

GENDER AND ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS IN SOCIAL STUDIES IN ABAKALIKI URBAN OF EBONYI STATE

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ABSTRACT: *The study focused on gender and academic achievement of secondary school students in Social Studies. Two research questions such as; what is the effect of gender on students' mean achievement, and effect of teachers' gender on the mean achievement of male and female students and null hypotheses were tested at 0.05 level of significance. The population of this study comprised of three thousand four hundred seventy-nine (3,479) Junior Secondary School II (JSS II) students selected from all the secondary schools in Abakaliki urban of Ebonyi State. The instrument used for data collection was Social Studies Achievement Test (SOSAT), data were analyzed using mean and standard deviation for all research questions, and analysis of co-variance (ANCOVA) was used to test the null hypotheses at 0.05 level of significance. The findings of the study revealed that the mean achievement score of female secondary school students was higher than the mean achievement scores of male students. The findings of the study also revealed that: male and female secondary school students taught Social Studies by male teachers obtained higher mean scores than male and female students taught Social studies by female teachers and female students taught Social studies by male teacher performed better than masculine students taught Social Studies by male teacher and vice versa. The study also reviewed that there are significant different in the mean achievement of secondary school students in Social Studies based on gender. Based on these findings, the researcher recommended that Social Studies teachers should re-assess their classroom instructional practice because there is a need for them to shift from instructional practice that will give the students equal opportunities to excel in instructional activities.*

KEYWORDS: Gender, Secondary School, Students' Achievement and Social Studies

INTRODUCTION

Ensuring quality instruction at all levels of education is one of the core objectives of Social Studies education and these can be achieve through effective classroom interaction which create equitable chances for either of the students gender to acquire; right knowledge of the subject matter, positive attitudes, values, behaviors and have equal opportunities for participating intelligently in making rational decision for their own well-being. This implies that classroom interaction should among other things; create the desire and equal opportunity for understanding in both students' gender when confronted with critical situations that they cannot explain in terms of their initial experiences and knowledge. The students' desire to know is motivated by their relationship with their teachers who might be either male or female and conducive learning environment, which provide basis for critical reasoning, reflecting, questioning, and reading to find out information, and readily to initiate and carry out investigations. It therefore means that, for Social studies education to ensure qualitative instruction the classroom must be properly managed to give students equal opportunity to display their worth irrespective of their gender. Since this seems to be a yardstick for quality

instruction that gives rise to increase in students' achievement in classroom interaction, the issue of gender disparities in students' achievement in Social Studies should be put in consideration.

Gender is a specially constructed phenomenon that is brought about as society ascribes different roles, duties, behaviours, and mannerisms to the two sexes, (Mangvwat, 2006). It is a social connotation that has sound psychological background, and it is used to refer to specific cultural patterns of behaviour that are attributed to human sexes. Gender relates to cultural attributes of both males and females (Akpochofo, 2009). Gender according to Lahey (2003) is a psychological experience of being a male or female. It has to do with personality and central components of self-concept. Unlike sex, which is concerned with, only the distinction between male and female based on biological characteristics, gender encompasses other personality attributes as roles, orientation and identity based on individual's conceptualization of self. For instance, Singh (2010) opines that gender refers to a socio-cultural construct that connotes the differentiated roles and responsibilities of men and women in a particular society. This definition implies that gender determines the role, which one plays in relation to general political, cultural, social and economic system of the society. According to Betiku (2002), gender refers to all the characteristics of male and female, which a particular society has determined and assigned each sex. Also, Onyeukwu (2000) sees gender as the dichotomy of roles culturally imposed on the sexes.

Avulata and Oniyama (1999) once described gender stereotype in school as "hidden curriculum" which send out messages to girls to conform to role expectation. In most societies, gender has roles based on the women folk, preventing their participating in, and benefiting from development efforts (UNESCO, 2000). This has created a big psychological alienation or depression in the minds of the female students (Joel and Aride, 2006). As a result, boys dominate Social Studies, Chemistry, Physics, Mathematics and Environmental studies classes while the girls go into reading languages and Arts.

