

Gender, Socio-economic status, Teacher qualification and their Interaction on Students' Retention Ability in Social Studies in Akwa Ibom state, Nigeria

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Abstract

This work sought to find out the effect of gender, socio-economic status, teacher qualification and their interaction on students' retention ability in Social Studies in Akwa Ibom State schools of Nigeria. Literature review was carried out on the variables directing the study. A total of 270 Upper Basic students were used for the study. The instrument consisted of thirty multiple choice objective questions and a questionnaire. The research design used for the study was a pretest post-test control group experimental design. One hypothesis was postulated for the study and tested at 0.5 level of significance using analysis of covariance (ANCOVA). The result of the analysis indicated that students' socio-economic status, teacher qualification and the interaction of teacher qualification with treatment significantly influenced students' retention ability in Social Studies. Specifically, the retention ability of higher SES students is significantly greater than that of medium SES students who in turn had significantly higher retention ability than low SES students. Based on these findings, recommendations were made.

Keywords: Gender, Socio-economic status, Teacher qualification, Students' retention ability, Social Studies.

Introduction

Edinyang (2012) in his research work entitled "prior knowledge of general objectives and specific behavioral objectives on students' academic achievement and retention in Social Studies in Akwa Ibom State of Nigeria" opined that among the variables that affect students' retention ability in Social Studies are; students' gender, socio-economic status and teacher qualification. This research work therefore seeks to ascertain the effect of the interaction of these variables on students' retention ability in Social Studies.

Literature review

Quite a lot of literature has been written on gender generally vis-a-vis retention ability Murphy (2000) Nelson (1990) William (1996) Don (1998). In their effort to investigate gender on students' performance, Murphy (2000) found males to be superior to females in certain subjects whereas Nelson (1990) found females superiority over males. Ifeoma (2001) in her research on the effect of sex differences on academic performance in Economics found no significant sex difference. Be that as it may, as far as teaching and learning of Social Studies is concerned, the authors' experience has shown that both sexes have good spatial skills if given appropriate exposure and "allowed independence early in life,"

Researchers have also shown that socio-economic status of parents is another variable that influence students' retention in Social Studies. Investigation by Ebong (2004), Tina (2001) Mgbado (2002) revealed that the socio-economic background of parents play a vital role in the retention of students in not only Social Studies but in school subjects generally. They reported that the best simple predictor of the child's future achievement is the family standard. This according to them is due to the fact that it is the family that first exposes the child to educational aids, recreational facilities such as radios, televisions, magazines, books and many others, that help to educate the child.

However, parents' socio-economic status can be classified into high, middle and low backgrounds. It invariably means that to be born into a family means to acquire the socio-economic status of that family and this affects the child's position in the society and invariably the child's retention ability not only in Social Studies but in other subjects as well. Ikpaya (2004) argued that the gifted and talented children cut across socio-economic status, Tina (2001) submitted that majority of them are found in the middle and upper classes because as she argued retention and intelligent are significantly related to socio-economic status.

In line with this Ebong (2004) is of the view that children of higher socio-economic group tend to be more creative and intellectually sound than those of the lower and middle groups. He went further to say that children from higher socio-economic group scored substantially higher than those in the middle and low socio-economic groups. This assertion was made after a survey study which shows that children from high socio-economic background have performance advantage over their counterparts in the other classes in Imo state.

In his view, Denga (1986) opined that home environment to a great extent, influences the child's behaviour and achievement, He explained that home conditions such as noise, poor accommodation, poor lightening for reading and lack of educational materials have adverse effect on the child's learning ability. He

went on to suggest that for effectiveness and success in learning, there must be adequate reading space and a challenging environment for the child. This is true because as Ikpay (2004) puts it, children who are economically depressed can develop certain psychological feelings which might lead to frustrating performance.

On his part, Andrew (1999) stated that children from low socio-economic background have poorer mastery of English language (their second language) as it is used in schools than children from higher socio-economic levels. The source explained further that these children did not only have a smaller vocabulary than children from more prosperous areas (upper class) but that their words had some special meaning in their dialect.

