

# CAUSES OF TEST ANXIETY AMONG STUDENTS IN THE FACULTY OF EDUCATION, UNIVERSITY OF CAPE COAST, GHANA

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## ABSTRACT

Tests are invaluable tools to educators but their over-dependence on tests in recent times has heightened the negative impact of test anxiety on its victims. Though the causes of test anxiety are many and varied, understanding them could greatly help bring the rather perturbing test anxiety situation among students under control. The study was a descriptive research design involving a sample of 376 first- and final-year students, purposively selected from 2 871 students in the Faculty of Education at the University of Cape Coast, Ghana. Data was collected by means of a structured questionnaire, which had a Cronbach alpha reliability coefficient of 0.80. Focus group discussions were also held separately with students in each year group to gather further data. Questionnaire results were analysed as to frequencies and percentages under a two-point scale of 'Agree' and 'Disagree', while responses from the focus group discussions were transcribed and summarised under two relevant themes on test anxiety. The study revealed that fear of examination failure, poor preparation for tests and the rigid grading system at the University of Cape Coast are typical causes of test anxiety among students. It is therefore recommended that counsellors at the University teach students good study habits and encourage them to commence serious studies immediately when school reopens.

**Key words:** test anxiety, examination, nervousness, counselling, students, fear, failure, worrying, panicking, sweating

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## INTRODUCTION

The use of tests as an assessment tool has gained prominence over the years. This could be attributed to the numerous benefits educators derive from using tests. Incidentally, the increased use of tests has emphasised the seriousness of the test anxiety problem by heightening its debilitating effects on its victims. Testing dates as far back as 2 500 years to the ancient Greeks (Whiston, 2005). The Chinese were also believed to have used a civil service examination for certain purposes about 500 years before the aforementioned Greek usage. Later, personalities like Francis Galton also used tests to measure certain human characteristics. Currently, testing has become an important part of the education system worldwide.

Various types of tests currently exist for different purposes. Whiston (2005) highlights the following categories of tests: cognitive and affective tests, verbal and non-verbal tests, speed and power tests, and objective and subjective tests. Gladding (2000) also adds standardised versus non-standardised tests, individual versus group tests, performance versus paper-and-pencil tests, norm versus criterion-based tests and maximum-performance versus typical-performance tests. Tests can also be categorised by the purposes for which they are created. In this regard, Gladding further identifies intelligence or aptitude tests, interest or career tests, personality tests and achievement tests. Tests are additionally used for screening job applicants (Coon, 2006), diagnosing clients in counselling situations, ascertaining school achievement and pupil appraisal (Gladding, 2000). According to Whiston (2005), counsellors also use tests in settings like community agencies and mental health facilities to support their work with clients.

Despite the usefulness of tests, testing has been criticised for many reasons (Whiston, 2005). Harris and Coy (2009) describe testing as a typical source of anxiety among students (Illinois Counselling Center, 2013). Similarly, Robinson (2009) quotes Methia (2004), who reported that more than one third of pupils experience test anxiety. This has become even more prevalent in the early 2000s due to the increased use of tests in recent times. Robinson (2009) further confirms the pervasiveness of test anxiety among students, since research on test anxiety started as far back as the 1950s with Mandler and Sarason.

What exactly is test anxiety and what are the symptoms of test anxiety?

## The nature and symptoms of test anxiety

Test anxiety refers to the nervousness that comes with writing a test. It emerges from the desire to score highly on a test. The Illinois Counselling Centre (2013) describes test anxiety as a 'distressful' and anticipatory state or feeling that influences examination performance. Robinson (2009) further describes it as a feeling of apprehension and discomfort that leads to difficulties in cognition while writing a test. He additionally identifies the cognitive, emotional and social elements of anxiety, emphasising that anxiety generally peaks at the beginning of the causal event and subsides once the event starts. He also opines that test anxiety sometimes lingers on in the victim until the end of the test.

Test anxiety is described as having two major aspects, namely, physiological hyper-arousal and cognitive disorganisation. The physiological factors manifest in increased heart rate, increased blood pressure, shortness of breath, and profuse sweating. The cognitive factors are described by Robinson as including symptoms like difficulty in thinking, low self-confidence, having negative thoughts and doubts about one's academic ability, difficulties in understanding test questions, and difficulties in recalling learnt information. Hashmat, Hashmat, Amanullah and Aziz (2008) and Harris and Coy (2009) also confirm the emotional aspect of examination anxiety, describing it as a common experience among students. In addition, they report symptoms like excessive worry, depression, nervousness, irrelevant thoughts, nausea, and frequent urination as typical in test-anxious people. Other symptoms such as stomach aches, headaches, shivering, sweaty palms, dry mouths, fainting and nausea are also reported.

