



Cognitive Test Anxiety and Examination Malpractices among Senior Secondary School Students in Rivers State

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Abstract: *The purpose of this study was to evaluate cognitive test anxiety and examination malpractices among senior secondary school students in Rivers State. The correlational research design was adopted for the study. The population of the study was 66,164 respondents, while the fluid survey sample calculator was used to draw a sample size of 382 respondents from the population. The simple random sampling technique was adopted for the study. In this study, two instruments were used for data collection. They were structured questionnaires titled as follows: 'Cognitive Test Anxiety Questionnaire' (CTAQ) which is to measure students' cognitive test anxiety and 'Examination Malpractices Questionnaire' (EMQ) as to measure the level of examination malpractices among students. Content and face validation of the research instrument was carried out by an experts in the field of Measurement and Evaluation and a lecturer guidance and counselling in Rivers State University, while the Pearson's Product Moment Correlation analysis was used to obtain the reliability index 0.74. The data collected were analyzed using descriptive statistics of mean and standard deviation, and inferential statistic of Pearson's Product Moment Correlation analysis to answer the research questions and to test the formulated hypotheses at 0.05 alpha level respectively. It was found that there is a significant relationship between excessive trembling, feeling of hopelessness, low self-esteem, affective tension and examination malpractices among secondary school students in Rivers State. It was concluded that we live in a test taking society and that when students are anxious before and during tests, cognitive test anxiety has a significant and effective impact on their involvement in examination malpractice which invariably leads to poor academic performance. Among others, the study recommended that examinations and continuous assessment tests as well as assignments should be well planned to avoid excessive trembling on the students which most likely triggers cognitive test anxiety.*

Keywords: *Cognitive Test Anxiety, Examination Malpractices, Secondary School Students, Rivers State.*

INTRODUCTION

Anxiety is referred to as a normal reaction to certain situations in life. A small level of anxiety is normal, but severe anxiety can be a serious problem. Huberty (2012) asserted that anxiety is the common phenomenon that constitutes a general cause of poor academic performance among students worldwide. He further stated that extreme level of anxiety implies individual's mental and physical health and also has a negative effect on their personal, social, familial, occupational, and educational performance. In the view of Zaharakar (2018), the various types of anxiety are obsessive-compulsive disorder, post-traumatic stress disorder, social phobia, generalized anxiety disorder, test anxiety, and panic disorder. One of the broadest research areas in recent years has been test anxiety and its dimensions. It is a kind of anxiety which turn out especially during examination. Test anxiety is a kind of self-preoccupation which is manifested with self-minimization and uncertainty about abilities of oneself and results in negative cognitive evaluation, lack of concentration, unfavorable physiological reactions and

academic failure. Test anxiety has been overwhelmingly identified as a two-factor construct, consisting of the cognitive (often referred to as “worry”) and emotional (or affective) components. The prime view of the association between these two factors suggests the cognitive component that directly influences the performance of students in exams, while the emotionality component is associated but does not directly persuade test performance (Cassady, 2010). Cognitive manifestations (i.e., worry) of test anxiety are experienced after the student perceives heightened levels of physiological arousal. Cognitive test anxiety is composed of individuals’ cognitive reactions or internal dialogue regarding evaluative situations, in the times prior to, during, and after evaluative tasks such as thoughts commonly entertained by individuals dealing with high levels of cognitive test anxiety center on (a) comparing self-performance to peers, (b) considering the consequences of failure, (c) low levels of confidence in performance, (d) excessive worry over evaluation, (e) causing sorrow for their parents, (f) feeling unprepared for tests, and (g) loss of self-worth. Most times, this can lead to low confidence or poor academic performance (Moadeli & Ghazanfari, 2015). Taking on new knowledge, roles, concepts and attitudes eventually leads to period of stress and dissatisfaction. Using factor analyses, the indices of cognitive test anxiety comprises of excessive trembling, feeling of hopelessness, low self-esteem, and affective tension. Tests and examinations at all stages of education, especially at higher education level have been considered an important and powerful tool for decision making in our competitive society, with people of all ages being evaluated with respect to their achievement, skills and abilities. Zollar and Ben-chain (2010) opined that the era in which we live in is a test conscious age in which the lives of many people are not only greatly influenced, but are also determined by their test performance. Test and examination stress is thought to prevent some individuals from reaching their academic potential. It has been found that students consistently perceive examination as a source of increase in anxiety and a situation engulfed with uncertainty/unfairness in letting them demonstrate their true achievements (Zollar & Ben-chain, 2010). Such feelings among students’ limit their potential performance during the test situation, resulting in higher text anxiety directly causing drop in the student achievement. Therefore, it can be seen as a measurement error towards measuring student achievement as tests are not meant to measure student achievement under intimidating situation but to know their level of achievement in an environment fair enough to let them demonstrate their abilities to the fullest.

