Influence of Anxiety on Test Performance among Students of Jigawa State College of Education Gumel

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Abstract

This research was carried out to examine the extent to which anxiety influence test performance of students in Jigawa State College of Education Gumel. Two objectives, two research questions and two hypotheses were formulated to guide the study. The research design employed was ex-post-facto survey design. The population of the study was level two hundred students of School of Arts and Social Sciences 2019/2020 session comprising of 572 students. From the population, 150 students were sampled. and Test Anxiety Scale (TAS) was used as an instrument for data collection. The instrument was developed by Sarason and Spielberger. It has internal consistency reliability estimates (test-retest) of 0.88 and a temporal stability coefficient of 0.75.The data was collected and analyzed using Analysis of Variance (ANOVA) and T-test independent sample. The findings of the study revealed that there is no significant difference in the influence of anxiety on the test performance among education students in Jigawa State College of Education Gumel and there is no significant gender difference in the influence of anxiety on test performance of education students in the Jigawa State College of Eduacation Gumel. Among the recommendations of the study are: lectures should simplify their teaching by using good methods of teaching, use of good examples and illustrations, this will reduce the level of test anxiety of the students. Students should work

hard, be committed to their study and prepare well for the test as a mechanism of reducing test anxiety.

Keywords: *Anxiety, Test Performance, Level II Students, College of Education, Test Anxiety Scale.*

Introduction

Kagan and Havermann (2002) defined anxiety as vague, unpleasant feeling accompanied by a premonition that something undesirable is about to happen. Fear and anxiety are considered closely related to each other and thus it is very difficult to draw any sharp line between the two words. However psychologist suggest that fear is a reaction to a specific stimulus, while anxiety is vague and its cause is not always apparent. Horney (2010) saw anxiety as a reaction an anticipated danger; it is signal a threat to whatever is experienced as having some rational or irrational value. He explained anxiety as an integral function of an organization, it may act as a creative force, leading an individual toward innovative responses, but when tension in the organism becomes excessive, anxiety may have disorganizing effects.

Anxiety refers to emotional state arising in situation of worry, nervousness and manifested in expectation for unfavorable events. It could also be defined as the psychological reaction to an expected danger whether real or imagined. (Ringim, 2016). Anxiety disorders are classified into phobic disorder, panic disorder, general anxiety disorder, obsessive compulsive disorder and stress disorder. Phobic disorder which means simple fear is the most common of all the anxiety related disorders, it also refers to persistent excessive or irrational fear of a particular object or situation. To be diagnosed as phobic disorder, the fear must lead to avoidance behavior that interferes with affected person's normal life example zoophobia: fear of animals, acrophobia: fear of heights, night acrophobia: fear of darkness etc. (Ringim,2016). Panic disorder people with panic disorder have recurring and unexpected panic attacks. A panic attack is a relatively short period of intense fear or discomfort, characterized by shortness of breath, dizziness, rapid heart rate,

trembling or shaking, sweating, choking, nausea and/or other distressing physical symptoms. It may last from a few minutes to a few hours. People having panic attack may believe they are dying or going crazy. Not surprisingly, they usually have persistent fears of another attack. For most people who suffer panic disorder, attacks have no apparent cause. However, many people with panic disorder also have acrophobia. (American Psychiatric Association, 1994). General Anxiety Disorder is an excessive or unrealistic worry about life circumstances that lasts for at least six months. The worries must be present during most of that time in order to warrant a diagnosis of GAD. Typically, the worries focus on finances, work, interpersonal problems, accidents or illness. GAD is one of the most common anxiety disorders, yet few people seek psychological treatment for it because it does not differ, except in intensity and duration from the normal anxiety of everyday life. It's difficult to distinguish GAD from other anxiety disorders as well, most often phobic disorder. (Barlow, Adler, Craske and Kirshenbaum, 1989). Obsessive Compulsive Disorder it's the most acute disorder. Obsessions are unwanted thought, ideas or mental images that occur over and over again. They are often senseless or repulsive, and most people with obsessions try to ignore or suppress them. The majority of people with obsession also practice compulsions, which may reduce the anxiety their obsessions produce. Compulsions are repetitive ritual behaviors, often involving checking or cleaning. (Davison and Neal, 1990). Stress disorders include post-traumatic stress disorder (PTSD) and acute stress disorder. The two disorders have similar symptoms but they differ in how quickly they occur after the traumatic events that triggers disorder. They also differ in how long they last. PTSD refers to intense, persistent feelings of anxiety that are caused by an experience so traumatic that it will produce stress in almost anyone. Experiences that produce PTSD include rape, severe child abuse, assault, severe accident, etc. it appears to be common syndrome in people who have experienced extensive trauma. (Ironson, 1993). Some of its symptoms includes; flashbacks, nightmares, numbness of feelings, increased tension etc. (American Psychiatric Association,1993)

