Gender Discrimination And Academic Achievement of Female Students In Some Selected Senior Secondary Schools In Karu Local Government Area, Nasarawa State, Nigeria

Idaa A.J., Ph D.  
Dept. of Science Education  
National Open University of Nigeria  
Nigeria, West Africa  
achokwui@yahoo.com

Ughede Abdul  
Dept. of Science Education  
National Open University of Nigeria  
Nigeria, West Africa  
abjunior4real@gmail.com

Abstract- The purpose of the study was to find out the impact of gender discrimination on the academic achievement of female student; the study was carried out using five Junior secondary schools in Karu LGA, Nasarawa State as case study ex-post facto research design was used for the study. Finding revealed that by overall performance, male students performed much better as compared to their female counterparts. Results shows, teacher’s negative attitudes and behaviors and, time wasting among girls, inadequate facilities, teacher’s dissatisfaction and lack of motivation in girls, irregular attendance to school by girls, low persistence and inferiority complex exhibited by female students were the factors responsible gender differences. According to the findings, the study recommends that; Training in gender sensitive techniques through workshops for teachers to change their attitudes and behaviours, parental involvement in encouraging girl children, as well as government effort to help schools acquire basic learning facilities, were among the recommendations arising from the study.

Keywords- Impact, Gender, Performance, Discrepancies, Gender discrimination, Academic achievement or (academic).

I. INTRODUCTION

The problem of students’ under-performance in Junior secondary schools in Nigeria has been a much discussed educational issue. In solving any problem however, it is pertinent to understand the causes of such problems. Many causes or agents have been studied as the etiological starting point for investigating the phenomena of student’s failure or success at school. These causes are looked into from several perspectives including the role of the students, teachers, parents or family, school environment, society, government etc.

Gender is one of such factors also mentioned in literature to have considerable effects on students’ academic performances. Gender is the range of physical, biological, mental and behavioural characteristics pertaining to and differentiating between the feminine and masculine (female and male) population. The importance of examining performance in relation to gender is based primarily on the socio-cultural differences between girls and boys. Some vocations and professions have been regarded as men’s (engineering, arts and crafts, agriculture etc.) while others as women’s (catering, typing, nursing etc.). In fact, parents assign task like car washing, grass cutting, bulbs fixing, climbing ladders to fix or remove things etc. to the boys. On the other hand, chores like dishes washing, cooking, cleaning and so on are assigned to the girls. In a nutshell, what are regarded as complex and difficult tasks are allocated to boys whereas girls are expected to handle the relatively easy and less demanding tasks. As a result of this way of thinking the larger society has tended to see girls as a weaker sex”. Consequently, an average Nigerian girl goes to school with these fixed stereotypes. Gender Discrimination is the type of discrimination which is based on the gender of the person. Usually, in Africa particularly Nigeria, women are treated differently and unequal than men in terms of education, career, economic advancement and political matters. It is a common type of discrimination that is happening throughout the world, even in the developed countries.

Academic performance is the quality and quantity of knowledge, skills, techniques and positive attitudes, behavior and philosophy that students achieve or acquire over a period of time. This achievement is evaluated by the mark or grade that students attain in a term or education cycle. The quality of grades and the number of students that pass in the various grades determine the level of academic performance. There are many factors that account for the good or poor academic performance of the students in secondary schools like; the quality of...
students admitted, the type of scholastic materials available in the school and home environment, the methods of teaching, the nature of administration and teacher’s involvement in academic matters. However, it seems that the most important factor to academic performance of students is the impact of sex differences on students; academic matters. In the same way, academic performance in secondary schools is the concern of all people who have vested interest in schools. This category may include teachers, parents, administrators, proprietors and the public. Regarding performance discrepancies of boys and girls, Megary (1984) concluded that once out of the primary school environment, Females under achieve in a variety of subjects.