According to Revina, Gregory, Gregory and Sheeba (2014), anxiety causes students to go blank, feel helpless and develop sweaty palms during examinations. High levels of anxiety, they note, also affect students' memory, reasoning abilities, self-esteem and academic achievement. Other mental reactions like worrying about poor test performance, perceiving tests as threats, and difficulties concentrating or recalling learnt materials, also exist (Illinois Counselling Centre, 2013; Lufi, Okasha & Cohen, 2004). Birenbaum (2007) also highlights worrying as a key hindrance to information retrieval among test-anxious people, but emphasises poor test preparation as a major cause of low test performance among such students. Similarly, Cassidy (2004) discovered that highly test-anxious students usually had poor study habits, felt threatened by tests and also performed poorly on tests.

## The causes of test anxiety

The causes of test anxiety, as indicated by several authors, are diverse and vary from person to person. These causes can, however, be generally categorised as psychological, behavioural, physical, or cognitive in nature. When investigating the causes of examination anxiety in medical students, Hashmat et al. (2008) reported behavioural causes such as inadequate rest, insufficient physical activity, poor nutrition, lack of time management and required information, procrastination, poor study habits, and poor test-taking skills as key contributors to examination anxiety. Birenbaum (2007) agrees with them when reporting that inconsistent content coverage, studying all night before examinations and poor revision of studied course material are significant causes of examination-related anxiety in students. The California Polytechnic Academic Skills Centre (2013) highlights additional common behavioural causes of test anxiety including, among others, lack of examination preparation, cramming the night before the examination, poor study habits and poor time management.

The physical factors causing test anxiety among students as highlighted by Barksdale-Ladd and Thomas (2000) include pressure from peers, family, and teachers; unfavourable testing environments, ineffective teaching and poor prior test performance. Lufi et al. (2004) also report negative outcomes of examinations and helplessness over examination situations as other physical causes of test anxiety among students. Parents have been found to create test anxiety in their children with constant demands for high grades. Barksdale-Ladd and Thomas (2000) additionally report that parental concerns about their children's performance and their continuous admonishing of their children to work harder at school often make children anxious.

Equally significant are the cognitive and psychological causes of test anxiety. The California Polytechnic Academic Skills Centre (2013) reports that lack of information organisation and worries about past test performance cause test anxiety among students. Einat (2000) also opines that test anxiety is caused by the high personal standards of people who expect maximum success, yet fear not being able to meet their own standards. Such students, Einat adds, often perceive tests as threats and thus react to them by worrying and entertaining irrelevant thoughts, which

eventually affect their performance. Furthermore, in medical school, Hashmat et al. (2008) identified students' perceptions of extensive course load during examination periods and irrational thinking as significant causes of test anxiety among final-year students. They explained that most final-year students felt anxious during the examinations period because they often perceived this period as excessively busy and intensive. Putwain, Woods and Symes (2010) also highlight a link between low academic self-worth and worrying about high test performance as a cause of test anxiety among students. This view is a combination of the psychological and cognitive factors as causes of test anxiety among students.

All of the above create significant levels of test anxiety and have diverse effects on students.

### **The impact of test anxiety on students**

Deep concerns have been raised in recent times regarding the negative influence of test anxiety on students and other individuals. For instance, Harris and Coy (2009) describe test anxiety as a 'severely disabling' condition that 'paralyses' students' thought processes and hinders their performance in examinations despite their high cognitive abilities. Decker, Hermans, Raes and Eelen (2003) and Yousefi et al. (2010) agree with Harris and Coy by emphasising that anxiety, worry and subjective stress are closely related to memory deficits among students. Eysenck (2001) additionally reports a significant relationship between high levels of test anxiety and low cognitive performance. In a similar vein, Vasa et al. (2007) found that respondents with high test anxiety had lower memory scores and Datta (2013) suggested a similar situation among capable students with special educational needs: he noted that test anxiety led to high levels of distress and a corresponding academic failure among them. Chapell et al. (2005) additionally reveal that anxiety interferes in students' performance in most assessment situations.

