

EFFECTS OF ART THERAPY ON EXAMINATION ANXIETY AMONG STUDENTS IN STAFF MODEL SECONDARY SCHOOL OF BAYERO UNIVERSITY KANO, NIGERIA.

BY

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ABSTRACT

The study investigated the effect of art therapy on examination anxiety among students in staff model secondary school of Bayero University, Kano, Nigeria. 60 subjects, 30 in the experimental group and 30 in the control group were drawn purposively from SS I and SS II students. Test anxiety checklist with reliability index of 0.76 and satisfactory content and face validity, was employed. The design of the study was quasi experimental in which test anxiety checklist was used in identifying the subjects of the study. Two research hypotheses were formulated to guide the study. Data were collected and analyzed using descriptive and inferential statistics. The result of the study showed that Art therapy was effective and significant in reducing examination Anxiety. The study further revealed that the differences in effectiveness of Art therapy in reducing examination anxiety on gender level are not significant. Based on the findings of the study, the implications of the findings were highlighted and recommendations and suggestions for further studies made. It was recommended, among others that Art therapy should be utilized by guidance counsellors in reducing examination anxiety among Secondary School Students in the state and the nation in general.

Introduction

Most students at the verge of entering for school tests are seen to exhibit some forms of anxiety, restlessness, trembling, fidgeting and panicking. This should not be the case because tests are normal situations which one should not be afraid of participating in. Egbochukwu, Obodo and Obadan (2013) observed that many secondary school students usually feel uneasy, fearful and anxious as tests approach; some even go to the extent of feigning sickness. This anxious state of emotion exhibited by students towards test-taking is what Spielberger (2015) has referred to as test anxiety, and it constitutes a serious academic impediment to students.

The educational standards of school children in Kano State Nigeria are primarily evaluated based on written examinations. Every year, the Kano Educational Resources Department (KERD) conducts examinations (common entrance, placement, qualifying) with a view to evaluating students' academic progress. Students suffer from various degrees of problems such as anxiety due to examinations stress. Anxiety is an emotional and behavioral disorder caused by the activation of sympathetic nervous system. High level of anxiety is often experienced by students during performance related activities such as, tests and examinations.

Art therapy is a mental health profession in which clients, facilitated by the art therapist, use art media, the creative process, and the resulting artwork to explore their feelings, reconcile emotional conflicts, foster self-awareness, manage behavior and addictions, develop social skills, improve reality orientation, reduce anxiety, and increase self-esteem. A goal in art therapy is to improve or restore a client's functioning and his or her sense of personal well-being. Art therapy practice requires knowledge of visual art (drawing, painting, sculpture, and other art forms) and the creative process, as well as of human development, psychological, and counseling theories and techniques. Today art therapy is widely practised in a wide variety of settings including hospitals, psychiatric and rehabilitation facilities, wellness centers, forensic institutions, schools, crisis centers, senior communities, private practice, and other clinical and community settings.

Anxiety

Anxiety as a noun could be seen as a feeling of worry nervousness or uneasiness typically about an imminent event or something with an uncertain outcome. Anxiety which is derived from the Latin word “angere” meaning to choke, or strangle. Anxiety in the view of many psychologists can be mild which is usually vague and unsettling. It can also be severe which can be extremely debilitating and has serious impact on the victim's daily life.

Ergene (2013) defined the term 'test anxiety' as a scientific construct, referring to the set of phenomenological, physiological, and behavioural responses that accompany concern about possible negative consequences or failure at an examination or at a similar evaluative situation. Test anxiety has been considered to include physiological over-arousal, often referred to as “emotionality,” along with dread, worry, and expectations of terrible failure (Ergene, 2012). Hence, Bufka, Barlow and David (2013) see anxiety as an emotional state in which people feel uneasy, apprehensive, or fearful.

Art Therapy

The art therapies, not only visual art but also music and dance, have been integrated with traditional treatment in health care facilities in the fields of psychiatry, psychology, education, and the arts throughout the United States over the last fifty years. *Art therapy*

uses art media, images, and the creative process, and respects patient/client responses to the created products as reflections of development, abilities, personality, interests, concerns, and conflicts. It is a therapeutic means of reconciling emotional conflicts, fostering self-awareness, developing social skills, managing behavior, solving problems, reducing anxiety, aiding reality orientation, and increasing self-esteem (American Art Therapy Association, 2004). Numerous people have added to the development of art therapy. "Margaret Naumburg was one of the first to delineate art therapy as a form of psychotherapy in the 1940's, working with her sister in a mental hospital during World War II" (Kramer, 1971). She thought art could enhance the verbal exchange between the patient and the therapist. She also used the images produced as a form of symbolic speech, which made a difference in treating some of the most difficult patients. She believes the healing potential of art is found in its creativity, not merely through its communication. Art therapist, Hanna YaxaKureatkowska, was one of the first to introduce art therapy into family group sessions, and she believes that art expresses family members' roles and status, providing a therapeutic process for families in crises. Later, Janie Rhyne used art to help people achieve self-awareness. Rhyne emphasized the person's own interpretation of art in therapy to provide self-discovery (Kramer, 1971). The Menninger Clinic in Topeka, Kansas, a world famous psychiArt therapy, throughout its brief history, has been found to be an effective treatment for the mentally, emotionally, and physically impaired, and also with the socially, medically, developmentally, and educationally impaired.

