

Effect of Time Management Technique on Test Anxiety Reduction among NCE Students in Kano State

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Abstract

The study examined the effect of time management technique on test anxiety reduction among NCE Students in Kano state Nigeria. 120 NCE Students were randomly selected from College of Education and Preliminary Studies, Kano. Federal College of Education (FCE Kano) and Sa'adatu Rimi College of Education Kano. Pre-test, post-test randomized control design using experimental and control groups was adopted for the study. The experimental group was exposed to time management technique while the control group did not receive the treatment. The treatment lasted for eight weeks after which the participants were exposed to post-test measure of students' test anxiety inventory (STAI) and students' time management inventory (STMI). The two instruments used for this study were validated using content and construct validity, test-re-test reliability index was obtained. The data collected was analyzed using Mann Whitney test. The outcome of the study indicates a positive influence of time management on anxiety reduction among NCE students in Kano state. Therefore the study suggests a strong emphasis to be put in place on time management among students through teaching methods, seminars and other enlighten avenues as well as teachers supervision and review of all teaching techniques in the NCE colleges.

Keywords: Time Management, Test Anxiety, NCE students, Mann Whitney test, Kano

1. INTRODUCTION

Undoubtedly, education stays the most noticeable development priority area globally. The essence of education, beyond doubt, is directed to change human and bring about his growth and development. If all things being equal, an educated individual/person who is accurately placed in socio-economic, cultural and political milieu is anticipated to be worthy and valuable asset to the society than another person who is unlettered and perhaps uneducated. NCE is an approved, proven and certified Education program that qualifies one to be a teacher and guarantees admission into 200 level in various tertiary institutions for successful students in Nigeria. The full meaning of NCE is **Nigeria Certificate in Education**. It is an A Level program and is a three year programme. Tests anxiety is method through which the academic performance, consummate and attainment of the students have been weight in their formal education. Solely, certification of the students depends on education. Contemporarily, the competing in every circle of human existence makes it more mandatory and the students should have to ensure a good result in examination for their future accomplishments and success. More so, many students feel anxious about their approaching test/examinations. The term 'anxiety' did not secure in the psychological literature until the 1930's (Sarbin,

1968). Anxiety is an indication or expression of intent (Campbell, 2004). Experience shows that anxiety is seen as one of the commonly noticeable psychological disorders of school-aged children and adolescents both in Nigeria and other place of the world. Anxiety is considered both emotional and behavioural disorders caused by the activation of sympathetic nervous system under the autonomic nervous system in the human body. Anxiety is made up of different/multiple parts and multidimensional phenomenon and can be seen as a “intuitive perception of tension, sudden attack, seizure, and worry accompanied with an arousal of the automatic nervous system as there are different forms and different symptoms of test anxiety. Test anxiety is a notable form of anxiety. (Rao, 2014).

Most school based students experience some nervousness or apprehension before, during, and/or after a test (Berger, 2004). When such experience aggravates to the extent that it leads to impoverish academic performance and interferes with learning, the student could be said to suffer from test or examination anxiety. Okoli (2002) described anxiety as the excessive and extremely serious fear that occurs when a threatening event is in the offing but remained unpredictable. According to Ipaye (2005), anxiety is real, common, and affects our whole being. It affects how we feel, how we behave and has some notable physical symptoms. Time is apprehended as a worthy commodity. Even though all substance and human resources that a particular group of people possessed can be increased within the stipulated time, more so, one asset which remained unchanged, or will not be procure is time. A key factor that guarantees having and living a successful life is effective time management attained equally by everyone, which supply much emphasis and attention on adequate planning (Macan, Shahani, Dipboye & Phillips, 2000). Management of time could be regarded as the organization, arrangement, planning and scheduling appropriately one’s time with the aim of attending a required effect on work and production. This can be the intentional allocation and configuration of time among competing needs on priority, this is perhaps we cannot register time and its receptiveness cannot be amplified within a day. (Adebayo & Omojola, 2015). Time management helps greatly in boosting the student’s academic achievements. All students are anticipated to have capability of managing time efficiently, which includes prioritizing schedules based on student’s purposes, and planning of daily activities for effective time management. The innate characteristics of test anxiety, the causes, and how to be treated has being long an area of concern to counsellors and researchers (Rubin, 1999). There are continuous studies on test anxiety because testing take place often, occasionally and assume to have much importance in the lives of almost all students within a school settings in primary, secondary and tertiary institutions (public and private). (Rubin, 1999). The prevalence of test anxiety among school population/students ranges from 10-30%. (Cassady, 2004). Psychological aspect in test anxiety is usually evident in physical reactions of testee during evaluations or test. These include among others, increment in skin reactions, heart palpitations, drowsiness, disgust, or excessive feeling of fear (Muhammad, 2018). Notwithstanding, emotionality is a subjective response from the students, as a result of the increased apprehension of arousal, not the arousal itself. In spite of the facts supporting emotionality as a prominent element of test anxiety, antagonistic argument suggested that higher levels of emotionality is related to belittle performances in a situation where these students experience high esteem worry levels (Ogundele, 2015).