The various means to minimize test anxiety are managing external factors like environment of examination hall, behaviour of examiners etc., internal factors like organization of questions in a test, sufficient description of the context, clarity in instruction for students etc. Despite these measures to minimize test anxiety it is generally agreed that it has become most upsetting and a disruptive factor for students. Cognitive test anxiety can have a negative effect on the information processing system. Excessive trembling, shaking, tremors and vibrating are common symptoms of anxiety disorder, including generalized anxiety disorder, social anxiety disorder, panic disorder, and others. Many people experience body tremors symptoms when they are anxious and stressed (Liebert, 2017). Feeling of hopelessness is an emotion characterized by a lack of hope, optimism, and passion. An individual who feels hopeless

may often have no expectation of future improvement or success. Feelings of hopelessness can often lead an individual to lose interest in important objects, activities, events, or people (Chinta, 2015). Low self-esteem is characterized by a lack of confidence and feeling badly about oneself. People with low self-esteem often feel unlovable, awkward, or incompetent. Affective tension/disorder according to Moadeli and Ghazanfari (2015) are a set of psychiatric disorders, also called mood disorders which includes; depression, bipolar disorder, and anxiety disorder etc. Symptoms vary by individual and can range from mild to severe. A psychiatrist or other trained mental health professional can diagnose an affective disorder. This is done with a psychiatric evaluation (Ader, & Erkin, 2010). However, there are effective treatments available, including both medication and psychotherapy. People with these aforementioned indices of cognitive test anxiety have difficulty storing and retrieving information. Some students are very difficult to formally or informally assess because of anxiety. Not all teachers understand the signs of cognitive test anxiety and the effects on their students. Many students suffer from anxiety when facing difficult academic tasks. Teaching self-regulation in early childhood is important to reduce the development of school related anxiety at an early age. People with anxiety have difficulty storing and retrieving information. Many students are very difficult to formally or informally assess because of anxiety. Not all teachers understand the signs of anxiety and the effects on their students. If teachers can recognize the signs, they can help the students cope with academic anxiety. Because all students are different, understanding multiple methods for coping with anxiety can be beneficial for more students (Spielberger & Sarason, 2011). In the fight against examination malpractice, it appears that no one is exonerated. As exposed in the preceding section, education stakeholders, students, as well as the national economy could rightly be apportioned blames for the preponderance of this menace. It is this gap that the study seeks to fill, hence the need to investigate cognitive test anxiety and examination malpractices among senior secondary school students in Rivers State.

Purpose of the Study: The purpose of this study generally is to examine cognitive test anxiety and examination malpractices among senior secondary school students in Rivers State. Specifically, the study seeks to;

1. Investigate the extent to which excessive trembling relate to examination malpractices among senior secondary school students in Rivers State.
2. Examine the extent to which feeling of hopelessness relate to examination malpractices among senior secondary school students in Rivers State.
3. Determine the extent to which low self-esteem relate to examination malpractices among senior secondary school students in Rivers State.
4. Evaluate the extent to which affective tension relate to examination malpractices among senior secondary school students in Rivers State.

Research Questions: The following research questions were raised to guide the study:

- To what extent does excessive trembling relate to examination malpractices among senior secondary school students in Rivers State?