Behaviorist (J.B. Watson and Rosalie Rayner) demonstrated anxiety itself as the result of a conditioning process and suggested that once such conditioning response is established, it has an effect upon performance in the conditioning situation. Watson's classical experiment with Albert (the child) who had no fear for a white rat but who developed a conditional fear of white rats and similar

animistic or in-anima tic objects when loud noise (US) was paired with the white rat (CS).

Hull considered anxiety as a drive. In Hullin theory, the effect of drive (D) is multiply habit strengths to heighten performance. If anxiety is a drive, strong anxiety means high drive, in others words, a high level of anxiety should improve performance under certain circumstances. Subsequent researches however, revealed that the Hullin idea of anxiety as a drive is valid for simple learning task.

From the fact analytic studies of Cattell and Shelver (1991) it emerged that there is trait anxiety. This research identified characteristics of high and low anxiety. For example people who are high in trait anxiety consider a wide range of situations as dangerous and threatening than low trait anxiety individuals. Further researches revealed that situations that involve psychological threat to self esteem, particularly where personal adequacy is assessed, appear to be more threatening for people high trait anxiety than for low trait anxiety ones.

A general survey of literature in anxiety may indicate that the term anxiety has been used to refer to at least three constructs:

1. It is an unpleasant emotional state which characterized by subjective feelings of tension, apprehension, nervousness and worry.
2. It is a complex psychological process that occurs as a reaction to stress.
3. It rather stable personality trait and there are individual differences in anxiety proneness.

Furthermore, test anxiety is an experience face by students during testing situations, albeit at different levels. It can be defined as feelings of tension and anxiety that interfere with the ability to communicate what one knows in a test situation (Austin & Wadlington 2005). Swetnam (2003) opined that test anxiety affects all students regardless of their achievement levels, for both high and low achievers are affected in the same way. It almost leads to poor achievement in tests. Test anxiety is a learned condition which begins to appear in third grade, finally affecting about fifty percent of all students. It can lead to school failure, poor esteem and stress related physical ailments (Craig (1988). Anxiety such as wrong and cognitive self-concern interferes with information processing in the particularly loop of the working memory system (Aluede, 2006). While a reasonable level of anxiety is useful in motivating students to perform better in

a tests, a high level of test anxiety may interfere with how students perform (Strnad,2003).

High achieving students with high test anxiety are consumed with doubts about their own perceived inadequacies: deficient intelligence, poor memory, inept problem solving abilities. They hold unrealistic parental, peer or self-imposed expectations to excel in all academic areas.

These students can't cope with the pressure of evaluation which might show their performance doesn't meet their high expectations of themselves (Swetman, 2003). Gronlund (1981) further adds that in some instances, invalid test interpretations are due to personal factors influencing the student's personal response to the test situation rather than to any shortcomings in the test instrument. Students may be hampered by emotional disturbances that interfere with the test performance. Some students are frightened by the test situation. Most of them are highly anxious students.

Among studies confirming the detrimental effects of high test anxiety include that of Faber and Spence (2013), who classified their subject as high anxiety and low anxiety, and concluded that students with high test anxiety learn simple tasks more quickly but have trouble with more complicated learning. In another study Ganther (2008) reported that people who are high in test anxiety perform poorly at learning tasks when they are being watched, subjects that low in anxiety actually perform better when they had an observer. Spielberger compared high and low college students' grades, and found that the students who were low anxiety made significantly better grades than high anxious students.