Peter (2014) investigated the relationship between anxiety level and academic achievement among students in selected secondary schools in Lang'ata District, Kenya. The study established that students encountered some high anxiety causing challenges which affect their ability to perform effectively, and that girls were found to be more prone to high anxiety levels as compared to boys.

Osiki and Busari (2015) in their study evaluated the efficacy of art therapy as a preventive intervention for the attenuation of test anxiety of students selected from secondary schools in Ibadan metropolis. Assessment data were collected from a waiting list control group. Dependent measures included irrational thoughts about test, test anxiety and poor academic performance. Result showed that the training program decrease irrational thoughts about tests, test anxiety and poor performances. Follow-up data indicated further decreases six weeks after termination of the training programme. Finally, the results also showed a reduction in general anxiety in the classroom as a result of the training.

Statement of the Problem

Most students are suffering from anxiety at some stages during an examination. However, when anxiety affects examinations performance, it becomes a problem.

Examination anxiety is actually a type of performance anxiety a feeling someone might have in a situation where performance really counts or when pressures are on to do well. Examination anxiety can bring a stomachache or headache. Some people might feel shaky, sweaty, feel their heart beating quickly as they wait for the test to be given out. A student with really strong test anxiety may even feel like he or she might pass out or throw up. Almost everyone feels nervous before examination. Butterflies in stomach and worrying thoughts “Will I be able to answer the question?”. Have I done enough revision? are indications of examination nerve. A certain amount of nervous tension probably helps one to perform to the best of his or her ability, helps to feel alert and focused but creating a negative frame of mind leads to panic and potentially poor examination performance.

Anxiety is present in everyone, yet few will openly admit to its presence; it is one of the most distressing built on enigmas of man. It is presumed to be a sign of weakness, so all deny its existence and attempt to avoid it. It encompasses tension, nervousness fear and worry. In this age of competition the secondary school students feel fear, tension, nervousness and stress. Examination anxiety is a very serious problem as many cases of suicide are found in the news papers during the period of examination. Based on the above, the problems of the study are to explore the effects of Art therapy on examination anxiety among students in Staff Model Secondary School of Bayero University, Kano.

Objectives of the Study

The following are the objectives of the study

1. To find out difference in the effect of Art therapy on examination anxiety among students in Staff Model Secondary School of Bayero University, Kano.
2. To find out the difference in the effect of Art therapy on examination anxiety between male and female students in staff Model Secondary School of Bayero University, Kano.

Hypothesis

HO1. There is no significant effect of art therapy on examination anxiety between students exposed to treatment and those in the control group.

HO2: There is no significant difference in the effect of Art therapy on examination anxiety between male and female students in Staff Model Secondary School of Bayero University, Kano.

Research Design

The research design for this study is Quasi-experimental design in form of pre-test post-test control group design. In this design, groups are pre-tested on the dependent variables after which experimental group is exposed to the experimental treatment (x) for a period of time. Both groups are then post-tested on the dependent variable (Y_2), the average difference between the pre-test and posttest ($Y_2 - Y_1$) is found and the average differences are compared in order to ascertain whether the experimental treatment produced greater change than the control situation (Bichi, 2004).

Population of the Study

The population of the study comprised of all SS1 and SS2 students of Bayero University, Kano Staff Model secondary School. According to class attendance register 2016/2017, SS1 has the total number of seventy-five (75) students involving male and female (33 males and 42 females) while SS II has the total number of seventy-two (72) students (45 males and 27 females). Therefore, the total number of SS1 and SS II is one hundred and forty-seven (147) students that is (78) males and 69 female. Out of which seventy-two (72) students (34 males and 38 females) were identified to have the symptoms of examination anxiety. The population constituted of males and females with an average age of 14–17 years.

Table 1 population of SS1 and SS2 students

S/N	C/ASS	STUDENT POPULATION			IDENTIFIED		
		MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
1.	SS 1	33	42	75	17	18	35
2.	SS 2	45	27	72	17	20	37
	TOTAL	78	69	147	34	38	72

Source: Class Attendance Register (2016/2017)

Sample Size

According to Bichi (2004) a sample is a portion of the population being studied drawn through a definite procedure. Out of 72 identified students, a sample of sixty (60) students was used in the study based on Research Advisors (2006) table for determination of sample size.