The reason why this occurs has to be answered. Attempts will be made to identify the conditions presumed to be responsible for the differential performance of boys and girls as claimed by teachers and some researchers. An examination of sex differences in academic performances in Arts or sciences reveals controversial results. Although researchers begin to show interest in the problem at the beginning of the 20th century, it is surprising that the results are inconsistent, even to this day. Some researchers attribute the differences to methodological flaws, while others mention conditions that favour academic performance of boys and girls such as an aversion of girls towards physical sciences and this could be responsible for the observed performance variations between the two groups.

Iroegbu (2000), who studied secondary school science, found that boys performed significantly better than girls do and posited that there are things in learning process, which affect the understanding of girls and boys differently. Adigwe (1993) in a research that investigated gender differences in chemical problem solving among Nigeria secondary school chemistry students, male students scored higher than their female counterparts. Tsado (1987), Gipps (1994), O’Connor (2001) concluded that as boys and girls grow up, the differences they have in achievement in other subjects diminishes, except in mathematics. According to Helena Holmlund & Krister Sund, (2006), girls perform increasingly better than boys in school. While it is well known that girls score significantly higher than boys on for example reading tests, there is now increasing evidence that the gender gap in school performance is closing in mathematics and science, subjects thought of as being dominated by boys.

Betz (1994) unlike other scholars found that girls perform much better than boys in many school subjects including mathematics, sciences and engineering. Scrimmage our (1993) in his study evaluated boys and girls on seven different areas; lesson core, class administration, questions asked of, questions asked by, tasks allocated to, discipline of, and other transactions. He concluded that boys scored higher in all of these levels than girls did, he added that classroom environment was responsible for observed differences among both genders.

II. STATEMENT OF THE PROBLEM
In spite of the fact that the government at all levels and nongovernmental organizations have vested interest on education for all, the level of gender discrimination still persist in educational system. It is observed that the academic achievement of male students is relatively higher than the female folk. This discrimination in gender, cut across performances in school curricular activities involving subjects of study and other extra curricula activities such as sports. One then tends to wonder that both sexes even when they stay together to receive instruction at the same time and space, there still exist difference in their performances. Could it be that the society beliefs and tradition that females are always weak sex, that affect their academic achievement? Or is it that the environment where learning takes place in these Senior secondary schools in Karu LGA is not conducive, therefore it creates loophole for less academic achievement on the part of female that could not withstand the harsh environment. It is against this back drop the study derives its problem.

III. RESEARCH QUESTIONS
- What was the level of academic achievement of students by gender in internal mock examination result between 2016 – 2018 in Karu LGA, Nasarawa State?
- What was the academic achievement of students in English language, literature and Religious Studies between 2016 – 2018 in some selected Senior Secondary Schools in Karu LGA, Nasarawa State?
- How was the academic achievement of students in Biology, Chemistry and Mathematics in internal mock examination result between 2016 – 2018 in Karu LGA, Nasarawa State?

IV. PURPOSE OF THE STUDY
The general purpose of the study was to find out gender discrimination and academic achievement of female students in some selected Senior Secondary School in Karu LGA, Nasarawa State, Nigeria.

The specific objectives of the study are;
- Determine the level of academic achievement of students by gender in internal mock examination between 2016 and 2018 in Karu LGA, Nasarawa State, Nigeria.
- Ascertain the academic achievement of students in English Language, Literature and Religious Studies between 2016 – 2018 in some selected Senior
Secondary Schools in Karu LGA, Nasarawa State, Nigeria.

- Find out the academic achievement of students in Biology, Chemistry and Mathematics in internal mock examination result between 2016 – 2018 in Karu LGA, Nasarawa State, Nigeria.

V. METHODOLOGY
The study made use of Ex-post Facto research design. This is suitable for the study because it requires records on the ground for the analysis of the problems under investigation. Five Senior Secondary Schools were selected for this study. These schools include:
- Saint Augustine’s College
- Sunvic Dominion International Academy
- Legacy International Academy
- Golden Gilead Academy
- Freedom International Schools

The choice of these schools was informed by the fact that they are strategically located in June settlement villages that made up the Karu LGA, Nasarawa State, Nigeria. The population used for this study was 932 students. Mean rating and simple percentage were used as statistical tools for the analysis.

