

The Influence of Parenting Styles and Gender on Academic Performance of Senior High School Students in Effutu Municipality of Ghana

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Abstract

The aim of this study was to assess the influence of parenting styles and gender on the academic performance of senior high school students in the Effutu Municipality in the Central Region of Ghana. The design was a cross-sectional survey design conducted among students in two senior high schools. A total of 260 students were drawn from two senior high schools in Winneba through a multi-stage sampling technique. Baumrind (1991) parenting style instrument which has a reliability coefficient of 0.79 was used to measure the perception of students about their parents' style of parenting. The results of the study showed that male students significantly perform better than the females students. The study also revealed that there is no statistically significance difference between females and males with authoritarian parents. The study recommended among others that senior high schools should create the enabling environment that will ensure that students succeed in their chosen fields of study. Additionally, the schools should create an enabling environment that would provide the students with warmth and nurturance, set academic expectations of maturity and control to help improve their performance.

Key Words: Gender, Academic Performance, Authoritative Parenting, Authoritarian Parenting, Permissive Parenting

Introduction

Parenting styles may be different from culture to culture and society to society. Parenting styles may have different types, which might have a differential influence on the academic performance of their children. Parental expectations have a greater impact on student's educational outcomes. Parental styles may include activities like helping children in reading, encouraging them to do their homework independently, monitoring their activities inside the house and outside the four walls of their house, and providing

coaching services for improving their learning in different subjects. The role of parenting in children's education has become a central issue in educational policy and research. Research findings support the existence of a positive relationship between parenting styles and educational success, especially in the secondary school years. However, current knowledge regarding the nature and magnitude of the effects of parenting styles in secondary education is inconsistent and limited in scope (Singh, Bickly, Trivette, Keith, Keith, & Anderson, 1995).

According to Bruno and Adams (1994), disturbing percentages of high school students are scoring below grade level. Academic performance of adolescents worsens when comparing achievement data from 1983 and 1993. For example, both the numbers of adolescents of 12 to 14 years of age performing below grade level in 1993 and the comparison data from 1983 and 1993 indicated that the number of low-achieving adolescents appears to be growing. Male adolescents were found to perform at lower academic levels between the ages of 15 to 17. In addition, the number of females of all races performing below grade level has increased by 1.3 percent between the ages of 12 to 14 and 15 to 17. However, the numbers of African and Hispanic American females below grade level continues to worsen slightly (from 33.2 % to 34.6% and 28.3% to 29.3 % respectively) during the 12 to 14 and the 15 to the 17-year range (Bruno & Adams, 1994).

Gender is the social dimension of being male or female. Gender identity is the sense of being male or female, which most children acquire by the age of three. Social learning theory and gender are knotted. The social learning theory is the view of psychologists who emphasise behaviour, environment, and cognition as the key factors in development. The majority of children normally begin to identify their various roles and duties society expects from them at the early stages of their developmental pattern (West and Zimmerman 1987). There is a distinctive line between the two, thus "Gender" is a combination of both masculine and feminine. Without these characteristics, a person has lost some of his/her sense of being.

Perceptions about gender differences have important implications for educational expectations by teachers, parents, and students themselves. Males traditionally are mostly known to have an interest in mathematics and physical sciences while most females prefer English and social subjects (Olson and Andrea 2014). This development, however, is changing and now girls are doing well in mathematics and some sciences while boys are also catching up with females on English Language and Social subjects.

In Ghana, over the years, some studies have been done on gender, (Eshun, S., Chang, E. C., & Owusu, V. (1998), Kotey, N.A. & D. Tsikata, 1998) but it appears little or no study has been conducted on gender influence on academic performance within Effutu Municipality for this reason this study sought to explore the correlation of gender and academic performance of students in Effutu Municipality of Ghana. Many people do not see how relevant gender is to the improvement of their academic performance. It is for the above reason that; the researcher thought it necessary to conduct this study to assess

student's gender and how it influences academic performance in Uncle Rich Senior High School and Zion Girls' Senior High School in Winneba municipality.

Theoretical framework

Baumrind's typology on parenting styles was used to provide a theoretical framework for investigating parenting style as a predictor of academic performance among students. Baumrind (1991) typology numerated three types of parenting styles. They are Authoritative (high-control, high-responsive), Authoritarian (high-control, low-responsive) and Permissive (low control, low/ high-responsive).

