Volume 18 Issue 34
Originally issued as A5

Global Journal of human-social science: A
Arts & Humanities - Psychology
Volume 18 Issue 5 Version 1.0 Year 2018
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Effects of Systematic Desensitization and Study Skills Counselling Therapies on Test-Anxiety in Physics among Senior Secondary School Students in Jalingo, Taraba State

By Dr. Karfe, Abigail, Seth & Mrs. Ntasin, Angela Atim
Taraba State University

Abstract- The study was conceived with the major objective of investigating effects of systematic desensitization and study skills counselling therapies on test-anxiety in physics among senior secondary school students in Jalingo, Taraba State, Nigeria. Quasi-experimental research design of non-randomized pre-test/post-test control group was adopted for the study. Purposive sampling technique was used to select a total of seventy-two (72) SS II students comprising of 36 males and 36 females who were found to be anxious and had poor achievement in physics. The study consisted of four groups: three treatment groups and the control group. Each of the treatments was carried out in six sessions. Two research instruments were used for the study and they were: Test- Anxiety/Study Skills Questionnaire (TAQ) and Physics Achievement Test (PAT)which were used for pre-test and posttest. Four research hypotheses were formulated to guide the study. The hypotheses were tested using ANCOVA statistics at 0.05 level of significance. The results from the data analysis led to the rejection of the first three hypotheses while hypothesis number four was retained.

Keywords: test-anxiety, systematic desensitization therapy (SDT), study skills counselling therapy (SSCT), achievement, effects, counselling therapies.

GJHSS-A Classification: FOR Code: 419999



Strictly as per the compliance and regulations of:

© 2018. Dr. Karfe, Abigail, Seth & Mrs. Ntasin, Angela Atim. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Effects of Systematic Desensitization and Study Skills Counselling Therapies on Test-Anxiety in Physics among Senior Secondary School Students in Jalingo, Taraba State

Dr. Karfe, Abigail, Seth [α] & Mrs. Ntasin, Angela Atim [σ]

Abstract- The study was conceived with the major objective of investigating effects of systematic desensitization and study skills counselling therapies on test-anxiety in physics among senior secondary school students in Jalingo, Taraba State, Nigeria. Quasi-experimental research design of non-randomized pre-test/post-test control group was adopted for the study. Purposive sampling technique was used to select a total of seventy-two (72) SS II students comprising of 36 males and 36 females who were found to be anxious and had poor achievement in physics. The study consisted of four groups: three treatment groups and the control group. Each of the treatments was carried out in six sessions. Two research instruments were used for the study and they were: Test-Anxiety/Study Skills Questionnaire (TAQ) and Physics Achievement Test (PAT)which were used for pre-test and post-test. Four research hypotheses were formulated to guide the study. The hypotheses were tested using ANCOVA statistics at 0.05 level of significance. The results from the data analysis led to the rejection of the first three hypotheses while hypothesis number four was retained. The findings of the study revealed that systematic desensitization therapy (SDT), study skills counselling therapy (SSCT) and the combination of the two therapies (SDT/SSCT) were effective in the treatment of test-anxiety. The study also revealed that SDT/SSCT combined treatment was more effective than the other two techniques in controlling the disorder. Having discovered the effectiveness of the counselling therapies on test-anxiety, it was concluded that although effects of test-anxiety in physics and poor study skills are enormous, effective counselling can successfully control the behaviour problem of test-anxiety and poor study skills. It was thus recommended that authorities in the educational systems should take it as a priority to train school counsellors in the use of systematic desensitization and study skill counselling therapies with a view to helping the students with problems such as test-anxiety/poor study skills.

Keywords: test-anxiety, systematic desensitization therapy (SDT), study skills counselling therapy (SSCT), achievement, effects, counselling therapies.

I. Introduction

Education is considered as a first step for every human activity. The development of any country depends largely on the quality of its education. Education also plays a vital role in the development of human capital and is linked with individual's well-being and opportunities for better living (Memon, Joubish and Khurram 2010; Farooq, Chaudhry, Shafiq, and Berhanu 2011). As a result, educators, trainers and researchers have long been interested in investigating variables contributing effectively for quality of performance of learners (Farooq et al., 2011).