VI. LITERATURE REVIEW
The literature in this study were reviewed under the following subheadings; differences in academic achievement of male and female students, gender discrimination, factors leading to gender discrimination and academic achievement of students. Differences in Academic Achievement of Male and Female Students

Klausmier Hodwin (1996) noted: differences are not usually found between girls and boys by the widely used intelligence tests. However, girls typically score higher on verbal items and boys on quantities and spatial items in both intelligence and achievement tests. Girls receive higher grades in school than boys, however, after the fifth grade boys score as high as do girls on achievement in both Arts and Science subjects.

Fennema (1987), asserts that recent studies have shown on male superiority in all subjects. All new studies show that any male superiority in mathematics may be related to the way mathematics may be traditionally taught as competitive endeavour rather than a comparative group leaving activity. When basic subject is taught in cooperative small groups, girls do better than boys. Wilberg and Lynn (1999) in a study of history classes and history tests found that girls outperform boys because they tend to work more conscientiously and word fluency, which contribute to better course work.

Onekutu (2002) opined that male student put up a superior performance as compared to female student. Williams et al (1990) who documented that in early years there were no gender differences in achievement of boys and girls, in early schools. Gender differences become more apparent in the higher classes with boys performing better than girls in the areas involving calculations.

Kimball (1989) in an examination of sex differences in classroom performances found that female students outperform the male in standardized test measures of mathematics achievement such as the SAT-M in math classes. Baker and Jones (1993) in their study on sex differences among eight grade in mathematics performance, found no evidence of significant gender gap in over 77,000 students in 19 developed and developing countries. Both cross national variation in sex differences in mathematical performance and the trend towards less of a difference between males and females’ questions and innate male superiority in intelligence.

1. Gender Discrimination
Iloegbunam (2006), said one of the ironies of history is the fact that despite the role women play both at home and in the society, they have remained unnoticed and even belittled. This is borne out of the notion that women’s function of being homemakers and caring for children is not important. Women therefore are to be seen and not heard. This has grossly affected women enrolment in education. History has revealed discrimination against women in education. In our African society, the education of women did not receive considerable attention and this led to the second class status assigned to women in society. Women are relegated to mere agents of domestic engagements at home, with considerable reproductive roles.

This apathy arising from gender inequality has also affected education in Nigeria. As a result the males have dominated Nigerian schools from the primary to tertiary level. According to Oganwu (1996), the Nigerian women and their counterparts in other African countries have been debased and dishonoured by the thought that every woman is supposed to consider motherhood as the principal purpose of her existence. She is expected to produce children, cook, mend and wash clothes and take care of men and be subordinate to male authority. In some communities the female children are not sent to school like their male counterparts due to some cultural practices. Most Nigerian parents erroneously believe that sending girls to school may interfere with their marriage, which they consider to constitute the primary mission of a female child (Nwideedu, 1994). However, for gender inequality to be reduced, which has always been in favour of the male gender, Olarenwaju (2005), observed that education has been recognized to be the only viable
instrument for correcting any inequality in any society. Also, male child education was given preference because of the patrilineal system, which confers rights of inheritance on the male child only (Nwideeduh, 1994; Maduabum, 1992, and Nwana, 1987).

2. Factors Leading to Gender Discrimination and Academic Achievement of Students

2.1 Self-efficacy

According to Bandura (1997), self-efficacy refers to judgments individuals make about their abilities to perform behavior at a certain level. Schunk & Gunn (1986) also agreed that students self-efficacy influences their type of activities done, the efforts expended on those activities, the ability to persist on doing a particular task, and the task that can be accomplished at a particular point in time.

Wainer (1992) and Kranzler (1995) emphasized self-efficacy as an important factor that plays a vital role in the task accomplishment of boys and girls in Art and sciences.

Stipek & Gralinski, (1991) in their study found that boys’ attribution patterns and levels of self-efficacy are more self-enhancing than those of girls are.