However, after a brief discussion of anxiety related disorders it will equally be important to discuss performance as our dependent variable. Performance is defined as the observable or measurable behavior of a person, an animal in a particular situation usually experimental situation (Simpson and Weiner. 1989). This means that performance measures the aspect of behavior that can be observed =at a specific period. To determine performance, a performance test is conducted. Singer (1999) defined performance in test as the type of mental testing which the subject is asked to do something rather than to say something. Performance test is the type of test which throws light on the ability to deal with things rather than symbols (Drever, 1981). In relation to educational research, academic performance of a student can be regarded as the observable and Measurable behavior of a student in a particular situation. For example, the

academic performance of a student in social studies includes observable and measurable behavior of a student at any point in time during a course. In social studies students' academic performance consists of his scores at any particular time obtained from a teacher- made test. Therefore, we can equate academic performance with the observed behavior or expectation of achieving a specific statement of or statement of educational intention in a research. Academic performance of students consists of scores obtained from teacher-made test, first term examination, and mid-semester test and so on.

Moreover with my little experience as a teacher I realized that a number of students have been practicing different kind of behaviors that deviate from normal individual practice. I have to think otherwise and look at the situation critically; this is because with all the actions taken by teachers, parents of guardians and the persistent warning still the behavior is repeated. This might be a problem which regarded by psychologist as disorder. The above example shows that the students may be suffering from one of the anxiety related disorder possibly mania or kleptomania especially during test, because it was characterized by feeling an internal energy is forcing you to act a behavior and the victim will not be at ease unless he/she did it no matter what will follow. It may be as a result of phobia which is one of the widest and simplest forms of anxiety related disorder. Phobia simply means irrational fear of object or situation, may be in the environment where the teaching learning activities is taking there are something that the students have its fear like zoophobia or agrophobia this may affect students concentration and resulted in stealing. However, as teachers we may be observing that some students doesn't have confidence on the test, they are always suffering with unwanted thought, ideas or mental images that occur over and over again. They are often senseless or repulsive, this is obsession and most people with obsessions try to ignore or suppress them. The majority of people with obsession also practice compulsions, which may reduce the anxiety their obsessions produce. Compulsions are repetitive ritual behaviors, often involving checking or cleaning. For example a student was obsessed every night with doubts that he has locked the windows and doors before going to bed. He feels driven to compulsively check and recheck every door and window in the hostel, perhaps dozen of times. Only then he relaxes and sleeps. Also it was reported that a lady who was obsessed with idea that she would pick up germ from nearly everything she touch. She compulsively washed her hands over and over again, sometimes

as many as 500 times a day. This is typical example of obsessive compulsive disorder (OCD) which is the most acute among anxiety related disorder. In addition, some students were observed with mood that is persistently and abnormally elevated. It sometimes be characterized by irritability, inflated self-esteem inability to sit still or sleep restfully, Pressure to keep talking and switching from topic to topic, Racing thoughts, Difficulty in concentrating e.t.c. These are typically the symptoms of bipolar disorder. I am sure as teachers we have been observing this kind of behaviors in some of our students. If that is the case there is a need to find out the influence of these disorders on students' test performance for proper therapy or otherwise.

It will be understand from our foregoing discussion that some student at every level of education i.e primary, junior, senior or even tertiary level may be practicing one or both of the disorders explained. However, we already know that classroom is heterogynous in nature it contains above average, average and below average students. This is to say individual differences exist. In most cases there is always a failure in noticing that there exists a gap, an obstacle or imbalance that brings about unsatisfactory state of affairs, these gaps, obstacle or imbalance undoubtedly occurred as a result of problem which need to be rectified after identified. In view of this its expected that some of this gaps, obstacles or imbalance takes place in a school system in general and classroom in particular which hinder students from pursuing academic activities as expected. This may be as a result of the influence of one or both anxiety related disorders explained. Therefore this research intends to find out the influence of test anxiety related disorders on the performance among senior secondary school students in Jigawa State.

Objectives of the Study

For the purpose of this research the following objectives were raised:
1. To find out the difference in the influence of anxiety on test performance among students of difference departments in Jigawa State College of Education Gumel.
2. To find out gender difference in the influence of test anxiety on performance among students of Jigawa State College of Education Gumel.

Research Questions

In order to achieve the above objectives the following research questions were raise

1. Is there any difference in the influence of anxiety on test performance among students of difference departments in Jigawa State College of Education Gumel?
2. Is there any gender difference in the influence of anxiety on test performance among Jigawa State College of Education Gumel students?