The authoritative parent attempts to direct the child's activities but in a rational, issue-oriented manner. The parents encourage verbal give and take, share with the child the reasoning behind their policy, and solicit his objections when he refuses to conform. Both autonomous self-will and disciplined conformity are valued. [Parents value both expressive and instrumental attributes, both autonomous self-will and disciplined conformity]. Therefore, parents exert firm control at points of parent-child divergence but do not hem the child in with restrictions. Parents enforce their perspective as an adult but recognise the child's individual interests and special ways. The authoritative parent affirms the child's present qualities, but also set standards for future conduct. Hae-Seong & Bauer (2002) found that authoritative parents use reason, power, and shaping by regime and reinforcement to achieve their objectives, and do not base their decisions on group consensus or the individual child's desires.

The authoritarian parents shape, control, and evaluate the behaviour and attitudes of the child in accordance with a set standard of conduct, usually an absolute standard, theologically motivated and formulated by a higher authority. The parent value obedience as a virtue and favours punitive, forceful measures to curb self-will at points where the child's actions or beliefs conflict with what she thinks is right conduct. She believes in keeping the child in his place, in restricting his autonomy, and in assigning household responsibilities in order to inculcate respect for work. Parents regard the preservation of order and traditional structure as a highly valued end in itself. Parents do not encourage verbal give and take, believing that the child should accept her word for what is right.

The permissive parents attempt to behave in a non-punitive, acceptant and affirmative manner towards the child's impulses, desires, and actions. The parents consult with him [the child] about policy decisions and gives explanations for family rules. Parents make few demands for household responsibility and orderly behaviour. Parents present themselves to the child as a resource for him to use as he wishes, not as an ideal for him to emulate, or as an active agent responsible for shaping or altering his ongoing or future behaviour. Parents allow the child to regulate his own activities as much as possible, avoid the exercise of control and do not encourage him to obey externally defined standards. Parents attempt to use reason and manipulation, but not overt power to accomplish their ends (Baumrind, 1991).

Related studies

Numerous studies have been conducted on this topic, while some researchers have rejected the idea that Gender and Parenting styles have an influence on Academic Performance others, on the other hand, have supported it. A study by Fergusson and Horwood, (2008) titled "Gender differences in educational achievement to age 25" is directly linked to the present study. The study was aimed at examining Gender differences in educational achievement with a sample size of 1,265. Data were gathered using various methods including semi-structured interviews with participants and parents; teacher assessments; and standardised testing. Analysis of results proved that there was a small but pervasive tendency for females to score better than males on standardised tests and to achieve more school and post-school qualifications.

Investigating academic performance at pre-collegiate level, Lao (1980) finds female students to obtain higher CGPA compared to males. Examining sex-related difference in classroom grades, Kimball (1989, pp. 198-214) finds that in contrast to standardised measures of mathematics achievement tests like SAT-M3, female students outperform males in math classes. Wilberg and Lynn (1999) arrive at a similar conclusion for history classes vs. history tests. The authors explain this pattern by stating that females tend to work more conscientiously and have a stronger work ethic than males. They also tend to have better language abilities including essay-writing skills, vocabulary and word fluency which contribute to better course work.

Lynn, Ivanec, & Zarevski, (2009) also performed a study titled "Sex Differences in General Knowledge Domains." The aim of their study was to investigate cognitive differences in highly comparable (according to age, education and motivation) samples of 280 females and 96 male University graduates in Croatia. Participants were given a number of cognitive tests as part of the selection procedure. Males obtained higher average scores on the g-factor intelligence test, on the general knowledge tests of natural and social sciences, world religion and customs and general knowledge of culture. An analysis of covariance with intelligence test as a covariate showed that sex differences in general knowledge were present when intelligence was controlled.

A study conducted in Ghana can be linked to the present study. Nyarko, (2008), sampled three senior high schools in the central region of Ghana. Only second year and third year (final year) students were used in the study. The schools are; University Practice Secondary School, Ghana National College and Assin Manso Secondary School all located in the central region of Ghana. Out of a sample of 239 adolescents, 45.2% were males and 54.8% were females. The results of the study indicated a positive and significant relationship between mothers and fathers' authoritativeness and the academic success of the students.

