

STUDENTS' ACADEMIC PERFORMANCE AS MEDIATED BY STUDENTS' ACADEMIC AMBITION AND EFFORT IN THE PUBLIC SENIOR HIGH SCHOOLS IN ASHANTI MAMPONG MUNICIPALITY OF GHANA

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ABSTRACT

This study sought to examine how the academic performance of SHS students in the Ashanti Mampong Municipality of Ghana is influenced and mediated by some key variables. Descriptive and correlational research designs were used and the data were collected via the use of questionnaires. The sample size was therefore 571 students via a multi-stage sampling procedure. The findings of the study established father's education, mother's education, the child's academic ambition and the child's effort as the associates of academic performance. The findings further revealed that mother's education, sex of the child, the child's academic ambition and the child's effort as the main determinants of academic performance. The findings again failed to reject the null hypothesis. Based on these findings, it was recommended that stakeholder in education should inculcate high academic ambition in students and also parents should ensure that a chunk of their wards' time is spent on their books and they should be ready to support children when the going gets tough.

Keywords: Academic performance, Father's education, Mother's education, Sex of the child, Child's academic ambition, Child's effort.

INTRODUCTION

Academic performance by students has always been a subject of interest to every educational institution. Whereas there is a consensus that schools should play a major role in this process, there seems to be disagreement about what exactly that role should be. While some believe that the primary focus of schools should be the academic preparation of students (Hirsch, 1996; Tienken, & Wilson, 2001). Others however believe that efforts of schools should be integrated with other social institutions such as family and community towards educating children (Huitt, 2007). In fact, heads of educational institution, teachers and parents are primarily responsible for students' academic performance (Darling-Hammond, 2000), and that schools should efficiently and effectively organize themselves towards this task (Engelmann & Carnine, 1991).

Researchers over the years have used a variety of ways to measure academic performance and these include report card grades, grade point averages, standardized test scores, teacher ratings, other cognitive test scores, grade retention and dropout rates (Burns & Darling, 2002; Hijazi & Naqvi, 2006). Thus student's academic performance is typically assessed by the use of teacher ratings, tests, and exams. In fact, student academic performance is more likely to be experienced

and evidenced when students feel personally validated and believe that their effort matters and can influence or control the prospects of their academic success. In reality, these inspire them to develop a sense of purpose and perceive the school experience as being personally relevant.

Granting the importance of academic performance is rarely questioned, however the factors that influence and mediate it have been elusive (Elliot, 2007). In reality, amongst the various predictors of academic performance, there are likely to be some interactions between each other, and therefore the effect of one factor on the academic performance may be indirectly reflected through others. Thus, the studies surveyed support the hypothesis that student academic performance depends on a number of factors. Findings from studies identify students' effort/persistence, academic ambition, previous grades (Anderson et al., 1994), parents' education, parents academic ambition for their wards (Sentamu, 2003; Osiki, 2001) sex of the child, age of student (Aripin, Mahmood, Rohaizad, Yeop, & Anuar, 2008), peer influence (Tope, 2011; Black, 2002), and personal effort, academic ambition (Schoon & Parsons, 2002) as factors that have a significant influence on the students' academic performance .

REVIEW OF LITERATURE

Academic Performance

Academic instruction is arguably the primary business of education. To this end, schools are expected to influence students' learning, socialisation, and even vocational preparedness. Despite the attention paid to a broad definition of educational outcomes, however, academic performance remains central. Students' academic performance is a term that appears frequently married in higher education discourse. Academic performance is a multidimensional construct composed of the skills, attitudes, and behaviors of a learner that contribute to academic success in the classroom (Hijazi & Naqvi, 2006). It is a satisfactory and superior level of performance of students as they progress through and complete their school experience (Tinto, 1993). The implication of this definition is underscored by research which repeatedly demonstrates that the vast majority of students who withdraw from school do so for no reason other than poor academic performance (Hijazi & Naqvi, 2006; Tinto, 1993).

Although the importance of academic achievement is rarely questioned, reaching unanimity regarding its measurement has been elusive. The measurement of students' academic performance continues to be a controversial topic among policymakers, measurement experts, and educators (Elliot, 2007; Johnson, 2003). Researchers have used a variety of ways to measure academic achievement such as report card grades, grade point averages, standardized test scores, teacher ratings, other cognitive test scores, grade retention, and dropout rates (Burns & Darling, 2002). However, for the purposes of this study, student academic performance is defined by the degree to which a student is able to accomplish a given class work in the school setting.

Parents' Education

Parents are the most immediate relation of a child. Educated parents better understand the educational needs and their children's aptitude. They, thus help their children in their early education which affects their proficiency in their relative area of knowledge. Parents' education or academic background definitely contributes immensely toward the academic life of children.