- To what extent does feeling of hopelessness relate to examination malpractices among senior secondary school students in Rivers State?
- To what extent does low self-esteem relate to examination malpractices among senior secondary school students in Rivers State?
- To what extent does affective tension relate to examination malpractices among senior secondary school students in Rivers State?

Hypotheses

The following research hypotheses were formulated to guide the study and tested at 0.05 alpha level.

4. There is no significant relationship between excessive trembling and examination malpractices among senior secondary school students in Rivers State.
5. There is no significant relationship between feeling of hopelessness and examination malpractices among senior secondary school students in Rivers State.
6. There is no significant relationship between low self-esteem and examination malpractices among senior secondary school student in Rivers State.
7. There is no significant relationship between affective tension and examination malpractices among senior secondary school students in Rivers State.

METHODOLOGY

The correlational research design was adopted for the study. The population of the study was 66,164 respondents, while the fluid survey sample calculator was used to draw a sample size of 382 respondents from the population. The simple random sampling technique was adopted for the study. In this study, two instruments were used for data collection. They were structured questionnaires titled as follows: 'Cognitive Test Anxiety Questionnaire' (CTAQ) which is to measure students' cognitive test anxiety and 'Examination Malpractices Questionnaire' (EMQ) as to measure the level of examination malpractices among students. Content and face validation of the research instrument was carried out by an experts in the field of Measurement and Evaluation and a lecturer guidance and counselling in Rivers State University, while the Pearson's Product Moment Correlation analysis was used to obtain the reliability index 0.74. The data collected were analyzed using descriptive statistics of mean and standard deviation, and inferential statistic of Pearson's Product Moment Correlation analysis to answer the research questions and to test the formulated hypotheses at 0.05 alpha level respectively

RESULTS

Research Question 1: *To what extent does excessive trembling relate to examination malpractices among senior secondary school students in Rivers State?*

Table 1: Mean and Standard Deviation of the extent excessive trembling relate to examination malpractices among senior secondary school students in Rivers State

S/N	Questionnaire Items	\bar{X}	SD	Remarks
1	I feel confident and relax while taking tests	1.32	1.93	Low Extent
2	While taking examinations, I have an uneasy, upset feeling.	2.42	1.27	High Extent
3	Thinking about my grade in a subject interferes with my attention when taking tests.	2.82	1.33	High Extent
4	Students cheat in examinations because they were not taught most of the things they are given in an examinations.	2.55	1.30	High Extent
5	Fear of confronting questions on areas not treated in class make students engage in examination malpractices	3.04	1.69	High Extent
Grand Score		2.43	1.50	High Extent

From the table above, the mean score of 1.32 and standard deviation score of 1.93 implies that students feel confident and relax while taking tests to a low extent, the mean score of 2.42 and standard deviation score of 1.27 to a high extent accepted that while taking examinations, students have an uneasy, upset feeling, the mean score of 2.82 and standard deviation score of 1.33, agreed to high extent that thinking about their grade in a subject interferes with their attention when taking tests, the mean score of 2.55 and standard deviation score of 1.30 entails that students cheat in examinations because they were not taught most of the things they are given in an examinations but to a high extent, the mean score of 3.04 and standard deviation score of 1.69 to a high extent agreed that fear of confronting questions on areas not treated in class make students engage in examination malpractices, while the grand mean score of 2.43 and standard deviation score of 1.50 implied that excessive trembling relate to examination malpractices among senior secondary school students in Rivers State to a high extent.