A common phenomenon that constitutes a universal cause of poor academic achievement among students worldwide is anxiety. It is a kind of self-preoccupation which is manifested as self-minimization and results in negative cognitive evaluation, unfavourable physiological reactions, lack of concentration and academic failure. In today's cut throat competitive environment, anxiety is a common phenomenon of everyday life. It plays a crucial role in human life, because most people are victims of anxiety in different ways (Lenka & Kant, 2012). Test-anxiety is an educational problem experienced by all students, and it is an undesirable reaction toward evaluation. Test-anxiety is the most important problem that is faced by the students in their education worldwide (Khosravi & Bigdeli, 2008). Practically, students will feel some level of anxiety when they take test/examination, but for some students, the level of anxiety increases drastically and affects their achievement. Test-anxiety has risen with the use of tests in educational decision making. As a result, test-anxiety and its dimensions became one of the broadest research areas in recent years.

Most of the secondary school students experience high levels of test-anxiety during final examination compared to other students. Egbochukwu, Obodo and Obadan (2008) observed that many secondary school students usually feel uneasy, fearful and anxious as tests approaches; some even go to the extent of feigning sickness. Students at all levels who suffer from test-anxiety most often choose and pursue careers which may not fully challenge their cognitive abilities. There is no doubt that these students need as much help as possible. The challenge of dealing with anxiety is not unique to adolescents only, but is one among a variety of common unpleasant emotional experiences that every human being encounter in different magnitudes at one time or another in life. Thus, anxiety is part of daily life that cannot be separated from

Author α: Federal Ministry of Education Abuja-Nigeria.
Author σ: Faculty of Education, Taraba State University, Jalingo.
e-mail: abigailkarif@gmail.com

© 2018 Global Journals

people, so students who suffer from high levels of anxiety should be taught the best ways to control it.

In Nigeria, especially in Taraba State, most students experience anxiety during test/examinations. According to Nwankwo, Obi and Obi (2014), most students at the verge of entering for school examinations are seen to exhibit some forms of anxiety, restlessness, trembling, fidgeting or panicking. This should not be the case, because examinations are normal situations which one should not be afraid to participate in. The effects of anxiety on an individual may vary depending on its interaction with the task performance process. Low to moderate anxiety is often deemed beneficial as it enables the body to discharge energy equivalent to the task at hand. High anxiety on the other hand, may be devastating because it excites the body system above normal functioning capacity, and impacts negatively on task performance. The problem of test-anxiety which often leads to poor academic performance has become worrisome and unsatisfactory to students, counselors, teachers, school administrators, parents and the larger society. In the field of psychology and counselling, there are numerous counselling therapies to enhance adaptive behaviour. These therapies are developed by psychologists and are geared towards the elimination of maladaptive behaviours such as fear, anxiety, neurosis, insecurity, and depression, among others.

Various treatments have been developed or applied to test-anxiety, they include: behavioral approaches incorporating systematic desensitization, relaxation training, biofeedback, modeling, anxiety reduction technique, anxiety management training and other behavioral techniques; cognitive approaches with rational emotive therapy, cognitive restructuring and other cognitive techniques, as well as cognitive-behavioral approaches including cognitive-behavioral modification, stress-inoculation training and other cognitive behavioral techniques (Duffy, 2011) and skill-deficit treatment approaches involving study skills training, test-taking skills training, other skill deficit approaches and cognitive behavioral and skill-focused treatment approaches combined.

Test-anxiety reduction programmers have gained widespread acceptance, and are used as treatment for students and persons in different stages of education. Literature exists that describes the process and outcome of test-anxiety reduction programmers with students at different level (Lawani, 2011). Some of the treatments have been shown to be effective in modifying test-anxiety levels of clients. Though there have been positive results with most of the cognitive behavioral interventions, and relaxation skills; test-anxiety issue among secondary school students still remains a distressing condition which ought to be rectified. To address the problem of test-anxiety, the researchers used systematic desensitization therapy and study skills counselling therapy. According to Mcleod (2008) systematic desensitization is a type of behavioural therapy based on the principle of classical conditioning. This therapy aims to remove the fear response of a phobia, and substitute a relaxation response to the conditional stimulus gradually using counter conditioning.