United Nations (UN) adopted various resolutions to ensure equal opportunities for all gender in education and empowerment. In 1982, UNESCO conference in Harare called for setting up of structures in Africa at the National level to develop, absorb and use Science and Technology to distribute developmental tools among the various genders. Okeke (1997) affirmed that the proportion of girls in science classes in secondary and tertiary institutions or in employment as scientist, engineers, and technologists in Nigeria is quite low. In line with the above claim, Akpochofo (2009) reported that in Nigeria as in many African societies, there is gender bias, a situation in which cultural beliefs and structural arrangement favour men over women. This can be witness in most of elective positions contestable by man and woman. People always see women as not fit to govern or rule since men are involved. The idea that female should be under and submissive to men have created negative influence in the life women folk. Explaining further, Anele (2008) is of the view that the socio-cultural practices of the African societies have placed men on the position, which give them domineering influence on women folk. In an argument for, and attempt to debunk a belief that seems to general in Africa to create a kind of relief for gender equality, Okoye (1987) argued that because of various biological differences in human make-up such as those between male and female, people assume that one sex may have a learning edge over the other sex. Intrinsically, there is practically no significant difference in the intelligence between male and female that can be traceable to gender difference. He argued that, the fact that men are regarded as the dominant

and even superior sex does not mean that they are artistically better than women are, (Okoye, 1987).

Okeke (2007) equally observed that, the Nigerian school curriculum is not gender fair since its contents reflect mainly the concerns of males; science careers portray masculine images in the curriculum; and more still, female suffer discrimination from teachers overtly & covertly, knowingly and unknowingly. These actions automatically put the girls in a disadvantaged position for achievement in classroom interaction especially in Social Studies and science related subjects.

Since post-independence era in many developing countries like ours (Nigeria), education has been emphasized both as a basic right and as a major enabling factor for the development process. The launching of the Universal Basic Education (UBE) and the world declaration of Education for All (EFA), to which Nigeria is a signatory, underscores the importance of education for all. There is a continual reminder that Nigeria is a signatory to various declarations of human rights 1948, 1959, 1966, 1989 and 1999, all of which agree that, the child irrespective of sex, has the right to good education, freedom from all forms of discriminations and freedom to participate freely in any National development programme (Allele, 2000). In many Nigerian societies, people and even some educated ones still believe that women education end in her kitchen. They still have this hunches that by nature women are created to continue the work of creation by God through child-bearing not to participate in any intelligent social action.

Okoro (2008) thus observed that males and females show great differences in their interest and career choice. These differences may be attributed to the psychological differences and cultural influences. Females' enrollment in vocations is quite different from those of males. Even parents generally encourage their daughters to opt for professions not masculine in nature. UNESCO (2000) has it that local customs, values have been developing in girls, and they are so deeply ingrained that some of them find it difficult to cope in areas that are believed to be male dominated professions. Lie and Syoberg (2004) observed that, invisible rules within the society have provided what is feminine and what is masculine. This could also be found in Social Studies classroom interaction as male students dominate the female folk in all sorts of curricula activities.

Achievement test results conducted by Onekutu (2002) has shown that boys and girls in the early ages perform equally in all subjects including English language, and as they grow to higher classes, the girls begin to get more interested in language Arts, while the boys take more to sciences and Social Sciences. This has resulted to a situation where there are more boys than girls offering Social Sciences. However, the issue of gender and students' academic achievement has remained a controversial one. While some propose that, males perform better than females in academics, others argue that, the reverse is the case. Veinon (2002) reported that, many comparisons show average scores of boys and girls to be the same on general intelligence test. He said that, girls do a little better on most verbal tests and on tests involving rote memory than boys. On tests of inductive reasoning and arithmetical ability, though with a great deal of overlapping, the average differences, he said, seldom exceeds about four points of intelligence quotient. He added that, the most marked difference occurs on spatial and mechanical tests, and wonders if such ability might be attributed to the cultural influences on our civilization, which encourages boys to develop physical, constructional and mechanical interests. He concluded that, many surveys demonstrate that the range or spread of ability is slightly more restricted in girls.