Another study by Chin-Ling Hsieh (1998) also has some relation to the present study. The first purpose of this study was to examine the relationship between parenting styles (authoritarian, authoritative, and permissive) and children's temperament (emotional,

activity, and sociability). 230 Taiwanese (108 boys and 122 girls) fourth, fifth, and sixth-grade children from ten elementary schools in Taipei, Taiwan, Republic of China participated in the study. Multiple regressions were conducted to test each research question. Results showed that parenting styles and children's temperament were related to children's academic achievement. Sociable children had higher academic performance and children who experienced authoritarian parenting showed lower academic achievement. These results clearly showed that children experiencing different kinds of parenting styles tend to have different patterns of temperament. Furthermore, the parenting styles and children's temperament showed different patterns of prediction for children's behavioural adjustment and academic achievement. Cohen and Rice (1997) surveyed a sample of 386 matched parent-child pairs in order to examine the relevance of parenting style to adolescent educational achievement. Results indicated that students with low grades rated their parents as less authoritative, more permissive (indulgent) and more authoritarian than did students with high grades. Based on the study results, researchers concluded that perceived authoritative parenting by students was associated with higher academic achievement.

Another study by Dornbush, Rutter, Leidermann, Roberts & Fraleigh (1987) also has some link with the present study. They tested a reformation of Baumrind's typology of authoritarian, permissive, and authoritative parenting styles in the context of adolescent school performance. Using a large and diverse sample of San Francisco Bay Area high school students (N = 7,836), we found that both authoritarian and permissive parenting styles were negatively associated with grades, and authoritative parenting was positively associated with grades. Parenting styles generally showed the expected relation to grades across gender, age, parental education, ethnic, and family structure categories. Authoritarian parenting tended to have a stronger association with grades than did the other 2 parenting styles, except among Hispanic males.

Paulson (1994) investigated the relationship between parenting characteristics and achievement among a sample of 247 adolescents. Standardised scales were used to operationalize parenting style in order to examine its association to academic achievement which was measured by adolescent self-reported grades. Results indicated that higher levels of parental control accompanied by both maternal and paternal responsiveness (characteristic of authoritative parenting) were related to higher academic achievement. Paulson concluded that authoritative parents have children who perform better in schools.

Steinberg, Susie, Sanford & Darling (1992) examined the impact of authoritative parenting on the school achievement of an ethnically and socioeconomically heterogeneous sample of 6400 American 14-18-year-olds. Standardised scales and other self-report instruments were used to assess the relationship between parenting style and academic outcomes. The results indicated that authoritative parenting had a significant impact on adolescent school performance during the high school years. This was seen in both the significant correlations between authoritativeness and the indices of

achievement as well as in the comparison of academic scores among adolescents from households varying in authoritativeness. On both indices, adolescents from clearly authoritative homes scored higher than their peers from homes that were neither unquestionably non authoritative or unquestionably authoritative, who in turn scored higher than students from definitely non authoritative homes. The researchers concluded that authoritative parenting promotes better academic achievement and students who describe their parents as authoritative report better school performance.

Objectives

1. To determine the influence of gender on student's Academic Performance.
2. To determine the influence of parenting styles on student's academic performance.

Research Questions

1. How does gender affect students' academic performance of Uncle Rich and AME Zion Girls' Senior High School students?
2. What is the influence of the parenting styles on the academic performance of Uncle Rich and AME Zion Girls' Senior High School students?

Hypothesis

There is no significant difference between authoritative, authoritarian, and permissive parenting styles and academic performance of students.

Methodology

The study adopted cross sectional survey design. According to Levin (2006) cross-sectional studies are carried out at one-time point or over a short period. They are usually conducted to estimate the prevalence of the outcome of interest for a given population. Data can also be collected on individual characteristics alongside information about the outcome. The target population was 812 Senior High School students from Uncle Rich (416) A.M.A Zion Girls (396) all at Effutu Municipality. A multi-stage random probability sampling technique was used. The multi-stage sampling was carried out in two stages. First, non-probability sampling technique specifically convenient sampling was used in selecting the two schools from the four senior high schools in the municipality. Uncle Rich SHS and AME Zion SHS were conveniently selected from the four Senior High Schools in the Effutu Municipality namely Winneba Business School, Winneba Secondary School, Uncle Rich and AME Zion SHS. Saunders, Lewis, and Thornhill (2007) maintain that convenience sampling involves selecting haphazardly those cases that are easiest to obtain from a given population.

The total number of students in SHS1 to SHS3 from both schools was 812. Students from Uncle Rich SHS numbered up to 416, with students from AME Zion Girls SHS being 396 of the total target population. The researcher used the Sample Size Determination Table by Krejcie and Morgan (1970). Considering the total number of students from the accessible population of 812 which is more than 800 but less than 850 suggests a sample

size of 260 is most appropriate.

