# EFFECTS OF RATIONAL-EMOTIVE BEHAVIOUR AND SYSTEMATIC DESENSITIZATION THERAPIES ON SS1 STUDENTS’ TEST ANXIETY IN GOVERNMENT SENIOR SECONDARY SCHOOL, TOWNSHIP, JOS-NIGERIA

**CLARA LADI JIBRIN**

# MARCH 2017

**EFFECTS OF RATIONAL-EMOTIVE BEHAVIOUR AND SYSTEMATIC DESENSITIZATION THERAPIES ON SS1 STUDENTS’ TEST ANXIETY IN GOVERNMENT SENIOR SECONDARY SCHOOL, TOWNSHIP, JOS-NIGERIA**

# CLARA LADI JIBRIN

**B.Ed. (Zaria), M.Ed. (Jos) UJ/2012/PGE/0461**

# A thesis in the Department of EDUCATIONAL FOUNDATIONS, Faculty of Education,

**Submitted to the School of Postgraduate Studies, University of Jos, in partial fulfilment of the requirements for the award of the degree of DOCTOR of PHILOSOPHY in GUIDANCE AND COUNSELLING of the**

# UNIVERSITY OF JOS

**MARCH 2017**

# DECLARATION

I hereby declare that this work is the product of my own research efforts undertaken under the supervision of Prof. Albert .L. Lannap and has not been presented elsewhere for the award of a degree or certificate. All sources have been duly distinguished and appropriately acknowledged.

# CLARA LADI JIBRIN

UJ/2012/PGED/0461

# CERTIFICATION

This is to certify that this thesis has been examined and approved for the award of the degree of **DOCTOR OF PHILOSOPHY in GUIDANCE AND COUNSELLING.**

Professor Abdul-Ganiyu Salawu Professor Philip Ojoru Elaigwu

# External Examiner Internal Examiner

**Date: Date:**

Professor Albert Lohkap Lannap Dr. Joseph Maina Musa (Senior Lecturer)

# Supervisor Head of Department

**Date: Date:**

Professor Mary Plangnan Haggai Professor Timothy O. Oyetunde

# Dean, Faculty of Education Dean, School of Postgraduate Studies

**Date: Date:**

# ACKNOWLEDGEMENTS

First and foremost, my thanks go to the Almighty God for providing me with the strength and grace to undertake this study up to this level. Time and space will fail me to mention all people who contributed in several ways to bring this study to this level. To them, I am so grateful.

I remain greatly indebted to my supervisor, Prof. Albert L. Lannap, for accepting to be my supervisor when I had lost hope of getting one. I thank him very much for his encouragement and guiding me in this study.

I highly appreciate the guidance and step by step corrections of Dr. Katrina A. Korb.

I thank her for her patience and kind words and may God bless her.

I must thank in a very special way, Prof. Cletus T. Gotan for his concern and prayers. In the same vein, I extend my thanks to Prof. Timothy O. Oyetunde for his understanding for making it possible for me to advance the work to its present stage and may the Lord bless him abundantly.

I will also want to thank Prof. Yakubu A. Mallum, Prof. Nanran B. Longbap, Prof. Philip O. Elaigwu, Prof. (Mrs.) Christiana .A. Ugodulunwa, Dr. (Mrs.) Grace Imo, Dr. (Mrs.) Tina Anakwe, Prof. Matthew N. Sule and Mrs. Maria Maigari, for their various contributions towards the progress made on this work.

I remain indebted to my husband, Barr. Alex Jibrin and my Children who supported me morally, financially and prayerfully. Indeed, I sincerely thank them very much. I am also indebted to my son‟s in-laws – Dr. George Dangana and Mr. Bethel Njoku; My daughters in- law Lina Jibrin, Edwina Jibrin and Ann Jibrin. I thank them for their various contributions and support to this research work. May God reward them all.

I appreciate the assistance of my husband‟s niece, Beatrice Jibrin, Noel Kwande, my husband‟s relation, Anita James my house help and many other too numerous to mention in this acknowledgment. I thank them.

To my typist, Mr. Victor D. Binda, Mr. Stephen James and my two daughters Barr. Mrs. Evelyn Dangana and Nuala Nyekwap Jibrin who also assisted in typing some parts of my work, I thank and appreciate them all. May God reward them abundantly.

I appreciate the Principal of St. Louis College Rev. Sr. Irene Miapyen, and the Guidance Counsellor, Miss Mercy Ajuzie for providing me with materials for the control group of this research work. I thank them for their encouragement.

I must also thank the principals of Government Senior Secondary School, Tudun Wada, Mrs. Laraba Magni and that of Government Senior Secondary School Township, Mrs. Nok Dinatu Sabo, and Mrs. Angelina Shehu, Vice Principal Government Senior Secondary School, Laranto for their contributions and cooperation.

I must not forget to thank the research assistants of Government Senior Secondary School Tudun Wada, Mrs. Vou Gazu, Mrs. Rose Laankwap, where I did my pilot study and Mr. Pankyes Yohanna, Rev. Sr. Nkechi Ukah, Mrs. Temswang Joseph, Mr. Marshall Dabang, Mr. Dewan Gideon and Miss Gloria Onoche of Government Senior Secondary School Township, Jos, for their cooperation and contributions to this research work. I thank them very much.

I am very grateful to my up-grading interview panel chaired by Prof. Nanran B. Longbap. Other members include – Prof. Albert L. Lannap my supervisor, Prof. E.D. Ozoji, Dr. Joseph Maina Musa, Prof. Matthew N. Sule (HOD) and Dr. (Mrs.) O.O Akintunde (Secretary). They painstakingly went through my work. Their constructive and scholarly input greatly improved the quality of the work. May God bless them all.

Finally, but not the least I am highly indebted to Late Prof. Ibrahim Bulus, my first supervisor who did not live to see me through, to the end of this research work. May his soul and the souls of all the faithful departed rest in perfect peace. Amen.

# DEDICATION

This work is dedicated first and foremost to God Almighty; to my husband, Barr. Alex Jibrin and my children – Fabian Jibrin, Barr. Mrs. Evelyn Dangana, Muknaan Jibrin, Homsuk Jibrin, NualaJibrin and Kemen .E. Njoku and my grandchildren Daniel, Justine, Clarion, Phoebe,Hoomuk, Micheal, Claire, Jordan, Miyalmen, Naanma, Ethan, Joan, Jessy and Naanmiyap.

# TABLE OF CONTENTS

**CONTENT PAGE**

TITLE PAGE - - - - - - - - - i

DECLARATION - - - - - - - - ii

CERTIFICATION - - - - - - - - iii

ACKNOWLEDGEMENTS - - - - - - - iv

DEDICATION - - - - - - - - vi

TABLE OF CONTENTS - - - - - - - vii

LIST OF TABLES - - - - - - - - x

LIST OF FIGURES - - - - - - - - xii

LIST OF APPENDIXES - - - - - - - xiii

ABSTRACT - - - - - - - - - xiv

# CHAPTER ONE INTRODUCTION

* 1. BACKGROUND OF THE STUDY - - - - - 1
  2. STATEMENT OF THE PROBLEM - - - - - 9
  3. PURPOSE OF THE STUDY- - - - - - 9
  4. RESEARCH QUESTIONS - - - - - - 10

1.5 HYPOTHESES- - - - - - - - 10

* 1. THEORETICAL FRAMEWORK- - - - - - 11
  2. SIGNIFICANCE OF THE STUDY - - - - - 14
  3. DELIMITATIONS OF THE STUDY - - - - 15
  4. OPERATIONAL DEFINITION OF TERMS- - - - 16

# CHAPTER TWO

**REVIEW OF RELEVANT LITERATURE**

|  |  |  |
| --- | --- | --- |
| 2.1 CONCEPT OF TEST ANXIETY- | - - - - - | 18 |
| 2.2 CAUSES OF TEST ANXIETY- | - - - - - | 19 |

* 1. [BEHAVIOURAL MANIFESTATION OF TEST ANXIETY AND ITS EFFECTS ON SECONDARY SCHOOL STUDENTS - - - 24](#_TOC_250023)
  2. THE NEEDS OF SENIOR SECONDARY SCHOOL STUDNETS AND THE PROBLEM OF TEST ANXIETY- - - - - 25
  3. [COUNSELLING AS A TOOL FOR ADJUSTMENT- - - 26](#_TOC_250022)
  4. COUNSELLING TECHNIQUES OF REMEDIATING TEST ANXIETY 28
  5. [IMPACT OF RATIONAL-EMOTIVE BEHAVIOUR THERAPY AND SYSTEMATIC DESENSITIZATION ON TEST ANXIETY- - 31](#_TOC_250021)
  6. [EMPIRICAL STUDIES- - - - - - - 33](#_TOC_250020)
  7. SUMMARY OF REVIEW OF RELEVANT LITERATURE- - 45

CHAPTER THREE METHOD AND PROCEDURE

* 1. [RESEARCH DESIGN - - - - - - 48](#_TOC_250019)
  2. [POPULATION AND SAMPLE- - - - - - 52](#_TOC_250018)
     1. [Population - - - - - - - 52](#_TOC_250017)

[3.2.2 Sample - - - - - - - 52](#_TOC_250016)

* 1. [SAMPLING TECHNIQUES - - - - - - 53](#_TOC_250015)
  2. [INSTRUMENT FOR DATA COLLECTION - - - 54](#_TOC_250014)
     1. Description of the Instrument- - - - - 54
     2. Procedure for the Development of the Instrument - - 55
  3. [VALIDITY AND RELIABILITY OF THE INSTRUMENT - - 56](#_TOC_250013)
     1. [Validity of the Instrument - - - - - 56](#_TOC_250012)
     2. [Reliability of the Instrument - - - - - 56](#_TOC_250011)
  4. [PROCEDURE FOR DATA COLLECTION- - - - 57](#_TOC_250010)
     1. [Training of Research Assistants- - - - - 58](#_TOC_250009)
     2. [Administration of Pre-Test- - - - - - 60](#_TOC_250008)
     3. [Administration of the Programme- - - - - 60](#_TOC_250007)
     4. [Administration of Post-Test - - - - - 65](#_TOC_250006)
  5. [METHOD OF DATA ANALYSIS- - - - - - 65](#_TOC_250005)
     1. [Research Questions - - - - - - 65](#_TOC_250004)

[3.7.2 Hypotheses- - - - - - - - 66](#_TOC_250003)

[3.7.3 Scheffe Multiple Comparison Test - - - - 66](#_TOC_250002)

[CHAPTER FOUR RESULTS AND DISCUSSION](#_TOC_250001)

[4.1 RESULTS- - - - - - - - - 67](#_TOC_250000)

|  |  |
| --- | --- |
| 4.1.1 Research Question One - - - - - | 67 |
| 4.1.2 Research Question Two - - - - - | 70 |
| 4.1.3 Research Question Three - - - - - | 73 |
| 4.1.4 Research Question Four - - - - - | 76 |
| 4.1.5 Hypotheses - - - - - - - | 79 |
| 4.1.6 Hypothesis One - - - - - - | 79 |
| 4.1.7 Hypothesis Two - - - - - - | 90 |
| 4.1.8 Hypothesis Three - - - - - - | 95 |
| 4.1.9 Hypothesis Four- - - - - - - | 100 |

4.2 DISCUSSION - - - - - - - 107

# CHAPTER FIVE

**SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

* 1. SUMMARY OF FINDINGS - - - - - - 111
  2. CONCLUSION - - - - - - 111
  3. RECOMMENDATIONS - - - - - - 112
  4. LIMITATIONS OF THE STUDY- - - - - - 113
  5. SUGGESTIONS FOR FURTHER STUDY - - - - 114
  6. CONTRIBUTION TO KNOWLEDGE - - - 114

REFERENCES - - - - - - - 116

APPENDICES - - - - - - - 123

# LIST OF TABLES

**TABLE PAGE**

1. Structure of the Research Design in the Study - - - 50
2. Pre-Test Anxiety Mean Scores ofSS1Students in the Study - - 68
3. Pre-Test Self-Concept Mean Scores of SS1 Students in the Study - 71
4. Pre-Test self-efficacy Mean Scores of SS1 Students in the Study - 74
5. Students Mean Scores on Willingness to Engage in Examination

Malpractice of SS1 Students in the Study on Test Anxiety- - 77

1. ANOVA Test on Pre-Test Anxiety - - - - - 80
2. ANOVA Test on Post-Test Anxiety - - - - - 82
3. Summary of Pre and Post Test Statistics of Rational-Emotive Behaviour Therapy, Systematic Desensitization, Combined and Control Groups

in the Study on Test Anxiety - - - - - - 84

1. Scheffe Multiple Comparison Test of Control Group with Each of

The Therapies- - - - - - - - 88

1. ANOVA Test on Post Self-Concept Mean Scores - - - 91
2. Post Test Analysis of Self-Concept Mean Scores in Relation to the

Therapies - - - - - - - - 93

1. ANOVA Test on Post Self-Efficacy Mean Scores - - - 96
2. Post Test Analysis of Self-efficacy Mean Scores in Relation to the

Therapies - - - - - - - - 98

1. ANOVA Test on Post Test Analysis of Examination-Malpractice Mean Scores - - - - - - - - - 101
2. Post Test Analysis of Examination-Malpractice Scores in Relation to the Therapies - - - - - - - - 103
3. Summary Results of Scheffe Multiple Comparison Test of Control Group With Each of the Dependent Variables and the Therapies - - 105

# LIST OF FIGURES

**FIGURE PAGE**

1. A-B-C-D-E-F Paradigm of Rational-Emotive Behaviour Therapy - 40
2. Test Anxiety Events: Students‟ Example - - - - 44
3. Mean Plots of the Group - - - - - - 86

# LIST OF APPENDICES

# APPENDIX PAGE

A1 Students Test Anxiety Questionnaire - - - - 126

A2 Administration of the Programme - - - - 128

A3 Test Anxiety Scores (Pre and Post) - - - - 144

B1 Topics Taught to the Control Group - - - - 171

# ABSTRACT

The study examined the effects of Rational-Emotive Behaviour and Systematic Desensitization therapies on SS1 Students‟ test anxiety in Government Senior Secondary School, Township, Jos. This was motivated by the increasing incidence of mass failure of students in West African Examination Council (WAEC) and Unified Tertiary Matriculation Examination (UTME). This anxious state seems to make students fear examinations and engage in malpractices. The study examined the following variables associated with test anxiety such as: self-concept, self-efficacy and willingness to engage in examination malpractice. The pre-test, post-test control group experimental design was used. The population of the study consisted of all SS1 students with test anxiety in Government Senior Secondary School Township, Jos. The sample consisted of eighty SS1 students made up of both sexes in Government Senior Secondary School Township, Jos. The treatment consisted of Rational-Emotive Behaviour Therapy, Systematic Desensitization and Combined therapies that were aimed at counselling and educating students on test anxiety. There were twenty students in each treatment and control group. A researcher designed questionnaire named Students Test Anxiety Questionnaire (STAQ) was used for data collection. The statistical techniques used for data analysis were Mean, Standard Deviation, Analysis of Variance (ANOVA) and Scheffe Multiple Comparison Test. The homogeneity of variance was tested at 0.05 significance level. Pearson Product Moment was used to correlate the first and second test for reliability index of the instrument. The reliability result gave a correlation that was significant at 0.01 level and an index of 0.92. Therefore, all the four null hypotheses were rejected, indicating that the treatments were effective in changing students‟ behaviours. The results showed a statistically significant effect of the treatments (Rational-Emotive Behaviour Therapy, Systematic Desensitization and combined Therapies) on SS1 students‟ test anxiety as well as the related variables such as self-concept, self-efficacy and willingness to engage in examination malpractice. Rational-Emotive Behaviour Therapy was more effective in reducing students‟ test anxiety than Systematic Desensitization and Combined Therapies.

The results also showed that the treatment groups were found to be significantly different from the control group. The findings of the study were interpreted in terms of the need to counsel students out of the fear for examinations. The implication of the findings is that there are positive attitudinal and behavioural changes towards test anxiety. It is recommended that since Rational-Emotive Behaviour and Systematic Desensitization Therapies were effective in reducing test anxiety in Secondary School Students, they could be incorporated in the teacher training programmes to be used in normal classroom teaching in order to reduce test anxiety in students.

# CHAPTER ONE INTRODUCTION

* 1. **BACKGROUND OF STUDY**

Test anxiety generally, is the uneasiness apprehension, or nervousness felt by students during examination or test. It inhibits students from performing according to their potentials in academic setting. Test anxiety is believed to be the trait that predisposes an individual to react negatively to examination and test. (Keogh and French, 2001). Similarly, (Spiel-berger and Sarcison, 1989), defined test anxiety as a situation-specific trait that refers to the anxiety states and worry conditions that are experienced during examinations.

On the other hand, Examination or test is one of the main methods of assessment in schools at all levels. In secondary schools, tests are an important part of the educational process. Unfortunately, they can also be intimidating, leading to test anxiety that can adversely affect a person‟s test results. When this anxiety begins to affect examination performance, it has become a problem. Students are administered tests, which are used as screening and selection devices. Thus, tests take on a real threat value when one knows that his or her future will depend on the results of such tests. Test as a phobia is a condition which affects students, and causes them to fear and worry. Worry and dread might cause students to develop fear or failure, random thoughts, feelings of inadequacy, self condemnation, negative self-talk, frustration and comparing oneself unfavorably to others.

Secondary school education is expected to raise students who can think for themselves, share ideas and respect the views of others. It is expected to equip students to face challenges and appreciate others ideas. The implication of these statements is that, individuals are required to acquire the necessary skills through education, so that a strong dynamic nation can emerge. There will also be progress in general if individuals who make up the nation are guided aright from the secondary schools. A right guided person will be able to perform effectively without fear. Test anxiety is one problem that will not allow

secondary students to perform credibly and achieve these goals. Hence, if what one is acquiring is faulty, the Nation will be heading towards a faulty society.

Some individuals are so fearful of test or other forms of examination that their performance is impaired. Students are supposed to mobilize their intelligence and learning in test situations and perform well, but the reverse it seems is the case in our secondary schools. Some students are good and intelligent but because of fear, their memory become blocked in formal tests and examinations and so do poorly. Fears can be viewed as a form of learning or conditioning. What is learned can be unlearned, hence fear conditioning can be reversed.

In test anxious individuals, some observable behaviors such as perspiration, sweaty palms, muscle tension, headache, stomach aches, nausea, diarrhea, shortness of breath, rapid heartbeat and dry mouth, going blank, confusion, poor organization and the inability to concentrate are common during testing situations. Also, there may be disruption or disorganization of effective problem solving and cognitive control, including difficulty in thinking clearly (Cassidy and Johnson, (2001).

In the majority of cases, test anxiety is a roadblock to learning. Some students are so paralyzed by test anxiety that they feel no amount of study or preparation will enable them pass an examination regardless of how important that examination might be. This realization can be disheartening and demoralizing and in some extreme cases, can cause students to give up on their goals if achieving them requires taking any sort of formal test.

Secondary school students are mostly adolescents. Counselling psychologists, like Barnett and Schuler, (2000) and Adegoke (2002), described the adolescent stage as a period of “storm”, which is marked by profound physical, emotional and social changes. How they react to these problems depends on the degree of help or assistance they receive from various helping professions, such as counselling among others. It is to render such assistance that this research work is out to find out an effective technique to help senior secondary students overcome test anxiety.

Along with the unique developmental tasks that face young adolescents are historical experiences and expectations they collect that complicate and interfere with the successful sense of mastery and achievement of identity. One of such experiences present throughout life and especially salient during the institutional years of education, is the evaluative or testing experience.

Denga (1982), also found that Anxiety crisis is characterized by a state of high anxiety and turmoil. It may be predicated by fears, depression, and a feeling of uncertainty. Anxiety crisis appears to be very common among students during the examination periods. Students who are not adequately prepared for examinations for instance watch out for the slightest excuse that will trigger them off into demonstration in order to avoid sitting for the examination, especially if the institution is closed down. This avoidance fear does nothing more than a postponement of the inevitable agony for such ill-prepared students.

Olatoye (2009), investigated the relative and combined influences of test anxiety and motivation for examinations on science achievement of selected Junior Secondary School Students in Ogun State, Nigeria. He found that high test anxiety predicted low science achievement. This finding is instructive enough to show that high test anxiety could lead to poor academic achievement.

Rational-Emotive Behaviour Therapy and Systematic Desensitization could help to minimize or reduce test anxiety to the barest minimum in secondary schools. Students who are deficient in self-concept, self-efficacy, study-skills and those who are willing to engage in examination malpractice are more likely to have test anxiety. One of the keys for students going to school is to have students with values and vision who can develop positive feelings about themselves. Positive feelings or attitudes like respect for others, caring, comparison, apathy etc are the results of a positive feeling, attitudes and pride individuals feel about themselves – (Reasoned& Lane 2007). Students behave the way they see themselves and expectations they believe others have of them; For example, if a student has negative feelings about himself or herself, there will be a tendency for him or her to relate to others in negative

than positive ways. These affect everything students do in life, in the home, at school and in the society at large. A student who has poor self-concept is likely to perform poorly during test and examination while a student who has positive self-concept will not fear examination but will have the courage to face it headlong.

Another factor is the self-efficacy of the students. Efficacy beliefs influence the amount of anxiety students experience as they engage in an activity. A strong sense of efficacy enhances students accomplishment, and confident when they approach difficult tasks as challenges to be mastered rather than as threats to be avoided. Conversely, people who doubt their efficacy may believe that things are tougher than they really are, a belief that fosters test anxiety and narrow vision of how best to solve a problem. (Parades and Schunk (2001).

One other factor is the study-skills. In talking about study-skills, it is considered necessary for students to be aware that there are ways to study more effectively in order to avoid test anxiety during examinations. If only they can learn to study more effectively the pains and punishment now accompanying the process can be reduced. Studying can be more successful as it is still like other skills which any student can learn how to do. Lack of this preparation may result in severe test anxiety which also lead to paralysis during a formal testing situation.

Onyeizugbo, (2010), testified to the fact that no matter how hard or diligently students have prepared, suddenly they cannot remember any of the information studied as they take the test. Faced with this blank state, the affected students freeze up even more, and a vicious circle develops. Students with high test anxiety tend to have or use inadequate learning or study skills while in the preparation stage of examination taking.

One other important element of test anxiety is examination-skills. Examination is not just mere measure of achievement on a course of study. It is significantly perceived by students and society as one of the score determinants of life success. Examination results are therefore taken as the single index of the level of intellectual ability, aptitude and hence the

only clear measure of students‟ adequacy for a life career. Examinations form part of the evaluation of school performance and are therefore inevitable by the students. This explains why the approaching examination often generates so much tension, fear and disorganizing emotion of the students. Examinations skills are therefore, important to get help students out of their anxious states.

Lack of preparation towards an examination has been identified as one of the reasons why students get anxious when taking the examination. Obasi (1997) suggested that students should prepare for examination or test. The first preparation for an important examination begins at the very on set of the course. The need to know what ground to be covered from a syllabus is necessary; they need to know the course outline and list of books and important references; they need to know the conditions of the examination, such conditions as the number of papers to sit for, how long each paper is, how many questions to answer and what choice of questions is usually given and on what basis marks are allocated. Lack of these preparations might make students experience test anxiety.

Commenting about malpractice in examination, Eromeosele (2007), described it as an unlawful behavior or activity engaged by students to have personal advantage in examination over their colleagues or mates who are competing in the same examination. Throwing more light on its illegality, he said, examination malpractice is an unacceptable equality; an act or any act(s) of misconduct such as leakage impersonation, writing on hidden part(s), encoding/decoding of the fingers for objectives tests, exchange of question papers and answer booklets committed before, during or after the examination by students taking the examination or by officials assigned with the administration, evaluating or measuring the examination result. These can only be avoided when effective counselling of students is carried out in senior secondary schools to overcome test anxiety among students. It is against this background that two counselling theories (Rational-Emotive Behaviour and Systematic Desensitization) are adopted to help secondary school students with high test anxiety to overcome it.

Rational-Emotive Behaviour Therapy is characterized by the therapist‟s communication (often highly dramatic) to the patient of the distortions in his/her thinking. The founder of the Therapy, Albert Ellis, feels that no one should be blamed for anything he or she does, but each person is responsible for both his and her negative and positive actions. Unhappiness results from within and can be controlled. Man is being able to intervene between environment input and emotional output and therefore is seen as having considerable control over what he thinks, feels and does. This theory is much like a teaching technique and is, in fact, geared towards helping client‟s behavior pattern change from bad to good.

Rational Emotive Behaviour Therapy (REBT) is an improvement on Rational Emotive Therapy (RET) of Albert Ellis. According to Ellis (1995), the improvement and change of name was done to emphasize the fact that, it has always been cognitive, emotive and behavioural. Rational Emotive Behaviour Therapy aims at helping human beings achieve their basic goals or values. It is a method of solving emotional problems and also a technique whereby the clients are helped to maximize their self actualizing tendencies and encouraging them to assume responsibility for their own lives to become sensibly self-interested and self- directing. Rational Emotive Behaviour Therapy (REBT) is a truly eclectic approach to therapy that employs a wide variety of cognitive, behavioural and emotive technique.

Adeoye, (2009) said that the core belief of Rational Emotive Behaviour Therapy (REBT) is that many people make irrational or faulty assumptions about themselves and the world that lead to their emotional and behavioural disturbance. Its essence is that rational thinking can lead to more effective living but meaningful cognitive change is unlikely unless clients are prepared to replace faulty thinking and behave differently.

On the other hand, Systematic Desensitization is a form of classical conditioning in which anxiety evoking stimuli are paired with inhibitory responses through imagination (vicarious desensitization or in real-life situations) in vivo desensitization. For the purpose of this research work, it is the vivo desensitization that will be used.

According to Wolpe (1958), Systematic Desensitization usually starts with imagining oneself in a progression of fearful situations and using relaxation strategies that compete with anxiety. Once one can successfully manage his/her anxiety while imagining fearful events, one can use the technique in real life situations.

