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Difference in academic performance of economics students in public and private senior high schools within Cape Coast Metropolis in Ghana

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The purpose of this study was to determine the difference in students' academic performance in Economics between public and private senior high schools of the Cape Coast Metropolis. It was also aimed at examining the inherent conditions accounting for variations in students' academic performance in economics. The research focused on factors such as teacher motivation, availability and usage of teaching and learning resources, academic facilities. A descriptive design was used to explore the issue in the study. Questionnaire and the WASSCE results of students from 2010 to 2014 were used as instruments for the data collection. A cluster and simple random sampling techniques were used to select 8 schools and a simple random sampling technique was used to select the respondents. With the total sample of 400 Economics students and 48 economics teachers, the study found that senior school students in public schools performed better in Economics than those in the private schools. Again, the independent samples t-test result revealed that at 0.05 level of significance, in all the years (from 2010, 2011, 2012, 2013, 2014), there was a statistically significant difference in the mean performance of students in economics between public SHS private SHS. Public SHS have large libraries conducive for learning with modern recommended economics textbooks and large dining halls compared to their private counterparts. Teachers in the public SHS are more extrinsically motivated than those in the private schools. Teaching and learning resources such as radio tapes, projectors, etc. are barely used in both public and private S.H.S.

Keywords: teacher motivation; Economics students; performance in economics; academic facilities; public schools; private schools

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INTRODUCTION

Economics as a subject was introduced into the Senior High School curriculum (SHS) in Ghana by the Ghana Education Service (GES) in 1969. The "conditions for action" and the growth of subject communities (academic tribe) necessitated the introduction of economics into the SHS curriculum, (Routh, 1989; Jephcote, 2004). Scholars such as E.R. Emmett's and Sir Alexander Carr Saunders supported and promoted the teaching and learning of

economics at the pre-tertiary level with the arguments that: the teaching of economics at the pre-tertiary level could provide an introduction to economics for those intending to go on to further study at a university or polytechnic. It was also regarded as a valuable preparation for those choosing to take up careers in occupations such as commerce and banking and most importantly, the teaching of economics at the pre-tertiary level would be useful for learners in their future lives and as such meet the needs of those who left school at age 18.Hardbury and Szreter (1970) also supported this argument with their empirical research as they concluded from their findings that, students' study of economics below the university level does not, at the very least appear to hinder their academic success at the university level. It is worthy to note that, the teaching of economics at the SHS level comes with it, a lot of implications such as pedagogical and resources implications as well as quality delivery.

It has been noticed (Nzabihimana, 2010; Niyibizi, 2010) that at any educational level, the quality of education depends on many factors such as school facilities, teachers' qualifications, teachers' motivation, management and administration with active students voice and participation in the school system as key determinants. By implication, the quality of a school is determined by students' involvement in the decision-making process, their view about their own peers, their teachers and, their school management. In this regard, students need to accept responsibility for their own actions and inactions and also have unconditional positive regard for both themselves and others. With these in mind, teachers must be supported to be innovative by employing teaching strategies that are varied and personalized to meet the needs of all learners. Fenstermacher and Richardson (2005) explained these phenomena by pointing out the fact that "Success at learning requires a combination of circumstances well beyond the actions of a teacher" (p. 191). This is because learning does not arise solely on the basis of teacher's activity, but also from other sources such as other teachers, peers, school resources, school climate etc. They also added that learners are not passive receptors of information directed at them but rather active participant in the teaching and learning process.

The desire of many parents is to make very good decisions for their children's education and future. In doing so, they are faced with the options of either sending their children to private or public schools in the midst of several competing factors that concern them. Parents and guardians consider quite a significant number of factors which include academic reputation and college preparation; school size and class size; safety; special programmes; costs; religious and moral instruction; location and ideology before placing their wards into either a public or private school(Han, Baker, & Keil, 1996; NCES, 2002).

STATEMENT OF THE PROBLEM

Economics education in Ghana is aimed at providing intellectual training, preparation for citizenship, and vocational training generally for the purposes of business careers in areas such as actuarial science, accounting, banking, and insurance just to mention a few. At the individual level, a course in economics is supposed to make school leavers good citizens, more efficient producers and consumers of goods, and analytical in economic issues. Over the years, efforts of the government of Ghana at ensuring that these aims are met have attracted ambivalent feelings among the curious public. In fact, history supporting enrolment figures in public schools suggest that management and financing of these schools are provided by government, With regard to private schools, churches provide subsidies for the running of these schools (World Bank, 2004).In the eyes of the public, schools are not being given the necessary support in terms of infrastructural investment to bring about the best in students from the process of schooling. The reason is that now there is a formal dichotomization of public SHSs in Ghana: more endowed and less endowed ones (GES, 2011; David,2014; Babah, 2014). Perhaps this has called for increased private sector participation in the supply of education to the teeming Ghanaian youth. The number of and enrollment in private SHS is rapidly increasing because private sector now sees the need to partner government in the provision education for all(MOE Reports, 2013/2014, 2014/15). However, there are still visible signs of infrastructural disparity in schools which partly also contribute to differences in performance among schools. Though students from endowed and less endowed schools use the same economics syllabus and sit for the same WAEC examination, it appears no effort is being made by stakeholders to leverage students' learning circumstance in order to warrant a standardized assessment for all. This is not the case and yet students are expected to have the same level of academic achievement, given that their school experiences are shaped and guided by dissimilar learning contexts.