Equally significant are Wild, Hofer and Pekrun (2006) and Yousefi (2012), who also indicate a higher probability of students dropping out of school early or falling into truancy mainly because of their test anxiety experiences. Bodas and Ollendick (2005) suggest that test anxiety is a key cause of psychological distress, low academic performance or underachievement, and feelings of insecurity among students. Mulvenon, Stegman, and Ritter (2005) additionally emphasise the predominantly negative impact of test anxiety on students' performance over the years. Robinson (2009) reported that test anxiety leads to cognitive difficulties during a test and,

like Chapell et al., found that low performance on standardised tests correlated with increased levels of anxiety and stress among students. He thus concluded that increasingly using tests only aggravated the test anxiety problem and harmed more students.

Test anxiety has also been found to be predicated on certain gender factors. Robinson (2009) reports that females generally experience higher anxiety levels than males. He notes that test anxiety in females peaks during Grades 5 to 10, after which it falls significantly. In like manner, Chappell et al. (2005) are reported by Robinson (2009) to maintain that female graduates with low test anxiety recorded significantly higher Grade Point Averages (GPAs) when compared to their high test-anxious female graduate counterparts; but undergraduate females comparatively had higher test anxiety and higher GPAs than their male undergraduate counterparts. Among both high and low test-anxious male graduate students, however, similar GPAs were recorded, while undergraduate females tended to have higher test anxiety and higher GPAs when compared to their male counterparts. Female graduate students additionally had significantly higher test anxiety and GPAs than male graduate students (Robinson, 2009).

Nonetheless, the Illinois Counselling Center (2013) asserts that, despite its predominantly negative nature, anxiety could sometimes be useful when it enables the individual to escape or avoid dangerous situations. Spielberg, Farooqi and Ghani (2012) similarly believe that a little nervousness is important to push the individual into peak performance.

Nevertheless, the above negative effects of test anxiety make the extensive use of tests in recent times a worrisome phenomenon. If tests are so significant to educators and are being used more often for various purposes, then it is important to consider the effects of test anxiety on students and adopt the necessary strategies to address them. A study investigating the causes of test anxiety could thus be considered a step in the right direction when searching for a practical solution to this predicament.

### **Significance of the study**

Test scores are used by most educators, employers and students all over the world for making important life decisions. These decisions eventually determine the future of test takers. The study is of key importance to educators, examining bodies, and

employees, who use test scores for various purposes. These stakeholders should be well informed regarding the reviewed literature on the nature, symptoms and impact of test anxiety on students. With this awareness, in addition to the study findings and recommendations, they should become more conscious of anxiety-related factors, and thus able to initiate better strategies to reduce or avoid them in the planning and administration of their examinations and tests.

The study findings will also serve to educate the various staff members and counsellors in university counselling centres, and guidance co-ordinators at other levels of education, in order to further enhance their student support services in their respective institutions. With the study findings, these guidance and counselling professionals will be able to focus more on anxiety-related issues and thus re-package the student support services in their respective institutions.

Finally, the entire tertiary student body in Ghana (and worldwide) will benefit from this study, as the various factors, conditions and activities that create test anxiety among students within their respective institutions will be highlighted and subsequently controlled, so as to reduce anxiety among students. The study's recommendations in particular could help eradicate the anxiety-causing factors, thus reducing anxiety among students. By this means, students' test performance should eventually improve, and their self-esteem and confidence will be boosted to further enhance their personalities and performance.

## **STATEMENT OF THE PROBLEM**

Several authors have documented the negative impact of test anxiety on students' lives in general and on their test performance in particular. The literature indicates that the causes of test anxiety are diverse and vary from person to person. Vasa et al. (2007) and others propose that test anxiety affects the academic performance of students. Lufi et al. (2004) further highlight its interference with students' cognition. In this present age of increased testing, deep concerns have been raised regarding the impact of tests on students, but little is known about how testing affects students, specifically at the University of Cape Coast, Ghana. This study seeks to shed light on the effects of text anxiety at the University of Cape Coast.

## OBJECTIVES OF THE STUDY

The objectives of the study are to:

- Identify the causes of test anxiety among first- and final-year students in the Faculty of Education at the University of Cape Coast
- Outline the various symptoms of test anxiety among students in the Faculty of Education at the University of Cape Coast

## RESEARCH QUESTIONS

- What are the causes of test anxiety among first- and final-year students in the Faculty of Education at the University of Cape Coast?
- What are the various symptoms of test anxiety among first- and final-year students in the Faculty of Education at the University of Cape Coast?