However, Students in high institutions of learning are usually experiencing test anxiety; however, for a developing country like Nigeria, time management is part of the factors affecting the NCE students and contributes to anxiety during a test. This

includes procrastination, absenteeism or delay in attending to lectures in particular and generally the school for certain socio-economic reason domestic responsibility splitting and separating the student’s attention from studies. Technological advancement (social media) is another issue causing halt during lectures, issues such as making phone calls, texting, chatting, games, and video call on whatsapp, Facebook, and tiktalk. All the aforementioned, proceed to inadequate preparation for test/examination, which could lead to test anxiety. Anxiety is an emotional problem and if not attended to professionally, could be carried over to test situations. This can lead to test anxiety which can cause academic failure or poor performance academically. The cumulative effects of academic failure or poor academic performance resulting from test anxiety on students could include withdrawal syndrome, cultism, delinquency, crime and low self-esteem. The identified causes of test anxiety and its prevalence prompted motivated the researchers to conduct this experimental study on effect of time management counselling technique on test anxiety reduction among NCE Student in Kano State.

2. METHODOLOGY

This section presents the methodology used in this study. The subthemes are Research Design, Population of the Study, Sample and Sampling Techniques, Instrumentation, Validation of Research Instrument, Reliability of the Research Instrument, Procedure for Data Collection and Procedure for Data Analysis.

Research Design:

Research design used for the study is quasi-experimental design in the form of pre-test-post-test control group design. In this design, the groups are pre-tested on the dependent variable after which experimental group is introduced to the experimental treatment (X) for a period of time. Both groups are then post-tested on the dependent variable (Y₂). The mean or average difference between the pre-test and posttest (Y₂-Y₁) is supplied. Average differences are then assessed in order to discover whether the experimental treatment produce satisfactory change than the control group. Bichi, (2004).Quasi-experimental methods involve the creation of a comparison group most often used when it is not possible to randomize individuals or groups to treatment. Quasi-experimental designs identify a comparison group that is as similar as possible to the treatment group in terms of baseline. It symbol represent the following;

Experimental group	O1	X	O2

Control group	O3	-	O4

Where:

- **& O3** – observation before treatment (pre-test),
- **& O4** – observation after treatment (posttest)

X – treatment

– no treatment.

Population: The population of the study comprises of all NCE Students from College of Education and Preliminary Studies, Sa’adatuRimi College of Education Kano (SRCOE) and Federal College of Education Kano State, Nigeria. DEAR.

Sample and Sampling Technique: The sample size of the study is one hundred and twenty (120) NCE students comprising of 57 (47.5%) male and 63 (52.5%) female selected through multi stage sampling technique from KASCEPS, SRCOE and FCE Kano. The researchers used simple random sample of three NCE combination Department (e.g. science, Arts and management sciences) in each of the schools. Thereafter, the researchers randomly choose two departments in each of the selected faculties of the schools. Then, the Student Time Management Inventory (STMI) administered on the randomly selected NCE Students of the sampled departments. The researchers selected two hundred (200) respondents that scored below 75 in the inventory. Finally, selected respondents were pre tested with the Student Test Anxiety Inventory (STAI) and 120 respondents that scored between 81 and 160, that is, moderate to high test anxiety levels formed the sample of the study. The sample was randomly grouped into two. Group 1 was exposed to time management counselling technique, while group 2 served as the control. The subjects or participants in the control group did not receive any treatment.

Instrumentation: Student Test Anxiety Inventory (STAI) and the learning center Time management Inventory (STMI) was reproduced and use for this study. The instruments was be taken to five senior lecturers in the three institutions specialized in test construction to help establish the content and construct validity. Test – retest reliability method was used to ascertain the reliability of the instruments. A test – retest reliability for the Student Test Anxiety Inventory (SATI) and for the Student Time Management Inventory (STMI) was acquired in a week interval.

Pilot study/ Reliability of instrument

The pilot study was conducted among 20 students of the schools that were not part of the main study. The instrument were shared to them and retrieved after filling it. Thereafter the outcomes were entered into statistical package and the data analyzed for reliability using the Cronbach Alpha reliability method. Consequently, a reliability coefficient of 0.84 and 0.75 was obtained making the instruments highly reliable for the main study.