It is pertinent however from this review that socio-economic background of the child influences in no small measure the child's intelligence. It also influences the child's ability to complete school successfully, type of school the child attends, the type of food the child eat, the type of environment the child stays and the language development of the child.

Writing on teacher qualification and students' retention ability Darling-Hammond, Hudson and Kirby (1998) are of the view that better qualified teachers make a difference for students learning at the classroom, school, and district levels. There has also been an inquiry into the effects on achievement that may be associated with large scale policies and instructional practices that affect the overall level of teacher's knowledge and skills in a state or region, the result of which has been very positive. Sanders and Rivers (1996); Wright, Horn and Sanders (1997); Jordan, Mandro and Weerasinghs (1997) have found out that differential teacher 'qualification is a strong determinant of differences in students learning far outweighing the effects of differences in class size and heterogeneity. They observed that students who are assigned to several unqualified teachers in a row have significantly lower retention and gains in achievement than those who are assigned to several highly qualified teachers in sequence.

Studies by Sanders, Harbin and Phelps (1994) also indicate that students achieve highly and they are less likely to drop out of school when they are taught by teachers with certification in their teaching field. The authors pointed out too that differences in the perceptions and practices of teachers with differing amounts and kinds of qualification and their impact on students' retention have shown that less qualified teachers tend to be less satisfied with their training. As a result, they have greater differences in planning the curriculum, teaching and managing the classroom as well as diagnosing students' learning needs. The results are always poor performance by the students they teach when compared to students that are being taught by teachers with higher qualification.

Research problem

The problem of this study posed as a question is how can teacher qualification, gender and socio-economic status of students affect their retention ability in Social Studies?

Research questions

To achieve this purpose the following research questions were raised:

1. To what extent does the gender of students affect their retention of content in Social Studies after lesson?
2. To what extent does the socio-economic background of students affect their retention of content in Social Studies?
3. To what extent does teacher qualification affect the retention of content by students in Social Studies?

Hypothesis

There is no significant influence of gender, socio-economic status, teacher qualification and interactions on students' retention ability in Social Studies.

Research methodology

The design used for this study was pretest, post-test control group experimental design. The design was adopted because it allows the independent variables which are gender, socio-economic status and teacher qualification to be manipulated in order to determine their effect on the dependent variable which is students' retention ability in Social Studies.

The study population comprised 1800 JSSII students from 23 public post primary schools in Akwa Ibom state. The study had a sample of 270 respondents. The simple random samplings technique was used for the selection. The instruments used in the collection of data for the study were a test and a questionnaire. The questionnaire was used to gather information on teacher qualification, gender and socio-economic status.

A total of nine teachers were used to assist the researcher in teaching both the control and experimental groups. The used of teachers was very necessary here in order to assess the impact of teacher qualification on students performance in Social Studies. Thus three post graduate teachers, three first degree teachers and three NCE teachers were involved in the experiment that lasted' for eight weeks. The teachers before the commencement of the exercise were briefed of their role in the study. In order to ascertain that this instrument could reliably serve its objectives, a trial testing was conducted. The split half reliability method was used in computing the reliability co-efficient. The correlation co-efficient reliability was $r_{xy} = 0.44$ and the Spearman

Brown prophecy value was $t=0.61$. This result suggests that the instrument had the necessary requisite needed to effectively and adequately generate the data needed for the study.

Result

In the hypothesis directing this study, there are three independent variables apart from the treatment and one dependent variable—retention ability. Thus, a four-way factorial ANCOVA with pretest as covariate was used in testing the hypothesis. The results are shown in Table 1.

Table 1
Four-way (2x3x3x3) ANCOVA of the influence of gender, teacher qualification, socioeconomic status and treatment on students' retention ability in Social Studies, with pretest as covariate.