Table 2 Distribution of sample

S/N	CLASS	POPULATION	SAMPLE SIZE
1.	SS1	35	30
2.	SS2	37	30
	TOTAL	72	60

Source: Class Attendance Register (2016/2017)

Sampling Technique

The technique is purposive sampling. Purposive sampling technique is use for the study because the students possessed unique characteristics of examination anxiety. In purposive sampling, elements judged to be typical or representative are chosen from the population for inclusion in the sample (Bichi, 2004). Purposive sampling technique was used in the study to select the whole SS1 and SS2 students to represent the class level.

Instrumentation

The instrument used for data collection was an adapted questionnaire. The questionnaire was adapted from Nist and Diehl (1990) with slight changes to suit the purpose of the study. The adapted questionnaire with close-ended format was named “Test Anxiety Checklist (TAC)”. The use of close-ended questionnaire format was based on the fact that it allows easier tabulation and interpretation by the researcher.

The instrument contains two parts: first part deals with the inclusion of demographic information to help the researcher to draw conclusion on whether there are differences in the effect of Art therapy on examination anxiety among students based on gender and class level while the second part contains 10 item questions that measure the level of examination anxiety. The questions are in the form of Likert Scale (Never (1), Rarely (2), Sometimes(3),Often(4) and Always(5) with the highest number indicating the greatest examination anxiety.

The items in the checklist (TAC) was scored by the researcher using the Likert Scale format. The instrument contains 10 items, the highest possible score any respondent is expected to obtained is 50 (i.e. 5x10), while the lowest possible score is 10 (i.e. 1x10). Thus, respondents who obtained scores from 20-50 were considered as those with symptoms of examination anxiety and they had met criteria for selection, while those who scored below 20 were considered as those not having the symptoms of examination anxiety.

The content and face validity of the instrument for the study was established by the research experts from the Department of Education , Bayero University, Kano. This was done to ascertain the appropriateness and relevance of the items in relation to the research objectives as well as to guarantee the adequacy of the instrument in measuring what it was intended to measure.

Reliability of the Instrument

Reliability is the ability of the instrument to consistently yield the same results when repeated measurement are taken of the same individuals under the same conditions (Koul,2012). In order establish the reliability of the instrument for the study, test-retest procedure was used. In the words of Anikweze (2014), test re-test of reliability is determined by administering the same test twice to the same candidates under approximately the same conditions. The scores obtained on the two occasions are then correlated to establish the degree two sets of scores correspond. A test that yields similar scores on two administrations where no significant event has taking place is highly reliable. To find out the reliability of the instrument, the instrument was pilot tested on twenty students (10 SS1 and 10 SS2) of one school other than the selected schools. The scores obtained was computed using cronbach's Alpha procedure which revealed the reliability index of 0.76. Based on this coefficients, the instrument was statistically adjudged to be reliable and appropriate for the study.

Procedures for Data Analysis

The data obtained in this study was statistically analyzed using descriptive statistics to answer the research questions and inferential statistics t-test for independent samples was used to test the hypotheses. All the hypotheses were tested at 0.05 level significance using t-test for independent sample because it is the appropriate statistical tool for determining the significance of the difference between two groups.

Results

Table3 Pre-test and post-test of experimental and control group.

	Experimental	N	Mean	Standard Deviation
Pre-test	Treatment	30	23.4	3.48
	Control	30	24.3	3.86
Post – test	Treatment	30	12.8	3.06
	Control	30	23.4	3.48

Table 3 above shows the pre- test and post-test mean scores and standard deviations of Art therapy and control group. Looking at the post-test mean scores of Art therapy and control group (24.3 & 23.4) with standard deviation of (3.86& 3.48) it can be observed that it is higher than the mean scores of the experimental group (23.4 & 12.8) with standard deviations of (3.48&3.06). This shows that Art therapy had effect of reducing examination anxiety.

HO1: There is no significant effect of Art therapy on examination anxiety between students exposed to treatment and those in control group.

Table 4 T- Test for independent samples between experimental and control group

	Treatment	N	M	S.D	T-cal	Df	P-value (2 tailed)
Pre-test	Art therapy	30	23.4	3.48	.984	58	.329
	Control	30	24.3	3.86			
Post –test	Art therapy	30	12.8	3.06	12.50	58	.000
	Control	30	23.4	3.48			

Sig. at $P \leq .05$

Table 4 above shows the calculated post-test t-value of 12.50 with p-value of .000, tested at a level of 0.05 and degree of freedom 58. From the table, it was observed that the p-value .000 is less than the level 0.05. Therefore, the null hypothesis which states that there is no significant effect of Art therapy on examination anxiety is rejected. This indicates the effectiveness of Art therapy on examination anxiety.