## METHODOLOGY

The study made use of a descriptive research design involving an accessible population of 2 871 first- and final-year students from five departments in the Faculty of Education at the University of Cape Coast. There were 1 538 first-year students and 1 333 final-year students. The reasons for selecting only first- and final-year students were that, in the University of Cape Coast, failure of three courses in the first year of study leads to the outright dismissal of the student; and in the final year, failure in any course means not having an opportunity to graduate in that year. It was therefore rationalised that test anxiety could be heightened in these two groups of students.

The purposive sampling technique was used on different days to select first- and final-year Bachelor of Science (Psychology) students of the Faculty of Education (now College of Education Studies) to respond to a 29-item questionnaire. Just after their lectures, the students were approached in the lecture venue and briefed on the purpose of the research and the fact that it was an academic exercise. Students were then given the liberty to volunteer to be involved in the research. In both cases, some students left the venue, but 131 first-year students and 172 final-year students volunteered to respond to the questionnaire. This resulted in a total sample of 303 students. Prior to administering the questionnaire, the research participants were assured of anonymity, and for that reason they were asked not



to write their names anywhere on the questionnaire. They were also encouraged to provide candid responses to the items. The 29-item structured questionnaire mainly focused on the causes of test anxiety as identified from the reviewed literature. Item responses were on a four-point Likert scale of 'Strongly Agree', 'Agree', 'Disagree' and 'Strongly Disagree'.

The questionnaire was also validated by a pilot test involving 30 second-year students purposively selected after a lecture in the Arts Faculty at the University of Cape Coast. The Cronbach alpha reliability coefficient was 0.80. Gathered data from the questionnaire was analysed with the Statistical Package for Service Solutions through frequency counts and percentages. Results were presented with tables on a two-point scale of 'Agree' and 'Disagree'.

In addition to the use of the questionnaire, four focus group discussions were held with a total of 73 first- and final-year students from four departments in the Faculty of Education. Two focus group discussions were held with first-year students and another two with final-year students. Students for the first focus group discussion were purposively approached just after lectures in the Department of Arts and Social Sciences Education as well as the Department of Basic Education, at different times. They were then briefed on the purpose of the research work, after which a sheet of paper was sent round for those who were interested to write down their names in order to be involved in the study. A date was then fixed for the discussion and a total of seven students from the Arts and Social Sciences and 11 from Basic Education were present on the scheduled date for the discussion. Eighteen first-year students were thus conveniently sampled and involved in the first focus group discussion. For ethical reasons, participants were assured that any information they supplied was to be treated as confidential.

The same procedure was followed to select another group of 12 first-year students from the Department of Health and Physical Education as well as the Department of Vocational and Technical Education for the second focus group discussion. After purposively approaching and briefing these first-year students, six of them from each of the two departments were involved in the discussion.

The same procedure was used in selecting study respondents for the final-year focus group discussions. They were also purposively approached and briefed about the research at the end of their lectures in the Department of Arts and Social Sciences Education as well as the Department of Basic Education. Ten students

were sampled from each of the two departments for the discussion on the scheduled date. The 23 final-year students involved in the second focus group discussion were also conveniently sampled from the Department of Health and Physical Education as well as the Department of Vocational and Technical Education by means of the aforementioned procedure. They comprised 10 from Health and Physical Education and 13 from Vocational and Technical Education.

The total sample of 376 students involved in the study was determined by Cohen, Manion and Morrison's (2007) approved sample size for a population of 2 800. The focus group discussions explored two main themes: students' reactions when informed of an impending test (symptoms of test anxiety) and causes of test anxiety among students. At the beginning of each focus group discussion, students were briefed on the purpose and significance of the study. They were also encouraged to express their opinions freely and candidly on the issues under discussion, as their responses would not in any way be associated with them or used against them. All four focus group discussions were recorded and later transcribed. The various responses were then organised under the two main themes and used to write a report.

## PRESENTATION OF THE STUDY RESULTS

### Causes of test anxiety

Table 1 shows the various causes of test anxiety reported by students on the questionnaires.