According to Egbule (2009), systematic desensitization is a therapy procedure based on social learning principles for the treatment of maladaptive fears. The client is taught to relax and then imagine a graded sequence of scenes that are progressively more fear-provoking. By experiencing the stimuli during a relaxed state that is incompatible with fear, the emotional reaction to the stimuli is gradually weakened. Systematic desensitization technique is effective when dealing with anxiety and other fear-related problems. The individual is given small doses of what is feared until a relaxed response is built up (Mayange, 2014). According to Kolo and Mallum (2015), systematic desensitization is technique developed by Wolpe in his theory as a procedure used to eliminate anxiety and fear.

Study skills are important factor influencing academic achievement of students.Based on skill-deficit model, anxious students suffer from test-anxiety due to inability of sufficient study skills and test taking skills to approach test/examination. Study skills refer to the student's knowledge of appropriate study strategies and methods and the ability to manage time and other resources to meet the demands of the academic tasks. The purpose of the study skills therapy is to help students maximize the learning process. Thus, it is needed to provide regular study skills interventions to the students in general. In this way, their self-regulation in learning can be boosted.Numerous studies revealed that study skills have the constructive role on academic performance of students in addition to education quality, students' intelligence and their affective characteristics. According to Menzel, cited by Rana and Kausar (2011), many students fail not because they lack ability but because they do not have adequate study skills. Study skills therefore can be seen as planned studying, organizing study environment, efficient reading, note-taking and efficient writing (Demir, Kilinc & Dogan, 2012). Study skills counseling therapy may assist anxious students to distinguish, recover and increase their study habits and test-taking skills. It can also improve students' cognitive processes which affect the organization, processing and retrieval of information. Through this intervention as a practical tool, students can be able to learn various tips and strategies across the study habits and test taking skills activities to improve their study abilities and academic achievement.

Otta and Ogazie (2014) investigated the effects of the Systematic Desensitization (SD) and Study Behaviour Techniques (SBT) in the reduction of test

© 2018 Global Journals

phobia among in-school adolescents in Abia State. The researchers reported that Systematic Desensitization (SD) and Study Behaviour Techniques (SBT) were effective in reducing test phobia. Similarly, Dawa (2007) in a related study affirmed that systematic desensitization and study skills counselling therapies are influential in controlling, managing and reducingtest-anxiety and improving performance in physics. The study further reported that there was a clear direction as to the superiority of the treatments over the other; specifically the combined treatment was found to be superior to the single mode of treatment. Ogbu (2007) noted that male students obtained higher mean score on test anxiety than female students. Also, Ngwoke, Ossai, and Obikwelu (2013) studied influence of study skills on test- anxiety of secondary school students in Nsukka urban, Enugu state, Nigeria. The findings of the study indicated that study skills had no significant influence on students' test-anxiety level.

II. Statement of the Problem

Students are expected to write examination with optimal level of anxiety. The observed situation is that students are prone to anxiety, leading most of them to experience poor performance in physics which is the basic requirement to study science-based courses in tertiary institutions. This study was necessitated by researcher's observation that students develop test-anxiety in physics which often lead to poor academic achievement and has become worrisome and unsatisfactory to students, counselors, teachers, school administrators, parents and the larger society. Thus, this study was an attempt to see if systematic desensitization and study skills counseling therapies could be used to solve the problem of test-anxiety and poor achievement of students in physics in secondary schools in Jalingo L.G.A. Taraba State.

III. Purpose of the Study

The main purpose of this study was to examine the effect of systematic desensitization and study skills counselling therapies on test-anxiety in physic among senior secondary school students in Jalingo Taraba state. Specifically, this study was to:

i. Determine effect of systematic desensitization therapy (SDT) on test-anxiety in physics among senior secondary school students in Jalingo L.G.A. Taraba State.
ii. Determine effect of study skills counselling therapy (SSCT) on test-anxiety in physics among senior secondary school students in Jalingo L.G.A. Taraba State.
iii. Examine effect of systematic desensitization therapy (SDT) and study skills counselling therapy (SSCT) combined on test-anxiety in physics among senior secondary school students in Jalingo L.G.A. Taraba State.
iv. Ascertain the effectiveness of systematic desensitization therapy and study skills counselling therapy (SDT/SSCT) on male and female students' achievement in physics test after treatment.

IV. Research Hypotheses

The following hypotheses are formulated to guide the study and will be tested at 0.05 level of significance.

HO_1: There is no significant mean difference in the effectiveness of systematic desensitization therapy in the reduction of test-anxiety in physics between the control group and the experimental group which was exposed to SDT after treatment.