Research Question 2: *To what extent does feeling of hopelessness relate to examination malpractices among senior secondary school students in Rivers State?*

Table 2: Mean and Standard Deviation of the extent feeling of hopelessness relate to examination malpractices among senior secondary school students in Rivers State

S/N	Questionnaire Items	\bar{X}	SD	Remarks
6	The harder I work at taking a test, the more confused I get	2.45	1.21	High Extent
7	Thoughts of doing poorly interfere with my concentration on tests	2.87	1.61	High Extent
8	I feel very jittery when taking an important test	2.32	1.18	High Extent

9	Students use text books during exams because they were not able to cover their syllabus	2.01	1.07	High Extent
10	Students cheat to pass examinations because they do not study well	1.40	1.99	Low Extent
Grand Score		2.21	1.41	High Extent

From the table above, the mean score of 2.45 and standard deviation score of 1.21 implies to a high extent that the harder a student work at taking a test, the more confused he/she gets, the mean score of 2.87 and standard deviation score of 1.61 to a high extent accepted that thoughts of doing poorly interfere with my concentration on tests, the mean score of 2.32 and standard deviation score of 1.18, agreed to high extent that I feel very jittery when taking an important test, the mean score of 2.01 and standard deviation score of 1.07 entails that students use text books during exams because they were not able to cover their syllabus but to a high extent, the mean score of 1.40 and standard deviation score of 1.99 to a low extent agreed that students cheat to pass examinations because they do not study well, while the grand mean score of 2.21 and standard deviation score of 1.41 implied that feeling of hopelessness relate to examination malpractices among senior secondary school students in Rivers State.

Research Question 3: *To what extent does low self-esteem relate to examination malpractices among senior secondary school students in Rivers State?*

Table 3: Mean and Standard Deviation of the extent low self-esteem relate to examination malpractices among senior secondary school students in Rivers State

S/N	Questionnaire Items	\bar{X}	SD	Remarks
11	During tests I feel very tense	3.31	1.66	Very High Extent
12	I wish examinations did not bother me so much	2.38	1.54	High Extent
13	During important test I am so tense that my stomach gets upset	2.63	1.35	High Extent
14	Poor study habits is at the root of examination malpractice in Nigeria	2.47	1.73	High Extent
15	Inadequate preparation for examinations is a major cause of examination malpractice.	1.93	1.20	Low Extent
Grand Score		2.54	1.50	High Extent

From the table above, the mean score of 3.31 and standard deviation score of 1.66 implies to a very high extent that during tests students feel very tense, the mean score of 2.38 and standard deviation score of 1.54 to a high extent accepted that students wished examinations did not bother them so much, the mean score of 2.63 and standard deviation score of 1.35, agreed to high extent that during important test students become tense that their stomach gets upset, the mean score of 2.47 and standard deviation score of 1.73 entails that poor study habits is at the root of examination malpractice in Nigeria to a high extent, the mean score of 1.93 and standard deviation score of 1.20 to a low extent agreed that inadequate preparation for

examinations is a major cause of examination malpractice, while the grand mean score of 2.54 and standard deviation score of 1.50 implied that low self-esteem relate to examination malpractices among senior secondary school students in Rivers State.

Research Question 4: *To what extent does affective tension relate to examination malpractices among senior secondary school students in Rivers State?*

Table 4: Mean and Standard Deviation of the extent affective tension relate to examination malpractices among senior secondary school students in Rivers State.

S/N	Questionnaire Items	\bar{X}	SD	Remarks
16	I worry a great deal before taking an important examination	2.38	1.64	High Extent
17	During tests I find myself thinking about the consequences of failing	2.53	1.80	High Extent
18	I feel my heart beating very fast during important tests	2.36	1.24	High Extent
19	Withholding or replacing or removal of script by student.	2.51	1.67	High Extent
20	Using ICT materials to cheat is common during examinations	2.20	1.70	High Extent
Grand Score		2.40	1.61	High Extent

From the table above, the mean score of 2.38 and standard deviation score of 1.64 implies to a high extent that students worry a great deal before taking an important examination, the mean score of 2.53 and standard deviation score of 1.80 to a high extent accepted that during tests students find myself thinking about the consequences of failing, the mean score of 2.36 and standard deviation score of 1.24, agreed to high extent that students feel my heart beating very fast during important tests, the mean score of 2.51 and standard deviation score of 1.67 entails that withholding or replacing or removal of script by student to a high extent, the mean score of 2.20 and standard deviation score of 1.70 to a high extent agreed that using ICT materials to cheat is common during examinations, while the grand mean score of 2.40 and standard deviation score of 1.61 implied that affective tension relate to examination malpractices among senior secondary school students in Rivers State to a high extent.