Gessell (2004) asserted that girls under the age of fourteen years usually perform better in English language than boys of the same age. In addition, after that age, the boys usually overtake the girls. The initial higher achievement by girls than boys, according to Okoye (2009) was as a result of girls over attachment to their mothers in household chores involving social interaction with their mothers and measuring out of food items, quantities of water and other liquids, timing the period for which a particular food needs to boil on fire. In addition, cooking involves estimation of how much each person in the family needs and making allowance for necessary wastages. All these are practical interactions of English language which girls are exposed to as they under-study their mothers, hence, their initial higher achievements as asserted by (Gersell, 2004).

Denga (1998) posited that no evidence is clear as to whether differences exist between males and females in academic achievement. He however stated that, girls tend to do better than boys in language Arts like English language and music while the boys tend to outperform the girls in Mathematics and Sciences. In the same vein, Kelly (2005) pointed out that attempting to relate specific intellectual abilities to achievement in specific subject areas is prone to considerable problems. Gender differences in intellectual abilities can be as a result of gender role stereotyping. Gender differences in academic performance cannot therefore be assumed to be due to inherent biological differences between the genders even if they exist. The theory of innate gender differences in ability that might be used to account for gender differences in academic performance has weak evidence. According to Kelly, in many psychological areas, it is virtual impossibility to separate completely the innate from the acquired.

Gender is a strong predictor of human conduct and many differences have been documented on attitude and behaviour that affect academic performance in between males and females, (Block, 2006). Academic performance differs between boys and girls in basic subjects like Social Studies both in primary and secondary levels. Calsmith (2007) explained that, the influence of gender and differences in academic performance is a complex task, thus many studies appear to be contradictory. A tremendous amount of work has been done in an attempt to find out potential causes of differences between girls' and boys' academic performances in Social Sciences and this has clearly demonstrated that male students are superior to their female counterparts in qualitative courses. Maccoby (2003) for example, pointed out that girls are more conforming, suggestible and dependent on the opinions of others. The traits in turn have been related to dependency, inability to break a set of tasks. Maccoby then suggested that, these same traits in females might also account for their superior performance on tests involving analytic thinking, spatial and abilities.

In western societies, females possess higher ability in verbal test English language than males. Sweeney, (2003) notes that female students are lower in mathematics and spatial ability, as males were superior to females on problem solving tasks and on specific abilities related to problem solving. Messies (2006) contended that there are gender differences in intellectual functioning that attempts to account for both mean differences and differences in correlation patterns between the genders. He concluded that in the period of secondary school and beyond, the intellectual domain reveals few consistent differences between the genders. Husen in Ayayo (2007) indicated in an investigation spanning twelve industrialized countries the ability of both male and female students in their general academic performance. The result revealed that males were superior over females. This superiority was not confining to the United States of America alone. The findings also confirmed that, even with the level of instruction held constant, males achieved higher levels than females. Ayayo (2007) attributed the differences in performance

between boys and girls to the school environment and programmes. She opined that prior to attending school, general intelligence of girls was higher than that of boys but the position gradually reversed with the findings.

According to Douglas (2004), girls excelled in English language, especially in subjects that are taught by men since the secondary schools where English language is taught, is highly a feminine teaching environment. Douglas stressed that, this is probably one explanation for girls' success at the primary and early secondary school years. Supporting this position, Powell (2004) held the opinion that girls do better at all levels than boys in achievement even in areas such as language and arithmetic where boys seemed to excel, girls seem to have better grades. It is obvious from the related literature reviewed that the role of gender in the academic performance of students is a controversial issue. This is because while some research findings revealed that gender plays active role in students' academic performance, others revealed otherwise. This therefore leads to investigation of effect of gender on secondary school students' academic achievement in Social Studies.

Research Questions and Hypotheses

Two research questions and two null hypotheses guided the researchers in the successful conduct of this study.

1. What is the effect of gender on main achievement of secondary school students in Social Studies in Abakaliki Urban of Ebonyi State?
2. What is the effect of Teachers' gender on main achievement of secondary school students in Social Studies in Abakaliki Urban of Ebonyi State?

Ho₁: There is no significant main effect of gender on the mean achievement of secondary school students in Social Studies.

Ho₂: There is no significant main effect of teachers' gender on the mean achievement of secondary school students in Social Studies.