According to Grissmer (2003), parents' level of education is the most important factor affecting students' academic achievement. Taiwo (1993) submits that parents' educational background influence the academic achievement of students. This, according to him, is because the parents would be in a good position to act as second teachers to their children; and even guide and counsel them on the best way to perform well in education and provide the necessary materials needed by them. Musgrave (2000) argues that children who come from an educated home would like to follow the steps of their family and by this, works actively in their studies. Jeynes (2002) also avers that a child from a well-educated family with high socio-economic status is more likely to perform better than a child from an illiterate family. This he suggests apparently because children from an educated family are seen to have lots of support such as a decent and good environment for academic work, parental support and guidance, enough textual and academic materials and decent feeding. Eamon (2005) again claims that virtually in all nations, children of parents high on the educational, occupation and social scale have far better chance of getting into good secondary schools and from there into the best colleges and universities than equally bright children of ordinary workers or farmers. In fact, the most important factor associated with the educational achievement of children is not race, ethnicity or immigrant status; instead the most critical factor is parents' education (Considine & Zappala, 2002).

Academic Ambition of the Child

The importance of setting up goals for behaviour was first suggested and defined by Dembo (1931). The ability to set goals and pursue these goals is sometimes referred to by educators as student's academic ambition (Dembo, 1931). Lewin, Dembo, Festinger and Sears (1944) demonstrate that ambitions can be linked to the seeking of success and the avoidance of failure. Pettigrove (2007) defines ambition as the persistent and generalized striving for success, attainment, and accomplishment. In short, ambition is about attaining rather than achieving, though of course there is a certain relationship between the two (Maurin, 2002). Ambition is thus discussed by numerous philosophers, with those seeing it as virtuous apparently outweighing those who perceive it as vicious (Pettigrove, 2007).

Students who choose to set difficult goals for themselves tend to become task oriented, with a sense of purpose for their lives (Quaglia & Cobb, 1996). Certainly, academic ambition can influence students' learning, preparation for life choices, academic motivation and achievement. Quaglia and Cobb (1996) conceive of academic ambitions as the "student's ability to identify and set goals for the future, while being inspired in the present to work toward those goals" (p. 130). Ambition thus, represents the perception that an activity is important as a means to future goals. It reflects individuals' perceptions that it is both possible and desirable to think in future terms and to plan for the future (Quaglia & Cobb, 1996).

Individuals' ambitions are considered important because they might influence key choices, and outcomes such as educational achievement (Goodman & Gregg, 2010). In fact, many studies suggest that young people with higher educational ambitions have greater motivation and higher educational attainment than their peers (Desforges & Abouchaar, 2003). Undeniably, the relationship between educational outcomes and academic ambitions seems to be a complex one. Ambition thus, can both be a predictor of educational achievement and an outcome of it, and

might be influenced by self-efficacy, personal traits, experiences and mediating family factors (Gutman & Akerman, 2008), or linked to beliefs about ability (Phillipson & Phillipson, 2007).

Effort of the Child

It is without doubt that the academic achievement of students depends on number of basic factors of which effort is paramount (Tella & Tella, 2010). Effort refers to the overall amount of energy expended in the process of studying (Zimmerman & Risenberg, 1992) whereas persistence, also known as effort management or effort regulation (Pintrich, Smith, Garcia, & McKeachie, 1993) means the continuous investment of energy in learning even when obstacles are encountered. Carbonaro (2005) defines school effort as the amount of time and energy that students expend in meeting the formal academic requirements established by their teachers and/or school. He identified three different types of school effort, thus rule oriented effort (showing up in and behaving in class), procedural effort (meeting specific class demands such as completing assignments on time) and intellectual effort (critically thinking about and understanding the curriculum).

Refreshingly, when students attribute their academic success to effort/persistence or receive feedback that attributes their success to effort, they develop a higher self-efficacy and expectations for future skill development (Siegle & McCoach, 2007). Indeed, a number of researchers have in the context of achievement goals explored the contribution of effort and persistence on students' academic performance (Opore & Dramanu, 2002). Research evidence shows that effort makes a positive contribution to the prediction of academic performance outcomes (Bouffard, Boisvert, Vezeau, & Larouche, 1995). In truth, in analysis, effort is found to relate positively to academic performance (Opore & Dramanu, 2002; Phan, 2008). Pintrich (2004) for instance, finds effort to be the only direct predictor of learning outcomes amongst all general strategies.

Statement of the Problem

Academic performance which is measured by examination results is one of the major concerns of a school. Hoyle (1986) argues that schools are established with the aim of imparting knowledge and skills to those who go through them and that the amount of knowledge and skills acquired by such students is evidenced by their academic performance. Actually, numerous factors have been linked to the poor performance of students' in Senior High School Certificate Examination in Ghana. In fact, this has become a recurrent phenomenon which has militated against the smooth transition from the secondary level to the tertiary level (Adetunde & Asare, 2009). Admittedly, the mass failure of students in both internal and external examinations can be attributed to a host of factors and might include teacher factors, parent factors and student factors (Huitt, 2007; Ajayi, 2006). The utility of this study therefore lies in the need to examine how the academic performance of students especially at the secondary level is influenced and mediated by certain key variables.

