

## INFLUENCE OF SELF-EFFICACY ON ACADEMIC PERFORMANCE AMONG SENIOR SECONDARY SCHOOL STUDENTS IN FUNTUA ZONAL EDUCATION QUALITY ASSURANCE KATSINA STATE NIGERIA

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### Abstract

*This study investigated the Influence of Self-Efficacy on Academic Performance among senior secondary schools' students in Funtua Zonal Education Quality Assurance, Katsina State. The study was guided by three research questions and hypotheses. The study adopted descriptive survey research design. The population of the study consist of a total number of 9,118 students offering Mathematics in all the twenty one Senior Secondary Schools in Funtua Zonal Education Quality Assurance, Katsina State. Simple Random Sampling Techniques was used to select sample of 350 students from ten schools selected and used for the study. This sample size was determined using Research Advisor (2006) table for determining sample size. An instrument was adopted for data collection namely; General Self-Efficacy scale questionnaire (GSESQ) constructed by Shwarzer, and Mathematics Qualifying Examination Results was used for the Academic Performance. Linear Regression Analysis and t-test for independent sample were used to test the hypotheses at 0.05 level of significance. The study recommended that administrators, counselors and teachers should use this study to acquire more knowledge, adopt suitable methods of improving student's self-efficacy as these variables leads to high academic performance. Teachers should show positive attitude which will help to motivate students in learning and making them willing to participate in cognitive context.*

**Keywords:** Influence, Self-Efficacy, Academic Performance, Zonal Education Quality Assurance

### Introduction

Educational activities are geared towards ensuring that the students achieve mastery of educational objectives in school. Academic performance of students especially at the secondary school level is not only a pointer to the effectiveness or other wise of schools but a major determinant of the future of youths in particular and the nation in general. The medium through which the attainment of individuals and the nation's educational goals can be achieved is learning. Learning outcomes have become a phenomenon of interest to all and this account for the reason why scholars have been working hard to unravel factors that militate against good academic performance (Aremu & Sokan, 2008). This phenomenon, academic performance of learners, has attracted attention of scholars, parents, policy makers and planners. (Adeyemo, 2010) opined that the major goal of the schools is to work towards attainment of academic excellence by students.

In Nigeria, public discussion frequently focus on educational standards. The public unhappiness becomes more prominent following the annual release of West African Examination Council (WAEC) Senior School Certificate Examination results in (2022) in Funtua Zonal Education Quality Assurance (West African Examination Council, 2022). Student's outcome did not match the government and

parental investment. All stakeholders are concerned about why the system is turning out graduates with poor result. It is questionable whether or not the teachers in the public school are competent enough to teach effectively. The National Policy of Education of the Federal Republic of Nigeria states “no education can rise above the quality of teachers in the system” (FGN, 2014)

Self-efficacy is a concept which relates to judgment people make concerning their ability to execute behaviors relevant to a specific task or situations. It refers to the confidence in one’s ability to behave in such a way or to produce a desirable outcome (Bandura, 1999). Self-efficacy makes a difference in how people feel, thinks and act. Self-efficacy pertains to optimistic belief about being able to cope with a variety of stressors. People with high self-efficacy choose to perform more challenging and difficult task. People with high level of self-efficacy approach life with a can-do attitude that allow them to see challenges as problems to be solved instead of threat that must be avoided. They also set appropriate challenging goals for themselves and maintain a strong commitment to those goals. People with strong self-efficacy enjoy life because they are highly engaged. When they encounter stressful situations, their belief in their ability to manage situation to their benefit allow being self-confident.

People with low self-efficacy typically view difficult task through the lens of fear. Low self-efficacy becomes a cycle; lack of faith in ability produces lack of action. Lack of action contribute to more self-doubt. A study conducted by (Sanna, 2005) found people with high self-efficacy reported high capability of coming up with solutions and experience in performing the task successfully as compared to low level of self-efficacy.

Academic performance refers to how well a student is accomplishing his or her task and studies (Scott, 2019). Grades are certainly the most well-known indicator of academic performance. Grades are the students score for their classes and overall tenure. Grades are most tallying or average of assignment and test scores and may often be affected by factors such as attendance an instructor opinion of the students as well. It is in line with this that the researcher undertakes to study the influence of self-efficacy on academic performance among senior secondary schools students in Funtua Zonal Education Quality Assurance Katsina state Nigeria.