Many authors (Han, Baker, & Keil, 1996; NCES, 2002; Oke & Maliki, 2009; Bonsu, 2016)have reported differences in students' academic performance between public schools and private schools. Bonsu (2016), for instance, reported that private junior high school students perform better than their counter part in the public junior high schools. In Nigeria, Oke and Maliki (2009) conducted a study to find the extent to which school ownership determines school performance at the WASSE. Their study confirmed that private-owned senior high schools perform better academically than public-

owned senior high schools; there might be a different situation in Ghana. Literature search appears to suggest that there is little scientific evidence in Ghana in relation to academic performance of economics students in public and private senior high schools, a necessary condition for this study. The general perception that public SHSs perform better than private SHSs also is a sufficient condition that warrants investigation into this matter. Hence, the desire of the researchers to establish whether there is evidence to support that difference sexist in the academic performance of students in economics between public and private SHSs.

PURPOSE OF THE STUDY

The study was aimed at examining difference in students' performance in Economics between public and private senior high schools in the Cape Coast Metropolis. It specifically sought to examine:

1. The difference in students' academic performance in economics between public and private senior high schools.
2. The difference in academic facilities in public and private senior high schools on students' academic performance in Economics.
3. The extent to which teacher motivation influences economics students' academic performance.
4. How the availability of teaching and learning resources and their usage influence students' academic performance in Economics.

RESEARCH QUESTIONS

The study sought to answer the following Questions:

1. What is the difference in students' performance in Economics between public and private in senior high schools in the Cape Coast metropolis?
2. Whatis the difference in academic school facilities in public and private senior high schools on students' academic performance in Economics in the Cape Coast metropolis?
3. What extent does motivation in public and private senior high schools influence students' performance in Economics in the Cape Coast metropolis?
4. To what extent does difference in stock of teaching and learning resources in private and public SHSs influence students' performance in Economics in the Cape Coast metropolis?

RESEARCH HYPOTHESES

1. Ho: There is no statistically significant variation in academic performance of students in economics between public and private senior high schools in Cape Coast metropolis.

2. Ho: There is no statistically significant relationship between the effects of academic facilities (X), teacher motivation (M), availability and usage of teaching and learning resources on academic performance of students in economics.

SIGNIFICANCE OF THE STUDY

The results of the study would help improve the work of school administrators, practice of teachers and the performance of students. In addition to this, the study would as a reference material for decision makers of public and private schools to structure their administration "if necessary" give optimum motivation to teachers and learners, make available the needed teaching and learning resources and create a conducive environment to ensure maximum academic outcome. This research would inform teachers to employ the appropriate resources needed for effective teaching and learning. They would be encouraged to motivate students using intrinsic and/or extrinsic motivation during the learning process and finally contribute to research.

REVIEW OF LITERATURE

This section reviewed the relevant outcomes of some previous researches carried out in the area of study. The literature review also helped in providing a framework for establishing the significant of the study; as well as provided a standard for comparing the outcomes of the study with other findings. It consisted of theoretical review, and empirical review.

TEACHING AND LEARNING RESOURCES AND STUDENTS PERFORMANCE

Teachers are an indispensable resource in the attainment of objectives of the school (Hansen, 1996). If this holds and having in mind that the principal objective of every school is to ensure that their students succeed, and then it pays to devote time for Economics teachers regarding the execution of their duties. Truly, Hansen further explained that teachers combined with other educational inputs, teachers serve as vital foundations in the achievement of educational goals. Indeed, teachers are that largest most critical input of any educational system.