Purpose of the Study

The purpose of this study was to find out whether the academic performance of the child is influenced by parental father's education, mother's education, the child's sex and also mediated by the child's academic ambition and the child's effort of Senior High School students in the Ashanti Mampong Municipality of Ghana.

Significance of the Study

A lot of research has been undertaken in the quest to ascertain the factors affecting academic performance of students. However, the shortfall of most researchers in ignoring the role student academic ambition and effort play in the academic journey of students. The study first and foremost helped to establish whether father's education, mother's education, the child's sex influence academic performance on one hand and the child's academic ambition and the child's effort/persistence mediate academic performance on the other hand. The findings of this study have also been beneficial to the stakeholders in the educational enterprise. For instance, the findings have informed parents, teachers and headteachers to realize their crucial role of not only imparting knowledge to students but also helping them have stronger academic ambition for themselves through words of encouragement. Most importantly, since the findings of this study have been accessible to the literate populace, it would be a source of reference material especially to students in helping them understand the correlates of academic performance.

Research Questions

The research sought to provide answers to the following questions

- 1 What is the relationship between father's education and the child's academic performance?
- 2 What is the relationship between mother's education and the child's academic performance?
- 3 What is the relationship between the sex of the child and his/her academic performance?
- 4 To what extent is the child's academic ambition related to his/her academic performance?
- 5 To what extent is the child's effort/persistence related to his/her academic performance?
- 6 What is the relationship between the child's academic ambition and his/her personal effort?

Hypothesis

H₀ The independent variables will not directly determine academic performance among SHS students.

METHODOLOGY

Design of the Study

The study adopted descriptive and correlational as the research designs. First, we considered how the predictor and intervening variables, thus father's and mother's education, sex of the child, the child's academic ambition and the child's effort/persistence influence and mediate students' academic performance. Second, we studied the relationship between these variables in the study and the academic performance of students.

Population and Sampling Procedures

The population of this study was Form Two Senior High School Students in Amanianpong SHS, St. Monica's SHS, St. Joseph SHS and Kofiase Seventh Day Adventist SHS of the Ashanti Mampong Municipality of Ghana. The form two students from each school were chosen obviously because they had been in the school at least for more than a year and therefore stood the better chance to provide useful information. Also, the forms two students were not under any final examination pressure which fostered their cooperation and commitment. The total population of the form two students of the four SHSs was 1631 comprising 565 students from St. Monica's SHS, 512 students from Amanianpong SHS, 329 students from St. Joseph SHS and 225 students from Kofiase SDA SHS out of which 571 was sampled. Multi-stage sampling procedure was therefore used to arrive at this sampled size. Thus, simple survey, purposive, stratified and quota sampling procedures were used to select schools, class, sex and number of students for the study respectively.

Research Instrument

The instrument for collecting data in this study was the questionnaire. Questionnaires were used because they are the main method of data collection and also the population was literate. Also the coverage of questionnaire is wide as researchers can reach respondents more easily and is unaffected by problems of 'non-contacts'. Again, the popularity of questionnaires is probably based on some advantages among which are its low cost in terms of both money and time involved (Sarantakos, 1997). In all 35 items made up the questionnaire of which 7 items were open-ended and the remainder close-ended questions.

Data Analysis Plan

Research questions one, two, four, five and six, were answered via the use of the Zero-order correlation matrix while chi square was used to answer research question three. Also, the hypothesis of the study was tested by means of multiple regression procedure.

RESULTS AND DISCUSSIONS

Research Question 1: What is the relationship between fathers' education and the child's academic performance?

The purpose of this research question was to find out whether the educational attainment of the father has any relationship with the academic performance of the child. Zero-order correlation

was therefore used to assess the relationship between father's education and academic performance. The result is presented in Table 1.

Table 1: Fathers' Education and Academic Performance in Mathematics and English Language

		Academic Perf. (Maths)	Academic Perf. (English)
Father's Education	Pearson Correlation	.458**	.458**
	Sig. (2-tailed)	.000	.000
	N	471	471

** . Correlation is significant at the 0.01 level (2-tailed).

The information in Table 1 reports the Zero-order correlation coefficients between father's education and the child's academic performance. The Zero-order correlation coefficients obtained are $r = 0.458^{**}$ for both Mathematics and English Language. This is positive with significance or $p\text{-value} = 0.000$ which is less than $\alpha = 0.05$. It therefore suggests that father's education was significantly related to the child's academic performance.

Research Question 2: What is the Relationship between Mothers' Education and the Child's Academic Performance?

This research question was also designed to find out whether the educational level of mothers is in any way related to the academic performance of the children. A comparison of relationship was made between mother's education and the child's academic performance using the Zero-order correlations. Table 2 presents the results.