Test of Hypotheses

Hypothesis I: *There is no significant relationship between excessive trembling and examination malpractices among secondary school students in Rivers State.*

Table 5: Pearson’s product moment correlation analysis of the relationship between excessive trembling and examination malpractices among secondary school students in Rivers State

Variables	Σx	Σx^2	Σxy	r-value
	Σy	Σy^2		
Excessive Trembling	4295	7364	80341	0.63*
Examination Malpractices	3612	6078		

* Significance at 0.05 level, critical r = .138, df = 380

The result in table five shows that the calculated r-value of 0.63 is higher than the critical r-value of .138 at 0.05 level of significance with 380 degrees of freedom. With this result, the null hypothesis was rejected. The result therefore revealed there is a significant relationship between excessive trembling and examination malpractices among secondary school students in Rivers State.

Hypothesis II: *There is no significant relationship between feeling of hopelessness and examination malpractices among secondary school students in Rivers State.*

Table 6: Pearson’s product moment correlation analysis of the relationship between feeling of hopelessness and examination malpractices among secondary school students in Rivers State

Variables	Σx	Σx^2	Σxy	r-value
	Σy	Σy^2		
Feeling of Hopelessness	5103	8673	92702	0.57*
Examination Malpractices	4039	8512		

* Significance at 0.05 level, critical r = .138, df = 380

The result in table six shows that the calculated r-value of 0.57 is higher than the critical r-value of .138 at 0.05 level of significance with 380 degrees of freedom. With this result, the null hypothesis was rejected. The result therefore revealed there is a significant relationship between feeling of hopelessness and examination malpractices among secondary school students in Rivers State.

Test of Hypothesis III: *There is no significant relationship between low self-esteem and examination malpractices among secondary school student in Rivers State.*

Table 7: Pearson’s product moment correlation analysis of the relationship between low self-esteem and examination malpractices among secondary school students in Rivers State

Variables	Σx	Σx^2	Σxy	r-value
	Σy	Σy^2		
Low Self-Esteem	4208	7321	81320	0.53*
Examination Malpractices	3116	8055		

* Significance at 0.05 level, critical r = .138, df = 380

The result in table above shows that the calculated r-value of 0.53 is higher than the critical r-value of .138 at 0.05 level of significance with 380 degrees of freedom. With this result, the null hypothesis was rejected. The result therefore revealed there is a significant relationship between low self-esteem and examination malpractices among secondary school students in Rivers State.

Test of Hypothesis IV: *There is no significant relationship between affective tension and examination malpractices among secondary school students in Rivers State.*

Table 8: Pearson’s product moment correlation analysis of the relationship between affective tension and examination malpractices among secondary school students in Rivers State

Variables	Σx	Σx^2	Σxy	r-value
	Σy	Σy^2		
Affective Tension	3671	7740	9350	0.59*
Examination Malpractices	3823	7125		

* Significance at 0.05 level, critical r = .138, df = 380

The result in table above shows that the calculated r-value of 0.59 is higher than the critical r-value of .138 at 0.05 level of significance with 380 degrees of freedom. With this result, the null hypothesis was rejected. The result therefore revealed there is a significant relationship between affective tension and examination malpractices among secondary school students in Rivers State.

RESULTS AND DISCUSSION

One of the major findings of this study was that there is a significant relationship between excessive trembling and examination malpractices among secondary school students in Rivers State. This study is in line with the view of Zaharakar (2018) who opined that excessive trembling, shaking, tremors and vibrating are common symptoms of anxiety disorder, including generalized anxiety disorder, social anxiety disorder, panic disorder, and others. Many people experience body tremors symptoms when they are anxious and stressed (Liebert, 2017). Excessive trembling has been overwhelmingly identified as a two-factor construct, consisting of the cognitive (often referred to as “worry”) and emotional (or affective) components. The prime view of the association between these two factors suggests the cognitive component that directly influences the performance of students in exams, while the emotionality component is associated but does not directly persuade test performance. It was also found that there is a significant relationship between feeling of hopelessness and examination malpractices among secondary school students in Rivers State. In the view of Cassady (2010), feeling of hopelessness is an emotion characterized by lack of hope, optimism, and passion. A student who feels hopeless may often have no expectation of future improvement or success academically. Feelings of hopelessness can often lead an individual to lose interest in important objects, activities, events, or people (Chinta, 2015). Most times, this can lead to low confidence or poor academic performance (Moadeli & Ghazanfari, 2015).