Source of variation	Sum of squares	df	Mean squares	F
Pretest	4477.910	1	4477.910	68.072
Gender (G)	84.879	1	84.879	1.290
Teacher Qualification (TQ)	276.757	2	138.378	2.104
Socioeconomic status (SES)	3231.582	2	1615.926	24.565*
Treatment (T)	2329.745	2	1164.873	17.708*
Gender x TQ	56.668	2	28.334	.431
G x SES	112.141	2	56.070	.852
G x T	32.263	2	16.132	.245
TQ x SES	289.849	4	72.462	1.102
TQ x T	116.626	4	29.157	.443
SES x T	66.109	4	16.527	.251
G x TQ x SES	340.494	4	85.124	1.294
G x TQ x T	162.186	4	40.546	.616
G x SES x T	214.681	8	53.670	.816
TQ x SES x T	684.232	8	85.529	1.300
G x TQ x SES x T	259.077		32.385	.492
Error	14143.092	215	65.782	
Total	28438.291	269		

* $p < .05$ F.05 (1,215) = 3.89; F.05 (2,215) 3.04
F.05 (4,215) = 2.41; F.05 (8, 215) = 1.98

The result in Table 1 indicates that the calculated f-value for pretest which is 68.072 is significant since it is greater than the critical f-value of 3.89 at .05 significance level and (1,215) degrees of freedom. This means that the difference between subjects pretest scores is significant. However, only the main effects for socio-economic status and treatment are significant because their calculated f- values (24.565 for socio-economic status and 17.708 for treatment) are respectively greater than the critical f-value of 3.04 at .05 significance level and (2,215) degrees of freedom. This means that only students' socio-economic status and treatment significantly influences students' retention ability in Social Studies. In other words gender, teacher qualification and all the interactions of gender, teacher qualification, socioeconomic status and treatment do not significantly influence students' retention ability in Social Studies.

In other to determine the points(s) where there is a significant difference for socio-economic status, a post hoc analysis was performed using Fisher's LSD technique. The results are shown in table 2.

Table 2
Post hoc comparison of the adjusted mean retention ability scores of students of different socio-economic status using Fisher's LSD technique

	Socioeconomic	1	2	3
1.	High	63.848 ^a	5.922 ^b	11.687*
2.	Medium	.000 ^c	57.926	5.765*
3.	Low	.000	.000	52.161

NB: a.= The adjusted means scores are along the principal diagonal
b.= The difference between adjusted means are above the principal diagonal
c.= Computer generated significance levels for the difference between adjusted means are below the principal diagonal.
* $p < .05$

Findings

- 1) Students' gender and all the interactions do not significantly influence students' retention ability in Social Studies.
- 2) Students' socio-economic status significantly influences students' retention ability in Social Studies. Specifically, the retention ability of high SES students is significantly greater than that of medium SES students who in turn have significantly higher retention ability than low SES students.

Discussion

Findings from the analyzed data (Table 1) show that student gender and all the interactions do not significantly influence students' retention ability in Social studies. This implies that either the males or females often perform better in tests, assignments and examinations. The result of this work is in total agreement with Ifeoma (2001) who reported that the performance of students (male and female) in Economics was not significantly different. It is also in line with Williams (1996) work which also reported no significant sex difference in cognitive styles and other Social Studies related subject. That is to say that there was no statistically sex difference in Social Studies retention ability.

More so, despite conventional wisdom that school inputs make little difference in students' learning, a growing body of research (Sanders and Rivers 1996; Jordan, Mendro & Weerasinghs 1997) suggest that schools can make a difference, and a substantial portion of that different is attributable to teacher qualification as seen from the result of this work on the effect of teacher qualification on students retention in Social Studies, The above writers argued and correctly too that teacher qualification at the classroom level using the Tennessee Value Added Assessment System and a seminar data base in Dallas Texas, have found that differential teacher qualification is a strong determinant of differences in students learning, far out weighing the effects of differences in class size and heterogeneity. These findings conform to the result of this work because as the writers argued, students who are assigned to several less qualified teachers in a row have significantly lower achievement (in this case the NCE teachers) than those who are assigned to several highly qualified teachers in sequence (in this case the post graduate teachers).