Table 2: Mother's Education and Academic Performance in Mathematics and English Language

		Academic Perf. (Maths)	Academic Perf. (English)
Mother's Education	Pearson Correlation	.471**	.408**
	Sig. (2-tailed)	.000	.000
	N	471	471

** . Correlation is significant at the 0.01 level (2-tailed).

The result in Table 2 illustrates the Zero-order correlation coefficients obtained for Mathematics and English Language as $r = 0.471^{**}$ and $r = 0.408^{**}$ in that order. The coefficients are positive with significance or $p\text{-value} = 0.000$ which is less than $\alpha = 0.05$ implying that mother's education is significantly related to academic performance of the children in Mathematics and English Language. The results from this study turn out to share similar views in the literature reviewed. Most of the literature surveyed establishes that parents' education is positively related to the academic performance of children (Considine & Zappala 2002; Eamon 2005; Jeynes 2002). For example, Grissmer (2003) asserts that fathers' level of education is the most important factor affecting students' academic achievement whilst Duncan and Brooks-Gunn (1997) indicate that mother's education was positively and significantly associated with children's cognitive and educational outcomes. Also, Musgrave (2000) says that a child that

comes from an educated home would like to follow the steps of his/her father and by this, works actively in his/her studies. Dill (2006) concludes that children of parents high on the educational scale have far better chance of getting into good secondary schools and from there into the best colleges and universities than equally bright children of ordinary workers.

Research Question 3: What is the relationship between the sex of the child and his/her academic performance?

The sex of the child is one demographic variable that is believed to affect the academic performance of children. For that matter, this research question was purposefully meant to find out whether the sex of the child relates to academic performance. The Chi square test for association was therefore used to establish the association between the sex of the child and academic performance. The Tables 3 and 4 present the results.

Table 3: The Sex of the Child and His/her Academic Performance in Mathematics

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact sig. (1-sided)
Pearson Chi Square	.809 ^a	1	.369		
Continuity Correction ^b	.590	1	.442		
Likelihood Ratio	.819	1	.365		
Fisher's Exact Test				.432	.222
Linear by Linear Association	.807	1			
N of Valid Cases	471				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 28.43.

b. Computed only for a 2x2 table

According to the result in Table 3, the Chi square index shows there is no significant association between the sex of the child and the child's academic performance in Mathematic $\chi^2(5) = .809$. In this case, the sig. value of .442 is greater than the alpha value of .05. This implies that the proportion of males that excel in Mathematics is not significantly different from the proportion of females that perform well in Mathematics.

Table 4: The Sex of the Child and His/her Academic Performance in English Language

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact sig. (1-sided)
Pearson Chi Square	2.236 ^a	1	.135		
Continuity Correction ^b	1.851	1	.174		
Likelihood Ratio	2.201	1	.138		
Fisher's Exact Test				.140	.088
Linear by Linear Association	2.231	1			
N of Valid Cases	471				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.46.

b. Computed only for a 2x2 table

Result in Table 4 shows that the association between the sex of the child and academic performance in English Language was not significant with the Chi Square value $\chi^2(5) = 2.236$. Indeed, the sig value of .174 is greater than the alpha value .05. These findings mean that the percentage of males that perform in English Language is not substantially different from their females' counterpart. These findings are not consistent with the findings of a number of researchers (Colom & Lynn, 2004; Young & Fisler 2000). For instance, Ekeh (2003) in his study discovers that secondary school male students performed better than females in science and mathematics while other researchers find female students to obtain higher CGPA compared to males (Lao, 1980; Kimball, 1989). In fact, Kimball (1989) finds that in contrast to the standardized measures of mathematics achievement tests like SAT-M3, female students outperform males in math classes. In spite of these adverse findings, my results are consistent with sufficient number of researchers (Stage & Kloosterman, 1995; Ugoji, 2008). Indeed, they all in like manner conclude that students, irrespective of sex can perform equally in any given task.

Research Question 4: To what extent is the child's academic ambition related to his/her academic performance?

Ambitions in any facet of human endeavours turn out to become the driving force behind that particular behaviour. In this regard, this study desires to establish the relationship between the academic ambition of the child and the child's academic performance. The Zero-order correlation was therefore used to ascertain the relationship and the result is found in Table 5.

Table 5: The Child's Academic Ambition and Academic Performance in Mathematics and English Language

		Academic Perf. (Maths)	Academic Perf. (English)
Academic Ambition	Pearson Correlation	.759**	.744**
	Sig. (2-tailed)	.000	.000
	N	471	471

** . Correlation is significant at the 0.01 level (2-tailed).

With reference to results in Table 5, the Zero-order correlation coefficients obtained for Mathematics and English Language are $r = 0.759^{**}$ and $r = 0.744^{**}$ respectively. Both are positive with significance or p-value = 0.000 which is less than alpha = 0.05 suggesting that the child's academic ambition was significantly related to academic performance in Mathematics and English Language.

This result finds a number of supports in the literature reviews (Desforges & Abouchaar, 2003; Goodman & Gregg, 2010; Jacob & Wilder, 2010). Individuals' ambitions are certainly considered important because they might influence key choices, and outcomes such as educational achievement. For instance, Lewin et al. (1944) demonstrate in their study that ambitions can be linked to the seeking of success and the avoidance of failure. In fact, individuals who are higher in ambition are more likely to translate their intentions to perform achievement-oriented tasks into practice (Jacob & Wilder, 2010). Schoon and Parsons (2002)

argue and conclude in their study that young people's academic ambitions have been shown to influence educational attainment, career choices and future earnings.