HO_2: There is no significant mean difference in the effectiveness of the study skills counselling therapy in the reduction of test-anxiety in physics between the control group and the experimental group which was exposed to SSCT after treatment.

HO_3: There is no significant mean difference in the relative effectiveness of the combined systematic desensitization therapy and study skills counselling therapy (SDT/SSCT) in the reduction of test-anxiety in physics between the control group and the experimental group which was exposed to SDT/SSCT after treatment.

HO_4: There is no significant mean difference in the effectiveness of systematic desensitization therapy and study skills counselling therapy (SDT/SSCT) on male and female students' achievement in physics examination after treatment.

V. Significance of the Study

This study is of significance in the sense that its findings may provide bases for solving problems of test-anxiety among secondary school students. This study is significant because anxious students might acquire various methods of treating test-anxiety and it might equip them with skills on how to study effectively. The outcome of this study might also help students understand the extent to which test-anxiety may affect their studies and also know that despite the very negative effects of the disorder, school counsellors may help them reduce the unwanted behaviour. This study is also of significance with regard to the teachers in the sense that the findings might form the bases for teachers' awareness and preparedness to help their test anxious students overcome test-anxiety behaviour. It is expected that by being aware of these test-anxiety behavior among their students, they should be in a position to help those students who exhibit such behaviour. The outcome of this study may convince researchers and teachers that the application of counselling techniques such as the ones adopted in this study might be very useful for school counsellors in

© 2018 Global Journals

minimizing the effects of test-anxiety which threatens the general objectives of educational system. The outcome of this study may also help policy makers understand the debilitating effects of test-anxiety and introduce some measures that may lessen the anxiety provoking features of test/examinations.

Examination bodies might also significantly benefit from the outcome of this study. Since it is the desired objective of any testing organization to give tests that have very high discrimination power, any condition that threatens that discrimination ability of the tests must be strongly addressed to make the test more valid and reliable. It is also hoped that the results of this study may be very significant to the counselling profession because it may further highlight the important roles of counsellors in reducing and controlling the negative effects of high test-anxiety, taking into considerations the differences of the backgrounds of the students. Also counsellors may be informed through the result of this study of ways of guiding or counselling students to develop good study skills and also use combined systematic desensitization therapy and study skills counselling therapy to handle test-anxiety. The findings of the study may also sensitize decision makers in the country's educational system, to recognize the unique roles of counsellors and make it mandatory for decision makers to employ trained counsellors in both public and private institutions of learning in the country.

VI. Scope of the Study

This study was carried out in Jalingo L.G.A. Taraba State, Nigeria. The SSII physics students were chosen for this study because they are next to the final year students and are going to get involve in preparing for external examinations soon. It is hoped that this study would enhance students' achievement in the external examinations especially in physics. In terms of the period for the study, the 2016/2017 academic session was used.

VII. Methodology

Quasi-experimental research design of non-randomized pretest-posttest control group was employed in this study. The target population for this study was 770 students. The total number of 373 students took part in the pre-test exercise out of the population of 770 students. It was from the analysis of the pre-test results that the test-anxious students and poor achieving students in physics were identified, out of which the sample of 72 students was constituted. Purposive sampling technique was used to select the sample from the selected school used for the study. In other words, only students who scored 80-135 on the test-anxiety questionnaire and have a score of 0-44 in physics achievement test were selected for the study. The seventy-two students were made up of thirty-six females and thirty-six males. Since the study examined gender influence, therefore equal number of the gender was determined to balance the number so that no sex was out numbered. The students' ages that participated in the study ranged from 14-18 years old. The selected students were assigned to experimental and control groups by balloting. This study employed this technique to assign students to four (4) groups: Three (3) experimental groups and one (1) control group. Group A = Systematic Desensitization Therapy, Group B = Study Skills Counselling Therapy, Group C = Combined Systematic Desensitization Therapy and Study Skills Counselling Therapy, Group D = Control Group. The last group received placebo treatment on HIV/AIDS and Sexually Transmitted Diseases. Each group had 18 members, nine males and nine females. Two instruments were used for data collection by the researchers. These included: Test-Anxiety Questionnaire (TAQ) and Physics Achievement Test (PAT).The physics content areas that were taught during the study are: Mechanics, Electricity, Matter, Unit and Measurement. The items in Physics Achievement Test were developed to cover knowledge, comprehension and application domain. After the treatment, the post-test was carried out on the sample almost immediately the treatment was completed.