By implication, they drive or spearhead the educational enterprise if policies are to be successfully implemented. Aside all these, teachers are seen also as role models and custodians of knowledge in the schools. Balogun (1995) supported this with the assertion that teachers' aside delivery their core mandate effectively and efficiently also serve as mentors for their students. By implication, what both teachers and students do, matters a lot in the teaching and learning process even though their efforts are occasionally measured by students' grades. The consequence of these opinions is that well trained teachers in economics if well deployed to the secondary schools will produce students who will perform academically well in Economics. Undoubtedly, teachers are the mainstay of the whole educational enterprise and therefore their effectiveness in the execution of their job is perhaps the most single vital role affecting the future development of education process (Akudu, 2007). Regarding the impact of teaching and learning resource on students' academic performance, Abudu, Banjoko, and Gbadamosi (2000) found in their study thata significant positive relationship exists between resource availability, utilization and students' performance. Earlier, Ojoawo (1990) and Oni (1992) had obtained similar results. In a recent study, Fabunmi, Brai-Abu, and Adeniji, (2007) came out also to confirm that there is indeed a correlation between resource allocation, utilization and secondary school students' academic performance. These researchers concluded from their findings that, resource allocation, and utilization positively affect students' academic performance. A major inference that could easily be made from these research findings is that, Economics students from schools with adequate and proper allocation as well as effective utilization of teaching and learning resources will ultimately do well than their counterparts in schools that lack or improperly utilizes these resources. Ojoawo (1990), for instance observed that, discrepancy in the distribution of educational resources impacted students' academic performance. Oni (1992)holds a similar view, when he showed that resource utilization and student academic performance were significantly related. One will not be wrong to say that, Ojoawo findings sends a signal to the managers of these schools that, downplaying the role of teaching and learning resources on the performance of Economics students in their schools might have diverse consequences. In addition, Fabunmiet al. (2007) from their findings also indicated that, resource input quality and quantity if taken together contributed positively to secondary school students' academic performance. These authors' discoveries also go to support the earlier assertion that, Economics students from schools with adequate resource (mutually human and material) in both quality and quantity are likely to record high performance than those in schools that are deficient in terms of these resources.

Teaching and learning resources accessibility as well as its adequacy does not only determine the efficiency of a school but also influence the learning outcome of students (Owoeye, & Yara, 2011). These resources, be they human or non-human, all collectively aid in the realization of the school's set goals (Maicibi, 2003). Otieno (2010) study also showed evidence of using both these human and other relevant non-human resources to maximize students' learning outcomes in Mathematics. Inferring from Otieno's research finding, adequacy and availability of teaching and learning resources matters a lot as far as Economics students' performance are concerned. From the earlier discussions, it is clear that there is a direct association between resource availability, utilization and students' academic performance. Even though resource input quantity is a major contributing factor to performance, it is complimented by the quality of the resource and that the role of teaching and learning resources in influencing Economics students' performance in both public and private SHS can never be downplayed.

TEACHER MOTIVATION AND STUDENTS' ACHIEVEMENTS

The quality of education at any level cannot be fully realized without the teachers' impacts. It is impossible for any educational system to rise above the quality of its teachers (Ayeni, & Olasunkanmi, 2015). By implication, for schools to achieve their goals and objectives, several initiatives need to be taken by the school management regarding teachers and other resources. Key among these initiatives is teacher motivation. Motivated teachers do not only portray attributes in class which have positive influence on their students' lives, they are in addition very cardinal in the determination of their students' performance (Afe, 2001). From this discovery, a question that could easily be probed is 'what are the factors the make these teachers have a sense of acknowledgement, and recognition in their profession and the school? Motivation, be it intrinsic or extrinsic, enables the teacher to give out his or her best in that, it sends a signal to the teacher that his efforts and effectiveness towards the realization of the schools goals are being recognized or acknowledged (Ali, 2009). Teachers are often considered to be effective when all that they bring into the teaching and learning process leads to high students' performance (Abimbade, 1999). It is a fact that, teachers who are motivated often give out their best as it is normally reflected in their effectiveness which ultimately affect students' performance directly (Sander, 2000). This reinforces the need to motivate teacher to give out their best in the profession.

THE EXPECTANCY THEORY

Motivation is basically of two types- intrinsic motivation and extrinsic motivation. Teacher's intrinsic motivation such as interest, perceptions, values, aspirations and expectations about the subject has a great influence on how he teaches the subject and its impact on the performance of the students. Vroom (1964) has a theory that supports intrinsic motivation. He calls it the expectancy theory. The theory states that the extent of a tendency to perform in a particular manner is dependent on the intensity of an expectation that the performance will be followed by a definite outcome and on the appeal of the outcome to the individual (Vroom, 1964).

From the expectancy theory point of view, Economics teacher's motivation is an interplay of three major forces. First, is what the theory calls 'Vallecy' which shows the result of how much the teacher wants a reward (allowances, occasional packages, promotion, accommodation etc). In a nutshell, Valence measures the power of an employee's preference for a particular reward (Vroom, 1964). In this regard, if an Economics teacher expects an increase in salary, allowances, occasional packages, or promotion, then the tendency that he/she would put in more efforts is high. It must be noted that, valence can be either positive or negative depending upon the employee's desire for getting a reward. Holding this view, Valence, then, provides a link to the need theories of motivation. The second force, according to the theory, is Expectancy, which measures the likelihood that the efforts will lead to expected performance. The third force is what Vroom calls 'instrumentality' which reflects the belief that the performance will lead to reward. In this regard, an Economics teacher will put in more efforts if he holds the belief that his performance will earn him/her a reward and if that happens, then it means that motivated teachers are likely to maintain their high level of performance given that they still want to continue enjoying rewards. It is worth noting that, expectancy is influenced by factors such as possession of appropriate skills for performing the job, availability of right resources, availability of crucial information and getting the required support for completing the job. To the manager of schools, the theory has clear implications for motivating teachers. The theory made it explicit those strategies that could be put in place to motivate Economics teachers as employees thereby ensuring higher work output. By altering the teacher's effort-to-performance expectancy, performance-to-reward expectancy, and reward valences. In sum, expectancy theory can be modeled as: M = EIV (where M=motivation, E=expectancy, I= instrumentality and V=valence).

