INFLUENCE OF EXAMINATION ANXIETY ON ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS IN OWERRI MUNICIPAL COUNCIL OF IMO STATE

By

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Abstract
This study investigated the influence of examination anxiety on academic achievement of secondary school students in Owerri municipal council of Imo state. Using a descriptive survey research design of ex-post facto type. Multi-stage sampling technique was used to select two hundred students from four secondary schools in Owerri Municipal of Imo State. Instrument used was: Sokan Examination Anxiety Scale ($\alpha = 0.75$). Two research hypotheses were tested at 0.05 level of significance. Data were analysed using t-test statistical tool. There was a significant difference in the academic achievement of male and female secondary school students due to the influence of examination anxiety $t$-$cal=2.106$ ($P<0.05$). Also, there was a significant difference in the academic achievement of young and old secondary school students due to the influence of examination anxiety: $t$-$cal=2.249$ ($P<0.05$). Teachers should endeavour to use teaching methods that will consider students individual differences, motivate students to learn and make teaching and learning more interesting.

Keywords: Academic Achievement, Examination Anxiety, Students, School, Owerri

Academic achievement of students especially at the secondary school level is not only a pointer to the effectiveness of teaching and learning but also a major determinant of the future of students in particular and the nation in general. The medium through which the attainment of individuals and the nation's educational goals can be achieved is learning. Learning outcomes have become a phenomenon of interest to all and this account for the reason why scholars have been working hard to unravel factors that militate against good academic achievement (Aremu & Sokan, 2002, Okoiye, 2011) and this phenomenon has been variedly referred to in literature as academic achievement, academic performance, or scholastic functioning.
Academic Excellence

Academic achievement of learners has attracted attention of scholars, parents, policy-makers and planners. For example, Adeyemo (2001) opined that the major goal of the school is to work towards attainment of academic excellence by students. According to Adeyemo (2001) the school may have other peripheral objectives; emphasis is always placed on the achievement of sound scholarship. Besides, virtually everybody concerned with education places premium on academic achievement and excellent academic achievement of children is often the expectation of parents (Osiki, 2001). This implies that high premium is placed on student’s academic achievement in Nigeria. In view of this, student’s are expected to attain high academic achievement considering the fact that attained level of academic achievement serves as parameters for class promotion, recruitment, placement and advancement in both public and private sector organizations. More importantly, these parameters are also highly adopted in selection of candidates for admission into tertiary institutions and colleges.

Due to this high premium placed on academic performance, individuals do everything possible to obtain excellent results and when they face challenges, they express examination anxiety (Adeyemo, 2001; Osiki, 2001).

Test anxiety is a relatively stable trait. Periodic tests and examinations at all stages of education have become an integral part of evaluating students in our competitive education system. Students are subjected to a wide variety of testing situations, such as school examinations, scholastic-achievement tests, intelligence tests and entrance examinations. Test and examination stress is thought to prevent some individuals from reaching their academic potential. Therefore, the negative impact of examination anxiety on student’s academic achievement cannot be overemphasized. High test-anxious students could perform poorly in a given task. These might be as a result of them having low academic self-efficacy, low self-esteem and expressed helplessness. These more often than not, could have some implications not only on the well-being of such students, but also on significant others and society. Therefore, identifying factors such as examination anxiety that influences student achievement to learn and attain success in classroom task continues to be the goal of researchers considering the fact that examination anxiety is a recurring stressful situation that is faced by large number of students (Okoiye, 2011).