Research Hypotheses

In order to answer the above research questions the following hypotheses were formulated

1. There is no significance difference in the influence of anxiety on test performance among students of difference departments in Jigawa State College of Education Gumel..
2. There is no significance gender difference in the influence of anxiety on test performance among students in Jigawa State College of Education Gumel.

Methodology

The research design employed was ex-post-facto survey design. The population of the study was level two hundred students of School of Arts and Social Sciences 2019/2020 session comprising of 572 students of Jigawa State College of Education Gumel. From the population, 150 students were sampled, and Test Anxiety Scale (TAS) was used as an instrument for data collection. The instrument was developed by Sarason and Spielberger. It has internal consistency reliability estimates (test-retest) of 0.88 and a temporal stability coefficient of 0.75. Students CGPA of the sampled students were collected and analyzed using Analysis of Variance (ANOVA) and T-test independent sample.

Results

RQ1. There is no significance difference in the influence of anxiety on test performance among students of difference departments in Jigawa State College of Education Gumel.

Table 1: There is no significance difference in the influence of anxiety on test performance among students of difference departments in Jigawa State College of Education Gumel.

Departments	N	Mean	SD
S/S Double Major	56	78.47	10.06
Hausa/IRS	34	77.17	8.13
History/.Economics	25	75.00	10.25
Economics/Geography	15	75.05	10.09
History/IRS	20	77.50	8.18

The descriptive statistics tables above answered the research question number one. The research question number one was on differences between programmes, S/S Double major which were 56 students had the mean score of 78.47 and standard deviation of 10.06, Hausa/IRS were 34 students had the mean of 77.17 with standard deviation of 8.13, while History/Economics which were 25 students had the mean of 75.00 with standard deviation of 10.25, Economics/Geography which were 15 with mean of 75.05 with standard deviationof 10.09, and lastly History/IRS were 20 students had the mean of 77.50 with standard deviation of 8.18. This indicated that there is no significant mean difference between the four programs.

RQ2. 2. Is there any gender difference in the influence of anxiety on test performance among Jigawa State College of Education Gumel.?

Table 4.1 Descriptive Statistical Table of gender Diff. in the Influence of Anxiety.

Gender Differences In Anxiety	N	Mean	SD
Male	85	77.77	8.51
Female	65	78.80	10.36

The hypothesis two which was on gender differences, male were 85 with mean of 77.77 and standard deviation of 8.51, while females were 65 with mean of 78.80 and standard deviation of 10.36.

Test of Hypothesis One
There is no significant difference in the influence of anxiety among students of different departments in Jigawa State College of Education Gumel..

Table 3. Analysis of Variance (ANOVA)

	Sum of Square	df	Mean Square	F	Sig
Between Groups	165.819	4	55.273	.823	.641
Within Groups	7343.181	145	76.491		
Total	7509.000	149			

In order to test the null hypothesis that there is no significant difference in the influence of anxiety on test performance among students of different programmes in Jigawa State College of Education Gumel., a one way analysis of variance (ANOVA) was performed. From table 1, the mean scores were (M=78.47, SD=10.06) for S/S double major students, (M=77.17, SD=7.13) for Hausa/IRS students, (M=75.00, SD=10.25) for History/Economics students, (M=75.05, S=10.09) Economics/Geography students and (M=77.50.50, SD=8.18) for History/IRS students.

Result from the Analysis of Variance table above shows that there was no significant mean difference across the mean scores on the influence of anxiety on test performance among students from different departments in Jigawa state College of Education Gumel. This was based on the obtained F statistics value of .823 at P=.641 level of significance. Thus obtained p value is > 0.05. Based on the obtained p value of .641, no significant differences exist in the mean scores of test taking strategies of students in different programmes. Based on the obtained result, the null hypothesis that there is no significant difference in the influence of anxiety among students of different programmes in Jigawa State College of Education Gumel was upheld. The finding revealed that no statistically significant difference exist in the influence of anxiety among students from different programmes in Jigawa State College of Education Gumel.

