

**EFFECT OF RATIONAL EMOTIVE BEHAVIOUR THERAPY ON REDUCING
TEST AMONG UNDERACHIEVERS IN SCHOOL IN PORT HARCOURT
METROPOLIS IN RIVERS STATE**

By

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Abstract

The study determined the effect of Rational Emotive Behaviour Therapy (REBT) on reducing test anxiety among underachievers in senior secondary schools in Port Harcourt metropolis, in Rivers State, Nigeria. Test anxiety is the dependent variable while REBT which was used on the experimental group is the independent variable. One research question and one null hypothesis guided the study. A sample of 52 SS1 test-anxious underachieving students drawn from a population of 16,864 SS1 students in Port Harcourt metropolis using a non-probability purposive sampling technique was used. Three instruments were used for the study: Basic Education Certificate Examination (BECE) result, Standard progressive Matrices (SPM) and Test Anxiety Scale (TAS). Data collected were analyzed using mean, standard deviation, paired t-test. Results of the study indicated that REBT was effective on reducing the test anxiety of underachievers, which was significant at 0.05 level of significance. Based on the findings, appropriate recommendations were made including that test-anxious underachieving students should be encouraged to receive psychotherapeutic intervention such as REBT and that the government should encourage counselors by providing facilities for counselor's training.

Introduction

Test achievement is important and decisive in students' academic development. The results obtained from tests usually determine whether a student will proceed to the next class or not. Test achievement,

many times, may also determine the kind of job or lifestyle that an individual will lead in the society; this is because high academic achievement often places a person on certain good jobs and positions in society which may not be available to others. Hence, test achievement is

perceived as very important to a student. In order to achieve high test scores, students are usually under immense pressure. Therefore, exams and tests have become stimuli for anxiety responses.

Although a certain degree of anxiety is necessary to arouse a student to prepare well and be able to give his or her best performance on exams, when the arousal becomes too much, student's ability to concentrate and perform successfully in examinations can be negatively impacted. Test anxiety is capable of impairing organized thinking by disrupting the ability to remember material at the time of a test. Many secondary school students may perform poorly not because they lack the mental ability for high academic achievement but because they suffer from test anxiety, which may lead to underachievement and their low achievement increases their anxiety.

Test anxiety is defined by Cherry (2018) as a psychological condition in which people experience extreme distress and anxiety in testing situations. Test anxiety is a feeling of apprehension and dread that an individual experiences about the outcome of an evaluative situation. The higher the importance attached to the impending test, the higher the level of apprehension felt by the student. Test anxiety of students may

lead to academic underachievement; reducing test anxiety of students may help students improve their academic achievement. Underachievement is when a student performs below his/her measured mental capability. Preckel et al.; Smith; Stipek & Miles, cited in Nomaan, Hanif and Rehna (2016) defined underachievement as achieving poor grades or performing below the predicted level of mental ability on some intelligence tests or standardized academic tests. Underachievers are a varied population and any student (both gifted and non-gifted) can underachieve, according to Gallagher (2017). Male underachievers are said to be more likely than female underachievers to become extreme underachievers,. Female underachievers are seen as non-compliant, and their non-compliance sustains their underachievement.

Rational Emotive Behaviour Therapy (REBT) is a psychotherapeutic approach developed by Albert Ellis and was first published in 1956. He believed that man's psychological, emotional and behavioural problems and disturbances stem from inappropriate thoughts and the elements that make up these thoughts are irrational beliefs, (Xo and Liu 2017). Rational Emotive Behaviour Therapy focuses on resolving man's psychological, emotional

and behavioural problems and disturbances by disputing the inappropriate beliefs, thoughts and self-statements that led to them, in order to enable the individual lead happier and more fulfilling live.

Ellis believed that whenever an individual becomes upset, it is not due to events taking place in their lives, but the beliefs that they hold concerning the events that make them upset, anxious and hopeless, (Wood, Turner and Barker 2018). Ellis held that humans have the tendency to adopt irrational beliefs and behaviours which stand in the way of their achieving their goals and purposes. Most importantly Ellis maintained that individuals have it within their power to change their beliefs and philosophies profoundly, thereby radically change the state of their psychological health. Ellis grouped humans' irrational beliefs and behaviours into three themes, which are referred to as the three basic "musts" of Rational Emotive Behaviour Therapy. According to Wood, Turner and Barker (2018) they include: a) the irrationally high expectation of oneself to be exceptional and perform at outstanding levels: *'I MUST do the best. I MUST show people how good I am'*. Of course, people cannot be the best in all situations, so anytime they do not meet or surpass their expectations, they will feel let