### **Statement of the Problems**

In Nigeria, public discussion frequently focus on educational standards. The public unhappiness becomes more prominent following the annual release of West African Examination Council (WAEC) Senior School Certificate Examination results in (2022) in Funtua Zonal Education Quality Assurance with less than 50% of the total number of students in the zone scoring grade C in mathematics (West African Examination Council, 2022). Student’s outcome did not match the government and parental investment. All stakeholders are concerned about why the system is turning out graduates with poor result. It is questionable whether or not the teachers in the public school are competent enough to teach effectively.

The concern about low academic performance constitutes a great concern to parents, teachers, examination bodies, counselors and psychologists. It represents a great wastage on the part of the students, parents, institution’s and the government. Student’s inability to perform in academic task have been worrisome. Students with high sense of efficacy are more likely to exert effort in attempting to accomplish academic task and persist when faced with difficulties. But those with low self-efficacy beliefs, put less efforts and they give up quickly when they encounter obstacles and difficulties. The resultant effect of which is poor academic performance that continued to generate a lot of worry and concern to all.

It is in line with this that the researcher undertakes to study the influence of self-efficacy on academic performance among senior secondary schools students in Funtua Zonal Education Quality Assurance

Katsina State. As such issues concerning low self-efficacy can be addressed and improved academic performance will prevail

### **Objectives of the Study**

The followings are the objectives of the study;

1. To ascertain the influence of self-efficacy on academic performance among senior secondary school student in Katsina state.
2. To examine the difference of gender (male and female) on academic performance among senior secondary school students in Katsina state.
3. To examine the difference of location (rural and urban) on academic performance among senior secondary school students in Katsina state.

### **Research Questions**

The following research questions were posed;

1. What is the influence of self-efficacy on academic performance among senior secondary school students in Funtua Zonal Education Quality Assurance Katsina state?
2. What is the difference between male and female scores in mathematics academic performance among senior secondary school students in Funtua Zonal Education Quality Assurance Katsina state?
3. What is the difference between rural and urban students' scores in mathematics academic performance among senior secondary school students in Funtua Zonal Education Quality Assurance Katsina state?

### **Research Hypotheses**

The following null hypotheses will be tested at 0.05 level of significance

**H<sub>01</sub>:** There is no significant influence of self-efficacy on academic performance among senior secondary school students in Funtua Zonal Education Quality Assurance Katsina state.

**H<sub>02</sub>:** There is no significant difference between mean achievement scores of male and female academic performance among senior secondary school students in Funtua Zonal Education Quality Assurance Katsina state.

**H<sub>03</sub>:** There is no significant difference between mean achievement scores in mathematics of rural and urban students on academic performance among senior secondary school students in Funtua Zonal Education Quality Assurance Katsina state.

### **Methodology**

This research study explore descriptive survey design. This enabled the researcher to establish whether the independent variable (self-efficacy) have any significant influence on the dependent variable (academic performance). The population for this study is Senior Secondary two (SSII) students in schools located in both rural and urban areas of Funtua Zonal Education Quality Assurance. The investigation shows that Funtua Zonal Education Quality Assurance is having twenty one (21) senior secondary schools containing nine thousand one hundred and eighteen students (9118). Five thousand four hundred and forty one (5441) males and three thousand six hundred and seventy seven (3677) females. (Katsina State Ministry of Education).

Three hundred and fifty (350) randomly selected (SSII) students were used out of five thousand two hundred and ninety two (5292) students, from the ten (10) randomly selected senior secondary schools in Funtua Zonal Education Quality Assurance of Katsina State. The selection was made based on recommendation offered by the Research Advisor 2006 table of determining sample size in a given population.

Simple random sampling was used as a sampling technique to select the respondents. This leads the researcher to the selection of ten (10) senior secondary schools from the zone out of twenty one (21) schools.