**Table 1: Causes of test anxiety among first and final year students**

Causes of Test Anxiety	First Year		Final Year	
	Agree	Disagree	Agree	Disagree
1. Because I fear failure, I get anxious when writing tests.	73 (55.7%)	58 (44.2%)	80 (46.5%)	92 (53.4%)
2. I only get anxious when I have not prepared well for the exam.	112 (85.4%)	19 (9.9%)	150 (87.2%)	22 (0.12%)
3. I think the test will be difficult so I get anxious.	66 (50.3%)	65 (49.6%)	79 (45.9%)	93 (54.1%)
4. Once I start and realise the test is easy, my anxiety goes away.	109 (83.2%)	22 (16.8%)	155 (90.1%)	17 (9.9%)
5. Failure in previous examinations makes me feel anxious when writing tests.	19 (14.5%)	112 (85.5%)	16 (9.3%)	156 (90.7%)



Causes of Test Anxiety	First Year		Final Year	
	Agree	Disagree	Agree	Disagree
6. Fear of my lecturer makes me nervous when writing his or her exams.	23 (17.5%)	108 (82.4%)	23 (13.3%)	149 (86.6%)
7. Because my lecturer does not teach me well, I get anxious when writing his or her exams.	16 (12.2%)	115 (87.8%)	24 (13.9%)	148 (86.0%)
8. Lack of time to study makes me get anxious during examinations.	24 (18.3%)	109 (74.8%)	20 (11.6%)	152 (88.3%)
9. Poor retention of learnt material makes me nervous during examinations.	22 (16.8%)	109 (83.2%)	22 (12.8%)	150 (87.2%)
10. I think I am not academically strong so I fear writing examinations.	4 (1.4%)	127 (96.9%)	8 (6.1%)	164 (95.3%)
11. I feel lazy when studying so I get anxious when writing examinations.	14 (10.7%)	117 (89.3%)	17 (9.9%)	155 (90.1%)
12. I feel stressed when preparing for examinations, so examinations give me stress.	31 (23.6%)	100 (76.3%)	65 (37.8%)	107 (62.2%)
13. I have difficulty expressing myself on paper so I get test anxious.	12(9.1% )	119 (90.8%)	15 (8.7%)	157 (91.2%)
14. Because our exams are very theoretical, I get test anxious.	64 (48.9%)	67 (51.1%)	116 (67.4%)	56(32.5%)

The study results indicated that 73 first-year students (55.7%) identified fear of failure as making them anxious, but 92 final-year students, representing 53.4%, opposed this idea. Also, both first- and final-year students, 112 (85.4%) and 150 (87.2%) respectively, agreed that poor preparation for tests led to anxiety. A total of 66 first-year students also said they became anxious because they thought the test would be difficult, but 93 final-year students did not think so. Both year groups, (112 first year students or 85.5% and 156 final year students or 90.7%) reported that failure in previous examinations did not make them anxious when being tested, while 108 first-year students and 149 final-year students said they did not get nervous because they feared the lecturer testing them. Additionally, 115 first-year students and 148 final-year students said they did not get anxious due to their lecturer not teaching well.

Over 70% of both year groups did not agree that factors such as lack of time to study, poor retention of studied material, not being academically strong and feeling lazy when studying made them anxious during testing. While 67 first-year students denied that the theoretical nature of their tests made them anxious, 116 final-year students reported the contrary. Results also showed that 100 first-year students

and 107 final-year students did not think that preparations towards examinations made them anxious, and an even greater percentage (90.8% first-year students and 91.2% final-year students) denied that they had difficulties with self-expression during examinations leading to anxiety.

On the whole, 109 first-year students and 155 final-year students reported that once they started the examinations and realised that the questions were easy, their anxieties subsided.

Results from the focus group discussions generally highlighted similar causes of test anxiety among both year groups as identified by responses on the questionnaires.

The major factors causing test anxiety among first-year students as reported at the focus group discussions included uncertainty as to the difficulty level of tests, insufficient preparation for tests, transfer of negative course perceptions to the impending test, fear of failure, and the dreadful picture painted by friends about examination failure at the University of Cape Coast. Other test anxiety causes mentioned were the rigid grading system at the University of Cape Coast and the generally demanding nature of the academic system in the institution. The off-campus factors causing anxiety among first-year students were pressure from home for them to perform well and the extremely high standards set by parents.

In like manner, the final-year students highlighted several causes of test anxiety in their two separate focus group discussions. They listed the uncertainty of test outcomes, the desire for high test performance, transfer of negative course perceptions to the impending test, poor relations with the testing lecturer, the dreadful picture of examination failure painted by their seniors, and the generally unpredictable nature of examinations. They also mentioned poor preparation for tests, uncertainty regarding the topics to be covered by the test, and fear of failure. Final-year students also indicated that their inability to recall specific answers to test items, confusing information about test expectations (from course prefects and teaching assistants prior to writing the test), and the theoretical nature of examinations, created anxiety in them.