SCHOOL FACILITIES AND STUDENTS' PERFORMANCE

There is a growing body of both theoretical and empirical literature to support the claim that school facilities have positive impacts on students' academic performance and for that matter in Economics. For instance, Cash (1993) in Virginia examine the impact of building conditions on students' performance where socio-economic status was held as control variable. The study found that factors such as conditioning, absence of graffiti, condition of laboratories, locker accommodations, condition of classroom Furniture, wall color and acoustic levels amongst others positively affected student achievement when socio-economic status of students are held constant. In fact, even the physical appearance of a school is shown to have positive impact on students' performance (Asika, 2010). Previously, Chan (1996) had also reported that student's in modern learning environment record high performance than students in obsolete learning environments. His study also brought to fore the supremacy of technology and adaptability of modern environments on facilitating students' success and that to ignore this fact was to disregard the physical difficulties of learning. This means that whether students will perform well in Economics or not is among other thing contingent on these school facilities.

Similarly, other commentators like Earthman and Lemasters (1996), have also found a significant impact between the students' achievement and age of the school facilities. They further pointed out age of school facilities as a proxy for other variables such as ventilation, lighting, temperature control, proper lighting, sound control, support facilities, laboratory condition and aesthetic values. Additionally, Earthman, Cash and Van Berkum (1996) have also proved that students in above standard buildings recorded higher marks on comprehensive test of basic skills than those in substandard facilities. Lyons (2002) underscored this fact with the assertion that, "Learning is a complex activity that puts students' motivation and physical condition to the test". The implication from these findings is that, high quality facilities result in a conducive learning environment which culminates in high student achievements. Another implication one can also deduce from these research findings is that, the physical conditions of a school plays a very critical role on students achievements despite the long-held assumption that curriculum and teaching have positive impacts on learning (Lyons, 2002).

In addition to the empirical works that has examine the relationship between schools facilities and students' performance, attribution theory also gives insights into the link between schools facilities and students' performance.

ATTRIBUTION THEORY

Attribution theory which has its roots from the works of Fritz Heider (1958) also provides insights into how individuals form judgments about the causes of events. In the view of Heider, individual's attributions about the causes of events are broadly categorized into two, namely internal and external. In accordance with this theory, individuals (students) attribute factors such as their own attitudes, ability, mood, and efforts to having caused a particular event to occur. This makes it internal since the individual sees it as a result of his own actions and inactions. On the other hand, external attributions are often thought of when the individual attributes the occurrence of the event to factors such as task, other people, or luck. To Heider, individuals often form causal framework which they use as a yardstick for measuring their successes and failures. Weiner (1971) fine-tuned this theory by providing additional dimension of the causal interpretation of events occurrence. In Weiner's view, stability of the cause is key and therefore influences the individual's explanation of the occurrence of the event.

Attribution theory is probably the most influential contemporary theory due to its implications for academic motivation. This theory thrives on a strong assumption that, people (students) will interpret their environment in such a way as to maintain a positive self-image. That is, they will attribute their successes or failures to factors that will enable them to feel as good as possible about themselves. By implication, this means that when learners succeed at an academic task, they are likely to want to attribute this success to their own efforts and abilities; but when they fail, they would attribute their failure to factors (like bad teaching, lack of facilities or bad luck) over which they have no control (Heider, 1958; weiner, 2000).

This theory is relevant to this study in the sense that, since Economic students are likely to attribute their academic failure or success to external factors such as teacher motivation, availability of teaching and learning resources and conducive school environment, there is the need for school authorities and policy makers to ensure that these are fully provided. From the theory, it can be deduced that schools that adequately provide these above mentioned conditions among other factors are likely to perform better than schools that inadequately provide them.

In sum, there several factors that might account for difference in academic achievement of students in Economics. Physical environment of the school can impact on student success, resource availability; utilization may equally influence students' academic performance. Teaching and learning resources availability as well as its adequacy can likewise influence students' academic performance and even the effectiveness of the school. Academic facility condition tends to influence student achievement and finally, Economics teacher's motivation whether intrinsic or extrinsic has a great influence on how he teaches the subject and its impact on the performance of the students.

METHODOLOGY

This section covered the research design, population, and sample, sampling procedure, instrument, data collection procedure and data analysis used in the study.