The (GSES) is an instrument that has 10-items designed to measure the self-efficacy of senior secondary school students. For the academic performance, Data on students’ academic performance were obtained from the student’s cumulative average scores of mathematics qualifying examination (2022) to ensure standard. (Source; Education Resource Centre, Katsina State Ministry of Education, 2022). The researcher used split half method to determine the reliability coefficient of the instrument. The scores were correlated using Pearson Product Moment Correlation (PPMC) to get the half reliability coefficient (rh). The spear Brown coefficient were also used with the full reliability of 0.7 for general self-efficacy scale questionnaire (GSESQ), was obtained.

In data analysis, Statistical package for Social Sciences (SPSS) 23.0 version was used. The researcher used both descriptive Statistics of mean and standard deviation (SD) as well as inferential statistics (parametric). To answer the research questions, simple mean/standard deviation and T-test for independent sample were used for data analysis. To analyze demographic data and to test hypotheses formulated for the study; out of the three hypotheses formulated, one hypotheses (i.e hypotheses 1, was tested using Linear Regression Analysis.) While T-test independent sample was used in testing hypotheses 2 and 3.

**Results**

**Research Question Two:** What is the difference between male and female student’s scores in academic performance?

**Table : Model Summary**

|                      | Gender | N   | Mean  | Std. Deviation | Mean difference |
|----------------------|--------|-----|-------|----------------|-----------------|
| Academic performance | Male   | 175 | 61.14 | 15.37          | 7.69            |
|                      | Female | 171 | 68.82 | 15.04          |                 |

**Table** reveals that the mean standard deviation scores of male students were 61.137 and 15.367 and that of female students were 68.824 and 15.035. The mean score difference was 7.6875. This implies that female students performed better than male students to find out if the difference is significant, the scores of the students were subjected to t-test independent sample statistic the result is presented below.

**Research Question three:** What is the difference between urban and rural students in scores in academic performance?

**Table 2: Model Summary**

|                      | Location | N   | Mean  | Std. Deviation | Mean difference |
|----------------------|----------|-----|-------|----------------|-----------------|
| Academic performance | Urban    | 242 | 70.19 | 13.44          | 17.49           |
|                      | Rural    | 104 | 52.70 | 13.53          |                 |

Table reveals that the mean standard deviation scores of urban school students were 70.194 and 13.438 and that of rural school students were 52.702 and 13.529 the mean score difference was 17.494. This implies that urban school students performed better than rural school students to find out if the difference is significant, the scores of the students were subjected to t-test independent sample statistic the result is presented below.

**Null Hypothesis One (Ho1):** “There is no significant influence of self-efficacy on academic

performance among senior secondary schools students in Funtua Zonal Education Quality Assurance Katsina State.

**Table 3: Model Summary**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .405 <sup>a</sup> | .164     | .161              | 14.34                      |

**Table 4: Simple Mean and Standard deviation Analysis of Self-Efficacy and Academic Performance.**

| Model |            | Sum of Squares | Df  | Mean Square | F     | Sig.              |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1     | Regression | 13851.89       | 1   | 13851.89    |       |                   |
|       | Residual   | 70778.70       | 344 | 205.75      | 67.32 | .000 <sup>b</sup> |
|       | Total      | 84630.60       | 345 |             |       |                   |

From the analyses of linear regression, in the model summary table, the R square (called the coefficient of determination) tells the proportion of variance in the dependent variable (Academic performance) that can be explained by variation in the independent variables (self-efficacy). Thus 40.5% of variation in the outcome variable is explained by the predictor (self-efficacy).

The F-ratio in the ANOVA table shows that the independent variable (self-efficacy) statistically significantly predict the dependent variable (Academic performance)  $F(1,344) = 67.323$ .  $P(0.00) < 0.05$ . Hence the hypothesis that says there is no significant influence of self-efficacy on academic performance is rejected. Meanwhile self-efficacy significantly and positively influence the academic performance of the students under study

**Null Hypothesis two (Ho2):** There is no significant difference between the mean achievement scores of male and female students.

In order to test hypothesis two (2), scores of male and female students were subjected to t-test of independent sample statistics. Summary of the analysis was presented in table

**Table 5: t-test analysis of the Means Scores of male and female students**

| Groups | N   | Mean  | SD    | Df     | t-value | P-value |
|--------|-----|-------|-------|--------|---------|---------|
| Male   | 175 | 61.13 | 15.37 | 344    |         |         |
|        |     |       |       |        | -4.70   | 0.000   |
| Female | 171 | 68.82 | 15.04 | 343.99 |         |         |

Table revealed that the t-value computed was -4.702 and the p-value of 0.000 is observed. Since the obtained p-value of 0.000 is greater than the alpha value of 0.05, Based on the decision rule, the null hypothesis three (3) that says there is no significant difference between mean achievement scores of male and female students. The decision implies that, there is a significant difference in the mean score between the male and female students, where by female students performed better than their counterpart male students.

