

EXAMINATION ANXIETY AMONG FINAL-YEAR JUNIOR HIGH STUDENTS IN DANSOMAN, GHANA

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ABSTRACT

This study was conducted to assess examination anxiety among final year pupils in public basic schools in Dansoman, Ghana. A descriptive survey design was employed and a multistage sampling technique was used to select the sample of 261 final year students. A questionnaire was the data gathering instrument for this study. Quantitative data collected was analysed by using mean and standard deviation scores and F-tests. It was found that the students reported a moderate level of examination anxiety in relation to the 2020 Basic Education Certificate Examination. Also, significant differences were reported in examination anxiety when the pupils were grouped according to intended school options and programmes of study at the senior high, technical and vocational schools. It was concluded that the thought of going to Category “A” schools will increase pupils’ examination anxiety more than the thought of going to Category “F” schools at the senior high, technical and vocational schools. Similarly, the level of examination anxiety of students will increase if they change their programme orientations from technical programmes to humanities. It is therefore recommended that public basic schools’ teachers should transcend beyond teaching and imparting knowledge to offering counselling, encouragement and sharing personal experiences on senior high schools in the country and their classifications to students. Teachers should desist from branding senior high schools as “good and bad” during teaching. There should be strong collaboration between the school and parents with respect to the choice of programme of study at the senior high school level. Teachers should assist parents to understand that all courses or programmes at the senior high level are relevant to the economy of Ghana. This can be done through career guidance prior to school and programme selection by the various schools’ guidance personnel.

Keywords: Basic Education Certificate Examination, Examination Anxiety, Programme of Study, School Choice.

INTRODUCTION

Everywhere around the world, the challenge of coping with examination is inevitable as it has become the norm at every level of education in the world (Ringeisen, Buchwald, & Hodapp, 2010; Paul, 2013). Examination has become a common occurrence in modern-day education programs and certainly in this day, almost all individuals experience tests at least once in their academic life (Zeidner, 1998). According to Zollar and Ben-chain (1990), we live in a test-conscious age in which the lives of many people are determined by their test performance (Rana & Mahmood, 2010). Indeed, everyone has been at risk of developing examination anxiety at one point in time, including those of average intelligence, with learning disabilities, and even the gifted prior to examination. This cognitive and behaviour feeling appears to be more profound among the BECE candidates as this is their first time taking an examination

conducted by an external body. Indeed, at the mention of the BECE, many candidates shiver, lose sleep and appetite. Others show somatic symptoms such as palpitation, headaches, stomach aches, diarrhea, excessive sweating, rapid heartbeat, dry mouth, and shortness of breath, manifesting before and during the examination. Some candidates end up soliciting help from spiritualists (e.g. juju men, prophets, etc.) to enable them to pass their BECE with flying colours as the examinations are perceived as a “do or die” affair.

Every year, the West African Examination Council (WAEC) organises an examination for all the final year, basic pupils, across the length and breadth of Ghana. The subsequent selection and placement of pupils into Senior High and Technical and Vocational Schools are based on the performance of pupils in the Basic Education Certificate Examination (BECE). Therefore, getting good grades and good school comes with heightened anxiety among these pupils. In support of this claim, Newton (2015) indicates that examination anxiety in pupils is normally high prior to taking major examinations and even afterward as they anticipate exam results to be announced. According to Choti (2009) and Newton (2015), high expectations set by parents, teachers, peers and the pupils themselves over improvements in the mean scores in the BECE is one of the contributory factors to increasing anxiety among final years pupils. For instance, parents pressurise their wards to attain high scores, usually aggregate 06, so that they can get admission into prestigious and reputed Senior High Schools (Option A schools) in the country. Admission to programmes such as Sciences (e.g. General and Agriculture), Humanities and Arts are the most preferred choices for parents because these qualifications are seen to guarantee future job prospects. As a result, candidates generally develop anxiety and remain anxious before the BECE since they are uncertain about their success or failure. Candidates who experience examination anxiety are easily distracted during the exams. It is reasoned that excessive anxiety among examinees can block their thoughts, leading to a negative frame of mind, and potentially poor examination outcomes.