Observably, examination anxiety seems like a benign problem to some people, but it can be potentially serious when it leads to high levels of distress and academic failure in otherwise capable students (Okoiye, 2011). In line with this view, examination anxiety can be described as a perceived notion of psychological distress which occurs due to the expectation of a disconcerting and potentially threatening event (Rachman, 2004). Giving credence to this assertion, Black (2005) reported that today’s students are associating a greater sense of consequence with the prospect of being tested, resulting in feelings of pressure to perform and fear of not performing adequately. Thus, examination anxiety is an uneasiness or apprehension experienced before, during, or after an examination because of concern, worry, or fear. Black (2005) further contended...
that students who suffer from examination anxiety tend to be consumed with feelings of anxiousness, worthlessness, and/or absolute dread in regard to their academic achievement. Sena, Lowe and Lee (2007) found that students with higher test anxiety obtain lower marks in examination. Chapell, Blanding, Silverstein, Takashi, Newman, Gubi and Mccain (2005) found a significant inverse relationship between test anxiety and grade point average among the students.

Rezazadeh and Tavakoli (2009) found that 11.8% of the students had high test anxiety, 73.60% had moderate test anxiety, while 14.5% of the students had low test anxiety. They found a significant negative correlation between test anxiety and students academic performance ($r = -0.199$, $p < 0.05$). They also found that females rated significantly higher than the males on the test anxiety scale as females were more affected by pressure. Karatas, Alci and Aydin (2013) conducted a study on correlation among high school senior students’ test anxiety, academic performance and points of university entrance examination using 194 (50.51% of them were males) high school senior students in Turkey. Data generated with 20-item test anxiety inventory of 5-point likert scale and analyzed using Pearson correlation coefficient technique showed that there was a weak but significant negative correlation between students’ test anxiety and points of university entrance examination. A t-test analysis of the data showed a significant difference in test anxiety and GPA in favour of female students and in points of university entrance examination in favour of the male students.

A study conducted by Nicholson (2009) to explore the effects of test anxiety on student achievement of grade 11 students, revealed that anxiety and achievement are related to each other. Khalid and Hasan (2009) conducted a study on a purposively selected sample of 187 undergraduate students to explore the relationship between test anxiety and academic achievement and found that students with academic achievement have low test anxiety scores and vice versa. Chapell, et al (2005) conducted a research study to explore the relationship between test anxiety and academic performance. They collected data from a large sample of graduate and undergraduate students and found a significant and negative relationship between test anxiety and academic achievement.

**Statement of the Problem**

Secondary school students who experience high levels of examination anxiety they believe that they have less control over their academic outcomes and are not motivated to perform the tasks needed for academic success including use of efficient study methods. Hence, examination anxious students are always overwhelmed by the feelings of inadequacy and distress when they are faced with the new demands of their studies and once they lose confidence in their abilities, it becomes easy for them to give up and be withdrawn.
**Academic Excellence**

**Purpose for the Study**

This study is designed to investigate the influence of examination anxiety on academic achievement of secondary school students in Owerri Municipal Council of Imo State and to specifically:

1. Ascertain if examination anxiety influence the academic achievement of male and female secondary school students in Owerri Municipal of Imo State
2. Know if examination anxiety influence the academic achievement of young and old secondary school students in Owerri Municipal of Imo State

**Research Hypotheses**

1. There is no significant difference in the academic achievement of male and female secondary school students due to the influence of examination anxiety in Owerri Municipal Council of Imo State?
2. There is no significant difference in the academic achievement of young and old secondary school students due to the influence of examination anxiety in Owerri Municipal Council of Imo State?

**Methods**

**Research Design**

This study used a descriptive survey research design

**Population of the Study**

The population of the study consisted of all Senior secondary school (SS II) students in the nine (9) government owned secondary schools in Owerri Municipal Council and their population is 4,224 (S.E.M.B, 2016).

**Sample and Sampling Technique(s)**

The sample for this study consisted of two hundred (200) senior secondary school (II) students selected through the use of multi-stage sampling technique considering the fact that the study samples were screened using a standardised examination anxiety inventory in stages to get and use only students that express examination anxiety and equally showcase poor academic achievement by consistently recording scores below 40% in not less than two examinations in English and Mathematics. However, simple random (hat picking) sampling technique was used to select four secondary schools to be used for the study.