The study also found that low self-esteem significantly relate with examination malpractices among secondary school students in Rivers State. Zollar and Ben-chain (2010) in compliance to this finding, opined that the era in which we live in is a test conscious age in which the lives of many people are not only greatly influenced, but are also determined by their level of low self-esteem correlated with test performance. Low self-esteem is characterized by a lack of confidence and feeling badly about oneself. People with low self-esteem often feel unlovable, awkward, or incompetent. Test and examination stress is thought to prevent some individuals from reaching their academic potential. It has been found that students consistently perceive examination as a source of increase in low self-esteem and a situation engulfed with uncertainty/unfairness in letting them demonstrate their true achievements (Zollar & Ben-chain, 2010). Such feelings among students’ limit their potential performance during the test situation, resulting in higher text anxiety directly causing drop in the student achievement. Therefore, it can be seen as a measurement error towards measuring student achievement as tests are not meant to measure student achievement under intimidating situation but to know their level of achievement in an environment fair enough to let them demonstrate their abilities to the fullest. Finally, it was found in this study that there is a significant relationship between affective tension and examination malpractices among secondary school students in Rivers State. Affective tension/disorder according to Moadeli and Ghazanfari (2015) are a set of psychiatric disorders, also called mood disorders which includes; depression, bipolar disorder, and anxiety disorder etc. Symptoms vary by individual and can range from mild to severe. A psychiatrist or other trained mental health professional can diagnose an affective disorder. This is done with a psychiatric evaluation. However, there are effective treatments available,

including both medication and psychotherapy. The various means to minimize cognitive test anxiety are managing external factors like environment of examination hall, behaviour of examiners etc., internal factors like organization of questions in a test, sufficient description of the context, clarity in instruction for students etc. Despite these measures to minimize cognitive test anxiety it is generally agreed that it has become most upsetting and a disruptive factor for students.

CONCLUSIONS

The results provide support for cognitive explanations of performance deficits encountered by students with heightened levels of cognitive test anxiety. Specifically, it appears that students may experience cognitive interference while preparing for examinations, taking examinations, or both. Interference during preparation may lead to a poor conceptualization or organization of the content, limiting the ability to retrieve key information during the test. Thus, the cognitive interference and information processing models of cognitive test anxiety seem to best account for cognitive test anxiety and examination malpractice observed in the study. The strategies which can be contextually relevant and useful for students in this study can be; task orientation and preparation, positive thinking, seeking social support, avoidance, relaxation training, coaching/ guided imagery, self-instructional training, establishing purpose, affirmation, modalities, positive Anchors, mental simulations, use of humour, preparation of cheat sheet and study skills training. To summarize this discussion, it is concluded that we live in a test taking society and that when students are anxious before and during tests, cognitive test anxiety has a significant and effective impact on their involvement in examination malpractice which invariably leads to poor academic performance.

RECOMMENDATIONS

From the findings of the study, it is recommended that;

- To effectively manage cognitive test anxiety, students can be helped by teachers, parents and educational administrators through the use of cognitive, affective and behavioral strategies.
- Students should be encouraged to prepare for their examinations in advance so that they will develop confidence consequently that can help to prevent or reduce excessive tension.
- Guidance and Counselling services should be employed through academic advising for students before examinations that may help to reduce feeling of hopelessness and low self-esteem.
- Guide students to handle and cope with affective tension during examinations and be made to understand that some level of tension is required as a motivating factor before the exam.
- Examinations and continuous assessment tests as well as assignments should be well planned to avoid excessive trembling on the students which most likely triggers cognitive test anxiety.

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