

Gender as a Correlate of Senior School Students' Reading Comprehension Achievement in English in Ebonyi State

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Abstract

The study considered the correlation between gender and senior school students' reading comprehension achievement in English in Ebonyi State of Nigeria. The design of the study was a correlational design, which correlated gender with senior school students' achievement in reading comprehension. The population of the study was 33,986, being the total number of senior school 2 students in Ebonyi State public schools. The sample size was 396 students which was arrived at, using the Taro Yamane formulae for determining sample size. Instrument for data collection was a reading comprehension test adapted from the government prescribed English language reading text. While research questions were answered using coefficient of correlation, hypotheses were tested at an alpha level of 0.05 of significance, using step-wise linear regression. Items whose "T" were less than significance of "T" were accepted, while items whose "T" were more than significance of "T" were rejected. Result showed that there was significant relationship between male students' attitude and achievement. Result equally showed that there was a significant relationship between female students' attitude and their achievement in reading comprehension. Based on these findings, recommendations were made among which was that since attitude to learning made a lot of difference in academic achievement, senior students' attitude to learning must be monitored by teachers if their achievement would be improved.

Keywords: Correlation, Gender, Senior School Students, Reading Comprehension Achievement, English Language.

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1. Introduction

Gender refers to the distinction that separates the male and female in terms of their sex organs and roles. The Medical Dictionary 8th edition (2003), sees gender as the socially constructed views of feminine and masculine behaviour within individual cultural groups. It equally posits that gender identity is a person's sense of their biological sex. Gender role is perceived as the set of behaviours, attitudes, and other characteristics normally associated with masculinity and femininity within a given culture or social group.

Gender is a variable that may strongly correlate with the reading comprehension achievement of students. In a study conducted to investigate the relationship between the reading abilities, frequency of reading and attitudes of males and females, and beliefs relating to their reading and school, Logan and Johnston (2009), observed that generally, females read and comprehend better than their male counterparts. They equally discovered that females read more frequently, and had a more positive attitude to reading and school than their male counterparts. However, they observed little differences between the two groups in reading (comprehension) ability than in attitudes and frequency of reading. It was further observed that effect sizes for gender differences in reading were found to be insignificant in this study and others that had been so conducted. Reading ability was found to correlate with both boys' and girls' reading frequency and competency; however, only the reading ability of males had relationship with their attitude to reading and school. It is widely believed that female students have better reading ability than their male counterparts. This belief may have been based on the notion that girls speak earlier and faster than boys. Since reading correlates with comprehension, the rate of one's reading may invariably determine one's comprehension.

However, Logan and Johnston (2009) observed some minor differences in the reading and comprehension abilities of both sexes than in their attitudes and frequency of reading. Reading ability was found to correlate with both boys' and girls' reading frequency and competency; however, only boys' reading ability was associated with their attitude to reading and school. It is widely believed that girls have better reading ability than boys. Logan and Johnston (2009) in another cross-sectional study of children in grades 1-6 found that the

strength of the association between ability and attitude to recreational reading grows stronger over time. The study shows that girls have better reading comprehension ability than boys. However, this may not be so in all cases as most boys may equally do better than girls if exposed to favourable home and early school environment.

Ideally, no significant difference is expected in the mean achievement of male and female students in learning situations. This is because gender does not determine Intelligence Quotient (IQ). However, the popular natural expectation is that males would perform better than females in achievement tests. This notion may have been based on the natural order of men being the head. But empirical evidence has proved that females may perform better than males given good study condition. An experimental study conducted by Genet (1997) on the effects of didactic teaching approach on 3rd and 5th grade boys' and girls' achievement on arithmetic computation problems, revealed that girls in the didactic group out-performed boys in both instruction groups. This result obtained by Genet, though in Mathematics, can equally be relevant in determining achievement of both sexes in reading comprehension. A study juxtaposing females and males performance in reading comprehension test may expose the stronger sex in such test.

It is also believed that where teachers are available in the right ratio, both boys and girls alike will have better achievement in reading. Statistics collected from EBSSEB (2014) however, showed teacher – student ratio in the senior secondary classes to be 1:324 and 1:81 at the SS2 classes alone. Teachers with such work load are not likely to put in their best in terms of instructional delivery, and so students' achievement may be poor. Also certain geographical factors may predispose either males or females to out-perform the other. Such impacting geographical factors may be the result of school location in either the urban or rural setting.