According to Hackett et al. (1981) in “a self-efficacy approach to career development of women” reveals that a woman’s self – efficacy positively correlates with her level of achievement in the direction where she thinks her abilities are applicable.

3. Teachers attitudes and behavior

According to Swill (1992) states that teachers attributes towards the teaching profession and towards the female students contributed to gender differences in performance of students.

Khale and Meece (1994) which documented that the teacher expectations, attitudes and classrooms interaction affects the ability of the girls to perform in math’s and allied sciences.

AAUW (1992) which documented that the teacher significantly affects the achievement of girls by giving them less and less attention, during classroom lessons. Gilligan (1982) and spender (1982) in their studies found boys attracted more of teachers, attention co-education classrooms; however, their findings are dated.

4. School Facilities

Williams (1987) posited that inadequate facilities in the school such as teacher supplies water facilities, restrooms, lab equipment basic instructional and instructional materials strongly affect performance of students differently in relation to their gender. Perhaps female students who are easily pressed might be affected by these. Hence, their academic achievement tends to be lower than their male counter parts.

5. Ability

Khale and Meece (1994) stressed that for girls to deal effectively with science subjects they should perform completely well in mathematics. Competence in mathematics is a prerequisite well for entrance in scientific and technical fields. Henwood (2008) who documented that girls underestimate their capabilities and think their success is a result of chance, luck of effort and not their capability.

Taylor and Mountfield (1994) and Koch (1994) found that girls attributed their failure in terms of personal factors whereas boys interpret their failures due to external factors. However, Taylor (1994), Koch, (1994) goes further to explain that girls attributed their inability to succeed in terms of inherent inadequacies’ where boys interpret their failures due to extraneous factors.

Wainer and Steinberg (1992) in their researchers have found that female students receive higher grades than more men do because of their ability to work harder and attend class more frequently than male counterparts. Scholars like Campbell? (1984), Taylor & Mount field, (1989) agreed that women and girl’s performance in computer science is curtailed by their abilities. On other hand a number of scholars also dispute, this assumption such as Anderson (1989): Linn & Hyde, (1989) and agreed that whatever differences that may exist in abilities, they are socially constructed and never the less their effect on achievement can minimized or eliminated by training. Leonard and Jiang (1999) suggest that females have better study skills as compared to the male students, the evidence they used was not scientifically oriented weakening their arguments.

Betzworth (1997) adds that women tend to underestimate their capabilities in all areas of their lives such as the ability to learn, verbal spatial and aptitude skills. He notes low self-efficacy hinders initiatives for women and girls to under tasks in a direction that could even lead to achievements of tangible results. The study examines the relevance of tangible results. The relevance of these findings in line with contemporary Kenya.

6. Gender Bias and Stereotypes

Betz (1984) issues such as gender role stereotypes, occupational stereotypes, gender bias in education, career counseling, low self-esteem, weak expectation for success represent barriers to women participation in Mathematics and science courses.

7. Parental and Family Attitudes

Campbell et al, (1992) discovered how parents influence their daughter’s science achievement by fostering positive attitudes about the subject: they even recommend that parents should openly talk their attitudes and performance. Davison (1993) kapakasa (1992) found that parental attitudes toward their sons and daughters determine the allocation of resources and the level of parental involvement education. Negative attributes towards girl’s education affect their participation,
performance and time use at the domestic and school level.

8. Gender Composition
Fabunmi (2004) in his investigated the extent to which gender composition influenced the performance of students in secondary schools student in Nigeria states of Edo and found that gender was among the factors influencing differences in academic performance of students. However, his study was a general and the current study will apart from looking at the overall performing will consider other levels such as at the subject level.

9. Attitudes and Interest
In short available literature agree that particular conditions can bring about the differential performance between boys and girls, with varying degrees and points of emphasis on subject. Although the problem has been studied for decades, in other countries especially in the west the result so far reported by different researchers are inconsistent and inconclusive. In patriarchal structure have a powerful influence on differential performance and the education system is a reflection of societies thinking about the education of girls. The educational provision made for boys and girls were biased towards the hegemony of boys. In recent years, the government has attempted to increase the participation rates of girls in the sphere of education, but enrolment rates are still low, especially in rural areas. Presently, but government is paying much attention on the education of girls, as shown in the education program of the country.