Poor performance as a result of examination anxiety can have futuristic consequences on the pupils’ academic and career life as this feeling may interfere with their daily thinking and feeling. The question that mystifies the researchers is “what is the level of examination anxiety among final year public basic school pupils in Dansoman in the Greater Accra region? Could the examination anxiety level of these students differ according to their intended school selection and program of study in Dansoman? Synthesis of the literature revealed that factors such as age and gender received considerable attention (Rezazadeh & Tavakoli, 2009; Mousavi, Haghshenas & Alishahi, 2008; Newton, 2015). However, it appears none of such studies was conducted in Dansoman. Also, the differences in examination anxiety levels of students according to their intended senior high school options and programme selections seemed not to have received much scholarly attention. Evidence from this study is expected to provide empirically supported data to answer the posers and also bridge the knowledge gap in the literature.

OBJECTIVES

The study was specifically aimed at finding out the;

1. levels of examinational anxiety among final year students in public basic schools.
2. differences in students’ examination anxiety levels according to their intended school selections.
3. differences in students’ examination anxiety levels according to their intended programme selections.

RESEARCH QUESTION

What are the reported levels of examination anxiety among final year Junior High School students in Dansoman?

RESEARCH HYPOTHESES

1. H₀: There is no statistically significant difference between examination anxiety and intended school option among final year pupils in public basic schools in Dansoman.
H₁: There is a statistically significant difference between examination anxiety and intended school option among final year pupils in public basic schools in Dansoman.
2. H₀: There is no statistically significant difference between examination anxiety and intended programme of study among final year pupils in public basic schools in Dansoman.
H₁: There is a statistically significant difference in examination anxiety and intended programme of study among final year pupils in public basic schools in Dansoman.

LITERATURE REVIEW

Concept of Examination Anxiety

Examination anxiety is a multi-faceted phenomenon that encompasses uneasiness, emotionality, and behavioural response to being preoccupied with the possible negative outcome of academic scores (Chapell, Blanding, Silverstein, Takahashi, Newman, et al., 2005). Examination anxiety is a state of uneasiness, worry or feelings of uncertainty about an impending or ongoing evaluation programme (Okorodudu & Ossai, 2004; Newton, 2015). Examination anxiety is a type of performance anxiety (Malhotra, 2015). In such situations, a pupil may feel pressured to perform excellently and becomes so worried about whether he will be able to perform or not. It is inferred that it is not examination per se that elicits anxiety, but rather the fear of its negative outcome (in terms of performance).

Students' Levels of Examination Anxiety

On a continuum, literature espoused three distinct levels of examination anxieties among test takers. Thus, low, moderate and high anxiety levels (Ali, 2012; Birjandi & Alemi, 2010; Hamzah, Bhagat, Mahyiddin & Che Mat, 2018; Ossai, 2011). However, differences exist in the estimations of these levels marginally due to the nature of self-reports used in such estimations. In the first place, research established that a low level of examination anxiety is a great disservice to examinees as it demotivates them in terms of examination preparations while moderate anxiety levels in test takers are helpful in their preparations to face impending examinations as it is often helpful for them to stay mentally and physically alert (Birjandi & Alemi, 2010; Hamzah et al., 2018). Such students, to large extent, perform better in examinations as there is limited interference by negative thoughts and emotions before the examination (Bentil, 2020; Ossai, 2011). In a related study, Driscoll, Evans, Ramsey and Wheeler (2009) and Cherry (2012) concluded that students with a moderate level of examination anxiety are able to perform relatively well on examinations. Likewise, Salend (2012) noticed that appropriate levels of examination anxiety heighten students' memory, attention, and motivation for learning. Dordinejad, Hakimi, Ashouri, Dehghani, Zeinali, and Daghighi (2011) agreed that some amount of test anxiety in students motivates them to work hard towards an impending examination. But, when examinees are under too much anxiety,

both emotional and physical wellness are affected. This could lead to difficulty in concentrating during examination preparations (Birjandi & Alemi, 2010; Hamzah et al., 2018).