RESEARCH DESIGN

A descriptive survey was used because it describes and predicts phenomenon without manipulating any factors that may influence the subject's behavior (Gay, 1996).Descriptive survey was used since the research aimed at finding out what is happening (the differences in school facilities, teacher motivation and teaching and learning resources) and describes those happenings exactly as they are in the selected public and private schools. According to Gay (1996), a descriptive survey method is suitable for studying a diversity of educational issues comprising assessment of opinions attitudes, conditions, demographic information, and processes of the enterprise and so was deem fit for this study.

POPULATION

The study population consisted of entirely senior high school Economics students and teachers in the Central Region of Ghana. Economics teachers and students were chosen because they are the right source of information when it comes to the teaching and learning of Economics. In all, eight schools were sampled from the region. Thus, four from public and four from private.

SAMPLE AND SAMPLING TECHNIQUE

The study employed multi-stage sampling techniques. Firstly, a cluster sampling was used to put the schools into public and private since there was the need to present all groups of the target population in the sample. A simple random sampling technique was used to select four schools ; two private, two public. With the total population size of 900 from the sampled schools, 852were Economic students and 48were Economic teachers. All the respondents (i.e students and teachers) were selected through simple random procedure. 400 students, 50 from each of the 8 schools were selected

randomly while 32 economics teachers, 4 from each of the 8 schools were also randomly selected for the study.

DATA COLLECTION (INSTRUMENT)

The researchers with the help of experts developed a questionnaire which was used as the main instrument in the research. The researchers also used the performance of economics students in WASSCE from 2010 – 2014 to study the trend of the students' performance in Economics under which two hypotheses were formulated and tested. The rationale behind the use of WASSCE results is to ensure content validity of the present skills and knowledge of the respondents (students) under the study. The WASSCE result helps to measure the performance of the students in economics.

DATA COLLECTION PROCEDURE

The respondents were assured of confidentiality and anonymity to encourage them to give accurate responses. The questionnaire for teachers and students were self -administered and collected immediately they had finished answering them.

DATA ANALYSIS

The data gathered were edited, coded and scrutinized by means of software called Statistical Package for Social Science (SPSS) version 22. Thus researchers numbered the questionnaires serially for purposes of identification and easy scoring. Responses such as strongly disagreed, disagreed, agreed and strongly disagreed were coded as 1, 2, 3, and 4 respectively for statements on the four likert scale. The opened-ended items were analyzed through thematic analysis. Thus, the data analysis procedures used in this research are the computation of percentages and the presentation of tables which comes as a result of the SPSS as well as thematic analysis. The first and second hypotheses were using Independent sample T-test and regression analysis respectively.

LOGISTICAL AND ETHICAL CONSIDERATIONS

According to Mugenda and Mugenda (2003), logistics in research talk about to all those procedures, activities as well as actions which a researcher must tackle in order to ensure a fruitful accomplishment of his/her research project. During the pre-field work, the researchers established a work plan, constructed the research instruments, obtained a research permit, carried out sampling, pre-tested and corrected the instruments. During the post-test, the researcher analyzed the data obtained and kept them for future reference. Ethical consideration for this study included communicating the aims of the investigation to the respondents, establishing rapport with the respondents and being honest at all times. The researcher took necessary precautions for the confidentiality of both the data and the respondents (Cohen, Manion, & Morrison, 2013).

RESULTS AND DISCUSSIONS

This section presents data collected from the field analysis, presentations and interpretations of the findings of the study.

> What is the difference in student performance in Economics between public and private in senior high schools in the Cape Coast metropolis?

Table 1 presents the outcome of the independents samples t-test performed on the performance of students in Economics of two independent groups (public SHS and private SHS) of randomly selected schools. The two groups were presented with the same test (WASSCE) in Economics.

As can be seen in Table 1, comparison of the students mean performance from the two independent groups revealed that, students in public schools performed better in Economics than their private counterparts for all the years(from 2010-2014) under consideration. For instance, in the year 2010, students in public s schools performed better (mean= 92.3300, S.D= 3.81803) than those in private schools (mean= 72.8200, S.D.= 4.13618).

In fact, a critical look at the students' mean performance in Economics between the two groups of schools for all the years in Table1 showed that, the mean score for the students in public schools are greater than those in the private schools. Again, the public schools have a smaller Std. Deviation in terms of performance than private schools as indicated in Table 1. This also confirms that, a cluster of the public SHS students' scores are closer to their mean score hence similarity exist in their performance than that of the private SHS students with the bigger Std. Deviation. To test whether these differences in their mean performance in Economics between the two groups is statistically significant, independent samples t-test was performed. The result of the independent samples t-test is shown in Table 2.

From Table 2, the independent samples t-test result revealed that, for all the years (from 2010-2014), there is a statistically significant difference in the mean performance of students in Economics between public

Table 1. Performance of Students in Economics in WASSCE from 2010-2014.