Wolpe developed a technique called Systematic Desensitization for the treatment of anxiety-related disorders and phobias in 1958. One of these anxiety-related disorders is test anxiety. Systematic desensitization is a technique based on the principle of classical conditioning and the premise that what has been learned can be unlearned. It also occurs when an emotional response is repeatedly evoked in situations in which the action tendency that are associated with the emotion proves irrelevant or unnecessary.

Wolpe (1958), gave several techniques which a counsellor can apply to achieve his or her goal. First, the Therapist should start with a behavioral analysis of stimuli that elicit anxiety in a particular area. The client is encouraged by the therapist to produce a list of such anxiety producing stimuli in an increasing order of intensity, for example, registering for an examination, preparing for the examination and writing examination. The stimuli are dealt with one at a time until the most anxiety-provoking is no longer capable of generating the anxiety. An important point to note here is the hierarchy in an increasing order of intensity from the worst situation that the client can imagine down to the least. Secondly, relaxation training is encouraged. The parts of the body involved are the arm muscles, the head, the neck and the shoulders, the back, abdomen the thorax and then the lower limbs.

The role of the therapist is thus to arrange conducive conditions for desensitization and to carry out appropriate relaxation procedures. It is a step by step counselling therapy. Lannap (2002), in his study pointed to the fact that Systematic Desensitization Therapy, like other therapeutic approaches, aims at changing maladaptive behavior. The main objective of the counsellor is to weaken and eliminate maladaptive behaviors while adaptive behaviors are initiated and strengthened. This is going to be the case with this study. In this research work therefore, two counselling theories will be tested practically on groups of students who will

first identified as having test anxiety. If Rational-Emotive Behaviour and Systematic Desensitization are therapies for curbing maladaptive behaviors, then they are essential for use in schools and non-school settings in Nigeria. Hence, the relevance of these techniques to this study.

Wolpe (1958), regards human nature as good basically, but that human normality can be hampered by anxiety. He believes that behavior is learnt and it can be unlearnt through conditioning procedure. Thus, test anxiety can be unlearnt through counselling.

While cognitive protocol, such as Rational-Emotive Behaviour Therapy identifies and challenges problems and otherwise maladaptive expectations and attempt to replace them with more realistic attitudes. Behavioral protocol, such as Systematic Desensitization relies on deep muscle relaxation and pair relaxation to a graduated sequence of anxiety-provoking images.

A counselling intervention particularly, anxiety and Mental Health counselling are essential in order to cut down excessive anxiety among test-anxious students. Through counselling, students experiencing test anxiety are helped to raise their ego domain, believe in themselves, be more assertive and resilient. Skills in effective study are also introduced to assist students in preparing more adequately for their examination since anxiety due to examination “fever” is the commonest source of anxiety among students.

The researcher investigated test anxiety because of so many reasons. The Nigerian child is expected to be trained and motivated so that he or she can contribute effectively to the development of his or her country. Low self-concept turn out to be their problems which increases their test anxiety. Test anxiety has affected academic performance of students. Also, chief examiners reports based on the review of the West African Examination Council (WAEC) and Joint Admission and Matriculation Examination Board (JAMB) results for five years 2002 – 2007, lamented the overall poor results in schools. The report is based on the fact that students engage in examination malpractice because of their test anxious nature and

their lack of confidence to face examinations as a result of test anxiety. This is the very reason why the researcher picked test anxiety for investigation in this study.

# STATEMENT OF THE PROBLEM

The problem of this study is test anxiety and its negative effects on secondary school students. Test anxiety makes students restless, confused and disturbed academically, emotionally and socially. Test anxiety has proven to impair and impede student‟s efforts to perform to the best of their ability in a testing situation.

Ohadike (1996), stated that success is particularly an important aspect in one‟s life and that it dictates the goal which one sets for oneself, and whatever one achieves in life depends on the value one places on such achievement. Test anxiety can be a hindrance in achieving this goal. A child who sets goals for himself or herself that he or she cannot reach will be frustrated. If students suffer from test anxiety, they may never be able to reach their life‟s goals.

Test anxiety prevents students from showing true ability on test. This is because students fear periodic tests or examinations. It does not go down well with them and they may focus only on the end result. They may cheat during examinations in order to get a certificate. Therefore, the levels of knowledge and competence of such students may not always be ascertained.

The problem of this study therefore, is the menace of test anxiety in inhibiting and impeding students‟ academic achievement, thus frustrating the attainment of their life goals. Test anxiety has devastating consequences on the nation‟s integrity. This has resulted to the collapse of ethical values in our institutions of learning.

# PURPOSE OF STUDY

The purpose of this study was to investigate the extent to which Rational-Emotive Behaviour and Systematic Desensitization Therapies affect senior secondary one students‟ test anxiety in Government Senior Secondary School Township, Jos.

To achieve this goal, the following specific objectives have been designed: -

* + 1. To ascertain the effects of Rational Emotive Therapy, Systematic Desensitization, and Combined therapies on the Test anxiety of senior secondary one students in Government Senior Secondary School Township, Jos.
    2. To determine the effects of Rational-Emotive Behaviour Therapy, Systematic Desensitization and Combined therapies on the Self-Concept of senior secondary one students in Government Senior Secondary School Township, Jos.
    3. To find out the effects of Rational Emotive Therapy, Systematic Desensitization, Combined therapies on the Self-Efficacy of senior secondary one students in Government Senior Secondary School Township, Jos.
    4. To determine the effects of Rational-Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies on the willingness to engage in examination malpractice of senior secondary one student in Government Senior Secondary School Township, Jos.

# RESEARCH QUESTIONS

The following research questions were posed to guide the study:

* + 1. What is the level of test anxiety of Senior Secondary one students in Government Senior Secondary School Township, Jos?
    2. What is the level of self-concept of Senior Secondary one students in Government Senior Secondary School Township, Jos?
    3. What is the level of self-efficacy of senior secondary one students in Government Senior Secondary School Township, Jos?
    4. What is the level of willingness to engage in examination malpractice by senior secondary one students in Government Senior Secondary School Township, Jos?

# HYPOTHESES

The following research hypotheses were formulated for the study and were tested at a

0.05 level of significance:

1. There is no significant Mean score difference between the test anxiety of senior secondary one students who are exposed to Rational-Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies and those who are not before and after treatment.
2. There is no significant Mean score difference between the self-concept of senior secondary one students who are exposed to Rational-Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies and those who are not.
3. There is no significant Mean score difference between the self-efficacy of senior secondary one students who are exposed to Rational-Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies, and those who are not.
4. There is no significant Mean score difference between willingness to engage in examination malpractice of senior secondary one students who are exposed to Rational- Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies, and those who are not.

# THEORETICAL FRAMEWORK

The idea behind a theory is to clarify and to have guiding principles as well as direction for the explanation and interpretation of social phenomenon. Similarly, a sociological theory is a set of ideas which tends to provide an explanation to human society. Mahuta and Inuwa in Umar (2016) is of the view that behavior exist in every sector of the social system, thus, every action is related to one theory or the other. Theoretical approach therefore, examines particular social phenomenon in respect to classes of theories in sociology. Major sociological perspectives, according to Haralambos and Holborn in Umar (2016), include the following: Functionalism, Conflict Theory and Symbolic Interactionism.

Functionalist sees society as a system of different parts that work together to generate relative stability based on consensus. They compared society with human organism in which each structured part, as the skeleton, the muscular, the brain, the lungs, heart are independent and function for the survival of the whole system. They argued that, if any part of the system fails to fulfill its function, it will affect others.

Conflict theory, on the other hand, holds that power is just as important as shared values in the society. Conflict is also responsible for social change. Similarly, this theory generates questions about how power affects the distribution of the scarce resources and how conflict changes society (Haralambos and Holborn,in Umar (2016).

Symbolic interactionism theory deals with how social structures are created in the course of human interaction. Similarly, it generates questions about how people behave in intimate groups. How symbols and communications shape perceptions, how social roles are learned and society constructed through interaction, symbolic interactionism unlike functionalism and conflict theories, is concerned with small scale interaction within specific setting (Haralambos and Holborn, in Umar (2016).

This present study is based on functionalist theory who interprets each part of society in terms of how it contributes to the stability of the whole society. Society is more than the sum of its parts: rather, each part of society is functional for the stability of the whole. When students suffer from test anxiety, their thinking and behavior are affected negatively. A functional framework is expected to make students with test anxiety function positively in terms of contributing to the stability of themselves, their parents and the society at large. In the functionalist perspective, societies are thought to function like organisms with various social institutions working together like organs to maintain and reproduce societies.

According to functionalist theories, institutions come about and persist because they play a function in society, promoting stability and integration. Structural functionalism is a framework for building theories that sees society as a complex system whose parts work together to promote solidarity and stability.

Functionalist theorist such as Durkheim sees education as a means of helping children grow to have good jobs so that they can raise and support their own families. In this process, the children become law-abiding, produce new forms of order, stability and productivity. In applying the functionalist theory to this study, students need to come out of their anxious situations so as to be functional in the society.

The functionalist perspective attempts to explain social institution as collective means to meet individual and social needs. It is sometimes called structural-functionalism because it often focuses on the ways social structure (e.g. social institutions) meet social needs.

Functionalists analyze social institutions in terms of the function they play. In other words, to understand a component of society, one must ask what is the function of this institution? How does it contribute to social stability? Thus, one can ask of education. What is the function of education for society? A complete answer would be quite complex and require a detailed analysis of the history of education, prepares individuals to enter the workforce and therefore, maintains a functioning economy.

Functionalism draws its inspiration from the ideas of Emile Durkheim. He was concerned with the question of how societies maintain internal stability and survive over time. The functionalist perspective continues to try and explain how societies maintained the stability and internal cohesion necessary to ensure their continual existence over time.

Beitner (2005) sees education as a social benefit and a means of maintaining power from the functionalist perspective. Beitner argued that test anxiety prevents students from demonstrating their knowledge on examination. Individuals for whom test anxiety is one manifestation of social phobia– generalized, are substantially limited in the major life activities of interacting with others, working and thinking. This is because they are excluded from any career requiring a test for application, credentialing, licensure or training.

It applies that when students suffer from test anxiety it will affect them physically, emotionally, socially and thus preventing them from functioning properly in the society. Durheim sees the family as dependent upon the school to help students grow up to have good

jobs so that they can raise and support their own families. In the process, the children became law-abiding and productive. From this perspective, disorganization in the system such as text anxiety leads to change in behavior and societal components must adjust to increase the knowledge and abilities of the students, to prepare them to contribute in the workforce, to help them develop and maintain their class hierarchy. Students should understand through counselling that the most educated are often also the most affluent and enjoy privileged access to the best jobs, the best schools, the best housing among others.

The functionalist theory was used in the study to help explain how different parts function for the survival of the whole system. If any parts of the system e.g. the heart, brain among others fail to fulfill its function, it will affect others.

# SIGNIFICANCE OF THE STUDY

The result of this research work is meant to be of immense benefit to individual students, teachers and counsellors, parents, society and Government.

If these therapies prove effective in helping students overcome test anxiety, students‟ performances in secondary schools will improve. The study will help develop their abilities, thereby eliminate fear of examination/test experienced by students. Students‟ health hazards experienced during examinations due to fear and self-defeating outlook will give way to a more realistic philosophy of life.

The new knowledge will facilitate teachers and counsellors abilities to teach and counsel students effectively. Counsellors can get data which they can rely on when carrying out similar research. Teachers and guidance counsellors will have less disciplinary cases to attend to, thereby helping them to focus more on their academic work.

If the therapies help resolve test anxiety among secondary school students, parents will have the cause to smile because their children will experience high academic performance and so, there will be less tendencies by students to cheat during examinations. The findings of this research will also lessen the burden heartache and disappointments that parents go

through when their children and wards perform poorly due to test anxiety. It will also lessen the burden of parents, paying fees for their children who repeat their classes year after year because of text anxiety.

The society will benefit from the findings of this research work because there will be changes in students‟ behaviors and attitudes. They will become well adjusted in the society. This will prepare students to take up leadership responsibilities at the end of their formal education. When the students drop out of school because of poor academic performance as a result of test anxiety, it is the society that suffers. The children will be unproductive and a drain on the resources of the nation. However, when the students are given effective counselling and adequate study skills, then there will be changes and good academic performance by students.

The findings of this research will help Government develop programmes to assist test anxious students in overcoming their difficulties in test anxiety. This will make its future leaders to be courageous and fearless, not only in examination matters but also in other aspect of life. This study has used Rational-Emotive Behaviour and Systematic Desensitization therapies for overcoming students‟ test anxiety in Government Senior Secondary School, Township Jos.

# DELIMITATION OF THE STUDY

The study will be limited to the effectiveness of two counselling therapies: (Rational- Emotive Behaviour Therapy and systematic desensitization). This study will not determine the effectiveness of all the other counselling therapies for overcoming test anxiety among students in secondary schools.

The population of this study is restricted to senior secondary school students instead of junior secondary. This is so because the senior secondary students are likely to respond to the questionnaire with more understanding. When that happens, the result of the study is likely to be more authentic. Another reason for the choice of senior secondary students is that, they are

mostly adolescents who are marked by profound social, academic and emotional problems. They need assistance from various helping professions, such as counselling to overcome the test anxiety. The opportunity to follow up when the students move from SS1 to SS2 and SS3 is another reason for the choice of SS1 students.

The reason for the choice of Government Senior Secondary School Township for this study is because the researcher wants to make sure that the school is large enough to get the required students with test anxiety. The choice of Rational-Emotive Behaviour Therapy and Systematic Desensitization for this study is because both are concerned about changing maladaptive behaviours in individuals.

# OPERATIONAL DEFINITION OF TERMS

The following terms are operationally defined as used in this study:

**Rational Emotive Behaviour Counselling Therapy:** as used in this study is to find out if the use of it would make students think positively in order to change their negative behaviours towards test anxiety to positive ones.

**Systematic desensitization:** as used in this study in order to see if its effects would help SS1 students from G.S.S.S Township change from their fear of tests to academic or intellectual freedom.

**Combined Therapy:** In this research work, combined Therapy means using Rational- Emotive Behaviour Therapy and Systematic Desensitization together to find out if a combination of the two therapies will yield better result than either separately.

**Test Anxiety:** In this work, it connotes a state where students experience fear, panic and tension among others during periodic tests or examinations, thus impinging on their academic achievement and good test performance.

**Self-concept:** In the context of this research, self-concept implies or refers to the ability of senior secondary one students to perceive themselves in terms of their abilities, weaknesses and strengths.

**Self-efficacy:** In this research work, is what an individual believes he/she can do using his/her skills under certain circumstance.

**Willingness to engage in Examination malpractice:** This refers to the degree to which senior secondary students are willing to cheat during examinations.

# CHAPTER TWO

**REVIEW OF RELEVANT LITERATURE**

In this section, the researcher reviewed relevant literature on problems of senior secondary school students as regard test anxiety. This problem seems to have remained unresolved for lack of identification of an effective counselling therapy in helping to overcome it.

In reviewing the relevant literature, the following areas were given focus; concept of test anxiety; causes of test anxiety; behavioural manifestation of test anxiety and its effect on secondary school students; the needs of senior secondary school students and the problem of test anxiety; counselling as a tool for adjustment; counselling techniques of remediating test anxiety; impact of Rational-Emotive Behaviour Therapy and Systematic Desensitization on test anxiety; review of empirical studies and summary of review of the relevant literature.

# CONCEPT OF TEST ANXIETY

Test anxiety is a psychological condition in which a person experiences distress or fear before, during, or after an examination or other assessment to such an extent that this anxiety causes poor performance or interferes with normal learning.

Beitner (2005), described test anxiety as an emotional distress confined mainly to fears. He pointed out that if test anxiety in individual is not checked, it may become an increasingly serious problem in their lives. He found that people with test anxiety suffer from the following: being in a state of constant anxiety; panic attacks which is a form of severe anxiety which may limit an individual‟s activity and which may cause him or her, to think they are going to faint, or die of a heart attack and depression, which is an emotional disorder, which can result, or die of a heart attack and depression, which is an emotional disorder, which can result in fatigue and loss of interest in their lives.

It is necessary to check test anxiety cases in senior secondary schools because, when anxiety and depression begin to dominate and disrupt students‟ lives, they will become

emotionally distressed for life. In this regard, an individual will require professional help such as counselling.

Test anxiety prevents students from demonstrating their knowledge on examinations. Individuals, for whom test anxiety is one manifestation of social phobia-generalized, are substantially limited in the major life activities of interacting with others, working and thinking. This is because they are excluded from any career requiring a test for application, credentialing, licensure or training. This present study therefore, seeks to help students overcome these problems so that they can become great achievers in life.

Atkinson (2000) in his study explained that it is now widely accepted that adolescence does present a special burden to an individual experiencing it. The youth, even with an unclear beginning and ending point in the journey to adulthood, has establish self-confidence, make important decisions concerning the future and become independent from attachments to parents. Adolescence according to him is a period of rapid and profound change in the body and the mind. It is a time to find out who one is and where one is going in the future. Most problems, particularly the family bickering increases during this time. The need to help these categories of teenagers in senior secondary schools to overcome their test anxiety so that they can be sound and responsible leaders of tomorrow is what this study is all about.

# CAUSES OF TEST ANXIETY

Evidence seems to suggest that students who exhibit test anxiety are those who lack self-concept and self-efficacy, those who exhibit poor habits, ill preparation for examinations and those who are willing to engage in examination malpractice.

# Self-Concept

Self-Concept is an important element of test anxiety. It is the individual‟s awareness of his/her owns self and one‟s identity. It has been stressed that what happens in schools where a child meets success or failure has a great deal to do with his/her concept. Purkey

(1970), opined that there is a continuous interaction between test anxiety and self-concept. Lack of self-concept can therefore affect performance of students in schools.

Self-Concept is an important construct in psychology and education. Byrne (1984), concluded that self-concept is a multidimensional construct having one general facet and several specific facets. Self-concept can be descriptive (e.g. I like mathematics) as well as evaluative (e.g. I am good at mathematics). It can also tend to focus on scholastic competence, or on attitude towards their academic performance.

Psychologists have recognized the important role of self-concept in an individual‟s personal adjustment while educators are becoming increasingly aware that student‟s perception of him/herself may have a significant influence on his/her academic performance in school. Studies done over the years have substantiated the positive relationship between self-concept and test anxiety and the volume of growing evidence that the two influences each other cannot be overlooked.

Anakwe (2003) stated that lack of confidence in the child‟s teacher may make the students to believe that no matter how much they try in certain subjects, they will always end up getting low marks. This factor can make students to be timid and thus develop a general feeling of inadequacy and may even become withdrawn.

Lack of confidence, fear of failure, and other negative thought processes may also contribute to test anxiety among students. Perfectionism and feelings of unworthiness provide unreasonable goals to achieve through testing situations. When a student‟s self-esteem is too closely tied to the outcome of any one academic task, the results can be devastating. In these situations students may spend more time focusing on the negative consequences of failure than preparing to succeed. (Matthew, 2008).

Elaigwu (2003) quoted Dikmeyer and Caldwell (1970) as saying that a child‟s view of himself (self-evaluation) could be convinced as a dominant factor in both development and behaviour. This may also be the central factor in determining his or her actions. They opined that children can formally rate themselves in relation to their classmates according to their

own view (same, higher, lower) on such things as: Abilities in particular school respondents; playing various games; level of self-confidence; ability to take leadership in certain activities; things in which they take pride; things which they feel inadequate; ability to tell stories, tell jokes, speak before the class; ability to stand up for own rights. If secondary school students are unable to develop these qualities and skills in themselves, they may end up with the problem of test anxiety during tests and examinations. The self-confidence they develop in themselves will go a long way in removing the test anxiety and giving the student a better chance to perform well during examinations.

# Self-Efficacy

Another factor of test anxiety is Self-Efficacy. When in a difficult situation such as a college type test, students with a strong academic self-efficacy would devote more attention and effort to the task at hand. Therefore, they will try harder and persist longer than those who have lower levels of self-efficacy. Bandura (1997), defined self-efficacy as beliefs in one‟s own capacity to organize and execute the courses of action required to manage perspective situations. According to Schwarzer (1994) and Bandura (1995), Self-efficacy can make a difference to people‟s ways of thinking, feeling and acting. With respect to feeling, a low sense of self-efficacy is associated with anxiety and helplessness. People with low self- efficacies also harbour pessimistic thoughts about their performance and personal development. In contrast, a strong sense of belief in one‟s self facilities cognitive processes in multiple contexts influencing the decision making (Grau, Salanova, &Peiro, 2001).

Test anxiety comes from the fear of being overwhelmed. A fear of being overwhelmed comes from the perception that one does not have the capacity to cope with the situation one faces (inefficacy). Jing (2007), found a significant negative correlation between test anxiety and self-efficacy. Also, social cognitive theory of Bandura (1997), postulates that human functioning results from interaction among personal factors, for example, cognition and environmental conditions. Self-efficacy affects an individual‟s task choice, effort and persistence. Shunk, (1995). Compared students who doubt their capabilities, those who feel

self-efficacious about situation are apt to participate more readily, work harder, and persist longer when they encounter difficulties (Bandura, 1997). Those who do not have self- efficacy are apt to experience test anxiety.

Test anxiety can come from a student comparing him or herself to others. If classmates seem to be having an easier time grasping the course material, he or she might see this as a shortcoming on his or her part and start to feel as if he or she would never be able to master the material and pass upcoming tests. Again, a level of frustration sets in that can lead to the same kind of downward spiral.

# Willingness to Engage in Examination Malpractice

One may be tempted to ask, why do students place their dependency on cheating during the period of testing? Adamu (2001), lamented that the Nigeria‟s emphases on certificate qualification may be one of the causes. The idea of acquiring certificates by all means, positively or negatively influences students thoughts toward the easiest way of getting the certificate. It seems that our secondary schools are merely certificate factories for students, a place for earning a livelihood for the teachers and a source of money making for proprietors. This is dangerous to a country like Nigeria because the whole nation may suffer from lack of good leaders to run the affairs of the nation in the near future. He maintained that academically, week students will at times try to compare themselves with naturally gifted students who are brilliant. When the weak academic students are not able to meet up with the challenge, they opt for the “missing” links with external help in order to pass their papers. When students think that they have to pass examination just to get promoted to the higher class, they do not actually have any liking for learning and they are not interested in gaining and enhancing their knowledge.

Adolescence from puberty to early adulthood has been viewed as risky and problematic. Andrews (2008), found that the behavior of contemporary American youth in secondary schools is consistent, if not severe, than that reported centuries past. He presented a comprehensive profile of adolescence problems not only in the social aspects but those of

academic failure and emotional problems including such problems as depression and anxiety. Under academic failure, more than 700,000 students drop out of school every year; one of every four 18 and 19 year old has not graduated from high school; up to 15 percent of students under the age of 18 years of age experience emotional problems serious enough to justify special treatment and approximately 70 percent of adolescents in secondary schools, report at least one diagnosable episode of depression. Andrews (2008),suggested that, prevention efforts should focus on students during the adolescent years. He further said, that the prevention efforts should be universal targeting all youth in secondary schools, because once students experience anxiety, many different forms or maladjustment occur which include test anxiety.

The researcher feels that both these sources of test anxiety have something in common: They originate from external causes. The students may have had past experiences with testing, but they cannot know for sure that they will have the same bad experience in the future. They assume that others are having difficulty learning the material than they are, but they could be mistaking. Their classmates might be battling the same difficulties they are battling with.

Students seem to fear examination because of the stress and anxiety which may be induced by parents, the peer pressure groups and other students. When students struggle to meet these various challenges, they may end up with enormous stress and anxiety. It is possible that such students may end up cheating during examinations. Adamu (2001).

This study is however different from others cited, because it investigated the effect of Rational-Emotive Behaviour and Systematic Desensitization on SS1 students‟ test anxiety in Government Senior Secondary School Township, Jos.

# BEHAVIOURAL MANIFESTATION OF TEST ANXIETY AND ITS EFFECTS ON SECONDARY SCHOOL STUDENTS

Ellis (2003) found that a positive behaviour will help students achieve more and come closer to realizing their potentials, whereas a negative beahviour will thwart achievement drive and live many potential abilities untapped. Thus, behaviour change occurs as a result of self-esteem affirmation responding to a threat to self-esteem by enhancing some facets of the self-concept. It is therefore easy to see how test anxiety leads towards little or no achievement, and this lack of achievement directs self-image.

Students tend to be evaluating themselves on what they achieve and how they feel about their achievement. When they realize how a negative self-image reinforces an already negative behaviour, they may see a potential harmful cycle. It is because of this negative behaviour that this study is out to help students who engage in such negative behaviours as test anxiety to change their attitudes to make themselves more consistent with their self- concept.

Matthew (2008), analyzed the symptoms of test anxiety as follows:

**Physical –** Headaches, nausea or diarrhea, extreme body temperature changes, excessive sweating, shortage of breath, light-headedness or fainting, rapid heart-beat, and or dry mouth. **Emotional**–Excessive feelings of fear, disappointment, anger, depression, uncontrollable crying or laughing, feelings of helplessness.

**Behavioural**– fidgeting, pacing, substance abuse, avoidance.

**Cognitive**– racing thoughts, going blank, and difficulty in concentrating.

**Negative Self** – talk, feelings of dread, comparing yourself to others, difficulty organizing oneself to others, difficulty organizing one‟s thought.

Daniel (2004) found in her studies that students are usually worried and frightened about passing their examinations. Apart from examination phobia, she found that students fear rejection, illness, injury to loved ones, death and failure of achievement. According to her, adolescents in secondary schools sometimes get worried. Their worries are caused by

imaginary ideas. They entertain fears because of some imaginative nature of some future happenings. She also found out that fear is one of the sources of adolescent‟s emotional developmental problems.

Ndoh (1995), and Anakwe (2003), both agreed that fearfulness and shyness are forms of maladjustment which could affect students during examinations. They confirmed that the adolescent role in life and their positions in the social groups are remarkably influenced by whether they are frightened, shy, curious, aggressive or happy. These are seen as very dangerous signs which can slow down the child‟s development in school as they will affect him physically and academically. This study is therefore timely and will add to knowledge because while other cited studies found out the problems of students in secondary schools, this study will find out the remedy for the problems, by dispensing counselling therapies that will help in overcoming test anxiety among senior secondary one (SS) students.