Similarly, Dordinejad et al. (2011) established that there is a high level of anxiety among students. Building up so much anxiety may be detrimental to the academic achievement of students (Coon & Mitterer, 2009). The literature further espoused that examination anxiety level is prevalent among elementary school students (Bentil, 2020; Akanbi, 2013; Barrows, Dunn, & Llyod, 2013). Akanbi (2013) indicates that students in public schools exhibited higher anxiety levels. In a cross-sectional survey, Bentil (2020) found that generally there was high examination anxiety among the Junior High School pupils. The prevalence of examination anxiety has been reported in studies and most of these studies have reported an anxiety rate of 10% to 40% among elementary and secondary school students (Cassady, 2010; Huberty, 2010; Salend, 2012).

From the literature so far espoused, it is clear that examination anxiety is prevalent among basic school pupils and it exists in levels. It is also established that students experience anticipatory examinations. However, the current literature is limited in providing empirical evidence on the levels of examination anxiety among final students in Dansoman in the Ablekuma West Municipality. Evidence from this study will help fill this knowledge gap. Besides, examination anxiety with respect to BECE is anticipatory, a worry that most candidates grapple with. The findings from this study would produce more knowledge on the level of worry and emotion experienced by final year pupils prior to the writing of the BECE. Indeed, candidates may be bewildered by negative thoughts such as; will my performance in the examination take me to my ideal senior high school? Will I be offered admission to study my preferred programme should I either perform well or poorly? From these perplexing questions, it can be observed that students' anxiety levels in impending examinations may be affected by the selection of senior high, technical and vocational schools and programmes of study at such institutions.

School Selection and Examination Anxiety of Students

In Ghana, all senior high schools, technical and vocational institutes, both public and private, are highly competed for by a cohort of BECE candidates every year. The introduction of the Computerized School Selection and Placement System (CSSPS), which is a competitive selection into Senior High and Technical and Vocational (TVET) schools and programmes has even worsened candidates' anxiety levels (Bentil, 2020). This is because students' performance in the Basic Education Certificate Examination (BECE) is used for the placement exercises. Public Second Cycle institutions are grouped into categories: **A, B, C & D** are Public Senior High Schools and category **E** comprises all Public Technical/Vocational Institutions based on the 2020 CSSPS manual for school selections. In all, there were 690 schools competed for by the BECE candidates. Out of this number, only 55 schools are in Category "A", 220 schools in Category "B", 368 schools in Category "C", 643 schools in Category "D" and 46 schools in Category "E" (CSSPS, 2020). It is assumed that candidates who may opt for Category "A" schools would experience higher anxiety than candidates who may opt for Category "D" schools. The credibility of this assertion can only be sustained when the empirical analysis is done for which this study is undertaken. According to Bentil (2020), since a high premium is placed on academic performance, individuals may do everything possible to obtain excellent results. This undoubtedly could place students at varying levels of anxiety and tension during competitive examinations such as the BECE.

Programme Selection and Examination Anxiety of Students

There are generally seven programmes run by the various senior high, technical and vocational schools in Ghana. These are agriculture, business, technical (including vocational), visual arts, general arts and general science. It was hypothesised that each of these programmes elicits different levels of anxiety among students. This hypothesis was investigated by Ndirangu, Muola, Kithuka, and Nassiuma (2008) in secondary schools in Nyeri District, Kenya and found that statistically significant differences exist between the levels of students' examination anxiety and subjects' options. Thus, it was evident that some subjects (e.g. Sciences and Mathematics related programmes) elicit higher levels of examination anxiety than others. Zettle and Raines (2000) also established that entering college students who are severely mathematics anxious may enroll in majors that require minimal courses in mathematics. More surprisingly, Lewis (2000) found that some students choose high school vocational/technical education as a consequence of many years of unsuccessful educational experiences. Clute (1984) also indicates that students who have a high level of mathematics anxiety will be less likely to pursue mathematics courses or careers in higher grades. One conclusion drawn from the literature is that students' level of anxiety in the BECE could fluctuate in anticipation of programme of study in higher grade classes such as the Senior High School in Ghana. It is assumed that students' intended programme of study at the senior high, technical and vocational schools may affect the degree to which they experience examination anxiety. The researchers, therefore investigate the influence of school and programme selections on examination anxiety of final year Junior High Students in Dansoman, Ghana.