### **Symptoms of test anxiety among students**

At the focus group discussions, students in both year groups highlighted a number of symptoms they often experienced immediately when they heard of an impending test or examination. The test-anxiety symptoms highlighted by first-year students

included restlessness, dreaming about the impending test when asleep, feeling cold, frequent urination, headaches, confusion about what to study, shivering, increased heart rate, and forgetting learnt material. Final-year students also mentioned test-anxiety symptoms like panicking, shivering, confusion, frequent urination, loss of appetite, diarrhoea, and sudden menstruation. They also said they experienced faster heart rates, headaches, profuse sweating, tension, fear, and shivering when writing the test. However, final-year students felt that their anxieties usually faded away once the test started and they realised it was not all that difficult after all. Students in both year groups, however, emphasised that these anxieties were often severe when the test was impromptu and they had no time to prepare for it. Students' reactions to the news of an impending test were thus similar in both year groups.

When asked whether knowing the test dates and the areas to target in preparation for the test helped to reduce anxiety, students reported that they still felt anxious, because they were often uncertain about the thoroughness of their preparation, and were also uncertain about the lecturer's style of setting questions.

Finally, students in both year groups acknowledged the importance of testing and the writing of examinations in schooling. They agreed that tests and examinations helped to evaluate learning outcomes and enabled students to identify their capabilities and weaknesses. They believed these were important in planning for their future. However, students suggested considering practical activities such as oral presentations in class, project work, group work, and other innovative activities when assessing their academic performance, rather than limiting evaluation to testing and the writing of examinations.

## **Discussion of the study results**

The study largely confirmed various reports in the literature regarding test anxiety. It primarily established the existence of test anxiety among students as indicated by Hashmat et al. (2008), Robinson (2009), and Decker et al. (2003), among others. In asserting that test anxiety affects people in every field and at all evaluative and gradable ages, Lufi et al. (2004) emphasised the pervasiveness of test anxiety by indicating that it cuts across all arenas and a wide age group. Some other assessment activities that cause anxiety, as identified by Robinson (2009), were public speaking, social contests, and general areas of competition. In agreement with Lufi et al. (2004), Datta (2013) further identified that students with

special educational needs also experience test anxiety when faced with evaluative situations. Similarly, Lancaster, Mellard and Hoffman (2001) identified test anxiety as the greatest difficulty for students with learning disabilities. McDonald (2001) additionally highlighted test anxiety as a key source of concern for many children in school today.

All these views confirm Methia (2004), who reported an over 30% prevalence of test anxiety among children in school. It is thus not surprising that test anxiety is described as one of the most researched human traits (Lufi et al., 2004; Robinson, 2009). Hopefully effective strategies and techniques will be discovered in the near future to reduce test anxiety among students and thus eradicate its negative effects. This, however, will only become a reality when research findings and recommendations are taken seriously and implemented promptly.

The study confirmed several symptoms of test anxiety mentioned by the literature. Symptoms like profuse sweating, shivering, headaches, heart palpitations, forgetfulness and sleeplessness, which were outlined by Harris and Coy (2009) and Robinson (2009), were also mentioned by study respondents at the focus group discussions. A final-year student, for example, stated that he developed palpitations and a sudden urge to urinate when told to write a test, and another student reported profuse sweating and headaches when faced with a test. Yet another said, 'I immediately develop running stomach when I hear about an impending test and I urgently want to ease myself.' Another also responded, 'Madam, when I hold the pen in the test room, it shakes and the paper gets wet with sweat from my palms. My handwriting even becomes shaky and horrible.' These symptoms are in agreement with Datta's findings (2013): she found that eight out of her nine participants were extremely nervous and shaky before and during an examination.

Parents involved in her study also reported that their children experienced high levels of test anxiety, worry, nervousness, sleepless nights, and sweaty palms before and during an examination. Lowe (2014) likewise noted that worrying, being tense and experiencing feelings of apprehension were common symptoms for some students when they wrote tests.