The instruments were validated through face and content validation. A Pilot Test was conducted using a sample of sixteen highly anxious and poor achieving in physics students purposively selected from SS II physics students in Government College Jalingo, Taraba State. The sixteen subjects were assigned to four groups corresponding to the four treatment groups of systematic desensitization therapy, study skills counselling therapy, the combined systematic desensitization therapy and study skills counselling and the control group by balloting. Each group was seen twice a week for two weeks. At the end of the second week, the post-test was given to the students. The pilot test result was used to estimate the reliability coefficient of the items examined. Based on the findings, the reliability coefficient was 0.857. On the bases of the calculated reliability coefficient, the two instruments were considered reliable. The researchers collected the data by using the two instruments already designed. Analysis of covariance (ANCOVA) statistics was employed to test hypotheses 1 – 4 at 0.05 level of significance.

VIII. Results

HO_1: There is no significant mean difference in the effectiveness of systematic desensitization therapy in the reduction of test-anxiety in physics between the control group and the experimental group which was exposed to SDT after treatment.

© 2018 Global Journals

Table 1: One-way Analysis of Covariance of systematic desensitization therapy (SDT) on the physics test-anxiety.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	117.459[a]	2	58.730	1.438	.244	.040
Intercept	414.922	1	414.922	10.160	.002	.128
Pre-SDT	110.774	1	110.774	2.713	.101	.038
Group	5.457	1	5.457	7.134	.006	.002
Error	2817.819	69	40.838			
Total	80422.000	72				
Corrected Total	2935.278	71				

Source: Field survey, 2017

From Table 1, the results of the main effects (SDT) on the test-anxiety of students indicated by F (1, 69) = 7.134 is significant at $P < .05$. This result affirms that there is a significant difference between the physics test-anxiety of the students that received the systematic desensitization therapy and those who did not. Thus, the hypothesis of no significant difference is not retained. That is, students who received systematic desensitization therapy experienced less test-anxiety than those who did not.

HO_2: There is no significant mean difference in the effectiveness of the study skills counselling therapy in the reduction of test-anxiety in physics between the control group and the experimental group which was exposed to SSCT after treatment.

Table 2: One-way Analysis of Covariance of study skills counselling therapy (SSCT) on physics test-anxiety.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	29.155[a]	2	14.578	1.264	.289	.035
Intercept	321.634	1	321.634	27.890	.000	.288
Pre-SSCT	17.114	1	17.114	1.484	.227	.021
Group	6.589	1	6.589	11.571	.002	.008
Error	795.720	69	11.532			
Total	34755.000	72				
Corrected Total	824.875	71				

Source: Field survey, 2017

Table 2 the results of the main effects (SSCT) on the test-anxiety of students indicated by F (1, 69) = 11.571 is significant at $P < .05$. This result affirms that there is a significant difference between the physics test-anxiety of the students that received the study skills counseling therapy and those who did not. Thus, the hypothesis of no significant difference is not retained. That is, students who received study skills counselling therapy experienced less test-anxiety than those who did not.

HO_3: There is no significant mean difference in the relative effectiveness of the combined systematic desensitization therapy and study skills counselling therapy (SDT/SSCT) in the reduction of test-anxiety in physics between the control group and the experimental group which was exposed to SDT/SSCT after treatment.

Table 3: One-way Analysis of Covariance of combined systematic desensitization therapy and study skills counselling therapy (SDT/SSCT) on the physics test-anxiety.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	101.030[a]	2	50.515	3.318	.042	.088
Intercept	271.279	1	271.279	17.816	.000	.205
Pre-SSCT	100.803	1	100.803	6.620	.012	.088
Group	1.263	1	1.263	10.083	.024	.001
Error	1050.622	69	15.226			
Total	51979.000	72				
Corrected Total	1151.653	71				

Source: Field survey, 2017

Table 3, the results of the effects of the combined systematic desensitization therapy and study skills counselling therapy (SDT/SSCT) on the test-anxiety of students indicated by F (1, 69) = 10.083 is significant at $P < .05$. This result affirms that there is a significant difference between the physics test-anxiety of the students that receive the systematic desensitization therapy and study skills counselling therapy combined

© 2018 Global Journals

and those not given the therapy. Thus, the hypothesis of no significant difference is not retained. That is, students who receive systematic desensitization therapy and study skills counselling therapy experience less test-anxiety than those who do not.