Most of the authors outlines their blames on the female student’s inadequacies as compared to the boys letting out negative attitudes and behaviours of the teachers, time wasting activities by female students. There is a claim that boys have more reading hours than girls, inadequate facilities lack of satisfaction and motivation among the teachers’ irregular attendance low levels of persistence inferiority complexes among female students. It should be noted that no single factor could independently explain the factors that underlying to observed gender differences in performance, but a host of variables interplay to bring out a true picture of gender differences in performance.

VII. RESULTS AND DISCUSSION
The researcher analysed internal mock ordinary level exam results for the selected secondary schools and the overall performance by gender as follows:

1. What was the level of academic achievement of students by gender in internal mock examination result between 2016 – 2018 in Karu LGA, Nasarawa State?

<table>
<thead>
<tr>
<th>Year</th>
<th>Gender</th>
<th>Group</th>
<th>Division (i)</th>
<th>Division (ii)</th>
<th>Division (iii)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Male</td>
<td>28</td>
<td>32</td>
<td>39</td>
<td>22</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>12</td>
<td>23</td>
<td>31</td>
<td>38</td>
<td>124</td>
</tr>
<tr>
<td>2017</td>
<td>Male</td>
<td>21</td>
<td>51</td>
<td>31</td>
<td>33</td>
<td>136</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>14</td>
<td>39</td>
<td>56</td>
<td>43</td>
<td>156</td>
</tr>
<tr>
<td>2018</td>
<td>Male</td>
<td>30</td>
<td>25</td>
<td>89</td>
<td>44</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>10</td>
<td>30</td>
<td>111</td>
<td>56</td>
<td>207</td>
</tr>
</tbody>
</table>

Table 1 Performance of students by gender in internal mocks for 2016-2018

Performance of students at the internal mock exams for the years 2016 -2018 reveals the following patterns in performance as indicated on table 1. 2016: available data reveals that majority of the male candidates (39) were in division (iii), while majority of the female candidates (51) fell low in division (iiii). The total number of male candidates in Division (i) & (ii) (60) exceeds the number of female candidates in the same divisions by 25 candidates.

In 2017, majority of the male candidates (51) in the selected schools passed their district, mock exams in Division (iii). The total number of male candidates passing in Division (I) & (ii) (72) also exceeded the number of female candidates passing in the same division by 15 candidates. 2018: The majority of the male candidates (89) in the selected schools passed their district, mock exams in Division (iii). The total number of male candidates passing in Division (I) & (iiii) (55) also exceeded the number of female candidates passing in the same division by 15 candidates. See table 1 above.

2. What was the academic achievement of students in English language, literature and Religious Studies between 2016 – 2018 in some selected Senior Secondary Schools in Karu LGA, Nasarawa State?

Table 2 Performance at internal mock in English language, literature and Religious Studies between 2016 – 2018.

<table>
<thead>
<tr>
<th>Year</th>
<th>English</th>
<th>Literature</th>
<th>Religious Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>N</td>
</tr>
<tr>
<td>2016</td>
<td>Male</td>
<td>121</td>
<td>44.81</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>124</td>
<td>50.93</td>
</tr>
<tr>
<td>2017</td>
<td>Male</td>
<td>136</td>
<td>45.45</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>156</td>
<td>49.05</td>
</tr>
<tr>
<td>2018</td>
<td>Male</td>
<td>188</td>
<td>40.47</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>207</td>
<td>44.32</td>
</tr>
</tbody>
</table>
The study also examined performance of boys and girls at the subject level and the findings were as follows indicated on table 2:

1. **English**

Results revealed that in 2016 female candidates led the male in performance of English at a mean mark of 50.93%, while male trailed at 44.81% in 2017, female candidates performed better than males at mean mark 49.90% while males were at 45.45% in 2016 female students performed better at 44.32% and male candidates followed at 40.47%.