**Instrument for Data Collection**

The instruments used for data collection for the study is Examination Anxiety Scale (Sokan, 1998) and students’ cognitive cumulative recorded scores for English and Mathematics
Description of Instruments

Examination Anxiety: Examination anxiety was measured using the Sokan Examination Anxiety Scale. The SEAS is an 18-item instrument measuring examination anxiety expressed with statements concerned with one's feelings towards examination. The Sokan Examination Anxiety Scale adopts a true or false response pattern with true response scored as one (1) while the false response scored as zero (0). The score is calculated in percentages e.g. a score of 18 is 100%. Thus any fraction score of 18 is converted to a percentage. A high index of score suggests anxiety disorder while a low index suggests the reverse. The reliability coefficient for Sokan Examination Anxiety Scale is 0.75 while the split-half reliability coefficient is 0.68. The test items were constructed in simple language thereby ensuring its face validity (Sokan, 1998).

Academic Achievement of students was measured using their recorded examination scores in their cognitive cumulative record folder of below 40% in English and Mathematics consistently in two terms examinations.

The Validity of the Instrument

Sokan Examination Anxiety Scale was validated through a pilot study using a test-re-test method and a reliability coefficient of 0.73 was got. This implies that the instrument is valid and reliable.

Method of Data Administration

The researcher visited the selected secondary schools in Owerri Municipal Council to attain permission from the principals and also seek the support of the teachers and students. The essence of the study was explained to the students to be used for the study and the need for them to be sincere in filling the questionnaire. Also the researcher made them know that the attained information will be treated with confidentiality. After which the questionnaire was distributed to the students with adequate instructions on how to fill the questionnaire and collected back for data analysis.

Method of Data Analysis

Data collected for the study was analysed using t-test statistical tool to determine the difference in the influence of examination anxiety on the academic achievement of male and female; also between young and old students.

Results

The results of the findings are thus, presented:

Research Hypothesis One

There is no significant difference in the academic achievement of male and female secondary school students due to the influence of examination anxiety in Owerri Municipal Council of Imo State?
**Table 1: t-test of Difference in the Academic Achievement of Male and Female Junior Secondary School Students due to the Influence of Examination Anxiety**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>t-cal</th>
<th>t-tab</th>
<th>P</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>100</td>
<td>27.22</td>
<td>8.32</td>
<td>198</td>
<td>2.106</td>
<td></td>
<td>1.960</td>
<td>P&lt;0.05</td>
</tr>
<tr>
<td>Female</td>
<td>100</td>
<td>30.46</td>
<td>10.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 above shows there was a significant difference in the academic achievement of male and female secondary school students due to the influence of examination anxiety: t-cal=2.106 (P<0.05). As indicated by the mean and standard deviation scores of male and female students on examination anxiety used for the study. Male students express lower anxiety ( \( \bar{x} = 27.22 \) ); SD 8.32 than female students ( \( \bar{x} = 30.46 \) ); SD 10.01.

**Research Hypothesis Two**

There is no significant difference in the academic achievement of young and old secondary school students due to the influence of examination anxiety in Owerri Municipal Council of Imo State?

**Table 2: t-test of Difference in the Academic achievement of Young and Old Secondary School Students Due to the Influence of Examination Anxiety**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>t-cal</th>
<th>t-tab</th>
<th>P</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young</td>
<td>120</td>
<td>25.05</td>
<td>7.12</td>
<td>198</td>
<td>2.249</td>
<td></td>
<td>1.960</td>
<td>P&lt;0.05</td>
</tr>
<tr>
<td>Old</td>
<td>80</td>
<td>28.19</td>
<td>9.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 above shows that there was a significant difference in the academic achievement of young and old secondary school students due to the influence of examination anxiety: t-cal=2.249 (P<0.05). As revealed by the mean and standard deviation scores of young and old students on examination anxiety used for the study. Young students express lower anxiety ( \( \bar{x} = 25.05 \) ); SD 7.12 than older students ( \( \bar{x} = 28.19 \) ); SD 9.24.