down and disappointed. They will feel like failures. Some students believe that they must all the time have 100% in exams, or must always be the best in their class, if before exam, they become aware of their unpreparedness for the exam, they become apprehensive and suffer test anxiety. b) The irrationally high expectation of others: Here, someone believes that others must always treat them with kindness and fairness. If others do not meet this expectation, they will be labeled as trouble, flawed or no good. Some students who hold this belief may engage in negative attitude and habits, negative self-perception, thoughts of failure and consequences of failure, test anxiety, anger and vindictiveness when faced with evaluative situation. c) The irrationally high expectation to always get what you want: In a very self-centered way, this belief marks the demand for only what you want, when you want it. It feels like a tragedy to not get what is desired. Some students who hold this belief tend to procrastinate studying and when faced with exams, may not be able to recall material which they have "crammed" at the last minute for the exam. These students may experience test anxiety, frustration, self-pity, depression, and exhibit behaviours such as avoidance.

Students' test anxiety and underachievement may be caused by negative and irrational beliefs and thinking patterns of students. The Rational Emotive Behaviour therapist can help the test-anxious underachievers to identify irrational beliefs, thought patterns and negative self-statements, dispute them, and replace them with more rational and self-helping ones, and also teach them how to discriminate between their own thoughts and reality, in order to enable them improve their psychological well-being and academic achievement.

Review of some empirical evidence indicated that Rational Emotive Behaviour Therapy has significant effect on mental and psychological problems of individuals. Xo and Liu (2017) investigated the efficacy of an 8-weeks Rational Emotive Behavior Therapy (REBT) programme on adjusted irrational beliefs and mental symptoms in female college students. Result revealed that Rational Emotive Behaviour Therapy had significant efficacy on the reduction of depression, anxiety, aggression, painful fear, paranoid thoughts, psychosis, obsession and compulsion and hypersensitivity to interactions in participants. A study conducted by Eifediyi, Ojugo & Aluede (2018) investigated the effectiveness of Rational Emotive Behaviour Therapy on

reducing examination anxiety of senior secondary school students in Edo State and the result suggested that Rational Emotive Behaviour Therapy treatment approach was successful in reducing exam anxiety of students. Farokhzard (2014) examined the effect of Rational Emotive Behaviour Therapy on adjustment and reducing irrational beliefs among adolescent girls in Tehran and result also revealed that Rational Emotive Behaviour Therapy reduces irrational beliefs and improves emotional and social adjustment among adolescent girls. Ntamu (2017) studied the effect of Rational Emotive Behavioural Therapy (REBT) on fear of failure among Public Secondary School Students in Calabar, Cross River State and The result of the analysis showed that there is a positive effect of Rational Emotive Behaviour Therapy on reducing fear of failure and hence on examination malpractice. However, Osenweugwo & Igbineweka (2018) reported that Rational Emotive Behaviour Therapy had no statistically significant effect on the test anxiety of participants, but that there were statistically significant decreases in test anxiety of participants in two of the treatments – Systematic Desensitization and Solution Focused Brief Therapy in their study of the differential efficacy of Solution Focused Brief Therapy, Systematic Desensitization and Rational

Emotive Behaviour Therapy in reducing the test anxiety status of undergraduates in a Nigerian university.

Statement of the Problem

Test anxious underachievers suffer from fear and heightened physiological activities like increased heart rate, respiratory disorders, hyperventilation, dizziness, nausea, sweating, stomachache, headache, diarrhea, dry mouth, and fidgeting, crying, fainting and other somatic symptoms in evaluative situations which influence the manner in which they interpret and respond to events in the environment. They may worry and have negative self perceptions and expectations; they may also engage in self deprecating habits and attitude. They may have feelings of dread, low competence, feelings of inadequacy, self-condemnation, negative self-talks, and frustration and lack of self-efficacy, “blanking out” or “freezing”, may experience low self-esteem, depression, anger, confusion, disorganization, feelings of hopelessness, panic attacks which may interfere with their response to test questions, thereby negatively affect their achievement. It is known that students who suffer from test anxiety may underachieve and as a result, may hate school, engage in truancy, and are at risk of school dropout. Therefore, a

lot of human and financial resources as well as opportunities are wasted. The negative consequences of test anxiety impact a student’s social, emotional, and behavioural development.

Several intervention strategies may be used to treat test anxiety. What is the effect of Rational Emotive Behaviour Therapy in the treatment of test anxiety among underachievers in schools in Port Harcourt Metropolis of Rivers State, Nigeria?