In the second stage of sampling, all the classes in both schools were grouped into sub-clusters under the various programmes from SHS1 to SHS3. Classes in both schools were sub-clustered into five groups based on the programmes offered in the school and since both schools offered the same set of programmes (Business, General Arts, Home Economics, Science and Visual Arts) that became the groupings. To cater for the gender disparity between the two schools, half of the determined population of (260) from each school thus one hundred and thirty (130) boys from Uncle Rich SHS and the other hundred and thirty (130) from AME Zion Girls' SHS were picked. Both schools had five (5) programmes (Business, Home Economics, General Arts, Visual Arts, and General Science). Twenty-six students were drawn from each cluster across the two schools using the random sampling technique.

Depending on the cluster size of which in both schools were more than thirty (30); students were made to pick sheets with the inscriptions "ON" and "OFF". For instance, in Uncle Rich SHS, all boys offering business from SHS1 to SHS3 were put into one cluster and made to pick the sheets with the inscriptions. The researcher made sure that to draw out the desired twenty-six (26), the "ON" inscriptions were twenty-six (26) for each cluster thus based on the programmes offered by the school. In total, there were two-hundred and sixty (260) students drawn from both schools with each school contributing half of that number.

Academic performance for participants was obtained by computing the average scores on subjects in the first term of 2014/2015 academic year. This was done by averaging all scores of participants' Continues Assessment (i.e.; examination and class exercise scores) for each subject per the duration specified (1 term). The scores were put into three distinct categories (good, average and poor) based on the WASSCE grading system. Good comprised scores from 65 to 100, average from 40 to 64, and finally poor from 0 to 39. This is because scores between: 65 to 100 are considered good, very good and excellent; 40 to 64 are considered credit and pass and; 0 to 39 are considered fail. For each subject we obtained the average scores by adding all the scores obtained in the term. Decimal values were rounded up to the nearest whole number.

Data collection Procedure

The questionnaire items were made of closed-ended questions. The use of closed-ended questions provided a number of alternative answers from which the respondents were expected to choose. Mainly, the questionnaire contained 15 items or self-reporting questions with responses which were coded numerically on a 5 point Likert scale (strongly disagree (1) to strongly agree (5) to enable quantitative analysis of the data obtained from the field. The research instrument was ordered into two sections (A and B). Section A comprised question that sought the demographic characteristics of the students whereas Section B focused primarily on a review and contextualization of the Parental Authority Questionnaire (PAQ) by Buri (1991). This was to measure the three

main parenting styles exhibited by parents; authoritative, authoritarian and permissive perceived by students. Originally, it was a 30-item questionnaire with 10 items each for each parenting style on a 5-point Likert scale. In this study, the questionnaires were based on the version adapted by Dawson (1996) for adolescents. Each parenting style consists of five items. Analysis of Variance was used to analyse Research Question one whiles Pearson Product Moment Correlation was used to analyse the two research questions. The hypothesis was tested using the Chi-square Test.

Results and Discussion

Research Question One: *How does gender affect students' academic performance of Uncle Rich and AME Zion Girls' senior high school students?*

Table 1: Distribution of Descriptive statistics of academic performance of Uncle Rich and AME Zion Girls' Senior High School Students on their gender

Gender	N	Mean	±SD	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Male	130	2.01	.676	.059	1.89	2.13	1	3
Female	130	1.80	.548	.048	1.70	1.90	1	3
Total	260	1.90	.623	.039	1.83	1.98	1	3

Data from Table 1 show the descriptive analysis of the results on gender and academic performance. The table shows that the test was carried out at the full numerical strength of 130 in each group, totalling 260 in all. The mean scores and standard deviation obtained by the males was ($m=2.01$, $\pm SD=.676$) which was higher than that of the mean and standard deviation scores obtained by the females ($m=1.80$, $\pm SD=.548$). From the output, it can be concluded that males perform better academically ($M=2.01$) than the females ($M=1.80$). This finding agrees with the works of Lynn, Iyanec and Zarevski (2009) who found males obtaining higher average scores than females on the g-factor intelligence tests, general knowledge tests and social sciences, world religion and customs and general knowledge of culture. However, the study's findings contradict works of Lao (1980), Kimbal (1989) and Wilberg and Lynn (1999) who found in their study females obtaining higher CGPA compared to males.

Table 2: ANOVA Results of Students' Parenting Style and Academic Performance

	Sum of Squares	Df	Mean Square	F	Sig.
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Between Groups	2.804	1	2.804	7.397	.004
Within Groups	97.792	258	.379		
Total	100.596	259			

It is believed that gender influences the academic performance of students. The essence of results in Table 1 was to find out whether there is a statistically significant difference between the group (gender) means as obtained in the Table 2. The Table 2 shows a significant level of ($F=7.397, p = .004$), which establishes that there was a statistically significant difference in the academic performance of males compared to that of females. From the results, it can be concluded that males performed better than the females. This finding is in line with works of Iyanec and Zarevski (2009), Lao (1980), Kimbal (1989) and Wilberg and Lynn (1999) who established that there was a statistically significant difference in the academic performance of males compared to that of females.