METHODS

Research Design

A descriptive survey design was used by the researchers to gather information, summarize, present and interpret predictors of examination anxiety. We used this design because the variables of interest were not manipulated and the findings were reported as obtained from the research instrument. The survey was a cross-section as data were collected at only one point in time from the respondents.

Population

The study targeted all the final year students in all public basic schools in Dansoman with an estimated population of 814 students. The population represented candidates who were preparing to write the 2020 BECE in Dansoman.

Sample and Sampling Technique

The sample size of 261 was estimated using Krejcie and Morgan's (1970) sample size determination table. The simple random, without replacement technique, was used to sample these students for unbiased data to enhance the generalization of the findings.

Research Instrument

We prepared one set of a structured questionnaires for all the respondents. The questionnaire was divided into two subsections. The first section solicited demographic information of the respondents (such as intended senior high school option and intended programme of study). The second section had ten (10) closed-ended items with pre-defined responses on self-reported levels of examination anxiety. Seven (7) of the items that measured examination anxiety were adapted from Test Anxiety Questionnaires (TAQ) previously used by Suinn (1969) to screen undergraduate students. The 10 items were scored on a five-point Likert scale; Never (1), Hardly (2), Sometimes (3), Often (4) and Always (5). The scoring of the responses was done by adding scores from each item. The score range was between 10 and 50, where a score of 10

implied a low level of examination anxiety and that of 50 depicted a high level of examination anxiety. For interpretation of examination anxiety scores, three levels of examination anxiety were adopted from the works of Duraku (2016). The score ranged from 10 to 19 low student examination anxiety. The score ranged from 20 to 35 moderate student examination anxiety. The score ranged from 36 to 50 high student examination anxiety. Experts' advice was sought in improving the content validity of the instrument. The internal consistency of the items using Cronbach alpha was 0.84.

Data Collection Procedures

Permission was sought from the headteachers to use their schools and students for the survey. Parental assent was further obtained to enable students to participate in the survey. Potential benefits and challenges associated with their participation were duly discussed with the respondents. The respondents were informed about their right to participation. The Questionnaires were administered by the researchers and collected on the same day.

Data Analysis

Frequency and percentage counts were used to present the demographic information of the respondents. For the research question, mean and standard deviation were used to assess the level of examination anxiety. The One-way ANOVA was used to test for differences in examination anxiety according to intended school options and intended programme of study of the respondents to answer hypotheses 1 and 2.

RESULTS

The distribution of the respondents according to intended school placement options is presented in Table 1.

Table 1: School Placement Options of the Students

School Options	Frequency	Percent
Category A	126	48.3
Category B	93	35.6
Category C	35	13.4
Category E	7	2.7
Total	261	100.0

In Table 1, all the intended schools reported by the 261 respondents were categorised into five categories (thus, A, B, C, D, & E). Categories A-D comprised all public senior high schools while Categories E comprises all Public Technical/Vocational Institutions (Ghana Education Service, 2019). From these categorisations, 126 (48.3%) respondents selected "Category A" schools (also known as well-endowed and high-performing schools). Also, 93 (35.6%) and 35(13.4%) respondents selected "Category B" and "Category C" schools. Finally, 7 (2.7%) selected "Category E" schools. The distribution of the responses suggests that pure Technical and Vocational Education and Training (TVET) appeared least attractive to the respondents as compared to the Category "A" schools. The distribution of the intended programme of study of the respondents is presented in Table 2.

Table 2: Intended Programme of Study of the Students

Course of Study	Frequency	Percent
Agriculture	3	1.1
Business	31	11.9
Technical	7	2.7
Home Economics	50	19.2
Visual Arts	32	12.3
General Arts	99	37.9
General Science	39	14.9
Total	261	100.0

From Table 2, it can be observed that 99(37.9%) of the respondents wanted to offer General Arts, 50(19.2%) respondents wanted to offer Home Economics, and 39 (14.9%) respondents wanted to offer General Science. Furthermore, 32(12.3%) respondents preferred Visual Arts, 31(11.9%) respondents preferred Business, 7(2.7%) respondents preferred technical programmes and 3 (1.1%) respondents preferred Agricultural Science. One intriguing revelation from this result is that Agriculture and Technical programmes remained the least preferred senior high school programmes for the final year public basic school students in the Dansoman.