Research Question 5: To what extent is the child's effort related to his/her academic performance?

Effort refers to the overall amount of energy expended in the process of studying whereas persistence means the continuous investment of energy in learning even when obstacles are encountered. This definition leaves little doubt effort and persistence plays a role in the academic performance of a child hence its inclusion in this study. Zero-order correlation was run to assess the relationship and the results are shown in the Table 6.

Table 6: Personal Effort and Academic Performance in Mathematics and English Language

		Academic Perf. (Maths)	Academic Perf. (English)
Personal Effort	Pearson Correlation	.538**	.515**
	Sig. (2-tailed)	.000	.000
	N	471	471

** . Correlation is significant at the 0.01 level (2-tailed).

In Table 6, the Zero-order correlation coefficients obtained on Mathematics and English Language are $r = 0.538^{**}$ and $r = 0.515^{**}$ respectively. Both are positive with significance or p -value = 0.000 which is less than $\alpha = 0.05$. These results submit that effort and persistence was significantly related to academic performance in Mathematics and English Language.

Findings from this study are consistent with a number of studies (Carbonaro, 2005; Opare & Dramanu, 2002). For instance, Opare and Dramanu, (2002) argue that in the context of academic achievements, the contribution of effort and persistence on students' academic performance cannot be overemphasized. Also, Pintrich (2005) in his study finds effort to be the only direct predictor of learning outcomes amongst all general strategies.

Research Question 6: What is the relationship between the child's academic ambition and his/her effort and persistence?

Students' educational performance as it were is mediated by varied factors. Indeed, academic ambition and personal effort are no exception. In pursuant to this, I find it necessary to establish the linkage between these intervening variables per this study. Zero-order correlation was used to establish this association and Table 7 presents the results.

Table 7: Personal Academic Ambition and Effort and Persistence

		Personal Effort
Academic Ambition	Pearson Correlation	593**
	Sig. (2-tailed)	000
	N	471

** . Correlation is significant at the 0.01 level (2-tailed).

The result in Table 7 shows the Zero-order correlation coefficient obtained between personal academic ambition and personal effort is $r = 0.593^{**}$. It is positive with significance or p -value = 0.000 which is less than $\alpha = 0.05$, and implies that personal academic ambition is significantly related to the personal effort. The finding gives a clear signal that children who are academically ambitious are more inclined to devote a sizeable proportion of their time to their studies than doing other activities.

The findings from my study support a sizeable magnitude of relevant related literature reviewed (Dohmen, 2010; De Paola, 2012; Shamosh & Gray, 2007). Indeed, ambition, effort and persistence are particularly important because previous researches also suggest that these constructs are positively correlated (De Paola, 2012). Adekeyi (2002) summarizes that it is mainly through students' efforts and ambitions that they are socialized to become productive citizens.

Testing the Hypothesis

Efforts were made to test the hypothesis that guides the study. In this regard, multiple regression analysis was run to test the hypothesis. The null hypothesis hence states that...

H_0 The independent variables will not directly determine academic performance among day SHS students. The results of the regression of the dependent variable on the predictor and mediating variables are shown in Tables 8 and 9.

Table 8: Mathematic Test Score on the Independent and Control Variables

Predictor	Mathematics Test Score		
	Model 1 β	Model 2 β	Model3 β
Father's Education	.205 (.057)*	.060 (.043)	.065 (.042)
Mother's Education	.235 (.066)*	.131 (.080)*	.114 (.049)*
Sex of the Child	-.208 (.116)*	-.194 (.086)*	-.191 (.083)*
The Child's Aca. Ambi. Effort/persistence		.685 (.021)*	.669 (.021)* .448 (.027)*
Constant	.401	1.845	3.507
R	.601	.801	.812
R ²	.364	.641	.659
AR ²	.353	.636	.654

* $p < 0.05$.

The result from Table 8 demonstrates the multiple regression analysis. The analysis was run in Models. Model 1 gives the coefficients of the predictor variables, the standard error, the level of significance, the correlation (R), the R^2 and the adjusted R^2 . Model 2 also contains the coefficients of the predictor variables and one intervening variable, the standard error, the level of significance, the correlation (R), the R^2 and the adjusted R^2 . Lastly, Model 3 shows the coefficients of the predictor variables and two intervening variables, the standard error, the level of significance, the correlation (R), the R^2 and the adjusted R^2 .