Table 3: Chi-Square Test of association between Gender and Academic Performance

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.303 ^a	2	.001
N of Valid Cases	260		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 19.50.

There is the belief that gender has an influence on the academic performance of students. Presented in Table 3, is the result regarding the gender of respondents and the academic performance of students. Pearson's chi-square ($\chi^2=13.303, df=2, p<.05$) shows that gender has a statistically significant association between the gender of students and their academic performance. From the results, it could be concluded that gender has an influence on academic performance. The finding confirms the works of Lynn, Iyanec and Zarevski (2009), Lao (1980) and Kimbal (1989) who all saw a statistically significant association between gender of students and their academic performance.

What is the influence of parenting styles on the academic performance of Uncle Rich and AME Zion SHS students?

Table 4. Correlation matrix of factored variables

Parenting Styles	Academic Performance	Permissive	Authoritarian	Authoritative
Permissive	-.147*	1		
Authoritarian	.110*	.001	1	
Authoritative	.118*	.001	.001	1

*. Correlation is significant at the 0.05 level (2-tailed).

Parenting styles adopted by parents have significant influence on the academic performance of their children in school. The results give statistical credence to the fact that parenting styles have significant influence on children academic performance.

From Table 4, Permissive parenting style correlated negatively ($r=-.147, p<.05$) with the academic performance of the participants which presupposes that there is a negative relationship between the permissive parenting style and academic performance. This finding is consistent with the works of Cohen and Rice (1997) which maintained that students with low grades rated their parents as less authoritative but more permissive. However, academic performance correlated positively with Authoritarian ($r=.110, p<.05$) and Authoritative ($r=.118, p<.05$) styles of parenting. This indicates that Authoritarian and Authoritative parenting styles have positive influence on the performance of students. These findings are consistent with Paulson (1994) and Steinberg et al. (1992) who believe parenting styles have significant influence on the academic performance of students.

Hypothesis Tested

There is no statistically significant difference between students' parenting styles and their academic performance of students.

Table 5

SN	Hypothesis Statements	df and level of Sig.	Chi-square and P-Values	Decision
1.	There is no significant difference between authoritative, authoritarian, and permissive parenting styles and academic performance of students.	12 (5%)	49.258 (0.001)	Reject

The hypothesis indicated there is no significant difference between authoritative, authoritarian and permissive parenting styles and academic performance of students. From the analysis, it could be seen that with a chi-square value of ($\chi^2=49.258$, $p<.05$) we reject the null hypothesis by concluding that there is a significant difference between the authoritative, authoritarian and permissive parenting styles and the academic performance of students. This indicates that all the levels of parenting styles have significant influence on academic performance of students. This result agrees with the findings of Nyarko (2008) and Dornbush *et al* (1987).

Conclusions

The study concludes that males in the study area perform predominantly better than their female counterparts. The study also found authoritarian and authoritative parenting style to relate positively with academic performance while on the contrary, the study found that permissive parenting style was negatively related to academic performance of students.

Recommendation

From the findings, the following recommendations are proposed;

The study recommends that parents adopt a blend of the authoritarian and authoritative styles of parenting and consistently enforce the attributes associated with it. The authoritative style has been proven through literature as the parenting style that promotes the academic performance of children hence parents are encouraged to consistently practice the attributes associated with it not only on household chores but towards the academic activities of the children.

Also, girls will perform at the same level as their male counterparts when they are encouraged and motivated to succeed, are given the necessary educational tools, and have visible female role models excelling academically. Moreover, teachers should go beyond only teaching and impart knowledge to offering counselling, encouragement and sharing personal experiences that will go a long way to motivate them to perform. The teachers should do well to identify students with poor performances as a result of parenting styles they experience and encourage them to improve or recommend such students to visit the counselling centre. Lastly, on the national level, the Ministry of Education and the Ministry of Gender, Children and Social Protection must come up with policies that would ensure parents are more involved in the education of their children.

Lastly, the study recommends that schools should create the enabling environment that will ensure that students succeed in their chosen fields of study. Accordingly, the school must create the environment that would provide the students with warmth and nurturance, set academic expectations of maturity and control to help encourage them to

perform better.

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