Research Question

What are the reported levels of examination anxiety among final year Junior High School students in Dansoman?

To find out the levels of examinational anxiety among final year students in public basic schools, the respondents were asked to rate their current experiences concerning the 2020 Basic Education Certificate Examination (BECE) in each of the ten (10) scenarios presented, with possible responses being, Never (1), Hardly (2), Sometimes (3), Often (4), Always (5). Three levels of examination anxiety (low level = 10-19; moderate level = 20-35; high level = 35-50) were adopted from the works of Duraku (2016). The result is presented in Table 3.

Table 3: Pupils' Anxiety Levels Prior to the BECE

	Freq.	Minimum	Maximum	Mean	Std. Deviation
Total Examination Anxiety (TEA) as reported	261	10.00	50.00	31.57	7.83

From Table 3, it can be observed that the total minimum examination anxiety score was 10 whereas the maximum examination anxiety score was 50. Meaning, that the spread of distribution ranges from low to high levels of examination anxiety. However, the mean score of 31.57 suggests that the respondents possess a moderate level of examination anxiety. The result is not congruent with Akanbi (2013) who indicated that students in public schools exhibited higher examination anxiety. In a similar study, Bentil (2020) found that generally there was high examination anxiety among Junior High School pupils. However, the case is different among the final year public basic school pupils in Dansoman.

Hypothesis One (1)

There is no statistically significant difference between examination anxiety and intended school option among final year pupils in public basic schools in Dansoman.

The hypothesis finds out the difference between students' examination anxiety levels and their intended school selections using a one-way analysis of variance (one-way ANOVA). Table 4 presents a descriptive analysis of the responses.

Table 4: One-Way ANOVA Result on pupils' Examination Anxiety by School Options

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	898.569	3	299.523	5.116*	.002
Within Groups	15047.508	257	58.551		
Total	15946.077	260			

$p < 0.05$ (2-tailed)

The results of the ANOVA test presented in Table 4 show that final year public basic school students in Dansoman differ statistically in the reported examination anxiety when they are grouped according to their intended senior high school options [$F_{(3, 257)} = 5.116$, $p = 0.002$]. Based on the ANOVA test, the alternate hypothesis is accepted at an alpha level of 0.05. The statistical significance of the ANOVA test called for a post hoc test analysis (using Tukey HSD) to identify where these statistical differences were located. The result is presented in Table 5.

Table 5: Tukey HSD Post hoc on the Influence of School Options and Students' Examination Anxiety

(I) School	(J) School	Mean Difference (I-J) (MD)	Sig.
Category A	Category E	11.540*	.001
Category B	Category E	10.401*	.003
Category C	Category E	10.686*	.005
Category E	Category A	-11.540*	.001
Category E	Category B	-10.401*	.003
Category E	Category C	-10.686*	.005

$p < 0.05$ (2-tailed)

The Tukey HSD Post hoc on the comparative influence of school options on examination anxiety presented in Table 5 shows that statistical mean differences exist in the reported examination anxiety between respondents who selected Category "A" schools and Category "E" schools (MD = 11.540, $p = .001$), respondents who selected Category "B" and Category "E" schools (MD = 10.401, $p = .003$), and respondents who selected Category "C" schools and Category "E" schools (MD = 10.686, $p = .005$). This implies that examination anxiety of pupils opting for Category "E" will increase when they change school options to Category "A" schools ($p = .001$), Category "B" schools ($p = .003$) and Category "C" schools ($p = .005$). Alternatively, pupils who opted for Category "E" schools would have their examination anxiety increase when they change school options from Category "A" to Category "C" schools.

Hypothesis Two (2)

H_0 : There is no statistically significant difference between examination anxiety and intended programme of study among final year pupils in public basic schools in Dansoman.