HO2:There is no significant difference in the effect of Art therapy on examination anxiety between male and female students in Staff Model Secondary School of Bayero University, Kano.

Table 5. T-test for independent sample between male and female respondents exposed to art therapy

	Gender	N	M	St	t-cal	df	P-value
Post– test	Male	15	13.0	3.74	.353	28	.727
	Female	15	12.6	2.29			

NS at $P \geq .05$

Table 5 above shows the post –test results of gender on male and female respondents exposed to Art therapy. The results show the calculated t- value of .353 and p-value .727 respectively, tested at the level of 0.05 with degree of freedom 28. Since the p-value of .727 is greater than the level of 0.05, the null hypothesis which states that there is no significant gender difference in the effect of Art therapy on examination anxiety among students of Bayero University Model Staff School is therefore retained, meaning no significant difference was observed in the effect of Art therapy. This indicates that Art therapy is not gender sensitive.

Findings

From the results of the analysis presented in tables 3 - 5, the findings of this study were summarized as follows:

1. Art therapy had the effect of reducing examination anxiety. The calculated post-test t-value of 12.50 with p-value of .000, tested at level of 0.05 and degree of freedom 58, indicated that the difference in the mean scores was significant between those in treatment and those in control groups in favour of the treatment group. Since the p-value .000 is less than 0.05..
2. Art therapy had similar effect on examination anxiety, post-test mean scores of male and female respondents of the treatment group. The calculated t- value of .353 and p-value .727 respectively, tested at a level of 0.05 with degree of freedom 28 signifies no gender difference in the effect of treatment. Since the p-value of .727 is greater than a level of 0.05. This indicates that Art therapy is not gender sensitive. This finding is consistent with the hypotheses two of this study, which indicates that, there is no significant difference in the effect of Art therapy on examination anxiety between male and female students in Staff Model Secondary School of Bayero University, Kano.

Discussions

Finding from the testing of hypothesis one revealed that Art therapy had effect in reducing examination anxiety among students in Staff Model Secondary School of Bayero University Kano This was based on the t –test result ($t= 12.50$; $p= .000$, $p < .05$). This finding is consistent with the finding of Pfeifer (2012) who found Art therapy as effective in reducing the level of anxiety among the subjects of their respective studies. The finding also lends support to the work of Sri, Muryati and Hermaningsih (2015) who found that there is a difference in anxiety before and after the action of Art therapy among their experimental group. Meaning that Art therapy reduced the level of anxiety in their subjects

This is also in line with the findings of Hern (2014), Yusuf (2014), Donald (2012) and Osika and Burasi (2015), Suganya, (2016), that, guided imagery technique is effective in reducing the examination anxiety among school students. And it will help to reduce anxiety of students at all levels of examination to perform good in their academic especially in board examination. It is also in agreement with the findings of Obodo and Egbochuku (2015) that, systematic desensitization was found effective in the reduction of test anxiety of the students who were test anxious.

Furthermore, Anfgheluta (2012) emphasizes that, Art therapy is recognized as a helpful treatment in a number of reported cases, yet the use of art therapy in chronic pain treatment remains understudied and unevaluated. To promote understanding of how art therapy can be used in chronic pain treatment, an overview of chronic pain and art therapy was carried out, followed by a theoretical rationale for using art therapy in chronic pain management. Thus as examining anxiety is considered as a serious obstacle towards optimization of students' academic performance, art therapy intervention, on the other hand, reduces the level of anxiety among secondary school students.

Result in testing hypothesis two revealed that no gender difference exists in the effect of Art therapy on examination anxiety among the participants of the experimental group ($p = .727$, at 0.05 level) $M = 13.0$ and 12.6 $SD = 3.74$ and 2.29). the possible explanation to this finding can be offered that, intervention treatment (Art therapy) was done regardless of gender of the participant's equal attention and guide were given to the subjects during the treatment, this may likely motivate the two groups (male and female) to equally be affected by the therapeutic intervention aimed at reducing their level of anxiety which will in turn help them to perform better in their academic pursuits. This finding is not in line with the findings of Peter (2014), that, students encountered some

high anxiety causing challenges which affect their ability to perform effectively, and girls were found to be more prone to high anxiety levels as compared to boys.

Conclusion and Recommendations

Art therapy is effective in reducing examination anxiety as measured by TAC. This conclusion was made based on the evidence from the study which shows how Art therapy was utilized.

The following recommendations are made based on the findings of the study:

1. Art therapy should be utilized by school counselors, psychologists and social workers in handling examination anxiety in schools.
2. Male and female students should be given equal treatment in the use of Art therapy in handling examination anxiety in schools.
3. SS one and SS two students should also be given Art therapy in handling examination anxiety in schools.

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