It is important that reading comprehension achievement be encouraged across both gender. This is because if reading comprehension ability is poorly developed among youths at that level, it will impact negatively in their future educational career. According to UNESCO report (2017), the African continent has remained a place where over 50% of her parents has remained incapable of assisting their children to do their homework due to the high rate of parental illiteracy. The report further avers that over 153 million adult population, which constitutes about 38% of that human category are not literate as a result of their inability to read and comprehend, regretting that females constitutes two thirds of that population. The findings of Guardian (2015) puts the population of non-literate females at about 496 million which it claims to be about two-thirds of the world's illiterate adults, and blames this situation on the attitude of most males that conceive females as incapable of being their equals. There is therefore a significantly larger number of the female folk who cannot perform required academic tasks as a result of not being compliant to reading comprehension which forms the bedrock of academic achievement. It is necessary that the potency of reading comprehension in today's global development be emphasized in every aspect of education, since it is very imperative to learning and development. Though reading comprehension appears as a discipline in language, it is necessary in every discipline since reading and comprehending any subject of any discipline remains the tool of achievement in that discipline. Males and females, of the school stage should be adequately exposed to reading comprehension exercises to enable them to cope with global reading comprehension achievement challenges. Females especially can be of dual advantage when properly exposed to the tenets of reading comprehension. Apart from good academic achievement, females' education improves children's health and prevents infant mortality, because educated mothers have greater knowledge and awareness of the importance of hygiene which prevents contact of germs and mortal diseases which reduce the population of children. Besides, mothers' education also has significant impact on the educational attainment of the child. National Centre for Learning Disability (NCLD) (2019) succinctly averred that the mother is her child's first teacher, stating that the home is where the child would get his or her first experiences with books and reading.

It may therefore stand to be averred that the education of women develops the society more than male education. Reading comprehension, being the bedrock of learning, enhances the educational attainment of the beneficiaries and improves achievement.

This study examines the correlation between gender and reading comprehension achievement of senior secondary school students in Ebonyi State of Nigeria.

2. Statement of the Problem

The position of the English language in the Nigerian education, economic and socio-political life cannot be over-emphasized. English is Nigeria's adopted official language of records and communication, and so very necessary in the education process of her citizens. Federal Republic of Nigeria (2004) made the English language pedagogically significant as the language of instruction in virtually the entire school system, from the upper primary to the highest tertiary level. However, the achievement of students especially, of the senior secondary school level has not been encouraging in the English language examinations as conducted by West African Examination Council (WAEC). Reading Comprehension is an integral aspect of the English language study which prepares students for effective writing and in-depth reasoning and for that, it usually attracts a great chunk of the marks in the subject (English) in public examinations. Reading comprehension tests are designed to test

candidates' competence in the different basic skills of communication in English using the media of speech and writing. According to WAEC (2014), reading comprehension tests examine candidates' abilities in such cardinal areas as: the use of correct English, ability to find suitable replacements for chosen words or phrases, understanding of factual content, making deductions from the passage content, identification and explanation of basic literary terms and expression among others. Because of this affinity, poor achievement in reading comprehension may strongly correlate with students' poor achievement in English language. Results obtained from WAEC shows a fluctuating performance in the achievement records of senior secondary school students that have taken the examination in English. For instance, according to WAEC (2019), results showed that between the year 2015 and 2019, the percentage of senior secondary school students that obtained credit passes in 5 subjects including English language stood as follows: 39%, 53.19%, 54.06%, 49.98%, and 64.18% respectively.

Gender appears to be a variable that may strongly correlate with the achievement of senior secondary school students in English language reading comprehension. According to National Bureau of Statistics (2018), out of a total number of 24,146 male and female students that sat for the West African School Certificate Examination (WASCE) in 2016 in Ebonyi State, 6,967 males representing 28.85% and 6,489 females representing 26.87% scored up to 5 credits and above, including English. In year 2017, out of 23,389 males and females that sat for the examination, 9,113 males representing 38.9% and 9,159 females representing 39.15% scored up to 5 credits including English. In 2018, out of a population of 24,970 males and females that sat for the examination, 8,735 males representing 29.14% and 8,932 females representing 29.80% obtained up to 5 credits including English.

If gender correlation with reading comprehension achievement among senior secondary school students is not ascertained, it might be difficult for teachers of English to measure the extent of the effectiveness or otherwise of their teaching strategies, especially taking the rate of comprehension of male and female students into account, and thus, achievement level in English language among senior secondary school students may continue to be low in Ebonyi State.

The problem of this study therefore is to investigate gender as a correlate of Senior Secondary School students' achievement in reading comprehension in English language in Ebonyi State.

3. Purpose of Study

The main purpose of this study was to identify the correlation between gender and reading comprehension achievement in English in Ebonyi State.

4. Research Questions

One research question was formulated for the study namely:

1. What is the correlation between male students' attitude and senior secondary school students' achievement in reading comprehension in English in Ebonyi State, Nigeria?
2. What is the correlation between female students' attitude and senior secondary school students' achievement in reading comprehension in English in Ebonyi State, Nigeria?