Scoring: The instruments were scored on one to four points scale below: Never: 1 point; Few times: 2 points; Most times: 3 points; and Always: 4 points. For the Student Test Anxiety Inventory (STAI), the minimum score obtainable is 40 while the maximum is 160. The scores were interpreted thus: 40 – 80 = low level of test anxiety; 81 – 120 = Moderate level of test anxiety and 121 – 160= High level of test anxiety. For the Student Time Management Inventory (STMI) the minimum score obtainable is 30 while the maximum score is 120. The cut-off point put at 75.

Treatment Procedure

The participants were randomly allotted into experimental and control groups with 60 participants in each group. Participants were exposed to pre-test and post-test administration of Student Test Anxiety Inventory (STAI) and Student Time Management Inventory (STMI) before exposed to the treatment of Time Management Techniques. Only the participants from the experimental group were exposed the treatment package while those in the control group will not. Participants in the control group just discussed on life in the campus generally. The duration for both experimental treatment and the control general discussion lasted for eight weeks.

Data Analysis procedure

The data obtained from this study were statistically analyzed using both descriptive and inferential statistics. The bio data variables of study groups, gender were presented in frequency and percentages distributions using the descriptive statistics. The research question was answered using Mean Rank statistics. The null hypotheses was tested with the Non parametric statistics of the Mann Whitney test which is the appropriate statistics because the test item which is Test Anxiety is perception, measured using ordinal variables of 4 Likert scale each for 40 items, tested on the basis of a variable each having only two independent groups. Therefore the only appropriate statistical method to use is the Man Whitney Non parametric test. All the hypotheses were measured at 0.05 alpha level of significance.

3. RESULTS

This study basically assesses the effects of Time Management Technique (TMT) on reducing the Test Anxiety among NCE students in Kano state. The table 4.1 above showed the distribution of the students according to their study group. The first group consist of 60 students who are the experimental group students that were exposed to the Time Managing Technique in reducing their Test anxiety score levels, while the second group are the control group that were not exposed to any technique also consisting of 60 or (50.0%) of the students. The outcome from table 4.2 further indicates that the Mean Rank statistics showed that the computed Test Anxiety scores were 30.50 and 90.50 by students exposed to Time Management technique and those of control groups respectively. Also the Sum of Ranks Test anxiety scores were 830.00 and 5430.00 respectively. This shows that the TMT has positive effect on reducing Test Anxiety among the students.

Moreover, the result of The Non Parametric statistics of Man Whitney from table 4.3 showed that the calculated p value of 0.000 is lower than the 0.05 alpha level of significance and its computed Z scores value of 9.451 is above the 0.060 Man Whitney value. The computed Test Anxiety scores were 30.50 and 90.50 by students exposed to Time Management technique and those of control groups respectively. Also the Sum of Ranks Test anxiety scores were 830.00 and 5430.00 respectively. There is significant Mean Reduction of Test Anxiety among the Experimental students exposed to the TMT as compared with those in control groups. This shows that the TMT has significant effect on reducing Test Anxiety among the students. The outcome implies that the computed Test Anxiety scores were 30.50 and 90.50 by students exposed to Time Management technique and those of control groups respectively. Also the Sum of Ranks Test anxiety scores were 830.00 and 5430.00 respectively.

Table 4.1 Analysis of Bio data variables

	Frequency	Percent
Experimental	60	50.0
Control	60	50.0
Total	120	100.0

Table 4.2.: Mean Rank statistics on the effects of Time management Techniques (TMT) on test anxiety reduction among NCE students in Kano state.

Ranks					
	Study Groups	N	Mean Rank	Sum of Ranks	Man Whitney
Test Anxiety	Experimental	60	30.50	1830.00	0.060
	Control	60	90.50	5430.00	
	Total	120			

Table 4.3 Mean Ranks Statistics

	Study Groups	N	Mean Rank	Sum of Ranks	Man Whitney	Z	P cal
Test Anxiety	Experimental	60	30.50	1830.00	0.060	9.451	0.000
	Control	60	90.50	5430.00			
	Total	120					

$P = 0.000 < 0.05$, $Z \text{ score} = 9.451 > \text{Man Whitney score of } 0.060$

4. CONCLUSION

This study examines the influence of time management method on test anxiety reduction among NCE students in Kano State using Mann whiney test technique. The study used a sample of 120 NCE students. The finding of the study reveals that there is significant positive effect of time management on anxiety reduction among NCE students in Kano State. Hence, the study recommend that emphasis to be put in place on time management among students through teaching methods, seminars and other enlighten avenues. However, the study is limited to the incorporation of other relevant variable like teaching technique, school environment and the role of teacher's performance. Similarly, the study is also limited to only colleges of education in Kano state. Therefore futures studies should incorporate these important variables such as teaching techniques, school environment and teachers performance on reduction of student's anxiety. Future studies should also consider polytechnic and universities as the study area for better analysis and recommendation.

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