Supporting the above argument, Fuller (1999) reported that students in districts with greater proportion of teachers with higher qualification were significantly more likely to pass the Texas State achievement test, after controlling for student socio-economic status, school wealth, and teacher experience. Andrew (1999) also supported the above view that the effect of teacher qualification on students' achievement and retention have also been found to be very positive. It seems logical therefore, as Darling-Hammond et al (1998) rightly argued to conclude that teachers' ability to handle the complex tasks of teaching for higher level learning are likely to be associated to teacher qualification which is observed in the teacher verbal ability, adaptability and creativity, subject matter knowledge, understanding of teaching and learning, specific teaching skills and even experience in the classroom as well as interaction among these variables. The high performance of the students taught by the post graduate teachers, followed by the first degree teachers confirms her observation that "... the states that lead the nation in students achievement; in Mathematics and reading have among the most highly qualified teachers in the country and have made longstanding investments in the quality of teaching" (p.47).

Findings from the analyzed data also show that the high academic performance of students from high socio-economic status over that of medium and low socio-economic status is not surprising. This supports Ebong (2004); Tina (2001) and Mgbado (2002) report that students from the high socio-economic background are bound to perform higher than the students from the medium and low socio-economic status because the test single predictor of the child's future achievement is the family standard. This according to them is due to the fact that it is the family that first exposes the child to educational and recreational facilities such as radio, televisions, magazines, books and many others that helps to educate the child. This invariably means that the inability of a family to provide the above basic needs to a child due to financial difficulty, the child is bound to start off wrongly in school.

Socio-economic backgrounds of students play a very substantial role on the students' retention ability. These influences start from birth and shape the students' lives through adolescence to adulthood. From the home, the children go to school with a myriad of talent values, attitude, norms, aptitudes that predispose them towards school success or failure and these factors still have influence on them till the early stage of adulthood. Depending on this influence the students perform better or worse than others.

In the Nigeria society since the culture of the metropolis was inherited by the rich class, from then it follows that children whose parents can afford them with the cultural capital like, television, radio, computer with internet services, home library as mentioned earlier are put in an advantage over the non working class children whose parents cannot afford to provide them with these things.

Children from the low socio-economic family are academically low achievers in Social Studies lessons because of the struggle among the lower class to maintain a minimum level of substance which makes the goal of an advanced education seen as remote or manage. Low socio-economic status produces inadequacies in socialization. This is because it creates needs among the lower family. They cannot concentrate. They cannot

stimulate their children's intellectual growth or plan for their educational future because of poverty.

From the data in Table 2 it can be concluded that high socio-economic status students have higher retention ability than medium socio-economic status and low socio-economic status students respectively. More so, medium socio-economic students have higher retention ability than low socio-economic students when the student's retention ability scores are adjusted for the pre-instructional knowledge scores. The data in Table 1 also reveals that socio-economic factors are the only factors that influences retention of Social Studies lessons because their calculated f-values (24.565 socio-economic status and 17.708 for treatment) are respectively greater than the critical f-values of 3.04 at .05 significant level and, (2215) degree of freedom.

Recommendations and conclusion

Based on the result of the data analysis, the study recommends and concludes that:

- (1) No student should be gender stereotyped as both (gender) are equal and could compete favourably with one another given equal opportunity in Social Studies class.
- (2) This study underscores the importance of teacher qualification in improving student's performance in Social Studies. There is need to employ qualified teachers to teach our children. There is also need to train the ones in the system so as to be able to perform the "complex work of teaching" Social Studies effectively.
- (3) Irrespective of the socio-economic class to which one belongs, there is need for parents to have few children with reasonable spacing so that they may pay maximum attention and concentration to each child's need and thus contribute to his/her better academic performance in school.

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