YEAR	type of school	N	Mean	Std. Deviation	Std. Error Mean
year-2010	Public	10	92.3300	12.07367	3.81803
	Private	10	72.8200	13.07974	4.13618
year-2011	Public	10	92.5000	11.96523	3.78374
	Private	10	72.3000	10.25291	3.24226
year-2012	Public	10	91.7500	9.19918	2.90904
	Private	10	69.7000	21.14001	6.68506
year-2013	Public	10	91.4000	13.04863	4.12634
	Private	10	61.6000	15.77058	4.98709
year-2014	Public	10	88.2000	12.35404	3.90669
	Private	10	63.5000	17.31570	5.47570

Table 2. Independent Samples Test on Performance of Students in WASSCE between Public & Private SHS from2010-2014.

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
year-2010	Equal variances assumed	.235	.633	3.466	18	.003	19.51000	5.62897
	Equal variances not assume			3.466	17.886	.003	19.51000	5.62897
year-2011	Equal variances assumed	.000	.990	4.054	18	.001	20.20000	4.98286
	Equal variances not assume			4.054	17.587	.001	20.20000	4.98286
year-2012	Equal variances assumed	3.723	.070	3.024	18	.007	22.05000	7.29058
	Equal variances not assume			3.024	12.290	.010	22.05000	7.29058
year-2013	Equal variances assumed	.993	.332	4.604	18	.000	29.80000	6.47285
	Equal variances not assume			4.604	17.390	.000	29.80000	6.47285
year-2014	Equal variances assumed	1.316	.266	3.672	18	.002	24.70000	6.72648
	Equal variances not assume			3.672	16.277	.002	24.70000	6.72648

SHS private SHS. Thus, For all the years, the p-values (Sig. (2-tailed)) are all less than the alpha values. (i.e, .003, .001, .007, .000, .002 > 0.05) . Therefore the null hypothesis (that there is no statistically significant difference in the mean performance of students in Economics between Public SHS and private SHS) was rejected.

From Table 3 to Table 8 illustrates the results of regression performed under the null hypothesis: Ho: There is no statistically significant relationship between the effects of academic facilities (X), teacher motivation (M), availability and usage of teaching and learning resources on academic performance of students in Economics

Regression output

As presented in Table 4, the result shown that there is a positive correlation between students' academic performance in Economics and academic facilities, teacher motivation, type and usage of teaching and learning resources. The result of the multiple regression model from Table 6 using academic facilities (X), teacher motivation (M), type and usage of teaching & learning and resources (Z)as predictors of students performance in Economics P_E produces the model as follows: $P_E = -9.602+0.056X + 4.043Z + 2.858M$.

All in all, the regression test defeat the null hypothesis that , there is no statistically significant relationship between the effects of academic

Table 3. Descriptive Statistics

	Mean	Std. Deviation	N
Performance in economics	13.2400	5.35295	400
academic facilities	55.5600	22.10221	400
type and usage of T/LRs	3.4727	.38437	400
teacher motivation	1.9870	.37588	400

Table 4. Correlations

		Performance in economics	academic facilities	type and usage of T/LRs	teacher motivation
Pearson Correlation	Performance in economics	1.000	.407	.480	.393
	academic facilities	.407	1.000	.422	.259
	type and usage of T/LRs	.480	.422	1.000	.456
	teacher motivation	.393	.259	.456	1.000
Sig. (1-tailed)	Performance in economics	.	.000	.000	.000
	academic facilities	.000	.	.000	.000
	type and usage of T/LRs	.000	.000	.	.000
	teacher motivation	.000	.000	.000	.
N	Performance in economics	400	400	400	400
	academic facilities	400	400	400	400
	type and usage of T/LRs	400	400	400	400
	teacher motivation	400	400	400	400

facilities (X), teacher motivation (M), availability and usage of teaching and learning resources on academic performance of students in Economics. Therefore the researchers failed to accept the $_{Ho}$ at 0.05 alpha level. That is to say at 95% of confidence, the p- values (Sig. (2-tailed) are all is less than the alpha value of 0.05hence the null hypothesis was rejected. Therefore academic facilities (X), teacher motivation (M), availability and usage of teaching and learning resources have a significant positive effects on academic performance of students in Economics

What is the difference in academic school facilities in public and private senior high schools on students' academic performance in Economics in the Cape Coast metropolis?