METHODOLOGY

This study adopted quasi-experimental research design, involving a pre-test and post-test. The design was suitable for the study because intact classes were used and were randomly assigned to both treatment and control groups. Intact classes were used because of the period the study lasted and it was not proper to disrupt normal classes. The design is represented thus;

$$\begin{array}{c} Y_a \quad X \quad Y_b \\ \text{---} \quad \text{-----} \\ Y_a \approx_x Y_b \end{array}$$

Where

Y_a = Pretest

Y_b = Posttest

X = Treatment

≈_x = Control

The population of this study comprised of three thousand four hundred seventy-nine (3,479) Junior Secondary School II (JSS II) students selected from all the secondary schools in Abakaliki urban, (Ebonyi State Universal Basic Education Board, 2015). JSS II classes were used for the study because this is the class among which Social Studies is offered as a subject. The researchers decided not to use JSS I students since at that level of class, students were only exposed to introductory aspects of Social Studies which cannot contribute to the research at hand and JSS III students were not also chosen because this category of class is purely an examination class and so cannot be exposed to rudiments of experimental research design. The researchers' choice of JSS II students for this study stemmed from the fact that junior secondary school two students have been exposed to the basic processes and procedures of Social Studies as a subject of instruction and was not examination classes. The simple random sampling technique was used to select three (3) secondary schools with the sample size of two hundred and five (205) junior secondary school two students in Abakaliki urban for this study. Out of these four schools, two schools were assigned to the experimental group while the remaining two schools were assigned to the control group using simple random sampling technique by balloting. In addition, out of two hundred and five (205) students, one hundred and six (106) were female students while ninety-nine (99) were male students. Ninety-four (94) male and female students were taught Social Studies by both male and female teachers in Abakaliki High schools and out of the remaining one hundred and eleven (111) students, sixty-two (62) students were taught Social Studies by a male teacher separately in Urban Secondary School, Abakaliki while forty-nine (49) students were taught Social Studies by a female teacher in Izzi High School, Ishieke-Abakaliki respectively.

The instrument used for data collection in this study was Social Studies Achievement Test (SOSAT) constructed by the researchers with thirty-three (33) multiple-choice items with option A-D to aid achievement of the purpose of the study. The SOSAT was made up of two major sections thus; Section A and Section B. Section A contained information on the personal data of the respondents while Section B carried information on the Social Studies Achievement Test questions. At the beginning of the experiment 'SOSAT' was administered to both students in their respective schools as pre-test with the aid of the class teachers. At the end of the test, scores of the students on the pre-test were recorded and kept. The same instrument was administered to the students at the end of the experimental period. Later, the scores obtained from the pre-test and post-test were subjected to both inferential and descriptive statistical analysis. Mean and standard deviation were used to answer to the research questions while the analysis of co-variances (ANCOVA) was used to test the null hypotheses at an alpha level of significance 0.05.

RESULTS

In this section of the study, the results of data analysis were presented based on the two research questions and two null hypotheses that guided the conduct of this study.

Research Question 1

What is the effect of gender on main achievement of secondary school students in Social Studies in Abakaliki Urban of Ebonyi State? The mean scores of all male and female students involved in study in three schools for pretest and posttest were used to answer the research question. Summary of results of data analysis were presented in table 1.

Table 1: Mean scores of male and female secondary school students taught Social Studies

Gender	Mean	SD	Cases
Male	71.218	9.575	99
Female	73.053	11.357	106

The results of data analysis presented in table 1 above revealed that gender seemed to have differential effect on female students. This is because female students had a mean score of 73.053 and a standard deviation score of 11.357 while the male students had a mean score of 71.218 and a standard deviation score of 9.575. This implies that female students perform better than the male students in Social Studies in the classroom interaction.

Research Question 2

What is the effect of Teachers' gender on main achievement of secondary school students in Social Studies in Abakaliki Urban of Ebonyi State? The mean scores of one hundred and eleven (111) male and female students involved in study in selected two schools for pretest and posttest were used to answer the research question. Summary of results of data analysis were presented in table 2.