2. **Literature in English**

In the year 2016 the performance of female candidates in English Literature was better than that of the male at 54.02% while male candidates were at a mean mark of 50.47%. In 2017, female students continued to lead the male at a mean mark of 48.01%, while male candidates were at a mean mark of 46.13% in the year 2017 females, students had mean average of 51.44% yet the male were at 51.44%.

3. **Religious Studies**

Female candidates continued to exceed that of males at 49.11% in 2016, 45.43% in 2017 and 50.40% in 2018 Male candidates were trailing at a mean mark of 48.43% in 2016, 44.57% in 2017 and 48.34% in 2018

3. HOW was the academic achievement of students in Biology, Chemistry and Mathematics in internal mock examination result between 2016 – 2018 in Karu LGA, Nasarawa State?

Table 3 Performance of Students in internal mock in Science subject for 2016-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Biology</th>
<th>Chemistry</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>2016</td>
<td>Male</td>
<td>121</td>
<td>48.45%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>124</td>
<td>35.51%</td>
</tr>
<tr>
<td>2017</td>
<td>Male</td>
<td>136</td>
<td>50.03%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>156</td>
<td>41.43%</td>
</tr>
<tr>
<td>2018</td>
<td>Male</td>
<td>188</td>
<td>42.53%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>207</td>
<td>33.94%</td>
</tr>
</tbody>
</table>

The following table shows results for the district mock exams for the year 2016- 2018 by gender in biology, chemistry and mathematics as indicated on table 3.

1. **Biology**

In the year, 2016 female candidates had mean mark of 33.51%, yet male candidates had a mean mark of 48.45%. Similarly, in 2017, male students were leading at a mean of 50.03%, yet female candidates trailed at 41.43%. In the year 2018, male students still performed better at mean mark of 42.53% and females at 33.94% in all the selected secondary schools.

2. **Chemistry**

In 2016 male candidates led the girls at a mark of 43.20% while girls trailed at 38.43%. In 2017 male students still led the females at 41.10% while female candidates were at 30.34%. In 2018 male candidates still led at mean mark of 49.90% and females trailed at 32.47%.

3. **Mathematics**

In the year 2016 male candidates led the females at an average mark of 50.95%, yet girls trailed at 44.47% in the year 2017 the performance male candidates fell, but still led the girls at a mean mark of 46.31%, girls were at 38.80% in 2018, performance of the male students still led the females at 43.94%, while females were at 30.42%.

VIII. CONCLUSION

The results of the study show that in terms of overall performance male students were performing much better as compared to the females at ordinary level. However, at the subject level, female students outperformed the male students in the languages of literature and English. On the contrary, male students performed much better than the female in the science of biology, chemistry and mathematics. At the subject level, female students had a higher average mean mark than males in the languages of English and literature, yet boys scored a higher mean average compared to the girls in the science subjects including biology, mathematics and chemistry where performance differentials were highly significant. Negative attitudes and behaviours of the teachers, time wasting activities by female students, boys have more reading hours than girls, inadequate facilities lack of satisfaction and motivation among the teachers’ irregular attendance low levels of persistence inferiority complexes among female students.

IX. RECOMMENDATIONS

Based on the findings and conclusions made from the study, the following recommendations are hereby given:

- **Further training in gender sensitive techniques through workshops should be given to teachers to transform the negative attitudes and behaviors towards girls in classrooms. Workshops should also involve parents on how they can get involved in their daughters education.**
- **Female students should be sensitized on how to manage time while at school, and this will eliminate wastage of time.**
- **Government may come in to help schools by providing them with desks, chairs water lights and books which facilitate learning and teaching in schools.**
- **Schools administrators should improve teachers working conditions by, increasing their numeration and fringe benefits to motivate them for work. They can also be made aware of impact of their actions on girl’s child education.**
Female students should be encouraged through guidance and counselling to improve their esteem, persistence levels reading habits and school participation.

REFERENCES