The second research question aimed at discovering the difference in academic school facilities in public and private senior high schools under study. Analysis of the result showed Public Senior Schools have large libraries and dining halls which are able to contain more than half of the students at a time than the private S.H.S. From the study, majority of the students 131(65.5%) in the public schools agreed that their libraries are large enough, contain modern recommended economics textbooks and are conducive for learning. But most of the students 107(53.5%) in the private schools disagree with this. In a nutshell, public S.H.S. had adequate academic school facilities than the private senior high schools. These adequate facilities gave the students in the public schools an opportunity to easily access such facilities hence culminating in their high performance as against their private counterparts (Weiner, 1980, 1992; Abudu, Banjoko, & Gbadamosi, 2000).In accordance with attribution theory, individuals(students) will interpret the causes of events in their lives in a manner that reflects positive image of them. Thus, they will attribute their successes or failures to reasons that will make them have a sense of positive image about themselves. By implication, once students succeed on academic task, then there is a very high tendency for them attributing the success to their own efforts and abilities; however once they fail or are not doing well academically as in the case of students in the private schools, then the possibility of them attributing these deficiencies to causes (as lack of these facilities) over which they have no control, would be very high ((Heider, 1958; weiner, 2000).

In sum, majority of students from the public schools agree that their libraries are large enough to contain more than half of them at a time, conducive for learning and contains enough modern recommended text books to aid their learning. On the contrary, majority of the students from the private school are of the view that their libraries cannot contain more than half of them at a time; it is not conducive for learning and does not contain enough modern recommended text books to aid their learning. This endorses the studies conducted by Cash (1993), Chan (1996), Lyons (2002) Earthman, Cash and Van Berkum(1996), Asika (2010).Standard academic facilities lead to improvement in the performance of students (Earthman & Lemasters, 1996). In addition, this finding supports the assertion of Branham (2002) that, the infrastructure of a school has a significant influence on the performance of student. The implication of this is that, for school management to see improvement in the achievements of students, then they first of all to need to address the basic issue of infrastructure as it has a direct link with students' performance.

Table 5. Regression Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.559[a]	.313	.307	4.45505

a. Predictors: (Constant), teacher motivation, academic facilities , type and usage of T/LRs

b. Dependent Variable: Performance in economics

As illustrated in Table 5, academic facilities, teacher motivation, type and usage of teaching and learning resources collectively explained 31.3% (adjusted R squared=..307) of the variance in performance in Economics. This would suggest that the present regression model is a good predictor of students' performance in Economics.

What extent does motivation in public and private senior high schools influence students' performance in Economics in the Cape Coast metropolis?

The third research question addresses the critical issue of the extent to which teacher motivation in both private and public SHS influence students' performance in Economics. The prime motive of this question was to find out from each of these categories of schools,' where are teachers more motivated'. It is worth noting here that, on the side of intrinsic motivation, there was a mix feeling from both ends, that is, it appears both public and private teachers to some extent are intrinsically motivated to teach. On the side of extrinsic motivation, Teachers in the public schools are more extrinsically motivated than those in the private schools. This became evident when majority 12(75%) of the teachers in the public senior high schools strongly agreed that they are given incentives such as accommodation, occasional packages, among others' whiles an overwhelming majority of their counterparts 14 (87.5%) in the private schools strongly disagree with the same item. From the public teachers view, these incentives to some extent boosted their performance and effectiveness in the teaching of Economics (Sander, 2000; Afe, 2001; Ali, 2009s; Ayeni, & Olasunkanmi, 2015). To add to that, this finding had also strengthen the expectancy theory. Thus, reward and expectations leads to increased efforts and motivation which ultimately affect performance positively (Vroom, 1964).

Undeniably and as teachers in the public schools rightly put, these additional incentives given to teachers in the public schools boost their performance in terms of attitude, behavior, values, and methods towards teaching culminating in an enhancement of their students' learning outcomes as emphasized by (Combs, 1968, Ukeje, 1979; Balogun, 1995; Hansen, 1996; Akudu, 2007). Teachers 'efficacies have tremendous effects on the future of educational development Akudu (2007). Balogun (1995) supported this with the assertion that teachers' aside delivery their core mandate effectively and efficiently also serve as mentors for their students. By implication, what both teachers and students do matter a lot in the teaching and learning process even though their efforts are occasionally measured by students' grades? The result of these opinions is that well competent instructors in economics if properly groomed to the secondary schools will produce students who will perform academically well in economics. Economics is multi-dimensional and business enterprise escapes its application (Okereke, 2006, Okigbo & Osuafor, 2008).

To what extent does difference in stock of teaching and learning resources in private and public SHSs influence students' performance in Economics in the Cape Coast metropolis

The fourth research question aimed at determining whether or not difference in type and usage of teaching and learning resources in public and private senior high schools influence students' performance in Economics. From the study, there is regular supply of teaching and learning resources like dusters, markers/chalks, lesson notes among others to facilitate teaching and learning in both public and private senior high schools. However, Economics teachers in the public S.H.S use other teaching and learning resources like resource persons aside lesson notes more than teachers in the private schools. It was therefore not surprising when 125(62.5%) of students in the public S.H.S agreed that their teachers bring other resources such as resource persons, palm

Table 6. Regression Model Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	-9.602	2.077		-4.623	.000
	academic facilities	.056	.011	.232	5.031	.000
	type and usage of T/LRs	4.043	.697	.290	5.799	.000
	teacher motivation	2.858	.669	.201	4.271	.000