In model 1, when the Mathematics test score was regressed on the predictor variables, all of the independent variables were found to be significant predictors of academic performance in Mathematics. However in Model 2, when the Mathematics test score was regressed on the same independent variables and one mediating variable, thus the child's academic ambition, father's education, was no longer significant predictor of academic performance. This suggests that the coefficients of the independent and the control variables share with that of the intervening variable. The implication is that the independent variables do not determine academic performance unless the intervening variable is there. That is the independent variable makes an effect only when it passes through the mediating variable. Lastly, when effort and persistence was introduced in Model 3, the same independent variable was still not significant predictor. This further indicates that the independent variable do not directly determine academic performance. They do so only through the intervening variables.

Furthermore in Table 8, when the mediating variables where introduced in Models 2 and 3, the coefficients of all the independent variables shrunk while others even lost their significance. For instance, when personal academic ambition was introduced into Model 2, father's education shrunk by 70% and lost its significance too. Mother's education on the other hand, shrunk by 44%, yet it was still significant. Also, with the introduction of effort and persistence in Model 3, mother's education shrunk 12% respectively while surprisingly father's education appreciated by 8% though it was still not significant. This suggests that the values lost by the shrinkages constitute the contribution of the mediating variables to the independent variables themselves. The results from Table 8 eventually reveal that mother's education and the sex of the child were consistent predictors of academic performance in Mathematics even though they both shrunk in Models 2 and 3. Though the sex of child was an important predictor of academic performance in Mathematics, however the coefficients are negative. The interpretation therefore is that males did better than females in the Mathematics test. This is because males appear to be the category that received the lower coding.

Table 9: English Language Test on the Independent and Control Variables

Predictors	English Language Score		
	Model 1 β	Model 2 β	Model 3 β
Father's Edu.	.234 (.055)*	.057 (.043)	.027 (.042)
Mother's Edu.	.265 (.065)*	.139 (.079)*	.118 (.049)*
Sex of the Child	.211 (.116)*	.055 (.023)	.022 (.022)
The Child's Ambi.		.661(.020)*	.649 (.021)*

Effort/persistence			.439 (.027)*
Constant	1.075	3.251	4.761
R	.590	.794	.804
R ²	.348	.630	.646
AR ²	.340	.624	.640

* $p < 0.05$.

Result from Table 9 shows the results of the multiple regression analysis. Model 1 gives the coefficients of the predictor variables, the standard error, the level of significance, the correlation (R), the R² and the adjusted R². Model 2 also contains the coefficients of the predictor variables and one intervening variable, the standard error, the level of significance, the correlation (R), the R² and the adjusted R². Lastly, Model 3 shows the coefficients of the predictor variables and two intervening variables, the standard error, the level of significance, the correlation (R), the R² and the adjusted R².

In model 1, when the English Language test score was regressed on the independent variables, all were significant predictors of academic performance. In Models 2 and 3, when academic ambition and effort were introduced respectively, father's education and the sex of the child were found not to be significant predictors of academic performance in English Language. This submits that the coefficients of the independent variables are shared with that of the mediating variables. The implication is that the independent variables do not determine academic performance unless the mediating variable is there. That is the independent variable makes an effect only when it passes through the mediating variables.

Additionally in Table 9, when the mediating variables were introduced in Models 2 and 3, the coefficients of all the independent variables shrunk. For example, when the child's academic ambition was introduced in Model 2, father's education, mother's education and the sex of the child shrunk by 75%, 48% and 73% respectively. Though mother's education consistently remain significant predictor, the magnitude of reduction in its coefficients is alarming. Also, with the introduction of effort/persistence in Model 3, father's education, mother's education and the sex of the child again shrunk by 52%, 15% and 60% respectively. This essentially denotes that the values lost by the shrinkages constitute the contribution of the mediating variables to the independent variables themselves. The findings of this study therefore established mother's education, the child's academic ambition and effort/persistence as the major independent predictors of academic performance in English Language.

The results in Tables 8 and 9 show that the independent variables cannot directly predict academic performance in Mathematics and English Language. In reality, the intervening variables, thus academic ambition and effort share with the independent variables the variance in the dependent variable. The findings from this study are consistent with a number of researches (Dohmen et al., 2010; De Paola, 2012; Shamosh & Gray, 2007). For instance, Crosnoe et al. (2004) and Diaz (2003) in a different study submit that students' personal causal factors such as academic ambition and effort/persistence predict and mediate academic performance. Also, Shamosh and Gray (2007) in their study establish that brilliant students tend to attribute quality work to ambition and effort/persistence.

With regard to the findings emanating from Table 8 and 9, we failed to reject the null hypothesis which states that “The independent variables will not directly determine academic performance of SHS students.

CONCLUSION

In this study, an attempt was made to find out whether the academic performance of the child was mediated by the child’s academic ambition and the child’s effort. The study therefore established a positive relationship between parents’ education, the child’s academic ambition, the child’s effort and academic performance. This presupposes that the child academic performance was strongly mediated by the child’s academic ambition and the child’s effort. This further suggests that when these variables are present and positive, there is the likelihood that students will perform creditably well. We therefore conclude that parents must encourage their children to be academically ambitious and when they do, they must work hard in order to succeed in their ambition. Also, educated mothers were found to influence the child’s academic ambition much more than that of the educated father. Hence, educated mothers must be more involved in their wards education.