# THE NEEDS OF SENIOR SECONDARY SCHOOL STUDENTS AND THE PROBLEM OF TEST ANXIETY

Basic needs are important to adolescents in secondary schools to help them overcome test anxiety. Denga (1982), Ipaye (1983), Oladele (1987), Johnson, and Johnson, (1994), Lannap(1991) and Lannap(1996) in their separate studies pointed to the danger of denying adolescents in secondary schools with certain basic needs which they feel must be met before the students attain a state of congruence. They feel that love from the home by parents and in higher institutions by teachers is an important need. The need for better facilities, adequate staff, better communication between students and the school administration are other needs among others, which are necessary in the lives of adolescents in secondary schools. It is likely that students may fall short of expectations in their educational pursuits when these needs are not met. They are likely to become timid during examinations and other activities that require evaluation in the schools.

Maslow motivation theories also emphasized the basic needs of man to include both psychological and physiological needs. The theories argued that these needs motivate and enhance learning. If student‟s physiological needs are not physically met, it will affect their concentration in teaching and learning situations, thereby preparing the students to engage in all sorts of conducts involving both examination phobia and examination malpractice.

The problems of every country depend on the maximum exploitation of its human resources. To successfully achieve this depends on the proper guidance of adolescents in secondary schools. In view of the fact that the adolescence period is the most important in human life and because it is marked with a number of problems which affect mental health, government, secondary school administrators, staff and parents of this category of students are expected to see that the various needs of students are met. If these needs are not met, test anxiety and the poor academic performance by students in secondary schools might occur, as adolescents fear failure. They will cheat to pass. Test anxiety inhibits their quest for success and achievement in life.

An effective counseling among other needs, are needed more than before to help in sorting out students‟ characteristics and abilities to be able to offer appropriate counselling to them. Many counselling techniques exist that are employed in counselling psychology. These techniques are based on the various counselling theories which tend to explain the possible ways of affecting meaningful changes in the conduct or behaviour of an individual in his or her environment.

The researcher investigated the extend to which Rational-Emotive Behaviour and Systematic Desensitization therapies affect SS1 students‟ test anxiety in Government Senior Secondary School Township, Jos. Despite the long-standing attention and research work on the problems of test anxiety by other researchers, the problem still persists and it continues to manifest in secondary schools and it appears unresolvable.

# COUNSELLING AS A TOOL FOR ADJUSTMENT

Counselling has been defined in different ways depending on how an individual practitioner understands the nature of man on the basis of how change in behaviour is brought about. Dryden (2005), stated that counselling takes place when a counsellor sees a client in a private and confidential setting to explore a difficulty the client is having; distress he or she may be experiencing; or perhaps his or her dissatisfaction with life or loss of a sense of direction and purpose, as in the case of test anxiety.

Denga (1982), defined counselling as an interaction process which facilitates meaningful understanding of self and environment and results in the establishment and clarification of goals and values for future behaviour. According to him, counselling as a process is dynamic and educative in nature. The nature or structure of the process is that counsellors seek to educate an individual student to gain meaningful understanding of self which is sufficient to accommodate the very process of counselling itself into one‟s own personality construction over time. Therefore, counselling tends to emphasize understanding of self in relation to others and empowering clients with skills of problem-solving. The threat of test can be contended with effective counselling. Counselling aims at total development of the students, thus, it is also concerned with helping the students to find ethical and spiritual meaning in life and to help them learn to live in harmony with self and other members of the school organization or school community, devoid of unhealthy competition and cheating behaviour. They cannot possibly do these if they are faced with the problems of test anxiety, and more importantly, if they are unable to overcome the menace of test anxiety.

Elaigwu (2003), observed that one way to bring about change in attitude is through counselling, one-to-one or group counselling. According to him, group counselling is a social experience situation that deals with developmental problems and attitude of individuals in a secured setting. Essentially, counselling is meant to assist individuals to become better developed, better equipped to adjust in life and well prepared to live an anxious free life.

Student counselling is important because it helps the students to achieve orientation to their school environment, succeed in their studies, achieve and maintain a progressive understanding of themselves as human beings. Counselling is help students understand and make proper use of their emotions, develop lively and worthwhile interests, move towards the realizations of appropriate goals, develop into responsible citizens and prepare for a richer, satisfying and constructive life after graduation. For these students to develop these behaviours, they must acquire skills of overcoming test anxiety while in schools.

Counsellors are needed more than before to help in sorting out student‟s characteristics and abilities to be able to offer appropriate counselling to them. Students need help to become well-adjusted and overcome their maladaptive behaviours. Accordingly, the gifted, the normal and the sub-normal all need special services to help them become what they will become in the future in the world of work.

Animba, Denga and Omoluabi (1993), found that when students are troubled or uncertain, they desire the help that counselling brings. Counselling helps an individual student to contend with frustrations and obstacles that interfere with his or her personal development. Thus, counselling assists students to attain self-direction. Counselling is also needed in secondary schools in order to help produce mentally, healthy, happy and well adjusted individuals who will become well disciplined, inquisitive, adaptive and aware of their own strengths and limitations. This explains why secondary school students in particular need counseling to overcome test anxiety and thus increase their chances of success in school and life outside school.

# COUNSELLING TECHNIQUES OF REMEDIATING TEST ANXIETY

Counselling techniques, according to Oladele (1987), are approaches for the purpose of providing counselling service to various populations. These approaches are labeled by some psychologists and counsellors as: “Counselling models and “models.” “Counselling Theories”, “Counselling Therapies”, “Counselling” and methods. These approaches

according to Bulus (1995),basically, fall into two groups: the directive oriented approach which includes psychoanalytic theory, the existential theory, the Gestalt theory, the transactional analysis and the Rational-Emotive Behaviour theory, while the non-directive approach includes the eclectic, the client centred, the behavioural, the reciprocal inhibition and the trait and factor theories among others.

Since counselling in education focuses on helping clients acquire and develop problem-solving skills, it is important that the right counselling methods be identified and applied to enable students find ways to relate the knowledge to themselves in such a way that this knowledge becomes part of them and can be used in problem solving behaviours. In this way, the student becomes independently able to handle future difficulties, one of which is test anxiety.

Counselling techniques, if used correctly, remediate test anxiety of secondary school students and help them perform well in their tests and/or examinations. The Rational-Emotive Behaviour counsellor according to Uba (1989), uses a variety of techniques, including desensitization methods, operant conditioning strategies, didactic teaching and homework to help clients modify their maladaptive behaviours. The most important of these techniques is homework. The APPENDIX A III FOR counsellor believes that until a client is able to put into practice the lesson he or she has learned in the counselling sessions, he or she has not truly improved. The counsellor therefore makes sure that clients, especially secondary school students, are engaged in some good activities, real life homework or assignments, such as those games they are afraid to play, associating with those other students they had always been afraid of, and performing various tasks which ordinarily they had thought were impossible for them to do. Doing these activities over a period of time helps them overcome initial fears and anxieties they may have had.

Rational-Emotive Behaviour and Systematic Desensitization therapies are the theories on which this research work hinged. Rational-Emotive Behaviour Therapy (RET) founded by Albert Ellis in (1955) focuses on behavioral change through thinking. He took a logical and

intellectual approach to the process and solution of client‟s problems. Rational Emotive Theory holds that people get disturbed and dysfunctional mainly because of their erroneous and irrational beliefs, attitudes and their philosophies. Perhaps, the most elegant and efficient means to help them solve their problems lie in teaching and demonstrating to clients how to dispute and overcome their self-defeating beliefs.

Rational-Emotive Behaviour Therapy is relevant to this study because the essence of the study is behavioral change through logical thinking in order to overcome test anxiety. What disturbs a man‟s mind, according to Ellis (1955) is not the events but a man‟s judgment of them, which if radically re-dressed and changed, will ensure a man‟s happiness and efficiency at school and or work-place. One can only free oneself of emotional disturbance through intellectual powers. Since man is both good and bad by the nature of his mechanism, Ellis suggested several techniques, which a counsellor can apply to achieve his goals. He believes that teaching and inducement will help clients to rethink life events and will help them modify their illogical thought, emotions and behaviour.

This research sought to employ teaching to pass across factual information on test anxiety and some related variables like self-concept, self-efficacy, study-skills, examination skills and willingness to engage in examination malpractice. By gaining knowledge, the students will be able to reason logically and rationally thereby shunning test anxiety. He also emphasized the use of reinforcement skills as well as philosophic discussion and home works in helping clients rethink and modify their illogical thoughts. For the purpose of this study the researcher will apply teaching to achieve her goal.

Relating the relevance of Rational-Emotive Behaviour Therapy to the Nigeria situation, Bulus (1988), observed that in the present Nigerian situation where there is gross unemployment and frustration in all spheres, there is the possibility of people being irrational in their thoughts by thinking that the whole world is against them. This appears to be the case with clients who experience test anxiety, because when they experience distress during or after an examination or other assessment, it goes to such an extent that the phobia causes poor

performance and interferes with normal learning. It is, therefore an important function for the Rational-Emotive Behaviour therapist counsellor to make such people find suitable alternatives and/or solutions to such problems, rather than ponder on threats of test to the detriment of their health and survival.

Akinboye (1980), and Cassady and Johnson (2001), also suggested some strategies to overcome test anxiety. According to them anxiety during a test or examination may be due simply to realization that an individual has not adequately prepared for the examination. They suggested that it is necessary to counsel students to prepare hard for tests to avoid worry and anxiety during examination time. When students study steadily right from the beginning of the course to the end chances are that they will gain high self-confidence which is an antidote against test anxiety. It has been demonstrated that test anxiety is inimical to sound mental processes.

Students should be encouraged to recite after each vigorous study so that they can gain an experience of how accurately they have mastered the assignment and review the facts they cannot recall on each occasion. Reviewing past question papers by students as preparation before an examination is important. This builds confidence especially when an individual has studied and recited very well. If a student cannot effectively study alone, then study in group, becomes a better alternative where ideas are shared.

A mild degree of anxiety enhances performance, but a high degree of anxiety is disruptive and interferes with performance. What this means is that certain amount of anxiety prior to test examination is a desirable spur to effort. However, when the anxiety becomes excessive and is not channeled into productive work, it leads to general inhibition of mental processes. The importance of counselling techniques such as operant conditioning, desensitization and homework in this study, can therefore, not be overemphasized.

# IMPACT OF RATIONAL-EMOTIVE BEHAVIOUR THERAPY AND SYSTEMATIC DESENSITIZATION ON TEST ANXIETY

The impact of Rational-Emotive Behaviour therapy on test anxiety when it is successful according to Uba (1987) is that, the clients are expected to eliminate or avoid most of their emotional problems or unhappiness by learning to think rationally. They are expected to get rid of illogical, irrational ideas and attitudes and to substitute them with logical, rational ideas and attitudes.

When the therapy is successful it will show how the clients will maintain their disturbances by continuing to think illogically, that is, that it is their present irrational thinking that is responsible for their condition, and not the continuing influence of any early events.

The clients are expected to know how to re-think, challenge, contradict and re- verbalize their thoughts or internalize illogical sentences, so that their internalized thoughts become more logical and efficient.

The final result of Rational-Emotive Behaviour therapy on test anxiety should therefore be that the clients will acquire a rational philosophy of life; substituting the phobia aspect of their lives being the irrational attitudes and beliefs for rational ones. Once these are accomplished, the negative and thus disturbing emotions are expected to be eliminated along with self-defeating behaviour.

On the other hand, the impact of systematic desensitization on test anxiety when it is successful according to Green (2000) is that, the client is expected to have improved self- esteem; trust in one‟s inner feelings and experiences as valuable sources of information for making decisions; increased ability to learn from rather than repeating mistakes; decreased defensiveness, guilt, and insecurity; an increased capacity to experience and express feelings at the moment they occur; and openness to new experiences and new ways of thinking about life.

In the light of their clearer perceptions of themselves the clients of the systematic desensitization will choose, on their own initiatives and on their own responsibilities, new

goals which are more satisfying than their maladjusted goals. They will choose to behave in a different fashion in other to reach these goals, and this new behaviour will be in the direction of greater psychological growth and maturity. It will also be more spontaneous and less tense, more in harmony with social needs of others; will represent a more realistic, more alert, and more comfortable adjustment to life. It will be more integrated than his former behaviour. It will be a step forward in the life of the individual.

# EMPIRICAL STUDIES

In view of the importance of overcoming test anxiety in individuals, a number of researches have been carried out. In this section, some studies were reviewed. They are those of Oyeizugbo (2010), Ogundokun (2011), Andrews (2008), Elaigwu (2003), Ellis (2003), and Cassady and Johnson (2001).

Oyeizugbo (2010), carried out a research in Nsukka University, Nigeria on self- efficacy, gender and trait anxiety as moderators of test anxiety: self-efficacy contributed 14% of the variance in the model: This was significant (P<.01). Trait anxiety predicted 49% of test anxiety (P<.001). Therefore, knowing a student‟s level of self-efficacy gives one confidence in predicting how test anxious a student becomes.

Analysis of variance by Onyeizugbo showed that those with higher self-efficacy have lower test anxiety (Mean = 2.10; Standard Deviation (S.D) = .60) than those with lower self- efficacy (Mean = 2.53, S.D. = .59). The difference is significant F = 39.67, P<.001. As evidenced in the results, self-efficacy significantly predicted 14% of the variability in test anxiety. This implies that self-efficacy belief of the participants is a potent moderator of test anxiety experienced by the participants. Also, self-efficacy has a negative relationship with test anxiety. Students with higher self-efficacy had lower test anxiety and vice versa. Beliefs about the anticipated consequences of events can influence reaction to such events. Efficacy beliefs also influence the amount of anxiety individuals experience as they engage in an activity.

This study is relevant to the present study in the area of the relationship between self- efficacy and test anxiety. Both studies used self-efficacy as moderator or predictor of test anxiety. Both found that individuals with high self-efficacy had lower test anxiety. Both used experimental design for the study. Some of the differences between the two studies are as follows: The above study used university students and setting while the present study used secondary school students for the study. The findings of the above study created gap that the present study seeks to fill – the effects of Rational-Emotive Behaviour therapy and Systematic Desensitization on student‟s test anxiety in SS one students in relation to other variables like self-concept, study-skills, examination skills, and willingness to engage in examination malpractice were not included in the above study. The above study is limited to only self- efficacy while this study had more variables in the study that would help students overcome test anxiety. There is also gap to be filled because of the absence of the two therapies (Rational-Emotive Behaviour therapy and Systematic Desensitization) in the above study.

Ogundokun (2011), carried out a study on learning style, school environment and test anxiety as correlates of learning outcomes among secondary school students. The participants were three hundred senior secondary two students, age between 12 – 19 years. Pearson‟s Product Moment Correlation and Multiple regression analysis were used to analyse the data. The findings, demonstrated that learning styles, school environment and test anxiety jointly predicts the learning outcomes but test anxiety is the most potent predictor of learning outcomes.

The above study is related to the present study in terms of the analysis of data and the setting which is secondary school but the above study did not use Rational-Emotive Behaviour therapy and Systematic Desensitization to overcome test anxiety among SS1 students in secondary school in Government Senior Secondary School Township, Jos.

Andrews (2008), carried out a study on adolescents and found that the contemporary American youth in secondary school is consistent, if not severe, than that reported centuries past. In this study, he presented a comprehensive profile of adolescence problems not only in

the social aspect but also those of academic failure and emotional problems including such problems as depression and anxiety. Under academic failure: more than 700,000 students drop out of school every year, out of every four, 18 and 19 year old not graduated from high school. Up to 15 percent of students under age 18years of age experience emotional problems, serious enough to justify special treatment and approximately 70 percent of adolescents in secondary schools, report at least one diagnosable episode of depression.

The above study is related to this present study in terms of adolescents experiencing problems in test anxiety. The study is also related to the present study because both studies suggested that prevention efforts should focus on students during the adolescents‟ years and the prevention efforts should be universal targeting all youth in secondary schools. This is because, once students experience anxiety, many different forms of maladjustment occur which include test anxiety. However, the results of the above study created the following gaps: - Other variables like self-concept, self-efficacy, study-skills, examination skills and willingness to engage in examination malpractice were not included in the above study. Method and analysis of data to strengthen and make the data valid and reliable are different in the above study. This study used Rational-Emotive Behaviour therapy and Systematic Desensitization unlike the above study. The present study is carried out in Nigeria while the above was carried out in America.

Elaigwu (2003), carried out a study on the effects of two-group counselling techniques on self-concept, locus of control and drinking behaviour of selected students in Jos. The participants were one hundred and twenty junior secondary three students who were found to have low self-concept, externally inclined in their locus of control and were involved in excessive drinking of alcohol. The study employed the true experiment randomized pretest- posttest control design.

Four major hypotheses were tested using Analysis of Variance (ANOVA) and Duncan‟s Multiple Range Test (MRT) as post-hoc analytical technique. Post-hoc Duncan‟s Multiple Range Test (DMRT) was to determine which set of treatment group means differ

when the over all F-value for the factor has been found significant. The respondents‟ score obtained from the instruments (APDI) subscale A; Rotter/-ELSC;) administered in the study were analysed through descriptive and inferential statistical tools. For the first method, the mean scores and standard deviations of the treatment and control groups with respect to self- concept, locus control, orientation and behaviour towards excessive drinking were computed on group basis.

Analysis of Variance (ANOVA) was used as the inferential statistical tool to test the null hypotheses one to four with respect to self-concept, locus of control orientation and behaviour toward drinking of alcohol. For post-hoc test, the Duncan Multiple Range Test (DMRT) was used for the comparison of the group means hypotheses 1 – 3 with respect to self-concept, locus of control orientation and behavior toward alcohol. This method was an appropriate supplementary statistical tool for determining which set of treatment group means differ when the overall F-value for a factor has been found significant.

The results showed that the two treatment groups, that is, modeling and cognitive disputing were effective in modifying subjects. Low self-concept, their externally inclined locus of control and their excessive drinking behaviour. A combination of the two treatments was, however, found to be more effective in modifying subjects‟ excessive drinking behaviour than the other two treatments. It was also found out that the treatments were not affected by sex.

The similarities between the above study and current study are in the research design and change in behaviour. The experimental randomized pretest-posttest control design was used in the above study; the researcher used the same also. The above study was aimed at a change in drinking behaviour. The current study was aimed at a change in behaviour towards test anxiety. The above study used Rational-Emotive Behaviour therapy but failed to use Systematic Desensitization as an effective method in overcoming test anxiety.

Albert Ellis postulated the early Rational-Emotive Therapy (RET) in 1955 and developed to this day by other psychotherapists and psychologists. Some of such people are:

Aaron Beck (2001), and Albert Ellis (2003). While Beck (2001), structured, revised and developed a therapeutic approach which he calls “cognitive therapy” Ellis restructured, revised and developed a therapeutic approach which he calls “Rational-Emotive Behaviour Theory.” These two approaches were devoted to the identification and alteration of irrational belief matters. Their approaches differ from other clinical approaches like psychoanalysis, in that, it places little emphasis on exploring the past, but instead focuses on changing the current evaluations and philosophical thinking-emoting and behaving in relation to themselves, others and the conditions under which people live.

Human beings are biologically and sociologically pronged to illogical thinking processes and irrational beliefs. Ellis (1973), argued in a number of occasions, that, a person‟s irrational beliefs are magical and they are much more likely to tend to do more harm than good. Rational-Emotive Behaviour Therapy places man in the centre of the universe and of his own emotional fate and gives him almost full responsibility for choosing to make or not to make himself seriously disturbed.

# MAJOR TECHNIQUES AND PROCEDURES OF REBT(Rational-Emotive Behaviour Therapy)

Albert Ellis made use of a simple model to facilitate the understanding of his therapy by analyzing the interactions among the four alphabets A-B-C-D representing certain concepts as follows;

A – Activating Events (The cause)

B – Belief (How one views it; perception)

C – Consequences (Effects of one‟s perception) D – Disputation (Re-appraisal/Critical analysis).

People are driven by Goals (G), which includes survival, the avoidance of pain, and the striving for satisfaction. Goals influence the way people perceive events and evaluate reality. Activating events (A) are a person‟s subjective experience and description of reality. People interpret A based on G using their Belief system (B) evaluating what they perceived.

Two kinds of Beliefs, Rational Belief system (RB) and Irrational Belief (IB) evaluate reality and are influenced by Goals (G). All people possess both types of beliefs. While Rational Beliefs are responsible for healthy emotional and behavioural consequences; irrational beliefs create emotional disturbance and influence dysfunctional behavior. The goal of REBT is to help patients differentiate between these types of beliefs so that they challenge Disputing (D) and replace irrational beliefs with more rational beliefs in order to alleviate test anxiety and negative consequences.

According to Adeoye (2009), REBT also focuses on people‟s ability to disturb themselves about their disturbances. Patients typically view themselves as behaving poorly when they are emotionally disturbed and subsequently become disturbed about their disturbances. Emotions and behavior that are considered as consequences (C) become new Activating Event (A). Patients become anxious about their anxiety, depressed about their depression and angry about their anger. Patients‟ ability to upset themselves in this way has been classified by Ellis (1994) as secondary emotional disturbances.

The „D‟ is the Disputing of the validity of Irrational Beliefs and it is the primary methods of alleviating emotional distress. Patients can then generate new, more functional Effective Rational Beliefs (ERB) to replace IB. Disputing (D) can be conducted cognitively through scientific questioning and challenging of absolutistic and demanding beliefs (“I must” or “people must” or “It must be”).

Adeoye (2009) opined that emotional disturbance and process can be modified to achieve different ways of feeling and behaving. This leads to the extension of the theory and practice of REBT from ABCD to ABCDEF.

1. - Activating Event
2. - Belief
3. - Disputation
4. - Effect
5. - Feeling

# A: Activating Event

A represents an internal or external activating event that triggers a thought or emotional feeling. It is the existence of a fact, an event or opinion, behavior or attitude of an individual. For instance, an undergraduate can say “Research project is a difficult task especially concerning up to date Reference materials”.

# B: Beliefs about ‘A’

B is the faulty/irrational belief about A (attitudes, opinions and expectations) that colour, influence an shape one‟s thoughts. These thoughts are probably irrational. If for example, a research student says “my supervisor is too difficult, he/she does not allow one to meet him/her on project everyday”. This is in-spite of the “meeting schedule” pasted on the supervisor‟s door for the supervisees and others who want to meet the lecturer in the office

e.g. Friday: 9-11.00am or Thursday: 10.00am-12noon or Wednesday: from 2.00pm upwards.

# C: Reaction (Consequences)

C is the emotional and behavioural consequences of the belief about A, i.e. the negative emotions. The individual may refuse to carry out the assignment of his course lecturers or supervisor and instead trying to use his/her influence on the campus to seek waivers.

# D: Disputation

D is disputing or the act of challenging the thoughts when they are irrational or distorted. The therapist should dispute the irrational beliefs and assist the clients in so doing, in order for the client to ultimately enjoy the positive psychological effects (E) of rational beliefs.

# E: Positive Effect

E is the positive effect that results from challenging the irrational thoughts, for when the thought is changed, the feelings are also changed.

# F: New Feelings

F is the new feeling and the outcome of positive effects on the irrational thought which gives way to a new feeling.

Human thoughts and feelings are linked. This is why feelings go with positive thoughts and negative thoughts go with negative feelings.

The theory of REBT is summarized in Fig. 1.

D

(Disputing Intervention)

B

(Belief)

A

(Activating Event)

C

(Emotional and Behavioural

E

F

# Figure 1: REBT in a Diagram

Source: Journal of Rational-Emotive Behaviour & Cognitive Behaviour Therapy. 21(3) 4.

It can be seen from Fig. 1 that C is caused by B and not by A. However, D reframes B to result in E and ending up in F to become a new person who has done away with negative tendencies and feelings.

Adeoye (2009) asserted that the relationship between the therapist and the patient is very important, but is seen as existing to facilitate therapeutic work, rather than being therapy itself. The therapist shows empathy, unconditional acceptance and encouragement; but is careful to avoid activities that create dependency or strengthens any „need‟ for approval. The therapist works with the client‟s value system though the REBT is active directive. New ways of thinking are not imposed on the client, but developed collaboratively. Although, critics see psychotherapy as encouraging people to become self-centered, the REBT avoids this by teaching several principles. For instance, enlightened self-interest that encourages individuals to attend to both their own interests and those of other people. REBT is brief and time limited. It commonly involves 5 to 30 sessions over one to eighteen months. The pace of therapy is brisk. A minimum of time is spent in acquiring background and historical information; it is task-oriented and focuses on problem solving in the present. REBT is a method of psychotherapy that emphasizes on helping people change how they feel and behave in reaction to life events. REBT can therefore be used to assist undergraduate students to overcome test anxiety.

In his study, Ellis (2003), discovered that irrational and dysfunctional ways and patterns of thinking, feeling and behaving are contributing too much, though hardly all, to human disturbance and emotional and behavioural self and social defeatism. One of the beliefs or philosophies that humans tend to disturb themselves with, according to Ellis (2003), is:

I absolutely MUST, under practically all conditions and at all times, perform well or outstandingly well and win the approval or complete love of significant others. If I fail in these important and sacred-respects, that is awful and I am a

bad, incompetent, unworthy person, who will probably always fall and deserves to suffer. Page 54.

This belief tends to contribute to feelings of anxiety, panic, depression, despair and worthlessness. Any student that has this kind of belief is bound to display same during any testing. The fear therefore is that secondary school students today, seem to fall into these irrational and dysfunctional beliefs, pattern of thinking, feeling and behaviour and are getting themselves into trouble. This study is related to the above study in terms of using Rational- Emotive Behaviour therapy to overcome test anxiety in individuals. His method of teaching clients how to practice skills in order to overcome test anxiety is also related to this study. However, this study differs from the above study because experimental design was used in the research work. Moreover, the above research work did not use Systematic Desensitization as a therapy to overcome test anxiety in SS1 students in Government Senior Secondary School Township, Jos. The above study did not use other related variables like self-concept, self- efficacy, study-skills, examination skills and willingness to engage in exam malpractice as in this study.