. Predictors: (Constant), teacher motivation, academic facilities , type and usage of T/LRs
b. Dependent Variable: Performance in economics

In addition, Table 6 displayed the unstandardized (B) and standardized (Beta) regression coefficients, and the value of t statistic and its associated p-value for each variable that entered in the model. From Table 6, the respective T-values are bigger than 1.96 indicating the coefficients are significant. i.e academic facilities (B= .056): this value tells us that for every unit increase in academic facilities, students' performance in Economics will increase by 0.056 implying that, academic facilities affect students' performance in Economics positively. Type and usage of teaching and learning resources (T/LRs) (B= 4.043): this value informs us that for every unit increase in type and usage of teaching and learning resources (T/LRs), students' performance in Economics will increase by 4.043 and vise visa. Teacher motivation (B= 2.858): also enlightens us that, for a point increase in Teacher motivation, students' performance in Economics is likely to increase by 2.858 and the opposite is true. i.e. teacher motivation affect students' performance in Economics positively.

Tables 7 and 8 show the test for multicollinearity. As shown in Table 7, all the values under 'tolerance' in column 7 are greater than 0.2. According to Menard (1995), we are safe since these values are not below 0.2. Similarly, under 'VIF' in column 8 of Table 7, again all the values are less than 10.With this, Myers (1990), Bowerman and O'Connel (1990) give us assurance of non-violation of the principle of multicollinearity.

Table 7. Coefficients[a]

Model		t	Sig.	Collinearity Statistics	
				Tolerance	VIF
1	(Constant)	-4.623	.000		
	academic facilities	5.031	.000	.816	0.925
	type and usage of T/LRs	5.799	.000	.693	1.044
	teacher motivation	4.271	.000	.786	1.072

a. Dependent Variable: Performance in economics

Table 8. CollinearityDiagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions (Constant)	academic facilities	type and usage of T/LRs	teacher motivation
1	1	3.882	1.000	.00	.01	.00	.00
	2	.093	6.457	.01	.90	.00	.02
	3	.019	14.220	.15	.00	.04	.92
	4	.005	27.113	.83	.09	.96	.05

a. Dependent Variable: Performance in economics

fruits, milo tin, milk tin, charts, cardboards , and so on, to further explain certain economic concepts to them. But majority of the students 117(58.5%) in the private school disagreed implying that their teachers do not brings some of these resources that public students said their teachers use in the teaching of Economics. This is consistent with the findings of Ojoawo (1990) and Maicibi (2003).

However, a very interesting discovering from this study was that, teaching and learning resources such as radio tapes, projectors, etc. are not used in both public and private S.H.S. within the Central region of Ghana as about 118(59%) of students in the public schools strongly disagreed that their teacher uses projectors, phones, radio tapes, etc. Also 131(65.5%) of those in the private schools equally strongly disagreed with the statement. these numbers form the majority in the two cases.

CONCLUSIONS

The study revealed that difference in the mean performance of senior high school students in Economics between public and private counterparts exit and is statistically significant. Thus, students in public schools performed better in Economics than their private counterparts. This difference in their mean performance was attributed to difference in teacher motivation, teaching and learning resources as well as academic facilities in these schools.

It was evident that, public senior high schools students have access to adequate and furnished school facilities such as libraries, dining halls and classrooms as compared to their counterparts in private Schools. Again, public SHS Economics teachers were noticed to enjoy more motivational packages (accommodation, allowances, notebooks and other packages) than those in the private schools. The former was seen to have access required teaching and learning resources than the latter.

In sum, better conditions such as teacher motivation, teaching and learning resources as well as school facilities in the public schools helped improved students' performance in economics considerably. Thus, the inadequacy of these conditions explains the relatively poor performance of students in Economic in the private schools.

RECOMMENDATIONS

Per the conclusions of this research, the investigators recommended that:

1. The school administration and the Parent Teacher Association of private schools should collaborate to provide adequate facilities such as large and well stocked libraries, large and well-furnished dining halls and conducive classrooms to help boost students' performance.
2. Adequate modern teaching and learning resources (such as audio visuals, charts, projector, tape recorders, radio etc.) should be made available by the administration and the PTA. School administrators should provide regular allowances, free or subsidized accommodation, adequate notebooks, dusters and markers or chalks as well as other occasional packages to motivate teachers to give their best in the teaching process. Again philanthropist can support in this course.
3. Though the conditions in the public schools are quite better as compared to the private schools, they are still not the best. The government should step in and support these schools with some funds to help improve school facilities, provide modern teaching and learning materials such as audio visuals and motivate teachers adequately to further improve students' performance.
4. The parent teacher association should contribute their quota to the provision of certain basic school and academic facilities such as libraries, textbooks and furniture to facilitate teaching and learning.
5. The supervisory section of the Ghana Education service should equally step up their supervision role in both public and private but with much emphasis in the latter.

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