Objective of the Study

The objective of the study was to determine the following:

The effect of Rational Emotive Behaviour Therapy on reducing test anxiety among underachievers.

Research question:

To what extent does Rational Emotive Behaviour Therapy reduce test anxiety among underachievers?

Null Hypothesis

The following null hypothesis was tested at 0.05 Alpha levels.

There is no significant effect of Rational Emotive Behaviour Therapy on the reduction level of test anxiety among underachievers.

Methodology

The design for the study was quasi-experimental, adopted to examine the effect of Rational Emotive Behaviour Therapy on test anxiety of underachievers in schools in Port Harcourt metropolis in Rivers State, Nigeria.

The target population for the study was all Senior Secondary School One (SSS1) students in Port Harcourt metropolis, which is the urban area, (Port Harcourt LGA, parts of Obio/Akpor and Eleme LGAs) in Rivers State numbering 16,864 from the 82 public senior secondary schools and government approved private senior secondary schools (source: Senior Secondary Schools Board, office of the Director, planning, Research and Statistics, 2018, and Rivers State Ministry of Education, 2019). However, a sample of 52 test-anxious underachievers obtained through a non-probability purposive sampling technique from 2 senior secondary schools in Port Harcourt metropolis was used. Three instruments were used for the study: Basic Education Certificate Examination (BECE) result, Standard Progressive Matrices (SPM), and Students' Test Anxiety Scale (STAS). Subjects were randomized into 2 groups for 1 experimental group and 1 control group. The experimental group was treated

with Rational Emotive Behaviour Therapy for eight (8) weeks while the control group received no treatment.

The Basic Education Certificate Exam (BECE) is a standardized test administered to students who are in their third year of the junior secondary school, transiting from the ninth year of basic education class to the senior secondary school. It is meant to stream students who complete junior secondary school into senior secondary school, and other technical, vocational or apprenticeship schemes. BECE is conducted by each state government and the Federal Capital Territory Abuja for its candidates. National Examination Council (NECO) conducts the BECE for federal unity colleges, Armed forces secondary schools and other federal establishments. Eighteen subjects are administered at the BECE level.

The BECE result is made up of: A) continuous assessment scores and terminal examination scores of first term, second term and third term of their JSS1 and JSS2. B) Continuous assessment scores for the first and second terms of their JSS3 and C) the BECE (a standardized exam). A candidate is expected to sit for a minimum of nine subjects and a maximum of 10. A candidate is deemed to have passed the BECE if he/she makes grade P (Pass) in six subjects including English Language and Mathematics. The grades of BECE

are: A – distinction, B – higher credit, C – lower credit, P – pass, and F – fail. The BECE was used to get students who have low academic achievement. Students who made grades P in five subjects and grade F in the BECE were separated from other students and given the mental ability test (Standard Progressive Matrices).

Standard Progressive Matrices (SPM) is also called Raven's Matrices or RPM. It is a non-verbal test that is administered to persons ranging from 5-year-olds to the elderly. The SPM is in picture-like form, therefore, can be administered to persons who do not speak nor write English Language, as well as persons with physical and intellectual disabilities. All items are presented in black ink on a white background. SPM has 60 multiple choice items, classified into A, B, C, D, and E respectively. In each test item, respondents are required to identify the missing element that completes the pattern by choosing from a list of six or eight options. Each correct response attracted one point, the maximum score was 60 points and the minimum score was 0. Respondents who scored from 45 to 60 in the SPM were regarded as being intellectually superior and above average intellectual capacity. While respondents who scored between 44 and 0 were regarded as mentally inferior. The mental classification of Standard

Progressive Matrices (SPM) was done by John L. Raven and adopted by the researcher as follows: Mental Ability Test (MAT) 55-60 – intellectually superior, MAT 45-54 – Above average intellectual capacity, MAT 30-44 – Average intellectual capacity, MAT 11-29 – Below average intellectual capacity, and MAT 10 and below – intellectually inferior. SPM was administered to students in order to determine the mental ability of the students who made grade P in five subjects and grade F in BECE. Students who scored between 45 and 60 (intellectually superior and above average intellectual capacity) on the SPM but made grade P in five subjects and grade F in the BECE constituted the academic underachievers who were given STAS to test for test anxiety disorder, which will be sample of the study. The use of SPM in this study enabled the identification of the students who although have high intellectual capacity, however, failed to make high grades as expected of them in the BECE. These students are expected to have passed the BECE excellently considering their high intellectual capacity, but they made grade P in five subjects and grade F, this is an indication that something went wrong somewhere. These students may have suffered from test anxiety at the time of exams and so did not achieve to their full potential, hence their underachievement.