The difference between students' examination anxiety levels and their intended programme selections was tested using one-way ANOVA. Table 6 presents the one-way ANOVA test.

Table 6: One-Way ANOVA on Students' Examination Anxiety by Programme Options

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1139.941	6	189.990	3.259*	.004
Within Groups	14806.135	254	58.292		
Total	15946.077	260			

$p < 0.05$ (2-tailed).

The results of the ANOVA test presented in Table 6 show that final year public basic school students in Dansoman differ statistically in the reported examination anxiety when they are classified according to their intended programme options [$F_{(6, 254)} = 3.259$, $p = 0.004$]. Based on the ANOVA test, the alternate hypothesis is accepted at an alpha level of 0.05. The statistical significance of the ANOVA test called for a post hoc test analysis (using Tukey HSD) to identify where these statistical differences were located in the distributions. The result is presented in Table 7.

Table 7: Tukey HSD Post hoc on Programme Options and Students' Examination Anxiety

(I) Course of Study	(J) Course of Study	Mean Difference (I-J)	Sig.
Technical	Business	-10.622*	.017
	Home Economics	-10.529*	.013
	Visual Arts	-12.991*	.001
	General Arts	-10.004*	.016

$p < 0.05$ (2-tailed).

The Tukey HSD Post hoc test in Table 7 shows that statistical mean differences exist in the reported means of examination anxiety between respondents who selected Technical programmes and Business programme (MD = -10.622, $p = 0.017$); Home Economics (MD = -10.529, SD = .013); Visual Arts (MD = -12.991, SD = .001); and General Arts (MD = -10.004, SD = .016). The result suggests that as pupils change their programme of study from Technical to Business, Technical to Home Economics, Technical to Visual Arts and Technical to General Arts, their anxiety level will increase in intensity.

DISCUSSIONS

The reported moderate examination anxiety level in final year public basic school pupils is helpful in their preparations for the BECE as it is often helpful for them to stay mentally and physically alert (Birjandi & Alemi, 2010; Hamzah et al., 2018). It is not surprising that most public basic schools in Dansoman are among the top 100 schools with better performance in the BECE over time. With this level of examination anxiety, there is limited interference by negative thoughts and emotions before the examination (Bentil, 2020; Ossai, 2011; Simpson et al., 1995). Indeed, some amount of anxiety is needed to mobilize human beings to respond rapidly and efficiently in a testing environment such as the BECE. One reason accounting for this result is that the respondents possess strong convictions about their chances of success from their predecessors' academic achievement. It is argued that if public basic schools in Dansoman are performing well, and are getting the results over the years, then the pressure to do well in subsequent years would not be high. Another reason accounting for this result is that since public basic schools in Dansoman are noted for producing excellent results, and most of

the graduates end up offering their preferred courses in their preferred senior high schools, the anxiety associated with the writing of the BECE among candidates would be moderate. Other reasons may include adequate preparations in the form of exposure to many testing situations (e.g. mock examinations), completion of the syllabus, pupils' level of motivation to do well and schools' culture of excellence perpetuated over the years. These reasons coincided with study findings of Driscoll et al. (2009) and Cherry (2012) who concluded that students with moderate examination anxiety perform relatively well on examinations. The reason as noted by Salend (2012) was that an appropriate level of anxiety enhances students' memory, attention, motivation, and leads to improved performance.