HO_4: There is no significant mean difference in the effectiveness of systematic desensitization therapy and study skills counselling therapy (SDT/SSCT) on male and female students' achievement in physics achievement test after treatment.

Table 4: One-way Analysis of Covariance of combined systematic desensitization therapy (SDT) and study skills counselling therapy (SSCT) on male and female students' achievement in physics examination.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1548.690[a]	2	774.345	5.465	.007	.176
Intercept	4807.894	1	4807.894	33.934	.000	.400
Pre-Achv	608.357	1	608.357	4.294	.043	.078
Sex	497.326	1	497.326	3.510	.067	.064
Error	7225.847	51	141.683			
Total	118575.000	54				
Corrected Total	8774.537	53				

Source: Field survey, 2017

Table 4, the results of the effectiveness of systematic desensitization therapy and study skills counselling therapy (SDT/SSCT) on male and female students' achievement in physics examination indicated by F (1, 51) = 3.510 is not significant at $P < .05$. This result affirms that there is no significant difference between male and female students' achievement in physics examination. Thus, the hypothesis of no significant difference is retained. That is, male and female students did not differ in achievement in physics examination after receiving the combined treatment of systematic desensitization therapy and study skills counselling therapy.

IX. Discussion of Findings

The result indicated in table 1 shows that physics students who received systematic desensitization therapy experienced less test-anxiety than those who did not. The finding is consistent with the findings of Otta and Ogazie (2014) and Dawa (2007) who all pointed out that systematic desensitization technique was effective in reducing students' test-anxiety. The result in table 2 clearly showed that students who received study skills counselling therapy experienced less test-anxiety compared to those who were not exposed to the study skills counselling therapy. In other word, from the mean anxiety scores, students had lower test-anxiety when treated with study skills counselling technique than their control group counterparts, whose anxiety remained high. This finding is in agreement with the studies of Dawa (2007); Otta and Ogazie (2014) whose findings revealed that study skills technique was effective in reducing test-anxiety of students. However, the findings of this study is contrary with the findings of Ngwoke, Ossai and Obikwelu (2013), whose study reported that study skills had no significant influence on students' test-anxiety.

Table 3 presented the result showing statistically significant difference between the participants who received the combined treatment of systematic desensitization therapy and study skills counselling therapy (SDT/SSCT) and those who did not. The drastic reduction of test-anxiety using SDT/SSCT combined is in agreement with Dawa (2007), whose study proved that the use of SDT/SSCT was effective in controlling test-anxiety of students. It is observed that many research works on test-anxiety have not considered using the combination of two or more techniques in the control of students' test-anxiety. The results indicated in table 4 revealed that there is no statistical significant difference in the academic achievement of male and female students who received the combined treatment (SDT/SSCT). Since there was no significant mean difference in the effectiveness of systematic desensitization and study skills counselling therapies (SDT/SSCT) on male and female students' achievement in physics achievement test after treatment, the hypothesis 4 was retained. This findings disagrees with that of Ogbu (2007) whose findings reported that male students obtained higher mean score on test-anxiety than females, meaning that the academic achievement of female students were higher than their male counterparts, since it is assume that, the higher the test-anxiety the lower the academic achievement of students.

X. Conclusion

From the results of this research, the use of systematic desensitization and study skills counselling techniques in helping students to reduce their test-anxiety has been successful, when it is considered that there is a significant drop in the mean scores of the students' test-anxiety after the treatments. The study therefore concludes that systematic desensitization and study skills counselling techniques are very effective

© 2018 Global Journals

techniques in reducing the test-anxiety of students. It is concluded that the effects of test-anxiety in physics have enormous technological and socio-economic implycations on the larger population. The reassuring fact which the result of this study has confirmed, however, is that effective counselling can successfully control the behaviour problem. Therefore, teachers, parents, governments and all stakeholders in education must join hands with counsellors to reduce the students' test-anxiety to a minimal level.

