real life situations and also make learning interesting. In addition, utilizing learning aids teach from simple to complex and use positive and negative reinforcement judiciously. Teachers must be competent and make their lesson interesting.

References

- Barbalet, J.M. (1999). Boredom and social meaning. *British Journal of Sociology*, 50, 631- 46.
- Beggs, S. (2007) The boredom experience of disease and injury in Australia. Institute of Health and Welfare Canberra.
- Egbochuku, E. O. (1998). Differential Effectiveness of Systematic Desensitization & Rational- Emotive Behaviour Therapy on the Reduction of Test Anxiety. *Journal of School of language*, 11 (2)
- Egbochuku, E.O (1999 & 2000). Fear & Anxiety in Children; Counselling Intervention. *Benin Journal of Educational Studies*.
- Egbochuku, E.O., Obodo, B.O., & Obadan, N.O (2008) Efficacy of Rational –Emotive Behaviour Therapy on the Reduction of Test Anxiety among Adolescents in Secondary Schools., *the European Journal of Social Science*, 6, (4).
- Farmer, R., & Sundberg, N. D. (1986). Boredom proneness - The development
- Fisher, C. D. (1993). Boredom at work: A neglected concept. *Human Relations*, 46, (3), 395-417.
- Fisher, S. L., (2006). The role of goal orientation in a self-regulation framework (Doctoral dissertation, Michigan State University). *Dissertation Abstracts International*, 59, (7B). (UMI No. 9839639)
- Hintze, J. (2002) Biological, Psychological and Social processes in the conduct disorder. *Journal of Child Psychology and psychiatry and allied discipline*, 43 (1) 133
- Kanevsky, L., and Keighley, T. (2003). To produce or not to produce? An effective urban summer school: Students' perspectives on their success. *The Urban Review*, 43, (3), 358-378.
- Kraft, T. (1992) Behaviour Therapy for performance Anxiety. *A Psychodynamic Explanation for Rapiditdy of Treatment. Contemporary Hypnosis* 9(3). 174-181
- Makinde, B.O. (2000). " Behavioural Medication Strategies as a tool to reduce fear and Anxiety in children and youth in Lagos State. *West Africa Journal of counseling and Psychotherapy*. 1 (2) 4151.
- Obisanya, W.A (2014). Goal orientation, interest in Schooling and test anxiety on students of Lagos state secondary schools. Unpublished masters work, university of Lagos.
- Pekrun, R., (2006) *The Control-value Thoery; An integrated Approach*. Amsterdam: Academic press
- Pekrun, Reinhard; Hall, Nathan C.; Goetz, Thomas; Perry, Raymond P. (2014) Boredom and academic achievement: Testing a model of reciprocal causation, *Journal of Educational Psychology*, 106(3), 696-710.
- Todman, M. (2013) the dimensions of state boredom; frequency duration, unpleasantness, consequences and casual attributions. *Educational Research International* 1(1), 32-40.
- Wolpe, J. (1958). Psychotherapy by reciprocal inhibition. Stanford, CA: Stanford University Press.
- Wolpe, J. (1964). Behaviour therapy in complex neurotic states. *The British Journal of Psychiatry*, 110(464), 28-34.
- Wolpe, J. (1968). "Psychotherapy by Reciprocal Inhibition". *Conditional Reflex* 3 (4), 234-240.