Chamove (2005), and Cassady and Johnson (2001), found out that an individual cannot experience anxiety such as test anxiety while completely relaxed. Thus, if a person can be shown how to reach a state of deep relaxation he or she can be free from the tension that accompanies anxiety. The second and equally important principle cited is that, when a person vividly visualizes a scene while completely relaxed, the mental image evokes some of the feelings of the real scene. In order words, the mind cannot distinguish a real experience from one that is vividly imagined. Therefore, if one is suffering from test anxiety and visualizes that he or she is about to make an examination, he or she will begin to feel the tensions that one feels when actually taking the examination. It is also the case however, that if one learns to relax while visualizing oneself taking examination; one can also learn to be relaxed while actually taking the examination.

Desensitization of text anxiety involves three basic steps: One step is to determine one‟s hierarchy of anxiety-producing situations related to test-taking, so that one can gradually work up to the more difficult scenes. The second step is to learn how to reach a state of deep relaxation by using specific muscle relaxing exercises and/or imagine a scene of perfect relaxation. A third step is, while completely relaxed; visualize anxiety producing situations- beginning with the lowest, least threatening one on one‟s hierarchy. Eventually, one will be able to imagine the scenes at the high end of the hierarchy without feeling anxious. It is expected that once the individual has been taught these skills he or she must use them to react towards and overcome situations in an established hierarchy of fears. The goal of this process is that an individual will learn to cope and overcome the fear in each step of the hierarchy, which will lead to overcoming the last step of the fear in the hierarchy. Systematic Desensitization is sometimes called “graduated exposure therapy.” Cassady and Johnson (2001).

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Scale rank** |  | **Value**  **order** |
| When I come to a question I cannot answer | 80 | - | 1 |
| The exam paper lying face down before you | 40 | - | 9 |
| Awaiting distribution of exam papers | 45 | - | 8 |
| On the way to the school on the day of the exam | 50 | - | 7 |
| Discussion of my grades close to the time of the exam | 55 | - | 6 |
| When instructor tells what will be covered on the exam | 60 | - | 5 |
| When I cannot find the answers to questions on review sheet | 75 | - | 2 |
| The night before the exams | 70 | - | 3 |
| Two days before the exam | 65 | - | 4 |
| A week before the exam | 0 |  |  |
| Two weeks before the exam | 0 |  |  |
| One month before the exam | 0 |  |  |

# Figure 2: Test Anxiety Events: Students example

Source: Cognitive test anxiety and academic performance. Contemporary Educational Psychology. 27, 270-295. Retrieved 3rd Nov. 2011.

Figure 2, explained some possible events leading up to and including taking of an examination under test anxiety events be given to students as examples. To the right of each item is a number which should indicate the RANK ORDER of that item. For example, “When one comes to a question one cannot answer” has rank of “1” it is the event which produces the most anxiety for this student “When one can‟t find the answers to questions on review sheet” has the rank of “2”, it is the second most anxiety producing event. Once items are given rank order, each is assigned a value of “0” to “100” in the value scale column. “0” on the scale is said to indicate a state of complete relaxation the way we generally operate in everyday life. “100” is the value assigned to the most anxiety producing situation one might experience. Example of this can be seen on page 39 Figure 2. The above study found that test anxiety has been shown to have a consistently negative relationship with test performance, and test anxious students are found to perform about 12 percentile points below their non-anxious peers.

This study is related to the above study in terms of its use of Systematic Desensitization as a therapy for overcoming test anxiety in individuals and the difference lies in the fact that this study use experimental design while the above study was not. Some other variables like self-concept, self-efficacy, study-skills, examination skills and willingness to engage in examination malpractice were used by this study but the above study did not.

# SUMMARRY OF REVIEW OF RELEVANT LITERATURE

Foreign and Local literatures reviewed in this study have lent credence to the fact that test anxiety is a problem among secondary school students. The resultant effect of test anxiety and other related variables like self-concept, self-efficacy, study-skills, examination skills and willingness to engage in examination malpractice as documented include, dropping out of school, lack of preparation as indicated by cramming the night before the examination, poor time management, failure to organize test information, poor study habits, worrying about the following: past performance on examination, how friends and other students are doing and

negative consequences of failure. Test anxiety has been shown to have a consistently negative relationship with test performance. Therefore, there is significant relationship between irrational beliefs, low self-esteem and low school performances (Ellis, 2003). It was revealed that change or improvement in self-concept, self-efficacy and self-esteem can be achieved by helping students to overcome their fears. When students accept themselves and are enhanced internally, they perform well in life.

This problem of test anxiety is serious concern to all stakeholders especially parents, teachers, councillors, and society. The future of our youths is being destroyed and there present is ruined. It is evident from the literature that counselling intervention can successful brings about improvement in factors within the learners. Group counselling especially has been revealed to have special value in changing behaviour (Elaigwa, 2003). This is because the process leads to or facilitates deeper self-understanding and self-acceptance in a climate among peers who are members of a group. Many research studies have demonstrated the effectiveness of group counselling in changing students behaviour.

Rational-Emotive Behaviour therapy has been clearly shown to be effective in behaviour modification as an active and direct teaching to dispute and restructure irrational thoughts and beliefs. The goal of the therapy is to teach how people learn how they often needlessly upset themselves and then how to empower themselves to lead happier and more fulfilling lives. It‟s efficacy in improving self-esteem and changing student‟s attitudes from fear to confidence is evident from review of literature.

Systematic Desensitization therapy has also been clearly shown to be effective in behaviour modification. The theory deposits that anxiety responses are learnt or conditioned. This is, behaviouris learnt and can be unlearnt through conditioning procedures.

A number of researches have been carried out on this issues of test anxiety both local and internationally. For example, topics such as self-efficacy, gender and trait anxiety as moderators of test anxiety; learning style, school environment and test anxiety as correlates of many outcomes among secondary school students; effects of two-group counseling techniques

of self-concept, locus control and drinking behaviour of selected students in Jos; Rational- Emotive Behaviour Therapy and Systematic Desensitization. If studies as many as the above already have been carried out locally and internationally, then why was the present study carried out? There was every need to carry out the present study. First, all the studies reviewed only examined one or two variables on test anxiety. But this study examined three other variables apart from test anxiety such as self-concept, self- efficacy, and willingness to engage in examination malpractice.

Secondly, out of the studies reviewed only two of them used experimental research design in terms of the studies reviewed only two of them used experimental research design in terms of providing adequate and complete controls for all sources of internal invalidity and also enabling the researcher to draw causal inference and observe whether (independent variable) has an effect on the dependent variable. The type of research design a researcher uses makes all the difference. If the research design does not take care of sources of internal validity, the result from such a research may not be tenable. It is only studies that have validity (internal, external or both) that will lead to conclusions that can be accepted with a high degree of confidence. The present study had both. Not having as many variables as possible in a single study and that of the type of design are the gaps to be filled.

# CHAPTER THREE METHODS AND PROCEDURE

This section focused on the following: research design; population and sample to be used in the study; sampling techniques; instrument for data collection; validity and reliability of instrument; procedure for data collection and method of data analysis.

# RESEARCH DESIGN

This study, adopted the true experimental randomized pre-test post-test control design. The true experimental studies were used to expose one or more experimental groups to one or more treatments in order to establish cause-and-effect relationships. The results were compared to those of the control group (the group not receiving treatment) to confirm a hypothesis.

Random assignment involves hat and draw method, pooling subjects together and randomly assigning to experimental and control groups. Random assignment enables the researcher to control the intervening variables. It is a method of control that helps to offset the confounding effects of known, as well as unforeseen factors, when assigning subjects to the experimental and control groups. This enabled the researcher to have mixed subjects and also helped to reduce the effect of the intervening variables. There are designs that are true experimental in nature. They are (i) The pre-test – posttest control group design (ii) the posttest-only control group design and (iii) Solomon four group design.

The pre-test posttest control group design was used in this study. The following steps were involved in using a pre-test posttest control group design. (1) random assignment of research participants into experimental and control groups, (2) administration of a pretest to both groups, (3) administration of the treatment to the experimental groups but the control group was not given any treatment, (4) administration of a posttest to both groups.

The researcher chose to use pre-test posttest control group design because it served the purpose of the study which was to find out the effect of Rational-Emotive Behaviour and

systematic Desensitization on SS1 students test anxiety in Government Senior Secondary School Township, Jos. The design is illustrated thus:

# Table 1: Structure of the Research Design in the Study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Group** |  | | | | | |
| 1 | RO1 | X1 | O2 | Rational-Emotive Behaviour therapy. | | |
| 2 | RO2 | X2 | O4 | Systematic Desensitization. | | |
| 3 | RO3 | X3 | O6 | Rational-Emotive Behaviour therapy and Systematic Desensitization. | | |
| 4 | RO4 |  | O8 | Control. | | |
| Where R = random assignment of respondents to treatment groups. | | | | | | |
| O1 | | O2 | O3 | O4 | = | Pre-test observation. |
| O2 | | O4 | O6 | O8 | = | Post-test observation. |

X1=Rational-Emotive Behaviour therapy (Treatment) X2=Systematic Desensitization (Treatment)

X3=Rational-Emotive Behaviour therapy + Systematic Desensitization (Treatment).

Blank=Control (No treatment).

Quasi-experimental design is another design that could have been used for this study but the difference between quasi-experimental design and true experimental design used in this study is that quasi-experiments are conducted under conditions that do not permit control, manipulation of variables or random selection. Random assignment can be attained but the intact groups could with administrative constraints do not allow randomization, control or manipulation as in true experimental design.

The present study is a field experiment and according to Kerlinger (1973 P.382-386) “field experiment is a research study in a realistic situation in which one or more independent variables are manipulated by the experimenter under carefully controlled condition as the situation will permit”.

In experimental design, External validity concerns the question of generalizability, while Internal validity focuses on a specific experimental instance, external validity is primarily concerned with the extent to which the findings can be generalized to population, research settings, treatment variables and measurement variables other than those utilized in the study. Because rigorous control for internal validity is the hallmark of an experiment, this study tried as much as possible to exclude the influence of extraneous variables. Towards this end, the researcher took certain steps to prevent or maximize incursion of extraneous variables into the experimental programme. Some of these steps included:

* + 1. Non-Differential selection of respondents: The researcher selected treatment and control groups that did not differ except for exposure to the experimental treatment.
    2. The respondents in the experimental treatment groups did not see one another‟s treatment because they might have formed a bias in favour of one treatment, a bias they might not form if they were aware only of the treatment to which they were exposed. In order to avoid any interaction or distraction or any mix up among groups, the same day and the same time were allotted to each group under classroom condition but in different classes.
    3. Screening of respondents: The respondents were randomly selected and assigned to the treatment and control groups.
    4. Instrumentation: The researcher expected that a learning gain or change in behaviour might observed from pre-test because the nature of the instrument used might be changed. Therefore, the same instrument was used across board for the measurements.
    5. In order to avoid respondents quitting midstream, the respondents were motivated by giving moderate refreshment like biscuits and things like biros.
    6. To ward off any biases, hypotheses stated or generated for the study were non- directional.

# POPULATION AND SAMPLE

# Population

The population of this research consisted of all SS1 students in Government Senior Secondary School Township Jos, who exhibited the tendencies for test anxiety. This school met the criteria of being easily accessible, the school authorities willingly allowed their students to participate in the programme, the Guidance Counsellors and teachers willingly accepted to serve as research assistants and the school agreed that break time be used for the programme.

The choice of SS1 students was because they are adolescents and are faced with academic, social and emotional problems, of which test anxiety is one. Senior Secondary one students are younger and can adapt to the teachings treatment groups on test anxiety. This can easily change and mould them to perform better in school.

# Sample

The sample consisted of eighty (80) students from Government Senior Secondary School Township, Jos. To qualify for selection, students went through pre-test treatment for test anxiety. To determine this, the questionnaire named the students test anxiety questionnaire (STAQ) was administered to all SS1 students in Government Senior Secondary

School Township, Jos. Out of the 424 students, 149 demonstrated the tendency for test anxiety. From the 149 who demonstrated the tendency for test anxiety, 80 were selected to participate in the study.

The students were made up of both males and females in the ages of 15 and 19 years. 20 students each were assigned to the three experimental groups as well as the control group using draw and hat method.

# SAMPLING TECHNIQUES

Cluster sampling technique was used for this study. Cluster is a type of sample that is formed, first by selecting clusters (groups) then by selecting individuals within those groups or clusters in a population. There are two types of sampling; Random probability and Non- random probability. Random Probability samples are composed by randomly drawing from a population, while Non-randomly samples are composed by selecting subjects from a population. Random probability was used by the researcher to carry out this study.

In this study, purposive sampling was carried out for selecting the school for the study. The reason for the purposive sampling was in order to ensure that the school was large enough to get the required number of students with test anxiety. The school chosen was Government Senior Secondary School (GSSS) Township, Jos.

The researcher identified those students in SS1 with test anxiety in Government Senior Secondary School, Township by administering the questionnaire, namely, students Test Anxiety Questionnaire (STAQ) and from the established cut off points for the instrument. Cut-off point was the mid-point on the scale. Every respondent below the mid-point had low test anxiety because they ticked items that were either strongly disagree or disagree. Every respondent above the mid-point had high test anxiety because they ticked items that were either strongly agree or agree. The researcher used the cut-off points only to identify those with test anxiety but used raw scores for the analysis of data.

Hat and draw method was used such that each student in the sample was assigned to each group as follows:

Group I-were exposed to Rational-Emotive Behaviour therapy Group II- were exposed to systematic Desensitization Therapy

Group III-were exposed to a combination of Rational-Emotive Behaviour therapy and systematic Desensitization.

Group IV-control-(No treatment)

Experimental group I and II were taught by the research assistants while group III were taught by the researcher. The aim of this exercise was to compare the gain scores of the four groups. There was a pre-test administered to the four groups (questionnaire) before exposing them to the different conditions. Experimental groups, I, II and III were given the treatment by the research assistants and the researcher, while the control group were also taught by a research assistant with topics like justice, humility and discipline, completely different from the treatment groups. At the end of the treatment, a post-test was administered. Cluster sampling technique was chosen out of all the types of sampling techniques because it was more feasible to select groups of individuals rather than individuals from a defined population. Cluster sampling technique is more efficient in that, clusters are used and not all the individuals in a specific population. It is relatively easier to group and administer

the instrument to the clusters and less time consuming.

# INSTRUMENT FOR DATA COLLECTION

The instrument used for this study was a researcher designed instrument titled Student Test Anxiety Questionnaire (STAQ). The Student Test Anxiety Questionnaire (STAQ)before and after treatment was used by the researcher to identify students with test anxiety.

# Description of Instrument

The study utilized a 22 – item Student Test Anxiety Questionnaire (STAQ) which was developed by the researcher. The instrument had seven sections, vix,

introduction/instructions, sections “A”, “B”, “C”, “D”, and “E”. Introduction/instructions consisted of instruction about the instrument. Section “A” is the background information, Sections “B”, “C”, “D”, and “E” were made up of a four point Likert scale consisting of SA (Strongly Agree), A (Agree), D (Disagree), SD (Strongly Disagree) which was used to get information from the students on test anxiety.

The items were arranged in sections as follows: Section B, contained 10 items on test anxiety, Section C contained 4 items on self-concept, Section D contained 4 items on self- efficacy, Section E contained 4 items on willingness to engage on examination malpractice. There are more questions on test anxiety because it is the major variable in the study and other variables such as self-concept, self-efficacy, and willingness to engage in examination malpractice have less number of items because they are only indicators of the major variable which is test anxiety.

# Procedure for Development of the Instrument

The instrument contained 22 items used before and after treatment prepared by the researcher. A number of steps were taken to ensure that relevant items were included in the instrument. The items were derived based on a review of relevant literature on the subject matter.

The first step in the procedure involved a careful identification and review of some reliable test anxiety literature for possible items that were to be adopted for inclusion in the instrument. The researcher reviewed literature on test anxiety, self-concept, self-efficacy, study-skills, examination skills and willingness to engage in examination malpractice. A number of empirical studies, both international and local, were reviewed. The researcher also consulted libraries including the University of Jos library and National library for this purpose. The researcher also consulted relevant journals in Guidance and Counselling, magazines (both national and local).

The second step was the discussion with experts in psychology and Test and Measurement. The researcher prepared the 22 items- Students Test Anxiety Questionnaire

(STAQ) using a four point Likert scale of “SA” (Strongly Agreed), “A” (Agree), “D” (Disagree), “SD” (Strongly Disagree). The responses had weights of 4 and 3 for unfavourable statements, 2 and 1 for favourable ones. The scores on the scale for unfavourable and favourable options for each individual were summed up to give an individual a single score which showed whether he or she was affected or not.

In the third step, the instrument was given to experts in measurement and evaluation unit of the Faculty of Education University of Jos who also made their input. All necessary corrections were effected before the main study was carried out. The instrument was then edited by the supervisor to ensure that items were not ambiguous and grammatical errors corrected. Finally, the instruments were validated during the pilot study.

# VALIDITY AND RELIABILITY OF THE INSTRUMENT

This section described the procedures that were adopted in ensuring that the instruction used measured what it was designed to measure (validity) and the degree to which it was consistent in measuring it (reliability).

# Validity of the Instrument

Validity refers to the degree to which a test measures what it is supposed to measure. In the process of validating in this study, the instrument was subjected to scrutiny by experts from Guidance and Counselling unit and from Test and Measurement in the Department of Educational Foundations, Faculty of Education, University of Jos. Draft copies of the instrument containing 22 items were presented for their scrutiny. These judges were requested to indicate any item in their judgment they considered irrelevant and to suggest other items which they considered relevant but not included in the instruments. Based on the inputs and suggestions made, some items were rephrased and incorporated into the final version of the questionnaire and these were put into sections.

# Reliability of the Instrument

The word reliability as applied to educational measurement refers to the degree of consistency with which an instrument measures whatever it is supposed to be measuring. A measure is regarded as reliable if it shows the same results time after time; or if similar results come out consistently under the same or slightly different test conditions.

To determine the reliability of instrument in this study, the researcher used test-re-test method to ascertain the measure of the items. Other common indices of reliability are equivalent forms of reliability also known as alternative or parallel-forms technique split-half reliability and the rationale equivalence reliability.

A test re-test exercise with a two-weeks interval from the two test was administered by the researcher in Government Senior Secondary School, Laranto. This exercise was used to check the recall effect and to find out the stability of the instrument.

Test re-test method was designed to correlate the scores of the items taken in the first two weeks with the scores of the second test items after the two weeks interval. Each of the two groups of the questionnaire was treated separately and scored accordingly. To find the correlation coefficient obtained between the two tests, Pearson Product Moment Correlation formular (method) was applied. The reliability result gave a correlation that is significant at

0.01 level and an index of .92. This implied that the reliability of the questionnaire items was high.

# PROCEDURE FOR DATA COLLECTION

The researcher obtained a letter of introduction from the Department of Educational Foundations of the University of Jos to all the areas where the samples wereto be drawn. The researcher then made an initial personal visit to these places. The purpose for the visit was to obtain permission from the school authorities to use their students, teachers and counsellors in the experiment. The visit also enabled the researcher to know the characteristics of the school in terms of population and the number of students in SS1.

Discussion with the principal about the nature of the programme was carried out. A plea for six research assistants and cooperation from the school counsellors, teachers and students to make the experiment a success was made. Criteria considered for the selection of research assistants apart from educational qualification were, interest, experience and availability. The teachers chosen as research assistants were trained for the purpose of the programme. The researcher, then, explained the importance of the study to them, that is, the effects of Rational-Emotive Behaviour Therapy (RET) and Systematic Desensitization (SD) on students‟ test anxiety of SS1 students.

# Training of Research Assistants.

Six research assistants in the representative school were trained to participate in the study. These facilitators had pre-group counselling training to acquaint them with the nature, content and techniques in group counselling experimental programme. The contents or topics of the training were: understanding the nature of test anxiety; understanding the irrationality of negative self-talks, self-evaluation and how they affect individual‟s personality in connection to test anxiety, self-concept and self-efficacy; time management to avoid test anxiety; study time table to include study-skills, examination skills and willingness to engage in examination malpractice; test anxiety and career awareness, positive self-statements; acceptable behaviour towards testing and the use of relaxation techniques e.g. exercises to avoid test anxiety.

The key objective was that, they should be able to teach effectively the test anxiety counseling programme. Other objectives included:

1. The research assistants should identify test anxiety counseling programme.
2. They should be able to list factors that lead to test anxiety.
3. They should demonstrate an understanding on all test anxiety programme.
4. The research assistants should be able to appreciate the need for the test anxiety programme.

The training took place in the representative secondary school (Government Senior Secondary School Township). The researcher and the research assistants met six times for thirty minutes and three times for actual practice on other students not in the treatment group prior to the commencement of the experimental treatment. This was necessary because the researcher wanted the research assistants to completely deliver the counselling programme as follows: the schedule of meetings were

1. The first meeting focused on exposing research assistants to the nature of the programme, its objectives and highlights of procedures for conducting group counselling session.
2. The second meeting was to discuss basic guidelines for implementing Rational-Emotive Behaviour Therapy.
3. The third meeting was to discuss basic guidelines for Systematic Desensitization therapy.
4. The fourth meeting focused on discussion on the various topics.
5. The fifth meeting focused on discussion and suggestions.
6. The sixth meeting focused on suggestions and corrections in order to enhance the application of the programme.

The researcher did the training. Refreshments such as snacks and soft drinks were provided as incentives at the end of every meeting. Before the treatment, the researcher and the research assistants administered the pre-test in the school during break periods. There were two sessions of one hour each, twice in a week (Mondays and Wednesdays) between 10:40am – 11:40am.

There were four groups, three treatment groups and one none treatment group. The first group was exposed to Rational-Emotive Behaviour therapy and taught by two research assistants on Mondays and Wednesdays. The second group of students was exposed to Systematic Desensitization therapy and was taught by two research assistants on Mondays and Wednesdays. The third group of students was exposed to combined therapy (Rational- Emotive Behaviour and Systematic Desensitization therapies) and taught by the researcher on Mondays and Wednesdays. The non-treatment group was engaged with normal counselling

sessions retrieved from counselling department of St. Louis College, Jos, and was taught by two research assistants on Mondays and Wednesdays of the week. The teachers involved in teaching these groups included, one guidance counsellor of the school Mr. Pankyes Yohanna with an N.C.E qualification, Rev. Sister Nkechi Ukah Masters Degree, Justina Joseph B. Ed., Mr. Marshall Dabang B.Sc, Mr. Dewan Gideon G. HND/PGDTE, and Gloria Onochie B.Sc.

# Administration of Pretest

The pretest (STAQ) was administered in the class by the researcher and the research assistants for the 40 minutes during their break time that was between 10:40am – 11:20am. Instructions by the researcher on how the questionnaires were to be answered were carried out. The students were assured that the information they would give would be treated with great confidentiality. The collection of the questionnaire was done immediately after completion and after checking to ensure that all items were ticked. The items on the students‟ Test Anxiety questionnaire were meant to identify those of them with test anxiety.

# Administration of the programme

After the administration of the pre-test, the treatment programme was conducted in four classrooms comprising the experimental groups by the researcher and the six research assistants on the same days. The non-treatment group was engaged with counselling sessions retrieved from counselling Department of St. Louis College, Jos.

Two sessions of one hour each (twice in a week) were carried out as follows:

# GROUP ONE:

**TREATMENT PHASE FOR RATIONAL-EMOTIVE BEHAVIOUR (COGNITIVE) GROUP COUNSELLING SESSIONS**

1st Week of Counselling Sessions: Introduction of subjects and explanation of objectives of

the counselling programme.

2nd Week of Counselling Sessions: Understanding self and the nature of test anxiety.

3rd Week of Counselling Sessions: Understanding the irrationality of negative self-talk in

relation to test anxiety.

4th Week of Counselling Sessions: Negative self-talks in relation to poor self-concept/self-

efficacy.

5th Week of Counselling Sessions: Developing appropriate skills in relation to test anxiety. 6th Week of Counselling Sessions: Time management to include examination-skills.

7th Week of Counselling Sessions: Study time table; study-skills/homework. 8th Week of Counselling Sessions: Career awareness.

9th Week of Counselling Sessions: Making positive self-statements. 10th Week of Counselling Sessions: Evaluation.

This method was aimed at helping students change their irrational beliefs, perceptions and negative self-statements that may militate against having interest, choosing and having good performance in their school subjects and thereby making them to have test anxiety. This therapy was aimed at helping clients recognize and discard such self-defeating cognitions such as test anxiety. The goal was to change the way clients think and behave in order to learn and perform better in secondary schools especially during examinations.

The therapeutic process consists of training clients to modify the instructions they give to themselves so that they can cope more effectively with the problems they encounter. The theory believes in teaching and inducement of clients to rethink life events. Another method is the relationship technique that gives the client trust and confidence.

# GROUP TWO

**TREATMENT PHASE FOR SYSTEMATIC DESENSITIZATION**

The researcher and the research assistants conducted the two sessions of 1hour each twice in a week under classroom condition as follows:

1st Week of Counselling Sessions: Introduction and self understanding in order to establish

a relaxed atmosphere among students.

2nd Week of Counselling Sessions: Understanding the nature of test anxiety and understanding self.

3rd Week of Counselling Sessions: Discussion on what a test hierarchy means and how to

built one, - An assignment in which students were to build a test anxiety hierarchy.

4th Week of Counselling Sessions: Good time management to avoid laziness and

procrastination.

5th Week of Counselling Sessions: General discussion. Good study habits in relation to test

anxiety. Avoidance of cramming the night before examinations.

6th Week of Counselling Sessions: Discuss environment in relation to place of study, noise

and minimizing distraction. The need for a relaxed and quiet place for studying.

7th Week of Counselling Sessions: Examination time: “Equipment” Have everything ready

(book, pencil, ruler, biro etc.

8th Week of Counselling Sessions: Discuss: students to focus and not panic during

examinations.

9th Week of Counselling Sessions: Relaxation techniques of slow deep breath and

visualization.

10th Week of Counselling Sessions: Evaluation of sessions taught.

Systematic Desensitization therapy like other therapeutic approaches, aims at changing maladaptive behaviour. Lannap, (2002), described Systematic Desensitization as a method of desensitization where the individual is progressively taught how to reduce levels of anxiety related to anxieties provoking situations. Each step in sequence is accompanied by a lowering of anxiety to the step by step process.