Another significant finding deduced from this study was that examination anxiety of final year public basic school pupils in Dansoman fluctuates based on the type of senior high schools these students intended for. According to Bentil (2020), the introduction of the Computerized School Selection and Placement System (CSSPS) has worsened candidates' anxiety levels since pupils' performance in the Basic Education Certificate Examination (BECE) is used for the placement exercises. The categorisation of senior high schools in Ghana raises the argument over "quality" versus "quantity" in terms of performance, infrastructural development and traditions. All Category "A" schools have unique traditions, a history of consistent WASSCE performance and architectural monuments that attract lots of pupils, and parents. These schools are fiercely competing for hence, the current reported examination anxiety of pupils who opted for these school types. What even makes schools within this category intriguing is that these schools attract only top-notch students from the country's basic schools (either public or private). So, it is not surprising that pupils who selected Category "A" schools' experience marginally higher examination anxiety. Due to this, a high premium is placed on academic performance at the basic level, as individuals do everything possible to obtain excellent results in order to secure placement in these schools. Bentil (2020) indicates that the high premium placed on such schools places students at varying levels of anxiety and tension in the process. However, the same premium is not placed on Category "E" schools (usually, Public Technical and Vocational Education and Training Institutions) which are perceived to admit students with worse aggregates than the basic schools in the country. So, the pressure to do well among pupils who opted for Category "E" schools will not be as extreme as pupils who opted for Categories "A", "B", and "C" schools. Though some pupils willingly select Category "E" schools based on their unique interest in technical and vocational programmes, others are forced by their parents and teachers to go to Category "E" schools due to pupils' perceived "dumbness" in terms of the history of the poor school academic performances.

Finally, differences in students' level of examination anxiety according to their intended programme of the study confirmed the position of Ndirangu et al. (2008) who a statistically significant difference ($P < 0.01$) between the levels of anxiety aroused by different subjects. The fact that pupils who wanted to offer Visual Arts experienced much more anxiety associated with examination than Sciences and Mathematics related programmes, was not surprising. Zettle and Raines (2000) found that pupils with severe mathematics anxiety may enroll in majors that require minimal courses in mathematics such as majors in the humanities, the arts, and social sciences rather than enrolling in more mathematically oriented majors such as the sciences or engineering. Probably, it is this fear of science and mathematics-related programmes in the Senior High Schools that is influencing the current feelings of the pupils in Dansoman. On the strength of the findings, it is concluded that examination anxiety of final year public basic school pupils in Dansoman fluctuates based on the type of programme options these pupils' are intended for at the Senior High School level. Similarly, Lewis (2000) found that some students choose high school vocational/technical education as a consequence of

many years of unsuccessful educational experiences. From the position of Lewis (2000), Technical and Vocational programmes present perplexing phenomena for the pupils. This is because the pupils are unaware of the nature of the programmes. Perhaps, if they are aware, the perceived long duration for completion could be very scary for some of them. Also, the presence of mathematics-related courses in technical programmes could also be a source of worry for these pupils.

CONCLUSIONS

On the strength of the study findings, we conclude that final year public basic school pupils in Dansoman have the appropriate level of examination anxiety which is needed for optimal performance in the Basic Education Certificate Examinations (BECE). On the differences in examination anxiety according to the reported school options of the students, the study concludes that pupils who chose Category “A” schools would always feel the pressure to do well in the BECE since these schools are the best in the country. The unique tradition, school management system, infrastructural development and strings of sterling WASSCE outcomes, attract many pupils. The conclusion drawn from this is that placement into Technical and Vocational Institutions is not as competitive so some pupils who chose these institutions would feel less intense and unconcerned about their chances in TVET institutions. It is concluded that the anxiety associated with the study of science and mathematics-related subjects could make some students to avoid taking science and mathematics-related elective programmes at the Senior High School level. This could account for the reasons why most students are attracted to non-science and mathematics-related programmes.

RECOMMENDATIONS

Based on the conclusions, the following recommendations were made.

1. Moderate examination anxiety reported by the final year public basic school students is good for their academic success. It is therefore recommended that the headteachers in the Dansoman circuit encourage teachers to strengthen this anxiety level by projecting pupils’ academic success as they revise the syllabus with the BECE candidates.
2. Public basic school teachers should transcend beyond teaching and imparting knowledge to offering counselling, encouragement and sharing personal experiences on senior high schools in the country and their classifications to students. Teachers should desist from branding senior high schools as “good and bad” during teaching. This behaviour can exacerbate pupils’ anxiety levels towards “good” schools as in the case of Category (or Option) “A” schools.
3. There should be strong collaboration between the school and parents with respect to the choice of programme of study at the senior high school level. Teachers should assist parents to understand that all courses or programmes at the senior high level are relevant to the economy of Ghana. This can be done through career guidance prior to school and programme selection by the various schools’ guidance personnel.

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