Test of Hypothesis two
Hypothesis: This state that there is no significant difference in the influence of anxiety between male and female students in Jigawa State College of Education Gumel.
There is no significant difference in the test-taking strategies possessed by male and female students of Sule Lamido University, Kafin Hausa, Jigawa State.

Table 4. Gender Difference in the influence of anxiety among students of JSCEG.

Gender	N	Mean	S D	t-value	df	p-value
Male	85	97.77	9.51	.709	148	.915
Female		65	96.80	12.36		

In order to test the null hypothesis that there is no significant difference in the influence of anxiety by male and female students of Jigawa State College of Education Gumel, an independent sample t-test was performed. From table the mean on test taking strategy for each group was M=97.77 for male students and M=96.80 for female students. The results revealed that the mean score on test taking strategies for male students of Jigawa State College of Education Gumel (M =97.77, SD= 7.51) is not significantly different from that of the mean score on test taking strategies for female students (M=66.80, SD=10.36) at t-value (t=.709, df=148, p=.915). Thus, our P value .613 is > .05.

Based on the obtained result, the stated null hypothesis that there is no significant difference in the influence of anxiety by male and female students of Jigawa State College of Education Gumel was upheld. The result revealed that no statistically significant difference exist in the influence of anxiety due to gender among students ofJigawa State College of Education Gumel.

Discussion of findings

This section discussed the finding of two hypotheses. As predicted that there is no significance difference in the influence anxiety on test performance among students of College of Education Gumel. In testing these hypotheses, students CGPA and the TAS score were used to compute the difference, Analysis of Variance (ANOVA) and t-test independent sample were used as tools for analysis, and the entire null hypothesis were upheld. This indicated that there is no significant difference in the influence of anxiety among education students in Jigawa State College of Education Gumel. This finding is not corroborates with other studies confirming the detrimental effects of high test anxiety include that of Faber and Spence (2013), who classified their subject as high anxiety and low anxiety, and concluded that students with high test anxiety learn simple tasks more quickly but have trouble with more complicated learning. In another

study Ganther (2008) reported that people who are high in test anxiety perform poorly at learning tasks when they are being watched, subjects that low in anxiety actually perform better when they had an observer. Spielberger compared high and low college students' grades, and found that the students who were low anxiety made significantly better grades than high anxious students.

Furthermore, other findings supported that test anxiety is an experience face by students during testing situations, albeit at different levels. It can be defined as feelings of tension and anxiety that interfere with the ability to communicate what one knows in a test situation (Austin & Wadlington 2005). Swetnam (2003) opined that test anxiety affects all students regardless of their achievement levels, for both high and low achievers are affected in the same way. It almost leads to poor achievement in tests. Test anxiety is a learned condition which begins to appear in third grade, finally affecting about fifty percent of all students. It can lead to school failure, poor esteem and stress related physical ailments (Craig (1988). Anxiety such as wrong and cognitive self-concern interferes with information processing in the particularly loop of the working memory system (Aluede, 2006). While a reasonable level of anxiety is useful in motivating students to perform better in a tests, a high level of test anxiety may interfere with how students perform (Strnad,2003).

High achieving students with high test anxiety are consumed with doubts about their own perceived inadequacies: deficient intelligence, poor memory, inept problem solving abilities. They hold unrealistic parental, peer or self-imposed expectations to excel in all academic areas.

These students can't cope with the pressure of evaluation which might show their performance doesn't meet their high expectations of themselves (Swetman, 2003). Gronlund (1981) further adds that in some instances, invalid test interpretations are due to personal factors influencing the student's personal response to the test situation rather than to any shortcomings in the test instrument. Students may be hampered by emotional disturbances that interfere with the test performance. Some students are frightened by the test situation. Most of them are highly anxious students.

Conclusion

Based on the result generated from the analysis of the data, it was concluded that there is no significant difference in the influence of anxiety among students

of difference departments in Jigawa State College of Education Gumel. The result also found that there is no significant gender difference in the influence of anxiety among students in Jigawa State College of Education Gumel.

Recommendations

In the light of the research findings, the researcher has made some recommendations as follows:

1. Lectures should simplify their teaching by using good methods of teaching, use of good examples and illustrations, this will reduce the level of test anxiety of the students.
2. Students should work hard, be committed to their study and prepare well for the test as a mechanism of reducing test anxiety.

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