The main objective of the counsellor was therefore to weaken and eliminate maladaptive behaviours while adaptive behaviours are initiated and strengthened. In this study, the client was taught to emit responses that were inconsistent with anxiety and the aim was to weaken the anxiety producing stimuli while relaxation was strengthened. The method

included pairing of anxiety producing stimuli and relaxing responses. Relaxation training was another method through imagery or visualization among others. See Appendix AII.

# GROUP THREE

**TREATMENT FOR RATIONAL-EMOTIVE BEHAVIOUR THERAPY AND SYSTEMATIC DESENSITIZATION (COMBINED)**

The researcher and the research assistants conducted the two sessions of 1 hour each, twice in a week under classroom condition. **Week 1 – 4 and Week 9 (Rational-Emotive Behaviour Therapy)and Week 5 – 8 and Week 9 (Systematic Desensitization)** were carried out as follows:

1st Week of Counselling Sessions: Introduction of subjects and explanation of objectives of

the counselling programme.

2nd Week of Counselling Sessions: Understanding self and the nature of test anxiety.

3rd Week of Counselling Sessions: Understanding the irrationality of negative self-talk in

relation to test anxiety.

4th Week of Counselling Sessions: Negative self-talks in relation to poor self-concept/self-

efficacy.

5th Week of Counselling Sessions: General discussion. Good study habits in relation to test

anxiety. Avoidance of cramming the night before examinations.

6th Week of Counselling Sessions: Discuss environment in relation to place of study, noise

and minimizing distraction. The need for a relaxed and quiet place for studying.

7th Week of Counselling Sessions: Examination time: “Equipment” Have everything ready

(book, pencil, ruler, biro etc.

8th Week of Counselling Sessions: Discuss: students to focus and not panic during

examinations.

9th Week of Counselling Sessions: Making positive self-statements/Relaxation techniques

of slow deep breath and visualization.

10thWeek of Counselling Sessions: Evaluation of the counselling sessions by group

members and the researcher.

These two therapies believe that behaviour is a product of environment and the creation of learning conditions, that behaviour is learnt and therefore can be modified by manipulating the learning conditions. In these two theories, man is not at the mercy of his unconscious motivation or drives but they believe that what is learnt can be unlearnt.

The aim of this combination therapy was to find out if a combination of two therapies was stronger than either separately. To combine these two therapies, the researcher chose five lessons from Rational-Emotive Behaviour Therapy and five from Systematic Desensitization. The methods are as for Rational-Emotive Behaviour Therapy (group one) and Systematic Desensitization (group two). See Appendix AII.

# GROUP FOUR

**Control Group**

The research assistants conducted the session of one hour each, twice in a week under classroom condition as follows:

1st Week of Counselling Sessions: Introduction and preliminary activities. 2nd Week of Counselling Sessions: Challenges in senior secondary school. 3rd Week of Counselling Sessions: Health talk.

4th Week of Counselling Sessions: Self-discipline. What it means. Students rating

themselves on self discipline.

5th Week of Counselling Sessions: Justice. What it means. Students rating themselves on

justice.

6th Week of Counselling Sessions: Humility. What it means. Students rating, themselves

on humility.

7th Week of Counselling Sessions: Pre and Post rating on self-discipline. 8th Week of Counselling Sessions: Pre-Post rating on justice.

9th Week of Counselling Sessions: Pre-Post rating on humility.

10th Week of Counselling Sessions: Evaluation. Questions on various sessions-(Discussion)

This group did not have any treatment but they received normal counselling sessions. The syllabus for these counselling sessions for SS1 students were obtained from St. Louis College Jos whose counselling record is functional and reliable. At the end of the sessions, they were tested along side with those who had the treatment. This was to find out if those who had the treatment improved more than those who did not. Two research assistants conducted the sessions of one hour each every week. It therefore means that they conducted the sessions twice in a week under classroom condition for ten weeks. See Appendix AII.

# Administration of Post-Test

This was conducted after the treatment sessions were completed. The students completed the Questionnaire (STAQ). This was to find out whether levels of test anxiety had reduced in students. This took place a week after the pre-test treatment. The post test programme was conducted in four classrooms comprising of the treatment and the control groups. The same day and the same time were allotted to each group under classroom condition but in different classes. The post-test treatment was conducted in order to find out if those who had test anxiety had reduced their test anxiety conditions after the treatment.

# METHOD OF DATA ANALYSIS

The analysis of data was carried out based on the research hypotheses stated. Various data analysis tools were put into use.

# Research Questions

Descriptive statistics were used to answer all four research questions. For this research work, Mean and Standard Deviation were used to answer all the four questions using pretest scores. This is because mean takes into account all the participants in the group and also produces one score that summarizes the scores for everybody in the group.

The use of standard deviation is not necessary in this section because it lays emphasis on the degree of deviation of the variables away from their mean. Since the study is aimed at

measuring increase or decrease in test anxiety, the value of standard deviation may not convey relevant information about the variables of interest.

# Hypotheses

Inferential statistics were used to test the hypotheses. Examples of inferential statistics are t-test, Chi-square, analysis of variance (ANOVA) and analysis of Covariance (ANOVA). In this study Analysis of variance (ANOVA) was used to test the hypotheses.

One fundamental assumption underlying the use of ANOVA is that the within-group population variance is homogenous, i.e. drawn from the same population of variance. Analysis of variance (ANOVA) was used to test all the hypotheses in order to find out whether or not there was any indication of an overall effect of the experimental treatments on the subjects. It was also used because of the multi-group nature of this research work.

Four separate ANOVAs were conducted with the following as dependent variables: test anxiety, self-concept, self-efficacy, and willingness to engage in examination malpractice.

# Scheffe Multiple Comparison Test

Scheffe multiple comparison Test was used in this study as post-hoc analytical technique. Post-hoc Scheffe multiple comparison Test was used to determine which set of treatment group means differ from the over all F-value for the factor that has been found significant.

# CHAPTER FOUR RESULTS AND DISCUSSION

The results of the data analysis and discussion were presented under the following headings: Research Questions, Hypotheses, and Discussion of findings.

# RESULTS

* + 1. **Research Question One**

What is the level of test anxiety of senior secondary one students in Government Senior Secondary School Township, Jos?

The data for answering research question one were analysed using mean scores obtained from the pre-test of the instrument Students Test Anxiety Questionnaire (STAQ). From the thirty items on the instrument, ten measured test anxiety. All the items that measured test anxiety were summed to get the mean scores of 80 SS1 students in the study. See Appendix A III for the raw scores.

The result of the analysis is presented in Table 4.

# Table 2: Pre-Test Anxiety Mean Scores of SS1 students in the study

|  |  |
| --- | --- |
| TREATMENT | Mean Score |
| Group I: Rational-Emotive Behaviour Therapy | - 30.15 |
| Group II: Systematic Desensitization | - 30.35 |
| Group III: REBT + SD | - 31.20 |
| Control - | 30.00 |
| Mean | **30.4** |

From Table 2 on test anxiety, the mean score for test anxiety is 30.4 in the study. The scores could range from as low as 10 points to as high as 40 points, with a mid point of 25. It can be seen that most students scored above 25 which is the mid-point on the scale. This therefore, provides evidence that the level of test anxiety is high for SS1 students in Government Senior Secondary School Township, Jos.

# Research Question Two

What is the level of self-concept of SS1 students in Government Senior Secondary School Township, Jos?

The data for answering research question two were analysed using mean scores obtained from pre-test of the instrument Students Test Anxiety Questionnaire (STAQ). From the thirty items on the instrument, four items (Section C) measured self-concept. All the items that measured self-concept were summed to get the mean scores for self-concept for the 80 students in the study. See Appendix AIII for the raw scores.

The result of the analysis is presented in Table 3.

# Table 3: Pre-Test Self-Concept (SC) Mean Scores of SS1 Students in the Study

TREATMENT Mean Score

|  |  |  |
| --- | --- | --- |
| Group I: Rational-Emotive Behaviour Therapy  Group II: Systematic Desensitization | -  - 12.50 | 13.65 |
| Group III: REBT + SD | - | 12.60 |
| Control | - | 12.75 |
| Mean | **12.8** |  |

Looking at Table 3, the mean score is 12.8 in the study. Scores on this variable range from as low as 4 points to as high as 16 points, with a midpoint of 10. The Table shows that the level of self-concept of SS1 students in Government Senior Secondary School Township, Jos is high.

# Research Question Three

What is the level of self-efficacy of SS1 students in Government Senior Secondary School Township, Jos?

The data for answering research question three were analysed using mean scores obtained from pre-test of the instrument Students Test Anxiety Questionnaire (STAQ). From the thirty items on the instrument, four items (Section D) measured self-efficacy. All the items that measured self-efficacy were summed to get the mean scores of self-efficacy for the 80 SS1 students in the study. See Appendix A III for the raw scores.

The result of the analysis is presented in Table 4.

# Table 4: Pre-Test Self-Efficacy (SE) Mean Scores of SS1 Students in the Study

TREATMENT Mean Score

|  |  |  |
| --- | --- | --- |
| Group I: Rational-Emotive Behaviour Therapy  Group II: Systematic Desensitization | -  - 12.30 | 13.05 |
| Group III REBT + SD | - 12.60 |  |
| Control | - | 12.00 |
| Mean | **12.4** |  |

From Table 4, shows that self-efficacy score is 12.4. Scores on this variable range from as low as 4 points to as high as 16 points, with a mid-point of 10. The Table shows that the level of self-efficacy of SS1 students in Government Senior Secondary School Township, Jos is high.

# Research Question Four

What is the level of willingness to engage in examination malpractice by senior secondary one students in Government Senior Secondary School Township, Jos?

The data for answering research question six were analysed using scores obtained from pre-test of the instrument Students Test Anxiety Questionnaire (STAQ). Four items (Section G) on the instrument measured the level of willingness to engage in examination malpractice by SS1 students in the study. All the items that measured willingness to engage in examination malpractice were summed to get the mean scores of examination malpractice of 80 SS1 students in the study. See Appendix A III for the raw scores.

The result of the analysis is presented in Table 5.

# Table 5: Pre-Test Student Mean Scores on Willingness to Engage in Examination Malpractice (EM) of SS1 Students in the Study

|  |  |  |
| --- | --- | --- |
| TREATMENT | Mean | Score |
| Group I: Rational-Emotive Behaviour Therapy | - | 8.60 |
| Group II: Systematic Desensitization | - | 8.50 |
| Group III: REBT + SD | - | 8.25 |
| Control | - | 9.10 |
| Mean |  | **8.6** |

As can be seen from Table 5, Examination malpractices mean score is 8.6.Scores on this variable range from as low as 4 points to as high as 16 points, with a midpoint of 10. The table shows weak scores by students which means that the level of willingness to engage in examination malpractice of SS1Government Senior Secondary School Township, Jos is low.

# Hypotheses

ANOVA was used to analysed the data. For ANOVA to be used there must be homogeneity of variances between the pre-test and post-test scores. By homogeneity of variances we meant that the equivalence of all the groups must be established. That is, to demonstrate that all the groups were at the same level of test anxiety at the beginning of the experiment.

The homogeneity was tested at 0.05 significance level. If P-value is higher than 0.05, then there is homogeneity, or homogeneity is established. That is, he different groups were at the same level at the beginning of the experiment. However, if the P-value is lower than 0.05, then there is variation, no homogeneity– the groups were at different levels at the beginning of the experiment.

# Hypothesis One

There is no significant difference in the mean score between the test anxiety of senior secondary one students who are exposed to Rational-Emotive Behaviour Therapy, Systematic Desensitization, Combined therapies and those who are not before and after treatment.

# Table 6: ANOVA Test on Pre-Test Anxiety

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Test Anxiety | Sum of squares | df | Mean square | F | Sig. |
| Pre-test | Between Groups | 17.250 | 3 | 5.75 | .48 | .69 |
|  | Within Groups | 902.300 | 76 | 11.87 |  |  |
|  | Total | 919.550 | 79 |  |  |  |

The Fc: 0.484< 2.760 and it is statistically insignificant at 5% level. The study concludes that the null hypothesis is accepted. This implies that there is no significant difference in the mean score of the students before the treatment or that the students had the same level of test anxiety before the treatment.

Since hypothesis one is interested in looking at the effects of Rational-Emotive Behaviour, Systematic Desensitization and Combine Therapies before and after the treatment. Table 7, presents the results for post treatment effect.

# Table 7: ANOVA Test on Post-Test Anxiety

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Test Anxiety | Sum of squares | df | Mean square | F | Sig. |
| Post test | Between Groups | 366.100 | 3 | 122.033 | 9.735 | <.0001 |
|  | Within Groups | 952.700 | 76 | 12.536 |  |  |
|  | Total | 1318.800 | 79 |  |  |  |

Since Fc: 9.735 > F<0.05: 2.76, the null hypothesis is rejected and the study concludes that there is a significant difference in the mean score of SS1 students in Government Senior Secondary School Township, Jos after the treatment. This also reveals that the test anxiety of the experimental group has significantly reduced.

# Table 8: Summary of Pre and Post-Test Statistics of Rational-Emotive Behaviour Therapy, Systematic Desensitization, Combined and Control Groups on Test Anxiety in the Study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test Anxiety | **Groups** | **N** | **Mean** | **Standard Deviation** | **Minimum** | **Maximum** |
| Pre-Test | EG I: Rational-Emotive Behaviour Therapy | 20 | 30.15 | 2.758 | 26 | 36 |
|  | EG II: Systematic  Desensitization | 20 | 30.35 | 4.017 | 25 | 40 |
|  | EG III: Combined | 20 | 31.20 | 3.722 | 27 | 40 |
|  | Control | 20 | 30.00 | 3.146 | 25 | 38 |
|  |  | 20 | 20.05 | 3.706 | 14 | 26 |
| Post-test | EG I: Rational-Emotive Behaviour Therapy |  |  |  |  |  |
|  | EG II: Systematic Desensitization | 20 | 22.00 | 2.991 | 16 | 26 |
|  | EG III: Combined | 20 | 21.35 | 4.004 | 12 | 27 |
|  | Control | 20 | 25.80 | 3.381 | 20 | 30 |

EG = Experimental Group

The result in Table 8 shows the summary of the pre and post-tests of the Therapies under investigation. The pre-test mean anxiety of the students indicates higher level of anxiety of 30.43 and a higher range between the minimum and the maximum anxiety level. Those figures are in contrast with the statistics for the post test result where the result indicates that the level of test anxiety has dropped significantly to an average of 23.0 with a range (difference between minimum and maximum) mean lower than that of the pre-test.

26



25

**Mean of ANXIETY**

24

23

22

21

20

Rational-Emotive Therapy Systematic Combined Therapy Control Group

Desensitization Therapy

# Figure 3: Mean Plot of the Groups

Figure 3 is derived from post test anxiety of students across the groups in Table 8. The figure reveals that there is a significant reduction in the test anxiety of the students with Rational-Emotive Behaviour Therapy reducing more (x = 20.05) than others.

# Table 9: Scheffe Multiple Comparison Test of Control Group with each of the Therapies

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| (I) GROUP | (J) GROUP | Mean Diff. (I- J) | Sig. | 95% Confidence Interval | |
|  |  |  | Lower  Bound | Upper  Bound |
|  | Systematic  Desensitization Therapy | -1.950 | .393 | -5.15 | 1.25 |
| Rational-Emotive  Behaviour Therapy - (EG I) |  |  |  |  |
| Combined Therapy | -1.300 | .718 | -4.50 | 1.90 |
|  | Control Group | -5.750 | <.0001 | -8.95 | -2.55 |
| Systematic  Desensitization Therapy -  (EG II) | Rational-Emotive Behaviour Therapy | 1.950 | .393 | -1.25 | 5.15 |
| Combined Therapy | .650 | .953 | -2.55 | 3.85 |
|  | Control Group | -3.800 | .013 | -7.00 | -.60 |
| Combined Therapy - (EG III) | Rational-Emotive  Behaviour Therapy | 1.300 | .718 | -1.90 | 4.50 |
|  | Systematic Desensitization  Therapy | -.650 | .953 | -3.85 | 2.55 |
|  | Control Group | -4.450 | .002 | -7.65 | -1.25 |
| Control Group | Rational-Emotive Behaviour Therapy | 5.750 | <.0001 | 2.55 | 8.95 |
|  | Systematic  Desensitization Therapy | 3.800 | .013 | .60 | 7.00 |
|  | Combined Therapy | 4.450 | .002 | 1.25 | 7.65 |

EG = Experimental Group

The Scheffe Multiple Comparison Test in Table 9 suggested that all the three therapies were significantly different to the control group. It was observed that the range between the lower bound and the upper bound of the three therapies are lower than the range for the control group which has an average of 6.00 while that of the experimental group has an average range of -3.00.This suggests that the therapies are affection in reducing test anxiety.

# Hypothesis Two

There is no significant difference in the mean score between the self-concept of senior secondary one students who are exposed to Rational-Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies and those who are not.

# Table 10: ANOVA Test on Post Self-Concept Mean Scores (SCS)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Post Self-Concept  Mean Scores (SCS) | Sum of squares | df | Mean square | F | Sig. |
|  | Between Groups Within Groups Total | 32.238  101.150  133.388 | 3  76  79 | 10.746  1.331 | 8.074 | <.0001 |

The result on Table 10 indicates that empirical F-value (8.074) is greater than the theoretical F-value (2.760). This implies that the study rejects the null hypothesis and concludes that there is a significant mean score difference between self-concept of senior secondary one students who were exposed to Rational-Emotive Behaviour, Systematic Desensitization, and Combined therapies and those who were not.

# Table 11: Post Test Analysis of Self-Concept Mean Scores (SCS) in Relation to the Therapies

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Mean Scores** | **Groups** | **N** | **Mean** | **Standard**  **Deviation** | **Minimum** | **Maximum** |
| Self-Concept  Scores | Rational-Emotive  Behaviour Therapy | 20 | 14.20 | 1.105 | 12 | 16 |
|  | Systematic Desensitization | 20 | 14.25 | 1.293 | 12 | 16 |
|  | Combined | 20 | 14.00 | 1.124 | 12 | 16 |
|  | Control | 20 | 12.70 | 1.081 | 11 | 15 |

Table 11 shows the Self-Concept mean scores in relation to the therapies. The result shows that Rational-Emotive Behaviour Therapy, Systematic Desensitization and combined therapies impacted on the self-concept of senior secondary one students test anxiety with Systematic Desensitization therapy impacting more than the other therapies with a mean of

14.25. This implies that when treatments were applied, the self-concept of students increased, thereby reducing the student‟s test anxiety.

# Hypothesis Three

There is no significant mean score difference between the Self-Efficacy of senior secondary one students who are exposed to Rational-Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies and those who are not.

# Table 12: ANOVA Test on Post Self-Efficacy Mean Scores (SES)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Post Self-Efficacy  Mean Scores (SES) | Sum of squares | Df | Mean square | F | Sig. |
| Between Groups Within Groups  Total | 50.737  121.750  172.487 | 3  76  79 | 16.912  1.602 | 10.557 | <.0001 |

Looking at Table 12, the P-Value was 0.0001. This is lower than 0.05 level of significance. This implies that there was a significant difference in mean score between the self-efficacy of senior secondary one students who were exposed to Rational-Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies and those who were not. Given that Fc = 10.557>Ft=2.760 and since P-Value was 0.0001 and lower than 0.05, the corresponding null hypothesis was rejected and it was established that the treatments (Rational-Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies) impacted significantly on the senior secondary one students‟ self-efficacy making their test anxiety to reduce more than those who were not.

# Table 13: Post Test Analysis of Self-Efficacy Mean Scores (SES) in Relation to the Therapies

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Mean Scores** | **Groups** | **N** | **Mean** | **Standard**  **Deviation** | **Minimum** | **Maximum** |
| Self-Efficacy  Scores | Rational-Emotive  Behaviour Therapy | 20 | 13.80 | 1.322 | 11 | 16 |
|  | Systematic Desensitization | 20 | 14.10 | .968 | 13 | 16 |
|  | Combined | 20 | 14.35 | .988 | 13 | 16 |
|  | Control | 20 | 12.30 | 1.658 | 10 | 16 |

Table 13 shows Post-test self-efficacy mean scores in relation to the therapies. The result shows that Rational-Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies impacted on self-efficacy of senior secondary one student‟s test anxiety with combined therapy with a mean of 14.35 impacting more than the other therapies. This implies that when treatments were applied, the self-efficacy of students increased, thereby reducing the students‟ test anxiety.

# Hypothesis Four

There is no significant difference in the mean score between willingness to engage in examination malpractice of senior secondary one students who are exposed to Rational- Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies and those who are not.

# Table 14: ANOVA Test on Post Examination Malpractice Mean Scores (EMS)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Post Examination Malpractice  Mean Scores (SSS) | Sum of squares | df | Mean square | F | Sig. |
| Between Groups Within Groups  Total | 168.300  199.900  368.200 | 3  76  79 | 56.100  2.630 | 21.329 | <.0001 |

The result in Table 14 shows that the empirical F-value (21.329) is greater than the value of theoretical F-value (2.760). This means that the null hypothesis is rejected and the study concludes that there is a significant difference in willingness to engage in examination malpractice of senior secondary one students between those who were exposed to Rational- Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies and who were not.

# Table 15: Post Test Analysis of Examination-Malpractice Mean Scores in

**Relation to the Therapies**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Mean Scores** | **Groups** | **N** | **Mean** | **Standard**  **Deviation** | **Minimum** | **Maximum** |
| Examination Malpractice  Scores | Rational-Emotive Behaviour Therapy | 20 | 8.65 | 1.565 | 6 | 11 |
|  | Systematic  Desensitization | 20 | 5.10 | 1.410 | 4 | 9 |
|  | Combined | 20 | 5.35 | 1.663 | 4 | 9 |
|  | Control | 20 | 5.50 | 1.821 | 4 | 10 |

Table 15 shows the post-test examination malpractice mean scores in relation to the therapies. The result shows that the therapies impacted on willingness to engage in examination malpractice. The result also shows that Systematic Desensitization and combined therapies with lower means of 5.10 and 5.35 respectively impacted or reduced students test anxiety more than Rational-Emotive Behaviour Therapy on willingness to engage in examination malpractice.

# Table 16: Summary Results of Scheffe Multiple Comparisons Test of Control Group with each of the Dependent Variables and the Therapies.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Dependent  Variable | (I) GROUP | (J) GROUP | Mean  Difference (I-J) | Std.  Error | Sig. |
| SCS  Scheffe | Rational-Emotive Behaviour Therapy | Systematic Desensitization Combined Therapy  Control | -.050  .200 1.500\* | .365  .365  .365 | .999  .960  .002 |
|  | Systematic Desensitization | Rational-Emotive Behaviour Therapy Combined Therapy  Control | .050  .250 1.550\* | .365  .365  .365 | .999  .925  .0001 |
|  | Combined Therapy | Rational-Emotive Behaviour Therapy Systematic  Desensitization Control | -.200  -.250 1.300\* | .365  .365  .355 | .960  .925  .008 |
|  | Control | Rational-Emotive Behaviour Therapy Systematic Desensitization  Combined Therapy | -1.500\*  -1.550\*  -1.3008 | .365  .365  .365 | .002  .0001  .008 |
| SES Scheffe | Rational-Emotive Behaviour Therapy | Systematic Desensitization Combined Therapy  Control | -.300  -.550 1.500\* | .400  .400  .400 | .905  .598  .005 |
|  | Systematic Desensitization | Rational-Emotive Behaviour Therapy Combined Therapy  Control | .300  -.250 1.800\* | .400  .400  .400 | .905  .942  <.0001 |
|  | Combined Therapy | Rational-Emotive Behaviour Therapy Systematic Desensitization  Control | .550  .250 2.050\* | .400  .400  .400 | .598  .942  <.001 |
|  | Control | Rational-Emotive Behaviour Therapy Systematic  Desensitization Combined Therapy | -1.500\*  -1.800\*  -2.050\* | .400  .400  .400 | .005  <.0001  <.0001 |
| EMS  Scheffe | Rational-Emotive Behaviour Therapy | Systematic Desensitization Combined Therapy  Control | 3.550\*  3.300\*  3.150\* | .513  .513  .513 | <.0001  <.0001  <.0001 |
|  | Systematic Desensitization | Rational-Emotive Behaviour Therapy Combined Therapy Control | -.3.550\*  -.250  -.400 | .513  .513  .513 | <.0001  .971  .894 |
| Dependent Variable | (I) GROUP | (J) GROUP | Mean Difference | Std. Error | Sig. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | (I-J) |  |  |
| Combined Therapy | Rational-Emotive | -3.300\* | .513 | <.0001 |
|  | Behaviour Therapy | .250 | .513 | .971 |
|  | Systematic | -.150 | .513 | .993 |
|  | Desensitization |  |  |  |
|  | Control |  |  |  |
| Control | Rational-Emotive | -3.150\* | .513 | <.0001 |
|  | Behaviour Therapy | .400 | .513 | .894 |
|  | Systematic | .150 | .513 | .993 |
|  | Desensitization |  |  |  |
|  | Combined Therapy |  |  |  |

* P<0.05

SCS = Self-Concept Scores SES = Self-Efficacy Scores

EMS = Examination Malpractice Scores

Table 16 shows the summary of Scheffe Multiple Comparison Test of Control group with each of the dependent variables and the Therapies. Scheffe Multiple Comparison Test of Control was used as the Post-hoc-test to determine which of the treatments contributed more to the significant difference among the groups. The result shows that the Therapies impacted self-concept, self-efficacy, and examination malpractice. The result also shows that the therapies are significantly different from the control group. It was observed also that all through the mean difference (I – J) of the Control group is higher than those of the experimental group.