Interestingly, all the symptoms mentioned by study respondents also matched the behavioural and cognitive elements of test anxiety discussed by Harris and Coy (2009). Symptoms like restlessness, panicking, frequent urination, profuse sweating, palpitations or shortness of breath, diarrhoea, sudden menstruation, and shivering

matched the behavioural elements; while confusion, forgetfulness, and lack of concentration were cognitive in nature. It is equally significant to note that despite reports by the Illinois Counselling Center (2013) and Spielberger et al. (2012) that some level of anxiety is necessary to push students into peak performance, none of the test anxiety symptoms mentioned by study respondents seemed to have had any positive impact on their performance. At the focus group discussion, a first-year student said: 'Whenever I have an impromptu test, I immediately develop headaches, get confused and don't know what to study.' Another said, 'I also begin to sweat and immediately feel like urinating.' The shaky handwriting, worrying, forgetfulness, sweaty palms, palpitations, and frequent urination mentioned by respondents would only distract students, impede their levels of concentration, and reduce their writing speed during testing. Possibly, the anxieties experienced by study respondents were rather extreme and thus had a negative impact on them. It is thus significant that highly test-anxious students have been proven to have poor test performance.

Experiencing such debilitating symptoms can hardly make one excel in a test. Datta (2013) in like manner found that highly emotional, test-anxious students also experienced higher amounts of bodily discomfort, and their emotional states eventually interfered with their true test scores. Chapell et al. (2005) also agreed with Datta regarding the interference of students' anxiety with their true potential in most assessment situations. In this vein Eysenck (2001) specifically reported that high levels of test anxiety lead to low cognitive performance, while Vasa et al. (2007) discovered that high test anxiety often led to low memory scores. Cassady (2004) similarly revealed that highly test-anxious students usually felt threatened by tests and performed badly on tests. A study respondent, for example, remarked during the focus group discussion: 'I feel uncomfortable and my heart begins to beat faster whenever I have to write a test.' Another said, 'I also begin to sweat and immediately feel like urinating.' Yet another also reported, 'I immediately develop headaches; get confused and don't know what to study.' These study findings are all real and in agreement with Datta (2013) who found that the majority of her study participants were worried, apprehensive and tense in an evaluation activity. Einat (2000) also asserted that test-anxious students were in the habit of worrying and thinking irrelevant thoughts. When explaining the emotional state of test anxiety, Birenbaum (2007) described worrying as a key hindrance to the information retrieval process among test-anxious people.



Asked why they often reacted this way towards tests and not class exercises, study respondents explained at the focus group discussions that 'with class exercises, we can easily ask our colleagues or lecturer for explanations when confused about some questions but the test or examination rules forbid us to do so and this makes us anxious and scared of failure'. Another student's explanation was that 'examinations themselves comprise so many issues, including uncertainty, and their strict rules often make students more tensed and scared than normal class exercises'. Harris and Coy (2009) thus described testing as one of the most threatening events causing anxiety in students of late, as it appears that once students sense an impending test, they immediately feel threatened (Cassady, 2004; Robinson, 2009) and begin entertaining thoughts of failure, which often come along with the fear of failure. This coincides with the study finding that fear of failure (Einat, 2000) was a major cause of test anxiety among students. Study respondents also reported feeling anxious even when they knew of their test dates and the topics to be covered. At the focus group discussions, students explained that, despite having advance information about a test, they still felt anxious before writing. One student explained: 'I still feel anxious because I don't know the questions to expect and until I see the questions, I feel uneasy.' Another's response was, 'I get anxious because I feel I have not prepared well for the test.' All this reinforces the fear of failure as a cause of test anxiety and more importantly, the prevalence of test anxiety among students (Methia, 2004).

Most probably, students and test takers in general have been conditioned to react with anxiety towards evaluative and competitive activities; hence their high anxiety states. Study respondents did however acknowledge a reduction in their test anxiety once they started the test and realised that it was not after all that difficult. This conflicts with the view of Robinson (2009) who noted that test anxiety often lingered on until the end of the test.

Parents were also reported to contribute immensely to test anxiety among students. The respondents indicated that their parents constantly demanded good grades from them at school and this heightened their anxiety during testing. A number of first-year students for instance revealed that their parents' constant advice for them to do well at school made them worried every time they had to write a test. One of them remarked: 'Madam, my parents always tell me to work hard and make high grades at school. I always think about this and it makes me shiver and worried anytime I have to write a test.' Clearly, parents' keen interest in the education of their



children is adversely affecting the children, to the extent that parents' emphasis on academic excellence is being perceived as a threat. Such a situation could occur particularly when the concerned children are not exceptionally brilliant at school, and their fears could come from their inability to meet their parents' rather high standards. Einat (2000) described such causes of test anxiety as a result of high personal standards set by people who expected maximum success and yet feared not being able to meet those standards. Parents do not realise that not all students can be academically exceptional and this could be frustrating for students who are not that exceptional. Einat explained further that such students often perceived tests as threats and thus reacted to them by worrying and entertaining irrelevant thoughts, which eventually affected their performance. This finding links directly with Barksdale-Ladd and Thomas (2000) who reported that constant parental pressure created test anxiety among students.