Students' Test Anxiety Scale has section 1 and section 2. Section 1 elicited personal information including gender of student. While Section 2, titled **TAS**, is made up of 24 items, 10 of which were adapted from Westside Test Anxiety Scale by Richard Driscoll & Westside Psychology and 14 of which were adapted from Test Anxiety Scale by Spielberger and Sarason. Test Anxiety Scale (TAS) contained 24 items, each item has five (5) possible responses with test anxiety score ranging from 1-5 as assigned to each response, and the total score was computed to determine the degree of test anxiety of an individual student. All respondents were required to tick any of the statements of five options as it concerns them, for example: never, rarely, sometimes, often, and very often. The instrument has 24 items in all, the maximum score is 120 points and the minimum score is 24 points. 59 points is the cutoff for test anxiety disorder. Underachieving students who scored between 59 – 120 on TAS were considered as having test anxiety disorder; they were separated from the underachieving students who scored between 24 – 58 on the TAS for treatment.

Scoring Test Anxiety Behavior: 1-24 is considered normal, 25-40 is mild-test anxiety, 41-58 is borderline test anxiety, 59-69 is Moderate test anxiety, 70 and above - Extreme test anxiety.

The face and content validation of the instruments were done by experts in Measurement and Evaluation and Guidance and Counseling from the Department of Educational Psychology, Guidance and Counseling, University of Port Harcourt. Standard Progressive Matrices had its construct validity estimated by convergent method at 0.869. Instruments had good validity for the study. The reliability of TAS was established using Cronbach alpha at 0.720. This indicated that the items on the instrument have internal consistency. Standard Progressive Matrices (SPM) was pilot tested for reliability on 25 respondents through a test-retest method using Pearson Product Moment Correlation coefficient and the reliability was established at 0.68. The research question was answered using mean and standard deviation while the corresponding null hypothesis was tested using paired t-test.

Results

Research question: To what extent does Rational Emotive Behaviour Therapy reduce test anxiety among underachievers?

Hypothesis: There is no significant effect of Rational Emotive Behaviour Therapy on the reduction level of test anxiety among underachievers.

Table 1: Mean Standard Deviation and paired t-test on the effectiveness of REBT on the reduction of test anxiety.

Test mode	N	Mean	Std	Mean reduction	df	t-value	P-value
Pretest	26	82.27	11.74	44.38	25	25.43	0.0005
Posttest	26	37.88	4.55				

Table 1 revealed that the underachievers who were treated with REBT had the mean scores of 82.27 (SD = 11.74) before treatment and 37.88 (SD = 4.55) after treatment. This means that from the pretest to the post test their level in test anxiety reduced by a mean score of 44.38. Again it is shown in table 4.3 that when the mean difference was subjected to paired t-test, a calculated t-value of 25.43 was obtained at df of 25 at 0.0005 level of probability ($P < 0.05$). which is lower than the chosen level of probability. Hence, the null hypothesis was rejected. The rejection of the null hypothesis indicates that REBT had a significant effect on the reduction of test anxiety among underachievers.

Discussion

The finding of this study stated that Rational Emotive Behaviour Therapy had significant effect on the reduction of test anxiety among underachievers. This result is as expected because Rational Emotive Behaviour Therapy (REBT) is an intervention strategy used to help clients gain insight into how they have learnt to needlessly upset themselves through irrational cognition, emotion and behaviour, teaches them how to dispute their irrational cognition, emotion and behavior which sustain their test anxiety, and replace them with more rational cognition in order to be able to face exams and tests in a calm and confident way.

This finding is similar to the finding of Xo and Liu (2017) who investigated the efficacy of an 8-weeks Rational Emotive Behavior Therapy (REBT) programme on adjusted irrational beliefs and mental symptoms in female college students and found that there was a decrease in depression, anxiety, aggression, painful fear, paranoid thoughts, psychosis obsession and compulsion and hypersensitivity to interactions in participants in the REBT group but not in the non-REBT group.

Conclusion

Based on the result of the study, it was concluded that Rational Emotive Behaviour Therapy (REBT) is a rewarding technique in the treatment of test anxiety among students and

leaving test anxious students without subjecting them to psychotherapeutic intervention such as, Rational Emotive Behaviour Therapy is not the best.

Recommendation

Based on the finding, the researchers made the some recommendations that underachievers with test anxiety should be encouraged to receive trainings such as Rational Emotive Behaviour Therapy, School guidance counselor should make use of Rational Emotive Behaviour

Therapy to help students overcome their test anxiety and the government should encourage counselors by providing facilities for their training.

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