5. Hypothesis: Two null hypotheses were tested at 0.05 level of significance thus:

1. There is no significant relationship between male students' attitude and their reading comprehension achievement in English in Ebonyi State, Nigeria.
2. There is no significant relationship between female students' attitude and their reading comprehension achievement in English in Ebonyi State, Nigeria.

6. Methodology:

The design adopted for this study was a correlation design. Gender was correlated with students' achievement in reading comprehension. A correlation study according to Cheprasov (2018), is that used by the researcher to investigate relationships that naturally exist among variables and in what way such relationships do exist.

The population for this study was all SS2 students in the 189 public senior secondary schools in the three Education Zones in Ebonyi State, whose population was 33,986.

In the three Education Zones, all the senior secondary schools study English language and also use the same recommended text books in English. Using Taro Yamane formula for determining sample size, a sample size of 396 respondents was selected from the student population. Yamane's formula runs thus:

$$n = N / (1 + Ne^2).$$

Where n = sample size; =?

N = population under study; = 33, 986

e = margin of tolerable error; = 0.05

$$n = \frac{33,986}{1 + 33,986(0.05)^2} = 395.3469 \approx 396$$

Using simple random sampling by balloting, 20 senior secondary schools were selected representing 34%. Randomization ensured urban and rural coverage.

The instruments for data collection were: (i) a reading comprehension test adapted from the prescribed English text for senior school classes-*Intensive English for Senior Secondary Schools 2*, which were administered among boys and girls in their natural classes of study.

The researcher used a total of six (6) research assistants who were teachers, to administer both the questionnaire and the comprehension passage. The research assistants supervised the students after instructing them on what they were required to do in each of the instruments. Their supervisory role ensured the students worked independently. The reading comprehension passage test was collected and later marked and scored based on 100%. The HSL, which was administered the next day to the same group of respondents, was equally collected on the spot ensuring that no instrument was lost, and so there was a 100% return.

The instrument which consisted of a Reading Comprehension Test (RCT) was administered to a group of thirty five (35) students of SS2 classes from Okpuitumo Secondary School, Ikwo in Ikwo Local Government Area of Ebonyi State, who were not part of the sampled population for the main study. This was a trial testing. The Reading Comprehension Test (RCT) was subjected to a six man judges' rating on six students. The rankings from the judges were used in Kendal Coefficient of Concordance (KCC) which yielded a reliability coefficient of 0.84 which showed that the instrument was suitable for use. Data collected were used to compute the reliability coefficient based on Crombac Alpha. The reliabilities of the instrument based on clusters 1, 2, 3 were 0.87; 0.81; and 0.76. However, the reliability for the entire instrument of thirty (30) items was 0.91 which showed a high internal consistency, and therefore suitable for the study.

While Research question was answered using coefficient of correlation, hypothesis was tested at an alpha level of 0.05 of significance, using step-wise linear regression. Items whose 'T- calculated were less than significance of "T" were accepted, while items whose 'T-calculated' were greater than significance of "T" were rejected. The correlation coefficient table as proposed by Nwana (2008:311) the correlation interpretation table runs thus:

Table 1: Table of interpretation of correlation coefficient

Correlation	Interpretation
0.80 to 1.00	Very High, Near perfect Relationship
0.60 to 0.80	High Relationship
0.40 to 0.60	Medium Relationship
0.20 to 0.40	Low, Definite Positive Relationship
0.00 to 0.20	Very Low, Virtually No Relationship

7. Results

- Research Question 1:** What is the correlation between male students' attitude and senior secondary school students' achievement in reading comprehension in English in Ebonyi State, Nigeria?

Table 2: Correlation Coefficient between Male Students' Attitude and Achievement.

Variables	Male Achievement	Male Attitude
Male Achievement	1.0000 (188) P=.	0.8306 (188) P=0.000
Male Attitude	0.8306 (188) P= 0.000	1.0000 (188) P=.

r= 0.83.

In table 2, the relationship between Male Students' Attitude and their achievement was 0.83. This falls within 0.80 – 1.00 and showed a very high and positive relationship. This shows there is a relationship between male students' attitude and their reading comprehension achievement.

Research Question 2:

What is the correlation between female students' attitude and senior secondary school students' achievement in reading comprehension in English in Ebonyi State, Nigeria?

Table 3: Correlation Coefficient between Female Students' Attitude and Achievement

Variables	Fem. Achievement	Female Attitude
Female Achievement	1.0000 (208) P=.	0.5912 (208) P=0.000
Female Attitude	0.5912 (208) P= 0.000	1.0000 (208) P= 0.000

r= 0.59.

In table 3, the coefficient of correlation between Attitude and female students' achievement was 0.57. This falls within 0.40 – 0.60 and indicated a medium positive relationship. This indicates there is a relationship between female students' attitude and their reading comprehension achievement.