# DISCUSSION

The results of the analysis of data from this study revealed that students who received treatments (Rational-Emotive Behaviour Therapy, Systematic Desensitization and Combined Therapies) had good attitude and behaviour change towards test anxiety than those who did not. Table 8, shows the summary of the pre and post-tests of the Therapies under investigation. The pre-test mean anxiety of the students indicates higher level of anxiety of

30.43 and a higher range between the minimum and the maximum anxiety level. Those figures are in contrast with the statistics for the post test result where the result indicates that the level of test anxiety has dropped significantly to an average of 23.0 with a range (difference between minimum and maximum) mean lower than that of the pre-test. The statistics pointed to the fact that test anxiety of the students in the group fell within marginal points. The study could therefore infer that the level of the students test anxiety was the same across all the groups used for the study before treatment. After the treatment, that is the application of the therapies to the respective groups, the post-test statistics revealed a reduction in the test anxiety of the students across the groups as seen in Table 8. The result indicated that Rational-Emotive Behaviour Therapy reduced the average test anxiety of the students to the minimum level followed by Combined and Systematic Desensitization. By these results, objective one has been achieved.

Analysis of Variance (ANOVA) result in the pre-test section in Table 6 shows that there is no significant difference in the therapies as well as the control group. This was so because no treatment was applied. On the contrary, the post-test result showed clearly that there was significant difference in the groups under study after treatment since P-Value of 0.0001 was less than 0.05. The result could have been inconclusive without delving into where the difference lies. This led to the adoption of Scheffe Multiple Comparison Test. The result shows that the therapies are significantly different from control group as shown in Table 9.

This finding is consistent with previous works of Elaigwu (2003), which showed significant improvement in the attitude and behaviour of students who received treatment than those not exposed to any group counselling treatment. The Rational-Emotive Behaviour Therapy, Systematic Desensitization and Combined therapies were effective with the students in this study probably because of the counselling and information provided by the resource persons who were teachers during the experiment, which in turn influenced the behaviour of the students. By this new behaviour, it is assumed that the students would be able to move from their anxious states to a more relaxed condition during examinations. Behaviour or attitude change have been documented by Bojuwoye (1982), who found that information dissemination relating various science related occupations on students could help to improve their interests and attitude towards moral techniques.

Further more, the effectiveness of these therapies is consistent with the findings by Greignet (1975), Corey (1991), and Elaigwu (2003), that Rational-Emotive Behaviour Therapy techniques and other cognitive restructuring procedures are effective in helping people with self-defeating problems like test anxiety. Explanation for the effectiveness of the Combined therapy in the study could be based on the assumption that, because each method was effective when used separately, therefore, the combined method was expected to work.

The effectiveness of these treatments confirm the fact that Counselling aims at total development of individuals, thus it is concern with helping students to learn to live with self and other members of the school organization or school community, devoid of unhealthy competition and cheating behaviour, the students are better developed, better equipped to adjust in life and well prepared to live an anxious free life. With the change in their behaviours, these students have acquired skills of overcoming test anxiety while in school. The results have shown that when counselling therapies are effective, students will overcome their anxious state and challenges of life. The finding of this study is also in line with Denga (1982), and Uba (1989), who found that counselling therapies if used correctly may remediate test anxiety of secondary school students and help them to perform well in their tests and

examinations. Uba (1989), testified to the fact that for the students test anxiety to reduce after treatment means that the sessions were well digested. This is true of this study. The treatment groups used in this study involving teaching and giving of homework or assignment in respect to self-concept, self-efficacy and willingness to engage in examination malpractice by students are use to direct and active teaching by teachers. In this study the researcher and research assistants were probably seen as teachers, hence, the influence of students‟ behaviour exposed to these treatments.

The students‟ self-concept was enhanced and they gained more confidence in their approach towards examinations, thereby eliminating test anxiety as can be seen in Table 11which shows the Self-Concept mean scores in relation to the therapies. The result shows that Rational-Emotive Behaviour Therapy, Systematic Desensitization and combined therapies impacted on the self-concept of senior secondary one students test anxiety with Systematic Desensitization therapy impacting more than the other therapies with a mean of

14.25. This implies that when treatments were applied, the self-concept of students increased, thereby reducing the student‟s test anxiety. This was made possible because the therapies impacted on the self-concept of students in the study. The findings of this study have also revealed the fact that students have gained a sense of self-worth and a feeling of control, they have begun to develop good mental and physical health. Students in this study had high self- concept mean scores which lowered their test anxiety. This goes to confirm the findings of Olatoye (2009), where high test anxiety predicted low science achievement. This study also found that high self-concept predicted low test anxiety.

In these findings, a self-concept student in secondary school now has confidence in him/herself; can set goals for him/herself; the behaviours they hold about themselves which produce a different overall self-evaluation and behaviour they make to others become possible. Ejikeme (2001), agreed that when students accept themselves and are enhanced internally, they perform well because of the different outlook in personality. By these results objective two has been achieved.

Results of this study also revealed significant effects of the treatment conditions with respect to self-efficacy. The students‟ self-efficacy improved after treatments were applied as can be seen in Table 13 shows Post-test self-efficacy mean scores in relation to the therapies. The result shows that Rational-Emotive Behaviour Therapy, Systematic Desensitization, and Combined therapies impacted on self-efficacy of senior secondary one student‟s test anxiety with combined therapy with a mean of 14.35 impacting more than the other therapies. This implies that when treatments were applied, the self-efficacy of students increased, thereby reducing the students‟ test anxiety.

These results have helped in achieving objective three. Effectiveness of this treatment on self-efficacy agrees with previous studies of (Bandura (1995), Bandura, 1997; Grau, Salanova & Peiro, 2001; and Jing, 2007) showing a negative relationship exists between self- efficacy and test anxiety.

The therapies impacted on willingness of students to engage in examination malpractice to work in order not to be anxious during examinations. Students accepted to stay out of examination malpractice by this research work. Systematic Desensitization and Combined therapies were more effective in changing students‟ behaviours and attitudes towards willingness to engage in examination malpractice. However, findings of this study as can be seen in Table 15 show the post-test examination malpractice mean scores in relation to the therapies. The result shows that the therapies impacted on willingness to engage in examination malpractice. The result also shows that Systematic Desensitization and combined therapies with lower means of 5.10 and 5.35 respectively impacted or reduced students test anxiety more than Rational-Emotive Behaviour Therapy on willingness to engage in examination malpractice. By these results objective four has been achieved.

# CHAPTER FIVE

**SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

# SUMMARY OF FINDINGS

* + 1. The students who did not receive any treatment failed to show any improvement in their behaviours toward test anxiety but those who received treatment came out less anxious than those who did not. Rational-Emotive Behaviour therapy was more effective in reducing students‟ test anxiety than Systematic Desensitization and combined therapies.
    2. The students‟ self-concept was enhanced and they gained more confidence in their approach towards examinations, thereby eliminating test anxiety.
    3. The self-efficacy of the students improved after treatments were applied.

Students‟ abilities to cope even in carrying out hard tasks were realized.

* + 1. The therapies impacted on willingness of students to engage in examination malpractice. Students saw the need to stay out of examination malpractice and work harder in their academics in order not to be anxious during examinations.

# CONCLUSION

The study was carried out to find the extent to which Rational-Emotive Behaviour and Systematic Desensitization therapies affect SS1 students‟ test anxiety in Government Senior Secondary School Township, Jos.

Furthermore, the study sought to find out the extent to which the students test anxiety could be predicted by the related variables such as self-concept, self-efficacy and willingness to engage in examination malpractice.

Based on the results of this study, the following conclusions were made:

The treatments (Rational-Emotive Behaviour, Systematic Desensitization and Combined therapies used, were effective in reducing test anxiety in SS1 students. Students who did not receive any treatment failed to show any improvement in their behaviours

towards test anxiety. Those who received treatment came out less anxious than those who did not.

The results in this study revealed that Rational-Emotive Behaviour therapy reduced students‟ test anxiety more than Systematic and Combined therapies. Finally, the students‟ test anxiety questionnaire (STAQ) was developed by the researcher. The Reliability and Validity of the instrument was high and was successfully used for the pilot study and the main study. The instruments should be validated further on a larger sample in other parts of Nigeria.

# RECOMMENDATIONS

1. This study focused on the effect of Rational-Emotive Behaviour and Systematic Desensitization therapies on SS1 students‟ test anxiety in Government Senior Secondary School Township, Jos. The results of this study showed that Rational- Emotive Behaviour and Systematic Desensitization therapies were effective in reducing test anxiety in secondary school students. It is recommended that Government should try to encourage the training of more counselors to teach courses relating to test anxiety at both the primary, secondary and university levels in order to reduce the problem of examination malpractice that the nation is experiencing today.
2. Furthermore, it is recommended that counsellors, psychologists and other professionals working in secondary schools settings could create special programmes for students with test anxiety, which would include a special programme or programmes for enhancing self-concept, self-efficacy, and unwillingness to engage in examination malpractice.
3. Workshops and seminars in counselling should be organized often, in order to acquaint both the teachers and the students on how to help those students who have test anxiety and in order to improve their performance in schools. It is also recommended that teachers and students should be exposed to the need and

importance of being well adjusted in school while parents and the general public will also be given tasks on the same issue at seminars and at PTA meetings.

1. The past decade has witnessed a tremendous amount of controversy revolving around examination malpractice which comes about from anxiety and numerous aspects of our secondary schools educational system, including the structure of the schools, the classrooms, the curriculum, the goals of education and the means to reaching these goals. Government should try to encourage the training of more counsellors to teach at both the primary, secondary and university levels.

Finally, it is not just enough to have counsellors attached to schools. Their roles in terms of helping students to adjust socially, mentally and academically must be appreciated. This means that school counsellors should be given the opportunity to give or expose students to counselling sessions designed to improve their test anxiety, mental health and update their study habits.

# LIMITATIONS OF THE STUDY

In this section, attention was drawn to some of the shortcomings in the present study which have to be guarded against during future investigation of similar problems and in generalisation of the findings of this study as follows:

# Problems Encountered:

1. It took the Researcher time to get the Principals on seat to discuss the programmes.
2. Training of the Research Assistants was another problem because some of the teachers were not punctual and the researcher had to spend more time attending to these categories of teachers.
3. Most of the respondents wanted to know why they were selected to be in the programme while others were not.
4. The researcher and the teachers explained to the participants that the programme was purely for educational purposes where only a few students were expected to take part.
5. The study was limited to Government Senior Secondary School Township, Jos. The results of this study should not be generalized beyond the geographical area with similar characteristics because only eighty students were used.

These limitations, not withstanding, it is hoped that this study will go a long way towards helping future researchers who may be interested in this particular area of study.

# SUGGESTION FOR FURTHER STUDY

1. This study was confined to only one secondary school in Government Senior Secondary School Township, Jos. It is suggested that similar studies should be conducted in two or more schools or states of the Federation to ascertain its general effectiveness.
2. Another area of research borders on a survey design on the relationship among test anxiety and self-concept, self-efficacy and willingness to engage in examination malpractice of SS1 students in Plateau State or in Nigeria. It is suggested that in future, for researches in this area, the sample size and scope should be increased.
3. The validity and the reliability of the instrument used in this study need to be researched into on the state or national levels. The necessity for a national data base for the reduction of test anxiety in our secondary schools through the effectiveness of using the therapies and group counselling approaches is because it can increase the chances of most students to experience, participate and benefit from counselling, thereby enabling them overcome school related problems which otherwise could militate against personal development, adjustment and desired academic performance.
4. Finally, further investigations can also be instituted to discover which category of students – boys or girls are more affected by test anxiety in secondary schools.

# CONTRIBUTION TO KNOWLEDGE

The study outlined the major contributions to knowledge as follows:

1. One of the major contributions of this study is the students test anxiety questionnaire

(STAQ) which was developed by the researcher. The reliability and validity of the instrument was high and was successfully used for the main study. The instrument should be validated on a larger sample to which the students test anxiety of students could be predicted by the related variables such as self-concept, self-efficacy and willingness to engage in examination malpractice.

1. This study investigated the effectiveness of Rational-Emotive Behaviour and Systematic Desensitization therapies on SS1 students‟ test anxiety where it revealed that those who were exposed to the treatments reduced their test anxiety than those who were not. This finding is another contribution to knowledge.
2. Finally, the findings of this study provided basis through which other researchers can use in future researches in test anxiety in order to reduce test anxiety in secondary students.

# REFERENCES

Adamu, M. (2001, April). “*Examination malpractice”*. A Paper presented at the 4th Annual speech and prize giving day ceremony of Federal Government College, Daura, between 20th – 23rd April, 2001. Katsina State.

Adegoke, A.A. (2002). *Adolescents in Africa*. Ibadan: Hadassah.

Adeoye, A.B. (2009). *Effectiveness of Rational-Emotive Behaviour and Reality Therapies on academic stress of* Sandwich undergraduates, College of Education, Oro, Nigeria. An unpublished Ph. D (Educational Guidance and Counselling) Thesis submitted to University of Ilorin, Ilorin.

Akinboye,J.O. (1980). *How to study and pass important examinations: A psychological Approach.* Ibadan: Maritine Printers.

Anakwe, A.L. (2003). *The relationship among locus of control*, academic *performance and school adjustment of senior secondary school students Plateau State.* Unpublished doctoral thesis, University of Jos, Jos.

Andrews, D. W. (2008). *Understanding adolescent problem behaviour*. Retrieved March, 2, 2010, from [http://fcs.osu.edu/hdfs/bulletin/volume.2/bull21a.htm.](http://fcs.osu.edu/hdfs/bulletin/volume.2/bull21a.htm)

Animba, O., Denga, D., & Omoluabi, P. (1993).An appraisal of unrest in Nigeria. Emigu: Abic Publishers.

Annan, R. (2005).*Dangers of examination malpractice*. Retrieved April 1, 2006,from htt[p/www](http://www.ghanaweb.com/ChanaHomepage/Features/Airtikel.php?1D=79190).[gh](http://www.ghanaweb.com/ChanaHomepage/Features/Airtikel.php?1D=79190)a[naweb.com/ChanaHomepage/Features/Airtikel.php?1D=79190.](http://www.ghanaweb.com/ChanaHomepage/Features/Airtikel.php?1D=79190)

Atkinson, R. (2000), *Adolescence*. Retrieved June 5, 2007, from [www.usm.maine.edu/-](http://www.usm.maine.edu/-atkinson/adolescence.htm)

[atkinson/adolescence.htm.](http://www.usm.maine.edu/-atkinson/adolescence.htm)

Awotunde, P.O. & Ugodulunwa, C.A. (2004). *Research method in education.* Jos: Fab.

Anieh (Nig.) Ltd.

Bandura, A. (1995). *Self-efficacy in changing societies.* New York: Cambridge University Press.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Beck, A. (2001).Cognitive therapy: Nature and relation to behaviour therapy. *Journal of Cognitive Therapy* 1(2), 184-200.

Bernett, B., & Schueller, J. (2000).*Meeting the needs of young Clients: a guide to providing reproductive health service to adolescents.* Retrieved June 16, 2007, from htt[p/www](http://www.fhi.org/).f[hi.org.](http://www.fhi.org/)

Beitner, S.M. (2005). *Symptoms of psychological and emotional problems Retrieved* April 1, 2006, from http:/psyhologydoc.com.symptoms/child.htm.

Benton, H.H., & Benton, W. (1981).*The new encyclopedia Britannica*. (15th ed., vol. 15) Chicago: Benton publishers.

Bujuwoye, O. (1982). A case study of school related factors affecting Nigerian secondary school pupil‟s academic performance. *Journal of Education,* 12, 31-42.

Bulus, I. (1988). *Essentials of counselling theories*. Jos: Abic Publishers.

Bulus, I. (1995). *Indigenous and western counseling approaches*: *A synthetic model for use in Africa.* Ehindro Nigeria Limited Printing Press Jos.

Burn, R.B. (1977).*The self-concept and its relevance to academic achievement.* London: Holt Rinehart & Winston.

Byrne, B. (1984). The general/academic self-concept nomological network: A review of construct validation research. *(Review of educational research)* 54,427-456.

Cassady, J. & Johnson, R. (2001).Cognitive test anxiety and academic performance.

*Contemporary educational psychology, 27, 270-295.*

Chamove, A.S. (2005). Spider Phobic Therapy Toy. *The Behaviour Analyst Today,* 6(2), 109-

113. Retrieved November 11, 2011 from BAO ([http://www.baojournal.com](http://www.baojournal.com/)) Christopher, K.A. (2005). *Social anxiety and social phobia in Youth*. Retrieved March 20,

2007 from http//[www.springer.com.](http://www.springer.com/)

Cohen, I. (1976). *Educational research in classroom and schools. A manual of materials and methods.*London: Harper & Row.

Corey, G. (2009). *Theory and practice of counselling and psychotherapy*. Retrieved November 11, 2011 from [http://www.testanxietytips.com.](http://www.testanxietytips.com/)

Daniel, C. (2004). *Guidance needs of adolescence outside the School setting in Kadarko Local Government Area of Kaduna State.* Unpublished M.ED thesis, University of Jos: Jos.

Denga, D.I. (1982). *Students counselling: A major solution to Campus unrest*. Lagos: Orit Egwa. Publishers.

Denga, D.I. & Ali, A. (1982).*An introduction to research Methods and statistics in education and social sciences.* Calabar: Rapid Educational Publishers.

Dinkemeyer, A. & Caldwell, O. (1970).*Developmental guidance and counselling:* A comprehensive school approach. New York: McGraw Hill book Co.

Dryden, W. (2005).*Rational-Emotive Behaviour behavior therapy in anutshell*: New York: Beverly Hills: Sage Publication.

Ejikeme, G.G. (1990). *Related issues of the University students: Use and abuse of sedative and Narcotics.* A paper presented at Centre for developments studies University of Jos, Jos November 26th to 28th.

Elaigwu, O.P (2003). *Effects of two group counselling techniques on self- concept, locus of control and drinking behavior of selected students* in Jos. Unpublished doctoral thesis, University of Ilorin, Ilorin.

Ellis, A. (2003). Early theories and practices of Rational-Emotive Behaviour theory and how they have been augmented and revised during the 1st decade. *Journal of Rational- Emotive Behaviour& Cognitive-behavior Therapy,* 21(3),4.

Ellis, A.R. (1955). Rational psychotherapy. *Journal of General Psychology,* 5(13), 35-44. Ellis, A.R. (1973). Rational- Emotive-therapy in R. Corsini (Ed.).*Current psychotherapies.*

Hasca, Illnois: Peacock Publishers.

Emile Durheim. (2016). “The Functionalist Perspective.” *Boundless Sociology.* Boundless, 26 May, 2016. Retrieved 28 Sept., 2016 from https:/[/www](http://www.boundless.com/sociology/textbooks/boundless-sociology-).[boundless.com/sociology/textbooks/boundless-sociology-](http://www.boundless.com/sociology/textbooks/boundless-sociology-) textbooks/sociology-1/theoretical-perspective-in-sociology-24/the-functionalist- perspective-155-3284/

Eromosele, E.A. (2007). *Taming the menace of examination malpractice in Nigeria*.

Retrieved April 1, 2006 from[http://www.selfgrowth.com/articles/Eromosele3.html.](http://www.selfgrowth.com/articles/Eromosele3.html) Ferguson, J.G.(1957). *Webster’s dictionary,(of the English Language).* Chicago: Ferguson

Publishing Company.

Grau, R., Salanova, M., & Peiro, J. M. (2001).Moderator effects of self-efficacy on occupational stress.*Psychology in Spain*, 5(1), 63-74.

Green, C.D. (2000). *Person-centred therapy*. York University: Toronto, Ontario ISSN 1492- 3173.

Hartwell, G. (2005). *Overcoming fear*. Retrieved November 3, 2011, from www.healmylife.com(416) 234-1850.

Ipaye, T. (1983).Guidance and counselling practices. Ile Ife: University of Ife Press.

Jing, H. (2007). *Analysis on the relationship among test anxiety, self-concept and academic competency.* US-China Foreign Language, 5(1), 48-51.

Johnson, D. & Johnson, R. (1994).The effects of conflict resolution training on elementary school students. *Journal of Social Psychology*. 134, (6) 210-215.

Kaplan, R.M. & Saccuzzo, D.P. (2005).Psychological testing: Principles, applications and issues. Sydney, Australia: Wadsmorth.

Keogh, E. & French, C.C. (2001).Test anxiety, evaluative stress, and susceptibility to distraction from threat.*European Journal of Personality,* 15(2), 123-141.

Kerlinger, E.N. (1973). *Foundations of Behavioural Research.* New York: Holt, Rinehart & Winston.

Kleinjn, W.C. Vander-Ploeg, H.M. &Topman, R.M. (1994). Cognition, study habits, test anxiety and academic performance. *Psychological Reports,* 75, 1219-1226.

Lannap, A.L. (1991). *Student welfare service in Nigeria. An empirical analysis*. Unpublished doctoral thesis, University of Jos, Jos.

Lannap, A.L. (1996). *Management of student services in Nigerian higher institutions*. Jos: Mono Expressions.

Lannap, A.L. (2002). Directive or counselor centred approaches. In Lannap, A.L (Ed.) *counsellor theories and initiation of Adolescents to adulthood in some parts of Nigeria,* Jos: Ichejum Publications.

Manthe, L. (2004). *Support the youth to develop life skills*. Botswana: international financial service centre.

Marija, J.N. (1983). *Introductory statistics guide,* McGraw-Hill Book Company.

Marsh, H.W. (1990). The structure of academic concept: The Marsh/Shavelson Model.

*Journal of educational psychology.*84(1), 35-42.

Mathew, M (2008). *Examination phobia*. Retrieved April 1, 2006,from <http://ezineartices./?Examination-Phobia&id=1301740>.

Morin, K. N. (1972). Group Systematic Desensitization to Test Anxiety. *Journal of Counselling Psychology.* 72, (19), 125-129.

Mujica, H. (2002). *Xenophobia. A contemporary issue in psychology.* Ile-Ife: Published in the Ife Centre for psychological studies.

Ndoh, U.N. (1995). *Adolescent’s problems and the need for counseling in Jos North Local Government area of Plateau State.* Unpublished M.ed thesis, University of Jos, Jos.

Nwanko, J.T. (1983), *Introduction to research questions in education and Social Sciences,* Unpublished monograph. Department of Educational Management, University of Ibadan.

Obasi, M.C. (1997). “*The effects of Guidance Counselling on student’s academic performance”.* A Post Graduate Diploma Project in Education. Submitted to University of Jos.

Oguntokun, M.O. (2011). *Learning style, school environment and test anxiety as correlated of Learning outcomes among secondary school students:* Ile-Ife: Ife Psychologia.

Ohadike, H.O. (1996). Students and their goals. Asaba: Obi Press Nig. Ltd.

Oladele, J.O. (1987). *Guidance and counselling*: *A functional approach focus on the 6-3-3-4 educational system*. Lagos: Johns Lad Publishers.

Olaosebikan, O.I. (2000). *Effects of Rational-Emotive Behaviour Therapy on reduction of proneness to extramarital Affairs among identified women in Abeokuta.* A paper presented at the 41st Annual International Conference of CASSON held in UniLag between 22nd – 25th of August, 2016.

Olatoye, R.A. (2009). *Students’ test anxiety, motivation for examinations and science achievement in junior secondary schools.* Unpublished doctoral thesis Olabisi Onabanjo University, Ago-Iwoye, Ogun State.

Olushola, A. (2001). *Advocates of examination malpractice*. Retrieved January 1, 2006 from<http://ezinearticles.com/?Advocates-Of-Examination-Malpractice&id=292923>

Onyeizugbo, E. U. (2010). Self-Efficacy, gender and trait anxiety as moderators of test anxiety.*Electronic Journal of Research in Educational Psychology,* 8(1), 299-312.

Oyetunde, T.O. (2000). *How to read, study, and pass your examinations.* Jos: LECAPS Publishers.

Oyetunde, T.O. (2002). *Writing research projects, journal articles, conference papers and documenting references accurately.* Jos: LECAPS Publishers.

Pajares, F. & Miller, M.D. (1994). The role of self-efficacy and self-concept beliefs in mathematical problem-solving: A path analysis. *Journal of educational psychology,* 86, 193-203.

Pajares, F. &Schunk, D.H. (2001).*Self-beliefs and school success: Self-efficacy, self-concept and school achievement.* In R. Riding & S. Rayner (Eds.) *Perception. (pp. 239-266).* London: Abex Publishers.

Purkey, W.W. (1970). *Self-concept and school achievement.* New Jersey: Eaglewood Cliffs prentice-hall.

Reasoner, R.W., & Lane, M.L. (2007).*Parenting with purpose: Five keys to raising children with values and visions:* Benin City: Marvelous Christian Publications.

Reid, R. (1982). *The self-concept and persistent school absenteeism.* N.J: Prentice Hall.

Sarason, I.G. (1975). Test Anxiety and the Self-disclosing coping model. *Journal of consulting and clinical psychology,* 43, 148-152.

Schunk, D.H. (1995). *Self-efficacy and education and instruction.* In J.E. Maddux (Ed.), *Self efficacy, adaptation and adjustment:* Theory, research and applications (pp.281-303). New York: Plenum.

Schwarzer, R. (1994). Optimum, vulnerability, and self-beliefs as health-related cognitions: A systematic overview. *Psychology and Health:* An International Journal, 9, 161-180.

Spielberger, C.D. & Sarason, I.G. (Eds.)(1983). *(Stress and anxiety)* Washington: Hemisphere Pub. Co.

Uba, A. (1987). *Theories of personality*. Ibadan: claverianum Press.

Uba, A. (1989). *Theories of counselling and psychotherapy*.

Ibadan: Ganga Publishers.

Umar, M.R. (2016). *Relationship between parental background support and academic performance of public senior secondary students* in Sokoto State, Nigeria. Unpublished M.Phil Thesis submitted to Usman Dan Fodiyo University, Sokoto.

Wolpe, J. (1958). *Psychotherapy by reciprocal inhibition*. California: Standard University Press.

# APPENDIX A1

**STUDENTS TEST ANXIETY QUESTIONNAIRE (STAQ)**

# INTRODUCTION/INSTRUCTIONS

1. The questionnaire is designed to find out your feelings towards taking of examinations and your attitude to some issues related to taking of examinations.
2. Note that there are no wrong or right answers, so feel free to respond to the issues raised in the questionnaire as honestly as you possibly can.
3. The information you provide will be treated as confidential, and will be used for the purpose of this research work only. It will also be used to help students in secondary schools to be better informed about fear for examinations and how they can overcome it in order to be more useful to themselves and society.