XI. Recommendations

1. It is recommended that counsellors who are directly in contact with students should be trained to acquire behaviour modification techniques, such as systematic desensitization, to be able to detect and help students with high test-anxiety. This will not only help them in the success of their lessons but also in the general success of the educational system.
2. Schools counsellors, as well as the teachers, should be trained to acquire study skills counselling techniques to detect poor study skills of students and how to reduce their effects on the students. On the other hand, students should take responsibility to seek for help from counsellors.
3. Since the combined systematic desensitization technique and study skills counselling technique greatly reduces test-anxiety of students, the school guidance and counselling masters/mistresses as well as the teachers should be trained on the skills of using the counselling technique to reduce test-anxiety symptoms and its effects among the students. In other word, efforts should be geared towards ensuring that practising counsellors as well as those in training acquire and employ the combined intervention techniques when dealing with students test-anxiety/poor study skills.
4. Governments and school administrators should give adequate support to counsellors and teachers alike, by providing conducive environment and giving adequate incentives to boost counselling activities in schools. This would help to improve students' academic achievement.

References Références Referencias

1. Dawa,L. M. (2007). The influence of three counselling therapies on high examination anxiety in physics among senior secondary school students in Kaduna Polytechnic Staff School. A Research Project.
2. Demir, S., Kilinc, M.,& Dogan, A.(2012). The effect of curriculum for developing efficient studying skills on academic achievements and studying skills of learners. *International Electronic Journal of Elementary Education*, 4(3): 427-440.
3. Duffy, C. (2011). Systematic desensitization: A treatment from the learning approach.http:// gsspsychology.wordpress.com
4. Egbochukwu, E. O., Obodo, B, & Obadan, N. O. (2008). Efficacy of rational-emotive behaviour therapy on the reduction of test anxiety among adolescents in secondary schools. *European Journal of Social Sciences*. 6, (4): 152-164.
5. Egbule, J. F. (2009). Principles and techniques of behaviour modification. Mcasson department of counselling psychology. Delta State University. IVY international Training and counselling centre (IITCC) Abraka. (Global Network for human resources, Leadership Training and Manpower development, Research and Behaviour Therapy). Pp 236.
6. Farooq, M. S., Chaudhry, A. H., Shafiq, M. & Berhanu, G. (2011). Factors affecting students' quality of academic performance: a case of secondary school level. *Journal of Quality and Technology Management.* 7(2):1-14.
7. Khosravi, M. & Bigdeli, I. (2008). The relationship between personality factors and test anxiety among university students. *Journal of Behavioral Sciences*.2 (1): 13–24.
8. Kolo, F.D.& Mallum Y.A, (2015).*Counselling Practices and Approaches*, Zaria: p.a ndahi press.
9. Lawani, P. (2011). Systematic desensitisation. Retrieved from www.buzzle.com.
10. Lenka, S. K., & Kant, R. (2012). A study of academic anxiety of special need's children in special reference to hearing impaired and learning disabled. *International Journal of Multidisciplinary Research, 2* (2): 64-72.
11. Mayange, L. T. (2014). *Principles of behaviour and family adjustment*. Suleja-Abuja Jehoshaphat Printers.
12. Mcleod, S. A. (2008). Systematic Desensitization. Retrieved\from www.simply-psychology.org/Systematic-Desensitization. html 30th June 2016.
13. Memon, G. R., Joubish, F. M. & Khurram, A. M. (2010). Impact of parental socio- economic status on students' educational achievements at secondary schools of district Malir, Karachi. *Middle-East Journal of Scientific Research*, 6 (6):678-687.
14. Ngwoke, D. U., Ossai, O. V. & Obikwelu, C. L. (2013). Influence of study skills on test anxiety of secondary school students in Nsukka urban. *Journal of Education and Practice,* 4 (17): 162
15. Nwankwo, C. A., Obi, J. S.& Obi, I. (2014). Effects of study skills technique in reducing test anxiety among secondary school adolescents in Anambra State. General studies on education, science and public issues in Africa, 4(1).
16. Ogbu, C.O. (2007) Relationship between student test-anxiety levels and academic achievement in secondary schools. Research publications. A Research project presented to the department of

© 2018 Global Journals

educational Foundations University of Nigeria, Nsukka.

17. Otta, F. E. & Ogazie, C. A. (2014). Effects of systematic desensitization and study behaviour techniques on the reduction of test phobia. *World journal of Education Research*, 1 (3): 1-7 www.wjer.org.
18. Rana, S, & Kausar, R. (2011). Comparison of study habits and academic performance of Pakistani British and White British students. *Pakistani Journal of Social and Clinical Psychology,* Vol. 9, 21-26.

© 2018 Global Journals