Table 2: Mean scores of male and female secondary school students taught Social Studies by male and female teachers

Students	Social Studies Teachers	
	Male Teachers	Female Teachers
Male	75.250	67.915
Female	76.584	60.600

In table 2, the results of data analysis revealed that gender had much differential effects on secondary school students' mean achievement in Social Studies taught by male teachers with the mean scores of 75.250 and 76.584 compared to achievement of other secondary school students taught Social Studies by female teachers that had mean scores of 67.915 and 60.600. From the results of data analysis, in table 2 above the researchers observed that teachers gender influences the academic achievement of secondary school students in Social Studies. For instance, it could be observed in table 2 that female students taught Social Studies by male teachers performed better with mean score of 76.584 than their male counterpart with mean score 75.250 while male students taught Social Studies by female teachers performed better with mean score 67.915 compare to the performance of female students taught by female teachers with mean score of 60.600. These imply that both students' and teachers' gender have effects on secondary school students' mean achievement in Social Studies in Abakaliki urban of Ebonyi State.

Testing of the Null Hypothesis 1

H₀₁: There is no significant main effect of gender on the mean achievement of secondary school students in Social Studies.

Table 3: Analysis of Co-variance for students' mean achievement in Social Studies

Source of Variation	Sum of Square	Df	Mean of Square	F	Sig of F
Covariates	5365.288	1	5365.288	102.848	.000
Pretest	5365.288	1	5365.288	102.848	.000
Main Effects	999.067	2	499.533	9.576	.000
Gender	2029.109	1	2029.109	41.606	.000
2-way Interactions	245.601	1	245.601	4.708	.032
Explained	6609.956	4	1652.489	31.677	.000
Residual	5529.738	200	52.167		
Total	12139.694	204	110.361		

Significant at $P < 0.05$

In the ANCOVA table, the result of hypothesis 1 presented in table 3 showed that the value of F-sig (.000) is lower than the value of F-cal (41.606) at 0.05 level of significance; this indicated that hypothesis 1 is rejected. Therefore, there is a significant effect of gender on the mean achievement of secondary school students in Social Studies.

Testing of the Null Hypothesis 2

Ho₂: There is no significant main effect of teachers' gender on the mean achievement of secondary school students in Social Studies.

Table 4: Analysis of Co-variance for students' achievement based on Teachers' Gender

Source of Variation	Sum of Square	Df	Mean of Square	F	Sig of F
Covariates	12903.578	1	12903.578	332.205	.000
Pretest	12903.578	1	12903.578	332.205	.000
Main Effects	9.081	2	4.540	.117	.980
Male	2029.109	1	2029.109	41.606	.000
Female	8.651	1	8.651	.233	.847
2-way Interactions	60.388	1	60.388	1.555	.216
Male Female	60.388	1	60.388	1.555	.216
Explained	12973.047	4	3243.262	83.498	.000
Residual	3418.115	106	38.842		
Total	16391.161	110	178.165		

Significant at $P < 0.05$

In the ANCOVA table, the summary of result of hypothesis 2 presented in table 4 showed that the value of F-cal (1.555) is greater than F-sig (0.216) at 0.05 alpha level significance, this indicated that hypothesis 2 was rejected on the ground that the decision rule was to reject the null hypothesis when the calculated value is greater than the significant value at 0.05 level of significance. This implies that there were significant effects of teachers' gender on mean achievement of secondary school students in Social Studies in Abakaliki urban of Ebonyi State.

DISCUSSION

Effects of Gender on mean Achievement of Secondary School Students in Social Studies

The findings of data analysis presented in table 1 above revealed that gender seemed to have slight differential effect on male and female secondary school students mean achievement scores in Social Studies. This is because female students had a mean score of 73.053 and a standard deviation score of 11.357 while the male students had a mean score of 71.218 and a standard deviation score of 9.575.