**Discussion of Findings**

**Research Hypothesis One:** There is no significant difference in the academic achievement of male and female secondary school students due to the influence of examination anxiety in Owerri Municipal Council of Imo State? The findings of the study shows that there was a significant difference in the academic achievement of male and female secondary school students due to the influence of examination anxiety: t-cal=2.106 (P<0.05). As indicated by the mean and standard deviation scores of male and female students on examination anxiety used for the study. Male students express lower anxiety ( \( \bar{x} = 27.22 \) ); SD 8.32 than female students ( \( \bar{x} = 30.46 \) ); SD 10.01. In support, working with a sample of 65 female and 45 male undergraduate students from university of Isfahan, Iran who were in English Department, Rezazadeh and Tavakoli (2009) found that 11.8% of the students had high test anxiety, 73.60% had moderate test anxiety, while 14.5% of the students had low test anxiety. They found a significant negative correlation between test anxiety and students academic performance (r = - 0.199, p <
Influence of Examination…

They also found that females rated significantly higher than the males on the test anxiety scale as females were more affected by pressure. Also, Karatas, Alci and Aydin (2013) conducted a study on correlation among high school senior students’ test anxiety, academic performance and points of university entrance examination using 194 (50.51% of them were males) high school senior students in Turkey. Data generated with 20-item test anxiety inventory of 5-point likert scale and analyzed using Pearson correlation coefficient technique showed that there was a weak but significant negative correlation between students’ test anxiety and points of university entrance examination. A t-test analysis of the data showed a significant difference in test anxiety and GPA in favour of female students and in points of university entrance examination in favour of the male students.

Research Hypothesis Two

There is no significant difference in the academic achievement of young and old secondary school students due to the influence of examination anxiety in Owerri Municipal Council of Imo State? The findings of the study revealed that there was a significant difference in the academic achievement of young and old junior secondary school students due to the influence of examination anxiety: t-cal=2.249 (P<0.05) as revealed by the mean and standard deviation scores of young and old students on examination anxiety used for the study. Young students express lower anxiety (\( \bar{x} = 25.05 \)); SD 7.12 than old students (\( \bar{x} = 28.19 \)); SD 9.24. The possible reason for this development could be that students attach more importance to certification and become anxious before, during and after examination when they feel uncomfortable with their ability to succeed and older students term to reason more along this perspective. In line with this view, examination anxiety can be described as a perceived notion of psychological distress which occurs due to the expectation of a disconcerting and potentially threatening event (Rachman, 2004). Giving credence to this assertion, Black (2005) reported that today’s students are associating a greater sense of consequence with the prospect of being tested, resulting in feelings of pressure to perform and fear of not performing adequately. Thus, examination anxiety is an uneasiness or apprehension experienced before, during, or after an examination because of concern, worry, or fear. Black (2005) further contended that students who suffer from examination anxiety tend to be consumed with feelings of anxiousness, worthlessness, and/or absolute dread in regard to their academic achievement.

Conclusion

Since research has proved that examination anxiety makes students to develop an external locus of control, low levels of self-efficacy, low motivation, experience hopelessness and helplessness, resulting in poor academic performance. Students should therefore be taught how to develop self-regulated learning skills as a means to develop the capability to manage and overcome the experience of examination anxiety.

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**Recommendations**

1. Students should endeavour to develop good study habit by ensuring they create their private timetable and consultation with their teachers when they experience difficulty while reading. This would enable them overcome examination anxiety before, during and after examination.

2. Students should make sure they concentrate in class during teaching and learning process, take notes, ask questions and engage in group discussion as these measures could help students get familiar with their subject of study and overcome anxiety.

3. Teachers should endeavour to use teaching methods that will consider students individual differences, motivate students to learn and make teaching and learning more interesting.

4. Parents should give their children the necessary support that will enable them develop positive attitude to learning and be more focused with their studies.

**References**


**Influence of Examination…**


Sokan, B. O. (1998). *Test Anxiety Inventory* (TAIN) arranged besides a 4 -Point (Likert) scale