RECOMMENDATIONS

Based on the conclusions drawn from the study, the following recommendations were made.

1. Parents and stakeholders in education must be encouraged to adopt specific techniques and strategies aim at building a strong positive image for children about and have ambitions that commensurate their abilities. This will in fact help students feel emotionally and psychologically ready and not overwhelmed by the academic task ahead.
2. Parents are powerful agents of nurturing their children to have high academic ambitions. In this study, parents’ education is strongly linked with their children’s education. It is therefore suggested that educated parents and even parents in general should monitor the academic activities of children.

REFERENCES

- Adekeyi, A. (2002). *Teaching social studies in Nigeria Colleges*. Ile-Ife: University Press.
- Anderson, B., Benjamin, H., & Fuss, M. A. (1994). The determinants of success in university introductory economics courses. *Journal of Economic Education*, 25, 99- 119.
- Aripin, R., Mahmood, Z., Rohaizad, R., Yeop, U., & Anuar, M. (2003). *Students’ learning styles and academic performance*. Malaysia: Kuala Lumpur Convention Center.
- Black, S. (2002). When students push past peer influence. *The Education Digest*, 68, 31- 36.
- Bouffard. T., Boisvert, J., Vezeau, C., & Larouche, C. (1995). The impacts of goal orientation on self-regulation and performance among college students. *British Journal of Educational Psychology*, 65, 317-329.
- Burns, A., & Darling, N. (2002). Peer pressure is not peer influence. *The Education Digest*, 68, 4-6.
- Carbonaro, W. (2005). Tracking students’ efforts and academic achievement. *Sociology of Education*, 78 (1), 29-49.

- Colom, R., & Lynn, R. (2004). Testing the developmental theory of sex differences in intelligence on 12-18 year olds. *Personality and Individual Differences*, 36, 75-82.
- Considine, G., & Zappala, G. (2002). Influence of social and economic disadvantage in the academic performance of school students in Australia. *Journal of Sociology*, 38, 129-148.
- Crosnoe, R., & Elder, G. H., Jr. (2004). From childhood to the later years: Pathways of human development. *Research on Aging*, 26, 623-654.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Educational Policy Analysis Archives*, 8 (1), 67-93.
- Dembo, T. (1931). Der arger als dynamisches problem. *Psychol. Forsch.*, 15, 1- 144.
- De Paola, M. (2012). "The determinants of risk aversion: the role of intergenerational transmission", *German Economic Review*, 64, 193-209.
- Desforges, C., & Abouchaar, A. (2003). *The impact of parent involvement, parent support and family education on pupil achievement and adjustment: A literature review*. Department of Education and Skill: Queen's Printer.
- Diaz, A. L. (2003). Personal, family academic factors affecting low achievement in secondary school. *Electronic Journal of Research in Educational Psychology and Psychopedagogy*, 1 (1), 43-66.
- Dills, K. A. (2006). Trends in the relationship between socioeconomic status and academic achievement. Retrieved September 30, 2013 from <http://papers.ssrn.com/>
- Dohmen, T. (2010) Are risk aversion and impatience related to cognitive ability? *American Economic Review*, 100, 1238-1260.
- Eamon, M. K. (2005). Social-demographic, school, neighbourhood and parenting influence on academic achievement of Latino young adolescents. *Journal of youth and adolescence*, 34 (2), 163-175.
- Ekeh, P. U. (2003). Gender bias and achievement in science and mathematics among school pupils. Implications for human resource development. *Journal of Curriculum Organization of Nigeria*, 10 (1), 30-33.
- Elliot, A. (2007). A conceptual history of the achievement goal construct. In A. Elliot & C. Dweck (Eds.), *Handbook of competence and motivation* (pp.52-72). New York: Guilford Press.
- Engelmann, S., & Carnine, D. (1991). *Theory of instruction: Principles and applications* (Ed.). Eugene, OR: ADI Press.
- Goodman, A., & Gregg, P. (2010) 'Poorer children's educational attainment: how important are attitudes and behaviour?' York: Joseph Rowntree Foundation.
- Grissmer, R. H. (2003). Beyond helping with homework: Parents and children doing mathematics at home. *Teaching Children Mathematics*, 14, 120- 131.
- Gutman, L., & Akerman, R. (2008) *Determinants of aspirations*. Centre for Research on the Wider Benefits of Learning Research Project 27. London: Institute of Education.
- Hansen, N. M., & Mastekaasa, A. (2006). *Social origins and academic performance at university*. USA: Oxford University Press.
- Hijazi, S. T., & Naqvi, S. M. M. R. (2006). 'Factors affecting students' performance: A case of private colleges'. *Bangladesh E-Journal of Sociology*, 3 (1), 65-99.
- Hirsch, E. D. (1996). *The schools we need and why we don't have them*. New York, NY: Doubleday.
- Hoyle, E. (1986). *Policies of school management*. Suffolk: The Press Ltd.