Correspondingly, Harris and Coy (2009) theorise that test anxiety emerges from a combination of fear and uncertainty. They explain that test-anxious people often perceive tests as threats to their ego or self-esteem and thus react accordingly once they are faced with a test. The study finding, that fear of failure is a major cause of test anxiety, is thus corroborated. Uncertainty during tests was also confirmed at the final-year focus group discussion, where a student attributed his anxiety to the unpredictable nature of tests. His words were: 'Tests have always been unpredictable and this makes me anxious whenever I have a test to write. You can never predict the grade you will make until you have seen the final results.' Another student remarked: 'The uncertainty about tests is often at two levels, Madam; first, not knowing the questions to expect at the test, and secondly not being able to predict one's performance until the results have been released. We have heard of cases where students expected grade A and yet received lesser grades upon the release of the results.'

Equally significant is the study finding that poor test preparation is a cause of test anxiety among students. The high percentage of study respondents (85.4% of first-year students and 87.2% of final-year students) who reported getting test anxious when they had not prepared well for the examination reinforced this logical point. In describing their reactions to an impromptu test, a study respondent said, 'I get very anxious and my heart begins to beat faster because I think I will fail. This is because we students do not often prepare before going for lectures.' This situation is in line with Hashmat et al. (2008) who reported that inefficient study

and lack of revision of study materials are causes of examination anxiety among students. The inefficient study in this case could imply a variety of causes, including poor study habits, lack of examination preparation, poor time management, and lack of organisation of notes, among others. The Academic Skills Center (2013) also mentioned these factors as causes of test anxiety among students. Sangsiri, Bhosle and Sail (2006) additionally identified ineffective studying styles, inconsistent content coverage, and lack of revision of course material as further causes of test anxiety. Since poor test preparation has been confirmed to lead to test failure, it is meaningful that a relatively high percentage of first-year students identified fear of test failure as a cause of test anxiety. The fear of test failure also links up perfectly with students perceiving tests as threats (Einat, 2000; Haris and Coy, 2009) and therefore fearing them.

The frequency of testing during mid-semester at the University of Cape Coast was also mentioned by study respondents as leading to anxiety. At such times, most lecturers often administer their first tests and this often has a toll on students, making them describe the period as highly stressful. Two respondents at the first-year focus group discussion agreed, and one said: 'Madam, the pressure on us during the middle of the semester when all our lectures administer their first test is just too much. Despite these many tests, they still give us assignments and group work while we still attend lectures. This tends to be very tiring and makes us very anxious about our test performance.' Similar findings were reported by Hashmat et al. (2008) who note that loaded examination periods made students test anxious. This clearly is a practical problem that also deserves attention, considering the number of courses students read at school and the need to assess them in each of these courses. Varying the tools for student assessments, as recommended by study participants, would help reduce this periodic stress that mounts up when lecturers schedule tests all at once. A number of such activities, such as oral presentations in class, undertaking project work, and group assignments among others, are currently used at the University of Cape Coast, although tests and examinations remain the typical assessment modes.

Factors such as poor retention of learnt material, not being academically strong, and feeling lazy, were rejected as factors by the majority of the study participants in both year groups (83.2% of first-years and 87.2% of final-years). All these factors imply negative attitudes towards academic work and it is reassuring that they were rejected by students. This highlights some admirable study habits of students at

the University of Cape Coast and it deserves commendation. Incidentally, the study finding disagrees with Putwain, Woods and Symes (2010) who opine that people with low academic confidence undergo excessive worrying and tension about their ability to perform.

Many are the causes of test anxiety and many more are its symptoms, but the largely negative impact of these symptoms on test takers in general reinforces the need to urgently seek redress, particularly in these recent times of high-stakes testing. Students all over the world would relish any such effort to bring this phenomenon under control.

## **RECOMMENDATIONS**

- University academic advisors and counsellors should teach students good study habits and encourage them to start serious studies immediately when school reopens.
- Lecturers should adopt more group work presentations and tutorial methods in teaching. They should also teach students how to answer questions and make presentations to help boost students' confidence levels and eventually reduce anxiety in them.
- Counsellors should teach students some relaxation and desensitisation techniques and other esteem-building strategies to help control students' anxiety levels.
- Parents should also encourage their children to be assertive, responsible and independent in their youth to enhance their confidence levels.

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