**SECTION A:** BACKGROUND INFORMATION CODE NAME: \_ SCHOOL: \_ CLASS: **SECTION B:**

# TEST ANXIETY RELATED PROBLEMS

**Instruction:** Please indicate the extent to which you agree or disagree with the items below by ticking in the box provided.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **ITEM** | **SA**  **Strongly Agree** | **A**  **Agree** | **D**  **Disagree** | **SD**  **Strongly Disagree** |
| 1. | I always feel anxious, when reading test  questions in an examination. |  |  |  |  |
| 2. | I always panic as the teacher starts to give  instructions while handing over test booklets |  |  |  |  |
| 3. | The thought of upcoming examination  frightens me. |  |  |  |  |
| 4. | I experience dry mouth during examination. |  |  |  |  |
| 5. | My heart beats rapidly, when the teacher announces that the examination is one week  away. |  |  |  |  |
| 6. | I become discouraged, when examination questions are difficult. |  |  |  |  |
| 7. | I find it difficult to organize my thoughts  during examination. |  |  |  |  |
| 8. | Most of the times, I go blank on an  examination. |  |  |  |  |
| 9. | The closer I am to an examination, the harder  it is for me to concentrate on the study. |  |  |  |  |
| 10. | I keep fidgeting with papers when I cannot answer questions on an examination. |  |  |  |  |

# SECTION C:

**SELF-CONCEPT RELATED ITEMS**

**Instruction:** Please indicate the extent to which you agree or disagree with the items below by ticking in the box provided.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **ITEM** | **SA**  **Strongly Agree** | **A**  **Agree** | **D**  **Disagree** | **SD**  **Strongly Disagree** |
| 11. | I am not as good as I should be in school. |  |  |  |  |
| 12. | I am good in some of my school subjects. |  |  |  |  |
| 13. | I am good at remembering what I have learnt  in school, but not always. |  |  |  |  |
| 14. | I am able to follow my lessons easily when I  like the teacher. |  |  |  |  |

# SECTION D:

**SELF-EFFICACY RELATED PROBLEMS**

**Instruction:** Please indicate the extent to which you agree or disagree with the items below by ticking in the box provided.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **ITEM** | **SA**  **Strongly Agree** | **A**  **Agree** | **D**  **Disagree** | **SD**  **Strongly Disagree** |
| 15. | I may cope in most school situations. |  |  |  |  |
| 16. | I hardly handle whatever comes my way in  school. |  |  |  |  |
| 17. | I always manage to solve difficult problems  in school, if I try hard enough. |  |  |  |  |
| 18. | I can remain calm when facing difficulties in  school. |  |  |  |  |

# SECTION E:

**EXAMINATION MALPRACTICE RELATED PROBLEMS**

**Instruction:** Please indicate the extent to which you agree or disagree with the items below by ticking in the box provided.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **ITEM** | **SA**  **Strongly Agree** | **A**  **Agree** | **D**  **Disagree** | **SD**  **Strongly Disagree** |
| 19. | In some situations, I bring books into the  examination hall. |  |  |  |  |
| 20. | Sometimes, I copy from other students during  examination. |  |  |  |  |
| 21. | I sometimes engage myself in swapping  question papers during examination. |  |  |  |  |
| 22. | I sometimes ask for help during examination. |  |  |  |  |

# APPENDIX A2 ADMINISTRATION OF THE PROGRAMME

**Group One:**

# TREATMENT PHASE FOR RATIONAL-EMOTIVE BEHAVIOUR (COGNITIVE) GROUP COUNSELLING SESSIONS

**Week One**

**Session 1** (1 hour)

Topic: Introduction and preliminary activities/self-understanding Goal: (i) To help members develop self-awareness and get

acquainted with each other.

(ii) To assist members to increase their understanding and enhance their self- concept.

Activities: The researcher and the research assistants initiated self-introduction to enable members know more of one another. Each member in turn introduced him/herself giving such details as name, position in the family, family background, age, academic history, impression about school, aspirations, likes and dislikes.

**Session 2** (1 hour)

Warm-up exercise such as handshakes and embracing one another took place. All these were to foster interactions and reduce initial anxiety.

The purpose and format of the programme were explained by the group facilitator. The facilitator led members to spell out and explain the basic rules were regarded as binding on all members, which were also the essential ground rules for group counselling.

* Punctuality, confidentiality, honesty, orderliness, helpfulness, equality and action.
* Home assignment: Identification of interest and life goals were given to members.

# Week Two

**Sessions 1 & 2**

Topic: Preliminary activities/self-understanding to test anxiety.

Goal: The goal of these sessions was to assist members to self-understanding through increasing self-awareness in order to reduce test anxiety.

Activities: Activities were as those of the first week.

# Week Three

**Sessions 1 & 2**

Topic: Understanding self-evaluation, behaviour to self and test anxiety.

Goal: To help students understand the irrationality of negative self-talks, self- evaluation and how such can affect individual‟s personality.

Activities: Each student was asked to list statements they make about themselves and how they evaluate themselves.

Each member was asked to read what had been written. Members were encouraged to assist any member in reading out his/her list to identify statements on self-evaluation/self-talk that were negative. Members were assisted to understand the negative self-talks/self-evaluation as irrational/baseless and such statements can influence one‟s test anxiety.

# Week Four

**Sessions 1 & 2**

Topic: Understanding and relationships among negative self-talks/irrational beliefs, and test anxiety.

Goal: The general aim of this session is to help students‟ understand and appreciate how negative self-talks are related to poor self-concept and examination malpractice which comes about because of test anxiety.

Activities: Each student was asked to present a list of negative self-talks (on self/school work) they were assisted to understand that a person with poor self-evaluation, low self-

esteem or negative self-concept has faulty or irrational beliefs/behaviours that tend to maintain their un-adaptive behaviours.

# Week Five

**Sessions 1 & 2**

Topic: Challenging negative self-talks/irrational beliefs.

Goal: To assist members develop appropriate skills to be able to make positive self- talks and irrational statements.

Activities: Members were assisted to understand that virtually all humans‟ disturbances are the result of irrational, illogical thoughts, feelings and beliefs. These can therefore be directly and forthrightly be eliminated by individuals sticking vigorously to empirical reality. Irrational thoughts and beliefs are learnt and can be unlearnt by first questioning (source, how, why, when) of such thoughts and beliefs.

# Week Six

**Sessions 1 & 2**

Topic: Time management and making positive self-statements.

Goal: To inculcate in the students the habit of apportioning time in their daily work and to increase member‟s skills in making self-talks in order to improve their self-concept and to avoid test anxiety.

Activities: Members discussed in their groups on how to draw and use personal time table. They also reminded each other on the self-talk.

# Week Seven

**Sessions 1 & 2**

Topic: Study time table and making positive statement about self at home and school.

Goal: (i) To enable students form the habit of apportioning time to study while in school, so that they can do well academically and avoid test anxiety.

(ii) To improve skill in making positive self-statements in order to improve members self-concept and to change their behaviours towards examination malpractice which comes about because of test anxiety.

Activities: Students were instructed on how to draw up study time table to help them study well in school. They also discussed on how each one of them would practice self-talk in their various homes concerning their school work and examinations.

# Week Eight

**Sessions 1 & 2**

Topic: Test anxiety/career awareness

Goal: To enable members work harder in school to avoid test anxiety in order to be responsible adults and work life after the completion of their formal education.

Activities: Discussion was focused on the importance of hard work in order to avoid test anxiety and examination malpractice. A number of professions were identified and the group members discussed their various occupations, the benefits the occupations would accord the professionals and the importance of the occupations to the society.

# Week Nine

**Sessions 1 & 2**

Topic: Making positive self-statements.

Goal: To increase member‟s skills in making self-talks in order to improve their self- concept and develop acceptable behaviour towards testing.

Activities: There was a concise review of the previous sessions.

Members were taught how to replace this negative statement with positive ones and emphasis were also laid on having a natural look at the use of “should, ought and must” in daily discussion/interaction.

Assignment was given on practicing to make positive rational statements about self at home.

# Week Ten

**Sessions 1 & 2**

Topic: Evaluation

Goal: Aimed at reviewing the previous sessions, receiving and giving of feedbacks.

Activities: Discussion on previous sessions. Each student shared his/her experiences with other members. Possible future improvement in running the group sessions were suggested by members. These were overall evaluation of the counselling sessions by group members.

Post-test treatment took place in the week that followed after the treatment phase.

# GROUP TWO

**TREATMENT PHASE FOR SYSTEMATIC DESENSITIZATION**

The group facilitator conducted the two sessions of 1 hour each twice in a week under classroom condition as follows:

# Week 1

**Session 1** (1 hour)

The first session was devoted to:

1. Establishing a relaxed atmosphere; Introduction/Self understanding
2. allowing participants to discuss their test anxiety in general.

**Session 2** (1 hour)

Verbally introduce systematic desensitization, deep muscular relaxation, and an overview of the conditioning theory underlying retroactive inhibition;

# WEEK 2

**Session 1** (1 hour)

Discuss what a hierarchy means and how one is to be built.

Assignment – An assignment in which students were to build a test anxiety hierarchy was given. See figure 3 page 47.

# Session 2 (1 hour)

Good study habits – students were encouraged to study and know the material well enough so that they could recall it even if they were under stress. General discussion on time management was carried out.

# WEEK 3

**Session 1 (1 hour)**

Students to learn and practice good time management and avoid:

* Laziness
* Procrastination.

# Session 2 (1 hour)

“Day dreaming” – General discussion

# WEEK 4

**Session 1 (1 hour)**

* 1. Students learnt to concentrate on the material they were studying by generating questions from their textbooks and note books.
  2. Focusing on key words, concepts and examples in their text books and note books.

# Session 2 (1 hour)

1. Students built confidence by studying throughout the term and avoid cramming the night before the examination.
2. Students used relaxation techniques, for example, taking long deep breaths to relax the body and reduce stress. Discuss.

# WEEK 5

**Session 1 (1 hour)**

Discuss on the environment by letting students know that the environment in which they study could have a big effect on how efficient their study time is. They should check their place of study for the following conditions:

“Noise” – Minimize distracting noise. Some people need some sound and some like silence. Call on individual student to say what works for him or her.

# Session 2 (1 hour)

Discuss the environment: “Interruption” – Culprits are family and friends. Consider a “do not disturb sign”. They can catch up with friends later. General discussion.

# WEEK 6

**Session 1 (1 hour)**

“Neatness” – Students should have plenty of room to work; don‟t be cramped. Their study time would be better if they take a few minutes at the start to straighten things up. Discuss.

# Session 2 (1 hour)

“Comfort” – A desk and straight-backed chair is usually best. Don‟t get too comfortable-a bed is a place to sleep, not study.

# WEEK 7

Session 1 (1 hour)

“Equipment” – Have everything (book, pencils, paper, dictionary, calculator etc) close at hand. Students should not spend their time jumping up and down to get things.

Session 2 (1 hour)

1. Lighting – 75 watt bulbs are best, but not too close and placed opposite the dominant hand. Discuss what form of light they use in reading.
2. Temperature – Better cool than warm. What about them? Discuss.

# WEEK 8

**Session 1 (1 hour)**

Preparing for or anticipating Test, what is it students have to do? Students should be focused on dealing with the test anxiety. They should take one step at a time. Think about what they can do about it. That is better than getting anxious.

# Session 2 (1 hour)

Students were advice that no negative or panicky self-statements can help them, they should just think rationally. They should not worry. Worrying would not help them either. What they have to do is to stay relevant.

# WEEK 9

**Session 1 (1 hour)**

Students were asked to relax while taking examination. Students were taught relaxation techniques of slow deep breath and visualization.

# Session 2 (1 hour)

Students were taught relaxation technique of progressive muscle relaxation.

# WEEK 10

Evaluation of the treatment procedure. Here, students can ask questions about the various sessions discussed.

Post-test treatment took place in the week that followed after the treatment phase.

# GROUP THREE

**TREATMENT FOR RATIONAL-EMOTIVE BEHAVIOUR THERAPY AND SYSTEMATIC DESENSITIZATION (COMBINED)**

The research facilitator conducted the session based on time, days of the week, direction and venue earlier agreed upon.

# Week 1 - Week 4 (Rational-Emotive Behaviour Therapy)

**Sessions 1 – 2**

The Topics, Goals, Activities and Procedures were the same as contained in the treatment for Rational-Emotive Behaviour Therapy.

# Week 5 – Week 8 (Systematic Desensitization)

**Sessions 1 – 2**

The Topics and Activities were the same as contained in the treatment for Systematic Desensitization.

# Week 9 of Rational-Emotive Behaviour Therapy and Week 9 0f Systematic Desensitization

**Sessions 1**

**Topic:** Making positive self-statements/Progressive muscle relaxation.

**Goal:** To increase member‟s skills in making self-talks in order to improve their self- concept and develop acceptable behaviour towards testing and to help students relax while taking examination.

**Activities:** There was concise review of the previous sessions.

Members were taught how to replace this negative statement with positive ones and emphasis was laid on having a natural look at the use of “should, ought and must” in daily discussion/interaction. Students were taught how to relax while taking examination.

# Week 10

**Topic:** Evaluation

**Goal:** Aimed at reviewing the previous sessions, receiving and giving of feedbacks.

**Activities:** Discussion on previous sessions. Each student was to share his/her experiences with other members. Possible future improvement in running the group sessions were suggested by members. These were overall evaluation of the counselling sessions by group members.

Post-test treatment took place in the week that followed after the treatment phase.

# GROUP FOUR: - Control Group

The research facilitator conducted the sessions of one hour each, twice in a week under classroom condition as follows:

# WEEK ONE

**Sessions 1 & 2 (2 hours)**

**Topic:** Introduction and preliminary activities.

**Goal:** To help members develop self-awareness and get acquainted with each other. **Activities:** The research assistant initiated self-introduction to enable members know more of one another. Each member in turn introduced him/herself, giving such details as name, position in the family, family background, age, academic history, impression about, school, aspirations, likes and dislikes.

# WEEK TWO

**Sessions 1 & 2 (2 hours)**

**Topic:** Challenges in Senior Secondary School.

**Goal:** To help students know what challenges there are in SS, so that they would take their studies seriously.

**Activities:** Students were allowed to write down their challenges and how they intended to overcome the challenges. Students came out, one by one, to discuss their points.

# WEEK THREE

**Sessions 1 & 2 (2 hours) Topic:** Health Talk.

**Goal:** To help students keep fit and to eat correctly (Balanced diet) and not “junk” foods.

**Activities:** Discussion and recommendation on exercises; discussion on eating in between meals and discussion on balanced diet were carried out.

# WEEK FOUR

**Sessions 1 (1 hour) Topic:** Self Discipline.

**Goal:** To help students rate themselves on discipline.

**Activities:** Discussion on what self-discipline means was carried out.

Students pointed out what things they do to show that they are disciplined students.

# Sessions 2 (1 hour)

**Activities:** Students were given the following to rate themselves on self-discipline:

|  |  |  |  |
| --- | --- | --- | --- |
| **SELF-DISCIPLINE** | **ALWAY** | **SOMETIM** | **NEVER** |
| 1. Overdo things or let yourself become too lazy. | **S** | **ES** |  |
| 2. Lose control when you feel hurt or angry. |
| 3. Choose what is right in life. |
| 4. Procrastinate when you have a task to complete. |
| 5. Do whatever you feel like doing. |
| 6. Disregard rules at home and in school. |
| 7. Behave well only when you are being watched. |
| 8. Control your feelings when angry at a family  member. |
| 9. Speak and act calmly when someone has angered you. |  |  |  |
| 10. Resist negative peer pressure. |  |  |  |

# WEEK FIVE

**Sessions 1 (1 hour) Topic:** Justice

**Goal:** To help students learn how to treat others with justice.

**Activities:** What justice is all about was discussed with the students.

How do they practice justice in school and in their homes?

# Sessions 2 (1 hour)

**Activities:** Students rate themselves on justice.

|  |  |  |  |
| --- | --- | --- | --- |
| **JUSTICE AL** | **WAYS S** | **OMETIMES** | **NEVER** |
| 1. Talk behind someone else‟s back. |  |  |  |
| 2. Accuse someone before hearing his/her side of the  story. |
| 3. Avoid getting involved if someone is getting hurt. |
| 4. Try to get away with things that are wrong. |
| 5. Treat people differently because of how they look. |
| 6. Share fairly with others. |
| 7. Look for the truth by investing things yourself. |
| 8. See people as individuals and not objects. |
| 9. Stand up for one‟s rights and the rights of others. |
| 10. Reward someone or recognize when someone is  doing something right. |

# WEEK SIX

**Sessions 1 (1 hour) Topic:** Humility

**Goal:** To help students to be humble in what they do in life.

**Activities:** The research facilitator found out if students knew what was meant by humility. They gave examples of attitudes or attributes of one who is humble.

**Sessions 2 (1 hour) Topic:** Humility

**Activities:** Students were given the following to rate themselves on humility.

|  |  |  |  |
| --- | --- | --- | --- |
| **HUMILITY** | **ALWAYS** | **SOMETIMES** | **NEVER** |
| 1. Consider yourself more important than other people. |  |  |  |
| 2. Criticize others. |
| 3. Learn from your mistakes. |
| 4. Boast about your accomplishments. |
| 5. Do things only to impress others. |
| 6. Ask for help when needed. |
| 7. Respect what each person contributes. |
| 8. Focus on your growth and not on the faults of others. |
| 9. Worry about what others think about you. |
| 10. Expect yourself and others to be perfect. |

# WEEK SEVEN

**Sessions 1 &2 (2 hours)**

**Topic:** Pre and Post rating on Self-Discipline.

**Goal:** To enable students know whether they have Self-Discipline or whether they need to try harder to discipline themselves for good.

**Activities:** Students read out how they had rated themselves.

The outcome was discussed.

# WEEK EIGHT

**Sessions 1 &2 (2 hours)**

**Topic:** Pre and Post rating on justice.

**Goal:** To help students know whether they are people who practice justice or not and what they would do to change their attitudes towards others.

**Activities:** Students came out to read what they had written.

**T**he outcome was discussed.

# WEEK NINE

**Sessions 1 &2 (2 hours)**

**Topic:** Pre and Post humility rating.

**Goal:** To discuss the outcome of the students rating on humility.

**Activities:** Students rated themselves on humility. The outcome was discussed.

# WEEK TEN

Evaluation. Students asked questions about the various sessions discussed.

**DURATION:** 10 WEEKS

**Sessions:** 20 sessions of two hours each week (40 hours)

# STUDENTS TEST ANXIETY QUESTIONNAIRE (STAQ) CUT-OFF POINTS

30 questions made up of:-

* 1. 10 x 4 point Likert scale = 40 for Test Anxiety and

|  |  |  |
| --- | --- | --- |
| 10 | 25 | 40 |
| Low test anxiety | Mid-point | High test anxiety |
| 40 – 10 = 30 ÷ 2 = 15 + 10 = 25 |  |  |

Every respondent above the mid-point of 25 has high test anxiety and every respondent below the mid-point of 25 has low test anxiety.

* 1. 4 x 4 point Likert scale = 16 for self-concept, self-efficacy, study-skills, examination skills and examination malpractice.

|  |  |  |
| --- | --- | --- |
| 4 | 10 | 16 |
| Low test anxiety | Mid-point | High test anxiety |
| 16 – 4 = 12 ÷ 2 = 6 + 4 = 10 |  |  |

Every respondent above the mid-point of 10 has high self-concept, self-efficacy, study-skills, examination skills and examination malpractice; and every respondent below the mid-point of

10 has low self-concept, self-efficacy, study-skills, examination skills and examination malpractice.

# APPENDIX A3

**Test Anxiety Scores (Pre and Post) Group 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S/N** | **TREATMENT** | **TA** | **SC** | **SE** | **SS** | **ES** | **EM** |
|  | Rational-Emotive Behaviour  Therapy |  |  |  |  |  |  |
| 1. |  | 29 | 15 | 14 | 14 | 15 | 9 |
| 2. |  | 28 | 14 | 14 | 12 | 13 | 8 |
| 3. |  | 26 | 12 | 14 | 12 | 12 | 11 |
| 4. |  | 36 | 15 | 14 | 13 | 12 | 9 |
| 5. |  | 32 | 16 | 13 | 14 | 16 | 7 |
| 6. |  | 29 | 13 | 12 | 12 | 15 | 8 |
| 7. |  | 30 | 16 | 14 | 15 | 14 | 6 |
| 8. |  | 28 | 14 | 15 | 14 | 13 | 10 |
| 9. |  | 33 | 15 | 13 | 12 | 13 | 7 |
| 10. |  | 29 | 16 | 15 | 15 | 15 | 10 |
| 11. |  | 34 | 13 | 12 | 11 | 12 | 10 |
| 12. |  | 27 | 14 | 13 | 12 | 11 | 9 |
| 13. |  | 32 | 11 | 12 | 13 | 13 | 6 |
| 14. |  | 27 | 14 | 13 | 14 | 15 | 7 |
| 15. |  | 30 | 14 | 12 | 13 | 11 | 8 |
| 16. |  | 28 | 11 | 12 | 14 | 12 | 7 |
| 17. |  | 31 | 12 | 13 | 13 | 11 | 10 |
| 18. |  | 30 | 12 | 11 | 14 | 11 | 11 |
| 19. |  | 29 | 13 | 12 | 11 | 12 | 10 |
| 20. |  | 35 | 13 | 13 | 12 | 12 | 9 |
|  | Mean Scores | 30.15 | 13.65 | 13.05 | 13.05 | 12.90 | 8.60 |

# Pre-Test Anxiety Scores Group 2

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S/N** | **TREATMENT** | **TA** | **SC** | **SE** | **SS** | **ES** | **EM** |  |
|  | Systematic Desensitization |  |  |  |  |  |  |  |
| 1. |  | 31 | 12 | 12 | 13 | 12 | 10 |  |
| 2. |  | 28 | 13 | 12 | 14 | 13 | 9 |  |
| 3. |  | 30 | 11 | 12 | 11 | 13 | 8 |  |
| 4. |  | 27 | 14 | 13 | 12 | 11 | 10 |  |
| 5. |  | 26 | 15 | 11 | 12 | 11 | 10 |  |
| 6. |  | 34 | 12 | 12 | 13 | 13 | 9 |  |
| 7. |  | 32 | 12 | 10 | 12 | 12 | 7 |  |
| 8. |  | 25 | 12 | 13 | 14 | 13 | 12 |  |
| 9. |  | 29 | 11 | 11 | 11 | 12 | 8 |  |
| 10. |  | 27 | 15 | 14 | 13 | 11 | 10 |  |
| 11. |  | 33 | 14 | 13 | 11 | 10 | 9 |  |
| 12. |  | 28 | 13 | 15 | 14 | 12 | 7 |  |
| 13. |  | 38 | 10 | 11 | 12 | 13 | 6 |  |
| 14. |  | 31 | 12 | 13 | 14 | 12 | 10 |  |
| 15. |  | 30 | 11 | 12 | 11 | 13 | 7 |  |
| 16. |  | 29 | 11 | 13 | 12 | 11 | 6 |  |
| 17. |  | 28 | 14 | 11 | 13 | 13 | 9 |  |
| 18. |  | 35 | 13 | 13 | 13 | 11 | 7 |  |
| 19. |  | 26 | 14 | 13 | 12 | 12 | 4 |  |
| 20. |  | 40 | 11 | 12 | 13 | 10 | 12 |  |
|  | Mean Scores | 30.35 | 12.50 | 12.30 | 12.50 | 11.90 | 8.50 |  |

**Pre-Test Anxiety Scores Group 3**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S/N** | **TREATMENT** | **TA** | **SC** | **SE** | **SS** | **ES** | **EM** |
|  | Rational-Emotive Behaviour Therapy & Systematic  Desensitization (Combined) |  |  |  |  |  |  |
| 1. |  | 27 | 12 | 12 | 11 | 10 | 6 |
| 2. |  | 32 | 14 | 15 | 13 | 11 | 10 |
| 3. |  | 36 | 11 | 11 | 12 | 10 | 9 |
| 4. |  | 40 | 10 | 12 | 12 | 12 | 7 |
| 5. |  | 29 | 13 | 12 | 14 | 12 | 6 |
| 6. |  | 31 | 12 | 14 | 14 | 13 | 10 |
| 7. |  | 28 | 15 | 14 | 16 | 14 | 11 |
| 8. |  | 30 | 13 | 12 | 13 | 12 | 9 |
| 9. |  | 33 | 14 | 15 | 12 | 11 | 8 |
| 10. |  | 36 | 12 | 12 | 11 | 11 | 10 |
| 11. |  | 34 | 13 | 14 | 15 | 10 | 7 |
| 12. |  | 28 | 13 | 15 | 10 | 11 | 6 |
| 13. |  | 32 | 14 | 11 | 13 | 11 | 10 |
| 14. |  | 28 | 14 | 14 | 14 | 12 | 8 |
| 15. |  | 29 | 12 | 13 | 12 | 11 | 10 |
| 16. |  | 28 | 13 | 8 | 12 | 10 | 10 |
| 17. |  | 35 | 12 | 11 | 14 | 12 | 6 |
| 18. |  | 27 | 11 | 12 | 11 | 14 | 8 |
| 19. |  | 27 | 13 | 14 | 14 | 15 | 10 |
| 20. |  | 34 | 11 | 11 | 11 | 13 | 4 |
|  | Mean Scores | 31.20 | 12.60 | 12.60 | 12.70 | 11.75 | 8.25 |