- Jacob, B., & Wilder, T. (2010). *Wilder educational expectations and attainment*. NBER Working Paper No.15683: National Bureau of Economic Research.
- Jeynes, W. H. (2002). Examining the effects of parental absence on the academic achievement of adolescents: The challenge of controlling for family income. *Journal of family and Economic Issues*, 23 (2), 65-78.
- Johnson, V. E. (2003). *Grade inflation: A crisis in college education*. New York, NY: Springer-Verlag.
- Kimball, M. M. (1989). A new perspective on women's math achievement. *Psychological Bulletin*, 105, 198-214.
- Lao, R. C. (1980). Differential factors affecting male and female academic performance in high school. *The Journal of Psychology*, 104, 119-127.
- Lewin, K., Dembo, T., Festinger, L., & Sears, P. S. (1944). Level of aspiration. In J. M. V. Hundt (Ed.), *Personality and the behavior disorders*. (pp 333-378). New York: Roland Press.
- Maurin E. (2002). "The impact of parental income on early schooling transitions: A re-examination using data over three generations". *Journal of Public Economics*, 85 (3), 301-332.
- Musgrave, C. B. (2000). Environmental factors affecting attitude towards science and mathematics. *Journal of Educational Psychology*, 91(1), 382-394.
- Opare, J. A., & Dramanu, B. Y. (2002). Students' academic performance. Academic effort as an intervening variable. *Ife Psychology*, 10(2), 136-148.
- Osiki, J. O. (2001). Effects of remedial training programme on the management of learning acquisition defectiveness and poor study habits problems of selected subjects in a community grammar school. *Nigerian Journal of Applied Psychology*, 6 (2) 107-115.
- Pettigrove, G. (2007). Ambitions. *Ethical Theory and Moral Practice*, 10, 53-68.
- Phan, H. P. (2008). Exploring students' reflective thinking practice, processing strategies, efforts and achievement goal-orientation. *Educational Psychology*, 29 (3), 297-313.
- Phillipson, S., & Phillipson, S. (2007) 'Academic expectations, belief of ability, and involvement by parents as predictors of child achievement: A cross-cultural comparison'. *Educational Psychology*, 27 (3), 329-348.
- Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review*, 16, 385-407.
- Pintrich, P. R., Smith, D., Garcia, T., & McKeachie, W. J. (1993). Reliability and predictive validity of the motivated strategies for learning questionnaire. *Educational and Psychological Measurement*, 53, 801-813.
- Quaglia, R. J., & Cobb, C. D. (1996). Toward a theory of student aspirations. *Journal of Research in Rural Education*, 12, 127-132.
- Sarantakos, S. (1997). *Social research*. New York: Palgrave Publishers Ltd.
- Schoon, I., & Parsons, S. (2002). Teenage aspirations for future careers and occupational outcomes. *Journal of Vocational Behaviour*, 60 (2), 262- 288.
- Sentamu, N. P. (2003). School's influence of learning: A case of upper primary schools in Kampala & Wakiso Districts. *Uganda Education Journal*, 4, 25-41.
- Shamosh, N., & Gray, J. (2007). "Delay discounting and intelligence: A Meta-Analysis", Unpublished manuscript. Department of Psychology, Yale University. USA.
- Siegle, D., & McCoach, D. B. (2007). Increasing student mathematics self-efficacy through teacher training. *Journal of Advanced Academics*, 18, 278-312.

- Stage, F. K., & Kloosterman, P. (1995). Gender, beliefs, and achievement in remedial college-level mathematics. *Journal of High Education*, 66, 294-311.
- Taiwo, H. G. (1993). Family environment and educational attainment of some school children in western Nigeria. *Journal of the Science Teachers Association of Nigeria*, 46 (2), 107-116.
- Tella, A., & Tella, A. (2010). Parental involvement, home background and school environment as determinant of academic achievement of secondary school students in Ogun State, Nigeria. *Africa Journal of Cross Cultural Psychology and Sport Facilitation*, 5 (2), 42-57.
- Tienken, C., & Wilson, M. (2001). Using state standards and tests to improve instruction. *Practical Assessment, Research & Evaluation*, 7 (13), 74-99.
- Tinto, V. (1993). Limits of theory and practice in student attrition. *Journal of Higher Education*, 53, 687-700.
- Tope, O. (2011). *The influence of peer group on adolescent's academic performance: A case study of some selected schools in Ogun State*. Nigeria: Egobooster Books.
- Ugoji, F. N. (2008). The impact of counselling on the academic performance of secondary school students. *Africa Journal for Inter Disciplinary Studies*, 8 (2), 67-73.
- Young, J. W., & Fisler, J. L. (2000). Sex differences on the SAT: An analysis of demographic and educational variables. *Research in Higher Education*, 41, 401-416.
- Zimmerman, B. J., & Risemberg, R. (1997). Self-regulatory dimensions of academic learning and motivation. In G. Phye (Ed), *Handbook of academic learning* (pp. 105-125). New York: Academic Press.