The summary of the findings of the test of significance of difference in the mean achievement scores of male and female students as presented in table 3 showed that the value of F-sig (.000) is lower than the value of F-cal (41.606) at 0.05 level of significance. This indicated that the null hypothesis 1 was rejected on the ground that the value of F-sig (.000) is lower than the value of F-cal (41.606) at 0.05 level of significance. This implies that there was significant main effect of gender on the mean achievement of secondary school students in Social Studies in Abakaliki urban of Ebonyi State. The findings of this study disagreed with the finding of Oleabhielle (2011) who held that male students perform better than female students in any classroom instructional activities that involve calculation. Also, Ajaegbu (1999) observed that female students perform better in languages and arts while male students perform better in Mathematics and related Science subjects. This showed that gender wield greater effects on female students' achievement in Social Studies here in Ebonyi State as observed most western societies where females possess higher ability in verbal test English language than males. Sweeney, (2003) notes that female students are lower in mathematics and spatial ability, as males were superior to females on problem solving tasks and on specific abilities related to problem solving. Messies (2006) contended that there are gender differences in intellectual functioning that attempts to account for both mean differences and differences in correlation patterns between the genders. He concluded that in the period of secondary school and beyond, the intellectual domain reveals few consistent differences between the genders. Husen in Ayayo (2007) indicated in an investigation spanning twelve industrialized countries the ability of both male and female students in their general academic performance.

Effects of Teachers' Gender on mean Achievement of Secondary School Students in Social Studies

The results of data analysis revealed that masculine gender had much differential effects on secondary school students' mean achievement in Social Studies with the mean scores of 75.250 and 76.584 compared to achievement of other secondary school students taught Social Studies by feminine gender that had mean scores of 67.915 and 60.600. In cross examination of the results of data analysis in table 2 above, it could be observed that teachers' gender influences the academic achievement of secondary school students in Social Studies. For instance, it could be observed in table 2 that female students taught Social Studies by male teachers performed better with mean score of 76.584 than their male counterpart with mean score 75.250 while male students taught Social Studies by female teachers performed better with mean score 67.915 compare to the performance of female students taught by female teachers with mean score of 60.600. These implies that teachers' gender have effects on secondary school students' mean achievement in Social Studies in Abakaliki urban of Ebonyi State.

Again, the summary of results of hypothesis 2 presented in table 4 showed that the value of F-cal (1.555) is greater than F-sig (0.216) at 0.05 alpha level significance, this indicated that

hypothesis 2 was rejected on the ground that the decision rule was to reject the null hypothesis when the calculated value is greater than the significant value at 0.05 level of significance. This implies that there were significant effects of teachers' gender on mean achievement of secondary school students in Social Studies in Abakaliki urban of Ebonyi State. The findings of this study are in line with the observation made by Block (2006) that gender is a strong predictor of human conduct and many differences have been documented on attitude and behaviour that affect academic performance in between males and females. The issue of effects of gender and differences in academic achievement is a complex task, thus many studies appear to be contradictory which pave way for tremendous amount of works to have been carried out in an attempt to find out potential causes of differences between girls' and boys' academic performances in Social Studies and this has clearly demonstrated that male students are superior to their female counterparts in qualitative courses. One of the works is the finding made by Oyibe (2015) who observed that feminine students perform better in classroom instructional activities than the masculine students if male teacher manned the instruction and vice versa. This observation is in line the findings of this present study in secondary school students taught Social Studies by male teachers unlike the students taught by female teacher though boys perform better than girls if female teacher direct the instructional activities. This incidence has been attributed to several reasons by educators. Odega (2011) for example, pointed out that feminine teachers are more conforming, suggestible and dependent on the views of others and these traits in turn have been related to dependency, inability to break a set of tasks. He is of the view that same traits in feminine teachers might also account for their superior performance on tests involving analytic thinking, spatial and abilities when it comes to classroom work.

CONCLUSION

The findings of the study revealed that both students and teachers' gender have effects on secondary school students' mean achievement in Social Studies. It is the opinion of the researchers if educational stakeholders can pay attention to the suggestions made; the problem of differences encountered in students' achievement in school will reduce to bearable rate.

RECOMMENDATIONS

Based on these findings, the researchers recommended that:

1. Social Studies teachers should re-assess their classroom instructional practice because there is a need for them to shift from instructional practice that will give the students equal opportunities to excel in instructional activities.
2. Social Studies instructional activities should not be entrust on the hand of either of the teachers' gender.
3. Government should put gender equality in consideration while recruiting Social Studies teachers.

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