# Pre-Test Anxiety Scores Group 4

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S/N** | **TREATMENT** | **TA** | **SC** | **SE** | **SS** | **ES** | **EM** |
|  | Control Group |  |  |  |  |  |  |
| 1. |  | 28 | 11 | 11 | 10 | 11 | 10 |
| 2. |  | 29 | 14 | 10 | 11 | 10 | 9 |
| 3. |  | 32 | 13 | 12 | 12 | 12 | 10 |
| 4. |  | 27 | 15 | 12 | 13 | 12 | 8 |
| 5. |  | 30 | 12 | 13 | 12 | 12 | 7 |
| 6. |  | 31 | 13 | 14 | 13 | 14 | 10 |
| 7. |  | 28 | 12 | 10 | 12 | 11 | 11 |
| 8. |  | 29 | 14 | 13 | 13 | 13 | 8 |
| 9. |  | 33 | 12 | 11 | 11 | 13 | 8 |
| 10. |  | 32 | 10 | 11 | 12 | 12 | 12 |
| 11. |  | 31 | 12 | 12 | 10 | 12 | 9 |
| 12. |  | 28 | 15 | 12 | 14 | 16 | 10 |
| 13. |  | 26 | 14 | 13 | 13 | 13 | 8 |
| 14. |  | 32 | 11 | 12 | 12 | 14 | 7 |
| 15. |  | 34 | 14 | 14 | 14 | 13 | 10 |
| 16. |  | 25 | 12 | 10 | 12 | 12 | 10 |
| 17. |  | 29 | 15 | 15 | 14 | 15 | 6 |
| 18. |  | 26 | 12 | 11 | 11 | 13 | 8 |
| 19. |  | 32 | 11 | 12 | 12 | 12 | 12 |
| 20. |  | 38 | 12 | 12 | 10 | 12 | 9 |
|  | Mean Scores | 30.00 | 12.75 | 12.00 | 12.05 | 12.60 | 9.10 |

**Post-Test Anxiety Scores Group 1**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S/N** | **TREATMENT** | **TA** | **SC** | **SE** | **SS** | **ES** | **EM** |  |
|  | Rational-Emotive Behaviour  Therapy |  |  |  |  |  |  |  |
| 1. |  | 22 | 16 | 14 | 15 | 15 | 10 |  |
| 2. |  | 20 | 14 | 14 | 15 | 15 | 9 |  |
| 3. |  | 20 | 13 | 14 | 13 | 13 | 11 |  |
| 4. |  | 19 | 16 | 15 | 13 | 13 | 9 |  |
| 5. |  | 21 | 15 | 16 | 16 | 14 | 8 |  |
| 6. |  | 21 | 12 | 13 | 15 | 15 | 8 |  |
| 7. |  | 16 | 15 | 15 | 16 | 14 | 10 |  |
| 8. |  | 25 | 14 | 13 | 15 | 13 | 6 |  |
| 9. |  | 22 | 15 | 14 | 13 | 14 | 9 |  |
| 10. |  | 14 | 15 | 16 | 14 | 15 | 7 |  |
| 11. |  | 24 | 14 | 13 | 12 | 13 | 11 |  |
| 12. |  | 15 | 15 | 14 | 13 | 12 | 9 |  |
| 13. |  | 26 | 13 | 13 | 13 | 14 | 7 |  |
| 14. |  | 19 | 15 | 14 | 14 | 14 | 8 |  |
| 15. |  | 20 | 13 | 11 | 13 | 12 | 7 |  |
| 16. |  | 15 | 13 | 13 | 16 | 16 | 8 |  |
| 17. |  | 14 | 14 | 15 | 14 | 13 | 9 |  |
| 18. |  | 25 | 13 | 12 | 12 | 12 | 10 |  |
| 19. |  | 20 | 14 | 12 | 16 | 16 | 11 |  |
| 20. |  | 23 | 15 | 15 | 15 | 14 | 6 |  |
|  | Mean Scores | 20.05 | 14.20 | 13.80 | 14.15 | 13.85 | 8.65 |  |

# Post-Test Anxiety Scores Group 2

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S/N** | **TREATMENT** | **TA** | **SC** | **SE** | **SS** | **ES** | **EM** |  |
|  | Systematic Desensitization |  |  |  |  |  |  |  |
| 1. |  | 26 | 13 | 13 | 14 | 13 | 9 |  |
| 2. |  | 22 | 14 | 15 | 16 | 15 | 6 |  |
| 3. |  | 22 | 15 | 15 | 16 | 16 | 7 |  |
| 4. |  | 21 | 16 | 14 | 15 | 16 | 5 |  |
| 5. |  | 18 | 16 | 16 | 16 | 16 | 4 |  |
| 6. |  | 20 | 13 | 14 | 13 | 14 | 5 |  |
| 7. |  | 20 | 13 | 13 | 13 | 13 | 4 |  |
| 8. |  | 25 | 14 | 13 | 14 | 14 | 6 |  |
| 9. |  | 23 | 13 | 14 | 15 | 15 | 7 |  |
| 10. |  | 19 | 16 | 15 | 16 | 15 | 6 |  |
| 11. |  | 24 | 12 | 13 | 12 | 14 | 4 |  |
| 12. |  | 16 | 15 | 15 | 16 | 16 | 4 |  |
| 13. |  | 21 | 14 | 14 | 15 | 14 | 4 |  |
| 14. |  | 24 | 15 | 15 | 14 | 15 | 5 |  |
| 15. |  | 25 | 13 | 13 | 11 | 12 | 4 |  |
| 16. |  | 26 | 14 | 13 | 13 | 14 | 4 |  |
| 17. |  | 26 | 13 | 13 | 12 | 14 | 4 |  |
| 18. |  | 18 | 16 | 15 | 16 | 16 | 4 |  |
| 19. |  | 20 | 16 | 14 | 15 | 15 | 4 |  |
| 20. |  | 24 | 14 | 15 | 14 | 15 | 6 |  |
|  | Mean Scores | 22.00 | 14.25 | 14.10 | 14.30 | 14.60 | 5.10 |  |

**Post-Test Anxiety Scores Group 3**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S/N** | **TREATMENT** | **TA** | **SC** | **SE** | **SS** | **ES** | **EM** |  |
|  | Rational-Emotive Behaviour  Therapy & Systematic Desensitization (Combined) |  |  |  |  |  |  |  |
| 1. |  | 24 | 14 | 14 | 13 | 12 | 5 |  |
| 2. |  | 20 | 16 | 15 | 14 | 14 | 9 |  |
| 3. |  | 17 | 13 | 13 | 14 | 12 | 8 |  |
| 4. |  | 21 | 12 | 14 | 14 | 15 | 6 |  |
| 5. |  | 21 | 15 | 15 | 15 | 16 | 4 |  |
| 6. |  | 25 | 14 | 13 | 14 | 15 | 5 |  |
| 7. |  | 15 | 16 | 15 | 15 | 14 | 4 |  |
| 8. |  | 22 | 15 | 16 | 15 | 15 | 7 |  |
| 9. |  | 26 | 13 | 16 | 13 | 14 | 4 |  |
| 10. |  | 18 | 14 | 15 | 14 | 15 | 6 |  |
| 11. |  | 24 | 15 | 14 | 15 | 16 | 4 |  |
| 12. |  | 23 | 14 | 13 | 14 | 14 | 4 |  |
| 13. |  | 27 | 14 | 14 | 15 | 15 | 4 |  |
| 14. |  | 18 | 12 | 13 | 14 | 15 | 4 |  |
| 15. |  | 19 | 14 | 14 | 15 | 15 | 6 |  |
| 16. |  | 12 | 15 | 14 | 13 | 14 | 7 |  |
| 17. |  | 25 | 14 | 16 | 15 | 16 | 4 |  |
| 18. |  | 24 | 12 | 14 | 15 | 15 | 4 |  |
| 19. |  | 20 | 14 | 15 | 16 | 15 | 8 |  |
| 20. |  | 26 | 13 | 14 | 14 | 14 | 4 |  |
|  | Mean Scores | 21.30 | 13.95 | 14.35 | 14.35 | 14.55 | 5.35 |  |

# Post-Test Anxiety Scores Group 4

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S/N** | **TREATMENT** | **TA** | **SC** | **SE** | **SS** | **ES** | **EM** |  |
|  | Control Group |  |  |  |  |  |  |  |
| 1. |  | 26 | 12 | 16 | 11 | 13 | 8 |  |
| 2. |  | 26 | 13 | 11 | 12 | 11 | 7 |  |
| 3. |  | 30 | 13 | 11 | 12 | 11 | 4 |  |
| 4. |  | 20 | 14 | 10 | 13 | 12 | 4 |  |
| 5. |  | 26 | 13 | 12 | 12 | 13 | 5 |  |
| 6. |  | 26 | 12 | 11 | 12 | 13 | 9 |  |
| 7. |  | 24 | 11 | 12 | 12 | 12 | 10 |  |
| 8. |  | 28 | 13 | 12 | 14 | 14 | 6 |  |
| 9. |  | 30 | 11 | 12 | 11 | 13 | 5 |  |
| 10. |  | 24 | 13 | 12 | 13 | 12 | 6 |  |
| 11. |  | 24 | 12 | 12 | 13 | 14 | 4 |  |
| 12. |  | 27 | 14 | 11 | 13 | 15 | 5 |  |
| 13. |  | 20 | 15 | 15 | 11 | 14 | 4 |  |
| 14. |  | 30 | 12 | 11 | 12 | 13 | 5 |  |
| 15. |  | 22 | 13 | 14 | 11 | 15 | 4 |  |
| 16. |  | 21 | 14 | 13 | 13 | 12 | 7 |  |
| 17. |  | 28 | 13 | 15 | 12 | 15 | 4 |  |
| 18. |  | 24 | 13 | 14 | 12 | 12 | 5 |  |
| 19. |  | 30 | 11 | 11 | 12 | 11 | 4 |  |
| 20. |  | 30 | 12 | 11 | 10 | 10 | 4 |  |
|  | Mean Scores | 25.80 | 12.95 | 12.30 | 12.55 | 12.75 | 5.50 |  |

**Pre-Test, Post-Test And Mean Reduction Test Anxiety Scores Of Therapies In The Study.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **S/N** | **Treatment** | **Pre-Test Scores** | **Post-Test** | **Reduction Scores** |
|  | Rational- Emotive Therapy | | | | |
|  | 1 |  | 29 | 22 | 7 |
|  | 2 |  | 28 | 20 | 8 |
|  | 3 |  | 26 | 20 | 6 |
|  | 4 |  | 36 | 19 | 17 |
|  | 5 |  | 32 | 21 | 11 |
|  | 6 |  | 29 | 21 | 8 |
|  | 7 |  | 30 | 16 | 14 |
|  | 8 |  | 28 | 25 | 3 |
|  | 9 |  | 33 | 22 | 11 |
|  | 10 |  | 29 | 14 | 15 |
|  | 11 |  | 34 | 24 | 10 |
|  | 12 |  | 27 | 15 | 12 |
|  | 13 |  | 32 | 26 | 6 |
|  | 14 |  | 27 | 19 | 8 |
|  | 15 |  | 30 | 20 | 10 |
|  | 16 |  | 28 | 15 | 13 |
|  | 17 |  | 31 | 14 | 17 |
|  | 18 |  | 30 | 25 | 5 |
|  | 19 |  | 29 | 20 | 9 |
|  | 20 |  | 35 | 23 | 12 |
|  |  | Mean Scores | 30.15 | 20.05 | 10.1 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/N** | **Treatment** | **Pre-Test Scores** | **Post-Test** | **Reduction Scores** |
| Systematic Desensitization | | | | |
| 21 |  | 31 | 26 | 5 |
| 22 |  | 28 | 22 | 6 |
| 23 |  | 30 | 22 | 8 |
| 24 |  | 27 | 21 | 6 |
| 25 |  | 26 | 18 | 8 |
| 26 |  | 34 | 20 | 14 |
| 27 |  | 32 | 20 | 12 |
| 28 |  | 25 | 25 | 0 |
| 29 |  | 29 | 23 | 6 |
| 30 |  | 27 | 19 | 8 |
| 31 |  | 33 | 24 | 9 |
| 32 |  | 28 | 16 | 12 |
| 33 |  | 38 | 21 | 17 |
| 34 |  | 31 | 24 | 7 |
| 35 |  | 30 | 25 | 5 |
| 36 |  | 29 | 26 | 3 |
| 37 |  | 28 | 26 | 2 |
| 38 |  | 35 | 18 | 17 |
| 39 |  | 26 | 20 | 6 |
| 40 |  | 40 | 24 | 16 |
|  | Mean Scores | 30.35 | 22.00 | 8.35 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/N** | **Treatment** | **Pre-Test Scores** | **Post-Test** | **Reduction Scores** |
| Rational-Emotive Behaviour& Systematic Desensitization  (Combined) | | | | |
| 41 |  | 27 | 24 | 3 |
| 42 |  | 32 | 20 | 12 |
| 43 |  | 36 | 17 | 19 |
| 44 |  | 40 | 21 | 19 |
| 45 |  | 29 | 21 | 8 |
| 46 |  | 31 | 25 | 6 |
| 47 |  | 28 | 15 | 13 |
| 48 |  | 30 | 22 | 8 |
| 49 |  | 33 | 26 | 18 |
| 50 |  | 36 | 18 | 18 |
| 51 |  | 34 | 24 | 10 |
| 52 |  | 28 | 23 | 5 |
| 53 |  | 32 | 27 | 5 |
| 54 |  | 28 | 18 | 10 |
| 55 |  | 29 | 19 | 10 |
| 56 |  | 28 | 12 | 16 |
| 57 |  | 35 | 25 | 10 |
| 58 |  | 27 | 24 | 3 |
| 59 |  | 27 | 20 | 7 |
| 60 |  | 34 | 26 | 8 |
|  | Mean Scores | 31.20 | 21.30 | 9.9 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **S/N** | **Treatment** | **Pre-Test Scores** | **Post-Test** | **Reduction Scores** |
|  | Control Group | | | | |
|  | 61 |  | 28 | 26 | 2 |
|  | 62 |  | 29 | 26 | 3 |
|  | 63 |  | 32 | 30 | 2 |
|  | 64 |  | 27 | 20 | 7 |
|  | 65 |  | 30 | 26 | 4 |
|  | 66 |  | 31 | 26 | 5 |
|  | 67 |  | 28 | 24 | 4 |
|  | 68 |  | 29 | 28 | 1 |
|  | 69 |  | 33 | 30 | 3 |
|  | 70 |  | 32 | 24 | 8 |
|  | 71 |  | 31 | 24 | 7 |
|  | 72 |  | 28 | 27 | 1 |
|  | 73 |  | 26 | 20 | 6 |
|  | 74 |  | 32 | 30 | 2 |
|  | 75 |  | 34 | 22 | 12 |
|  | 76 |  | 25 | 21 | 4 |
|  | 77 |  | 29 | 28 | 1 |
|  | 78 |  | 26 | 24 | 2 |
|  | 79 |  | 32 | 30 | 2 |
|  | 80 |  | 38 | 30 | 8 |
|  |  | Mean Scores | 30.00 | 25.80 | 4.2 |

# Table 3: Pre-Test Anxiety Mean Scores of SS students in the study.

|  |  |
| --- | --- |
| S/N. | Test Anxiety Scores |
| 1 | 29 |
| 2 | 28 |
| 3 | 26 |
| 4 | 36 |
| 5 | 32 |
| 6 | 29 |
| 7 | 30 |
| 8 | 28 |
| 9 | 33 |
| 10 | 29 |
| 11 | 34 |
| 12 | 27 |
| 13 | 32 |
| 14 | 27 |
| 15 | 30 |
| 16 | 28 |
| 17 | 31 |
| 18 | 30 |
| 19 | 29 |
| 20 | 35 |
| 21 | 31 |
| 22 | 28 |
| 23 | 30 |
| 24 | 27 |
| 25 | 26 |
| 26 | 34 |
| 27 | 32 |
| 28 | 25 |
| 29 | 29 |
| 30 | 27 |
| 31 | 33 |

|  |  |
| --- | --- |
| **S/N.** | **Test Anxiety Scores** |
| 32 | 28 |
| 33 | 38 |
| 34 | 31 |
| 35 | 30 |
| 36 | 29 |
| 37 | 28 |
| 38 | 35 |
| 39 | 26 |
| 40 | 40 |
| 41 | 27 |
| 42 | 32 |
| 43 | 36 |
| 44 | 40 |
| 45 | 29 |
| 46 | 31 |
| 47 | 28 |
| 48 | 30 |
| 49 | 33 |
| 50 | 36 |
| 51 | 34 |
| 52 | 28 |
| 53 | 32 |
| 54 | 28 |
| 55 | 29 |
| 56 | 28 |
| 57 | 35 |
| 58 | 27 |
| 59 | 27 |

|  |  |
| --- | --- |
| **S/N.** | **Test Anxiety Scores** |
| 60 | 34 |
| 61 | 28 |
| 62 | 29 |
| 63 | 32 |
| 64 | 27 |
| 65 | 30 |
| 66 | 31 |
| 67 | 28 |
| 68 | 29 |
| 69 | 33 |
| 70 | 32 |
| 71 | 31 |
| 72 | 28 |
| 73 | 26 |
| 74 | 32 |
| 75 | 34 |
| 76 | 25 |
| 77 | 29 |
| 78 | 26 |
| 79 | 32 |
| 80 | 38 |
| Mean Score = | 30.4 |

**Table 4: Pre-Test Self-Concept Mean Scores of SS Students In The Study.**

|  |  |
| --- | --- |
| S/N. | Self-Concept Scores |
| 1 | 15 |
| 2 | 14 |
| 3 | 12 |
| 4 | 15 |
| 5 | 16 |
| 6 | 13 |
| 7 | 16 |
| 8 | 14 |
| 9 | 15 |
| 10 | 16 |
| 11 | 13 |
| 12 | 14 |
| 13 | 11 |
| 14 | 14 |
| 15 | 14 |
| 16 | 11 |
| 17 | 12 |
| 18 | 12 |
| 19 | 13 |
| 20 | 13 |
| 21 | 12 |
| 22 | 13 |
| 23 | 11 |
| 24 | 14 |

|  |  |
| --- | --- |
| **S/N.** | **Self-Concept Scores** |
| 25 | 15 |
| 26 | 12 |
| 27 | 12 |
| 28 | 12 |
| 29 | 11 |
| 30 | 15 |
| 31 | 14 |
| 32 | 13 |
| 33 | 10 |
| 34 | 12 |
| 35 | 11 |
| 36 | 11 |
| 37 | 14 |
| 38 | 13 |
| 39 | 14 |
| 40 | 11 |
| 41 | 12 |
| 42 | 14 |
| 43 | 11 |
| 44 | 10 |
| 45 | 13 |
| 46 | 12 |
| 47 | 15 |
| 48 | 13 |
| 49 | 14 |

|  |  |
| --- | --- |
| **S/N.** | **Self-Concept Scores** |
| 50 | 12 |
| 51 | 13 |
| 52 | 13 |
| 53 | 14 |
| 54 | 14 |
| 55 | 12 |
| 56 | 13 |
| 57 | 12 |
| 58 | 11 |
| 59 | 13 |
| 60 | 11 |
| 61 | 11 |
| 62 | 14 |
| 63 | 13 |
| 64 | 15 |
| 65 | 12 |
| 66 | 13 |
| 67 | 12 |
| 68 | 14 |
| 69 | 12 |
| 70 | 10 |
| 71 | 12 |
| 72 | 15 |
| 73 | 14 |
| 74 | 11 |

|  |  |
| --- | --- |
| **S/N.** | **Self-Concept Scores** |
| 75 | 14 |
| 76 | 12 |
| 77 | 15 |
| 78 | 12 |
| 79 | 11 |
| 80 | 12 |
| Mean Score = | 12.8 |

# Table 5: Pre-Test Self-Efficacy Mean Scores of SS Students In The Study.

|  |  |
| --- | --- |
| S/N. | Self-Efficacy Scores |
| 1 | 14 |
| 2 | 14 |
| 3 | 14 |
| 4 | 14 |
| 5 | 13 |
| 6 | 12 |
| 7 | 14 |
| 8 | 15 |
| 9 | 13 |
| 10 | 15 |
| 11 | 12 |
| 12 | 13 |
| 13 | 12 |
| 14 | 13 |
| 15 | 12 |
| 16 | 12 |
| 17 | 13 |
| 18 | 11 |
| 19 | 12 |
| 20 | 13 |
| 21 | 12 |
| 22 | 12 |
| 23 | 12 |
| 24 | 13 |

|  |  |
| --- | --- |
| **S/N.** | **Self-Efficacy Scores** |
| 25 | 11 |
| 26 | 12 |
| 27 | 10 |
| 28 | 13 |
| 29 | 11 |
| 30 | 14 |
| 31 | 13 |
| 32 | 15 |
| 33 | 11 |
| 34 | 13 |
| 35 | 12 |
| 36 | 13 |
| 37 | 11 |
| 38 | 13 |
| 39 | 13 |
| 40 | 12 |
| 41 | 12 |
| 42 | 15 |
| 43 | 11 |
| 44 | 12 |
| 45 | 12 |
| 46 | 14 |
| 47 | 14 |
| 48 | 12 |
| 49 | 15 |

|  |  |
| --- | --- |
| **S/N.** | **Self-Efficacy Scores** |
| 50 | 12 |
| 51 | 14 |
| 52 | 15 |
| 53 | 11 |
| 54 | 14 |
| 55 | 13 |
| 56 | 8 |
| 57 | 11 |
| 58 | 12 |
| 59 | 14 |
| 60 | 11 |
| 61 | 11 |
| 62 | 10 |
| 63 | 12 |
| 64 | 12 |
| 65 | 13 |
| 66 | 14 |
| 67 | 10 |
| 68 | 13 |
| 69 | 11 |
| 70 | 11 |
| 71 | 12 |
| 72 | 12 |
| 73 | 13 |
| 74 | 12 |

|  |  |
| --- | --- |
| **S/N.** | **Self-Efficacy Scores** |
| 75 | 14 |
| 76 | 10 |
| 77 | 15 |
| 78 | 11 |
| 79 | 12 |
| 80 | 12 |
| **Mean Score =** | **12.4** |

**Table 6: Pre-Test Student Mean Scores on Willingness to Engage in Examination Malpractice of SS Students in the Study**

|  |  |
| --- | --- |
| S/N. | Examination Malpractice Scores |
| 1 | 9 |
| 2 | 8 |
| 3 | 11 |
| 4 | 9 |
| 5 | 7 |
| 6 | 8 |
| 7 | 6 |
| 8 | 10 |
| 9 | 7 |
| 10 | 10 |
| 11 | 10 |
| 12 | 9 |
| 13 | 6 |
| 14 | 7 |
| 15 | 8 |
| 16 | 7 |
| 17 | 10 |
| 18 | 11 |
| 19 | 10 |
| 20 | 9 |
| 21 | 10 |
| 22 | 9 |
| 23 | 8 |

|  |  |
| --- | --- |
| **S/N.** | **Examination Malpractice Scores** |
| 24 | 10 |
| 25 | 10 |
| 26 | 9 |
| 27 | 7 |
| 28 | 12 |
| 29 | 8 |
| 30 | 10 |
| 31 | 9 |
| 32 | 7 |
| 33 | 6 |
| 34 | 10 |
| 35 | 7 |
| 36 | 6 |
| 37 | 9 |
| 38 | 7 |
| 39 | 4 |
| 40 | 12 |
| 41 | 6 |
| 42 | 10 |
| 43 | 9 |
| 44 | 7 |
| 45 | 6 |
| 46 | 10 |
| 47 | 11 |
| 48 | 9 |

|  |  |
| --- | --- |
| **S/N.** | **Examination Malpractice Scores** |
| 49 | 8 |
| 50 | 10 |
| 51 | 7 |
| 52 | 6 |
| 53 | 10 |
| 54 | 8 |
| 55 | 10 |
| 56 | 10 |
| 57 | 6 |
| 58 | 8 |
| 59 | 10 |
| 60 | 4 |
| 61 | 10 |
| 62 | 9 |
| 63 | 10 |
| 64 | 8 |
| 65 | 7 |
| 66 | 10 |
| 67 | 11 |
| 68 | 8 |
| 69 | 8 |
| 70 | 12 |
| 71 | 9 |
| 72 | 10 |
| 73 | 8 |

|  |  |
| --- | --- |
| **S/N.** | **Examination Malpractice Scores** |
| 74 | 7 |
| 75 | 10 |
| 76 | 10 |
| 77 | 6 |
| 78 | 8 |
| 79 | 12 |
| 80 | 9 |
| Mean Score = | 8.6 |

# APPENDIX B1

**TOPICS TAUGHT TO THE CONTROL GROUP**

Retrieved from St. Louis College, Jos.

A.

|  |  |  |  |
| --- | --- | --- | --- |
| **SELF-DISCIPLINE** | **ALWAYS** | **SOMETIMES** | **NEVER** |
| 1. Overdo things or let yourself become too lazy. |  |  |  |
| 2. Lose control when you feel hurt or angry. |
| 3. Choose what is right in life. |
| 4. Procrastinate when you have a task to complete. |
| 5. Do whatever you feel like doing. |
| 6. Disregard rules at home and in school. |
| 7. Behave well only when you are being watched. |
| 8. Control your feelings when angry at a family member. |
| 9. Speak and act calmly when someone has  angered you. |
| 10. Resist negative peer pressure. |

|  |  |  |  |
| --- | --- | --- | --- |
| **B.** | | | |
| **JUSTICE** | **ALWAYS** | **SOMETIMES** | **NEVER** |
| 1. Talk behind someone else‟s back. |  |  |  |
| 2. Accuse someone before hearing his/her side of the story. |
| 3. Avoid getting involved if someone is getting  hurt. |
| 4. Try to get away with things that are wrong. |
| 5. Treat people differently because of how they look. |
| 6. Share fairly with others. |
| 7. Look for the truth by investing things yourself. |
| 8. See people as individuals and not objects. |
| 9. Stand up for one‟s rights and the rights of others. |
| 10. Reward someone or recognize when someone  is doing something right. |

C.

|  |  |  |  |
| --- | --- | --- | --- |
| **HUMILITY** | **ALWAYS** | **SOMETIMES** | **NEVER** |
| 1. Consider yourself more important than other people. |  |  |  |
| 2. Criticize others. |
| 3. Learn from your mistakes. |
| 4. Boast about your accomplishments. |
| 5. Do things only to impress others. |
| 6. Ask for help when needed. |
| 7. Respect what each person contributes. |
| 8. Focus on your growth and not on the faults of  others. |
| 9. Worry about what others think about you. |
| 10. Expect yourself and others to be perfect. |