Hypotheses:

H₀₁: There is no significant relationship between male students' attitude and their reading comprehension achievement in Ebonyi State, Nigeria.

Table 4: Significances of Relationship between Male Student Attitude and Achievements.

Variable	Computed R	R-Squared	Adjusted R-Squared	Standard Error	Beta	"T"	Significance of "T"
Male students' Attitude.	0.8305	0.6898	0.6881	6.2366	0.8305	20.339	0.0000
Constant						-1.431	0.1543

Significant at P < 0.05

Result in table 19 indicated that "T" which is 20.339 was greater than significance of "T". Hypothesis 5 was therefore rejected. It shows that there is significant relationship between male students' attitude and achievement.

H₀₂: There is no significant relationship between female students' attitude and their reading comprehension achievement in Ebonyi State.

Table 5: Significance of Relationship between Female Students' Attitude and Achievement

Variable	Computed R	R-Squared	Adjusted R-Squared	Standard Error	Beta	"T"	Significance of "T"
Fem students' Attitude	0.5912	0.3495	0.3464	7.7920	0.5912	10.522	0.0000
Constant						2.638	0.0090

Significant at P < 0.05

Result in table 5 indicated that "T" was 10.522 while significance of "T" was 0.0000. "T" was greater than significance of "T" and so, hypothesis 2 was rejected. It indicates there is a significant relationship between female students' attitude and their achievement in reading comprehension.

8. Discussion

Findings revealed that coefficient correlation between male students' attitude and achievement in reading comprehension was 0.83 which indicated a very high positive relationship. Similarly the corresponding hypothesis which is hypothesis 1 indicated that 'T' at 20.339 was greater than significance of 'T'. Hypothesis 1 was therefore rejected. It showed there was significant relationship between male students' attitude and reading comprehension achievement. This result agrees with Mullis et al in Logan and Johnston (2009) who posited that boys have significantly stronger correlations between attitude to school and competency beliefs, and attitude to school and perceived academic support and achievement. It goes to show that attitude to learning, especially of boys, makes a lot of difference in their academic achievement. It is evident that the incidences of drug addiction and social activities that often lead into cultism are higher in boys than in girls. Ikhilae (2012) commented that cultism had deprived most students from reading. The result equally lends credence to Ozoegu (2012) who maintained that the attitude of students towards reading was actually dying. In another study Mullis et al in Longan and Johnston (2009), however, stated that boys consistently perform more poorly, on average, on measures of reading comprehension.

Finding showed that coefficient correlation between female students' attitude and reading comprehension achievement was 0.59 which indicated a medium positive relationship. Similarly, result of corresponding

hypothesis which is hypothesis 2, indicated that 'T' was 10.52 while significance of 'T' remained 0.0000. 'T' was greater than significance of 'T' and so the hypothesis was rejected. It showed that there was a significant relationship between female students' attitude and their achievement in reading comprehension. However, the level of relationship among female students is lower than that of their male counterpart. This shows that the level at which the attitude of male students correlate with their achievement is higher than that of females. This result is therefore in consonance with the findings of Logan and Johnston (2009) who maintained that girls have more positive attitude to recreational reading than boys. Logan and Johnston maintained that girls and boys tend to differ in their reading preferences, habits, and reading interests. One of the variables that can influence attitude is motivation. Michelle (2013) agreed with this view and posited that teachers could improve students' motivation simply by smiling, giving extra help on an assignment, or by commending a student on a job well done. While these actions are great motivators, the best motivation lies in the teachers' personality towards students. Motivation is an enhancer of interest which in turn enhances attitude

9. Conclusion

Having established that there is a correlation between gender attitude and reading comprehension achievement, showing there is a disparity in the learning interest of males and females in a learning environment, it is therefore necessary that governments at all levels adopt strategies that would integrate gender interest into learning. Professionally trained educational guidance-counsellors should be effectively integrated into the education system to ensure this is effective.

10. Limitations to the Study

One of the limitations to this study was the pronounced ignorance of some teachers to the value of empirical study such as this. Most teachers and education staff, realizing that the enquiry would earn them no financial dividend, chose to exhibit apathy and sometimes intolerant attitude towards the exercise. On their part, students who realized that no score that would boost examination success would accrue from response to the enquiries also toed the line of some of their teachers.

11. Recommendations

1. Since boys' attitude to learning makes a lot of difference in their academic achievement, boys' attitude to learning must be monitored by teachers if their achievement will be higher.
2. There is need for Ebonyi State Government and indeed, Nigerian government to employ professional guidance counsellors who assists class teachers to remould and reform the attitude of students to certain subjects like Reading comprehension.
3. Since motivation has been identified as an enhancer of learning interest, teachers should employ a lot of motivational strategies to sustain students' interest that can enhance achievement.

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