**Null Hypothesis three (Ho3):** There is no significant difference between the mean achievement scores of urban and rural school students

In order to test hypothesis three (3), scores of urban and rural school students were subjected to T-test of independent sample statistics. Summary of the analysis was presented in table

**Table 6: t-test analysis of the Means Scores of urban and rural school students**



| Groups | N   | Mean  | SD    | Df     | t-value | P-value |
|--------|-----|-------|-------|--------|---------|---------|
| Male   | 242 | 70.19 | 13.44 | 344.00 | 11.08   | 0.000   |
| Female | 104 | 52.70 | 13.53 | 193.96 |         |         |

Table revealed that the t-value computed was 11.079 and the p-value of 0.000 is observed. Since the obtained p-value of 0.000 is greater than the alpha value of 0.05, Based on the decision rule, the null hypothesis four (4) that says there is no significant difference between mean achievement scores of urban and rural school students. The decision implies that, there is a significant difference in the mean score between the urban and rural school students, where by urban school students performed better than their counterpart rural school students

**Discussion of the Findings**

The result of hypothesis 1 revealed that there was a mild positive significant influence of self-efficacy on academic performance of students in the study area. This finding is in collaboration with the findings of (Zimmerman, 2020) whose review of major findings on self-efficacy. He concluded that the variable self-efficacy positively relate predicts academic performance. Also, (Schallert, 2006) found in his study that self-efficacy significantly predicted students’ academic performance.

The result of hypothesis 2 revealed that there is no significant difference between students mean achievement scores in mathematics academic performance. Recent findings suggested that gender difference in academic performance are either diminishing or practically absent (Choi, 2005). But on the contrary, this findings is not supported by the findings of (Louis & Mistele, 2012) who reported that there were difference in level of self-efficacy and self-esteem by gender. The result of hypothesis 3 revealed that there was strong difference between the mean achievement scores of urban and rural students in mathematics academic performance in the study area. This goes in line with the work of (Abdullahi, 2000). (Idowu, 2011) they all rectified that urban schools student performs better academically than their counterparts in the rural locations. This goes contrary to the works of (Osanwa, 2013) that stressed that both the urban and rural schools students can display greater achievement in performance when provided with the adequate facilities and good learning atmosphere.

**Conclusion**

Based on the findings of this study, the following conclusions were made;

Based on the result generated in analyzing hypothesis 1, using the data obtained. It was concluded that self-efficacy is statistically deemed to positively influence learning and academic performance among senior secondary schools students in mathematic qualifying examination through increased effort and persistence. This is due to the fact that positive influence was observed between both variables independent and dependent. By implication students with higher scores in self-efficacy would perform academically well. Therefore self-efficacy has a mild positive significant influence on academic performance.

Based on the result obtained in analyzing hypothesis 2, it was concluded that significant gender difference exist in mathematics academic performance. Based on the result obtained in analyzing hypothesis 3, it was concluded that significant location difference exist in mathematics academic performance.

**Recommendations**

Sequel to reviews made, facts encountered and the findings of the study, the following recommendations were made;

1. Administrators, counsellors and teachers should use this study to acquire more knowledge, adopt

suitable methods of increasing student's self-efficacy of the students they teach as increase in these variables leads to high academic performances.

2. Educational programs for secondary schools should be restructured in such a way that much emphasis would be given to developing the self-efficacy of students.
3. Teachers should establish and maintain supportive and appealing pedagogical environments and employ teaching and evaluation methodologies which are focused on student's educational needs and overall development and ways of boosting up students efficacy should be included in the curriculum.
4. Teachers should show positive attitude which will help to motivate students in learning and making them willing to participate in cognitive context.
5. Finally, counselling units in secondary schools should use appropriate psychological interventions to enhance self-efficacy in secondary school students. Discourage any form of bias among students, all students should be given equal opportunity to learn.

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