

Teachers' and Students' Variables as Predictors of Academic Performance among Senior Secondary School Students in Ekiti State

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Abstract-The study investigated the influence of teachers' and students' variables on the academic performance of senior Secondary School Students in Economics. Participants were 240 SSS2 students and 24 economics teachers from the three Senatorial districts in Ekiti State, using multi stage sampling techniques. The first stage involved the selection of two local governments from each of the senatorial district. In the second stage, 4 schools were selected from each local government and in third stage, 10 students and 1 teacher were picked from each school. Data were collected using four instruments, the Teachers Questionnaire (TQ), Students Motivation Questionnaire (SMQ), Students Attitudinal Questionnaire (SAQ) and Economic Performance Test (EPT).

The TQ, SMQ and SAQ all consisted of 20 items, each item rated on a four-point scale: strongly agree=4, agree=3, disagree= 2 and strongly disagree=1 while the EPT consisted of 40 Economics multiple choice items, with reliability coefficient= 0.63,0.74,0.81,0.77 respectively using Pearson Product Moment correlation and analyzed using ANOVA and regression, tested at 0.05 level of significance.

Results showed that teachers' variable significantly influence students' academic performance with teachers' attitude having a high predicting power, only students' attitude significantly influence students performance while students' motivation does not.

It was recommended that teachers and students should develop positive attitude towards teaching and learning to bring about improvement in academic performance.

Index Terms- Academic, performance, prediction, teachers, students, variables.

I. INTRODUCTION

Education is widely regarded as a basic human right, a key to enlightenment, and a source of wealth and power. It is an important factor for industrial and technological development, with the history of developed nations bearing records of this, developing nations aspiring to realize the same status has to put a premium.

Economics is one of the foundational subjects which act as a basic necessity for understanding developmental processes; it is involved in the analysis of social relations, decision making and managerial effectiveness.

Economics knowledge improves an individual's understanding of his daily living especially on the basic needs which are food, shelter, clothing, transportation, work, relaxation and so on. Specifically, students have also benefited from studying Economics in that it helps them in scaling preferences for their School needs, managing resources (financial, human and material) made available to them, understanding the management of a country's economy, budgeting in terms of revenue (from domestic and international trade) and expenditure for capital and recurrent projects, sources of taxes, its importance and uses, imports and exports e.t.c

Economics was first offered at the West African Examination Council (WAEC) ordinary level (O'level) in 1967 by only ten candidates who performed brilliantly well and since then, the number of Students who register for the subject has been on the increase because of its educational and civic values with its application to everyday life. This alongside the brilliant performance of the first Students who sat for the subject in WAEC O'level aided its popularity at the Secondary School. Despite all the importance attached to the knowledge of Economics, it was reported by Adeyemi (2010) that the performance of Students in Economics at the Secondary School level over the years has been less than satisfactory.

Researchers have been interested in exploring numerous variables that are associated with the quality of learners' performance. The variables may be grouped as either within or outside the School system. Literature classified studies on Student performance in terms of Student factors, family factors, School factors and peer factors in this wise explanations for good or poor Student's academic performance have been quite exhaustive yet controversy still exists among scholars as to what contribute singly or jointly to Students' poor performance.

II. PURPOSE OF THE STUDY

The purpose of the study was to find out whether teachers' and Students' variables would predict Students' academic performance in Economics. To investigate the influence of teachers' and Students' variables on Students' academic performance and find out the variable that can best predict Students' academic performance in Economics.

III. RESEARCH QUESTIONS

The following research questions were answered in the study

1. Will Teachers' variable predict Students' academic performance in Economics?
2. Will Teachers' attitude influence Students' academic performance in Economics?
3. Will Students' variable predict Students' academic performance in Economics?

IV. METHODOLOGY

The participants were 240 Senior Secondary School two Students and 24 teachers selected from the three senatorial districts in Ekiti state, using multi stage sampling techniques. The first stage involved the selection of two local governments from each of the senatorial district. In the second stage, 4 schools were selected from each local government and in third stage, 10 students and 1 teacher were picked from each school.

The instruments used were self-constructed questionnaires and Economics objective questions, the Teachers' Questionnaire (TQ) Section A contained bio data information about the respondents and this included the present qualification and the number of years of teachers' experience of the respondent, while section B was made up of 20 attitudinal items, each item rated on four point scale; strongly agree=4, agree=3, disagree=2, strongly disagree=1.

The students motivation Questionnaire (SMQ) Section A contained bio data information about the respondent and this included there school, sex and class, while section B was made up of 20 motivation items, each item rated on four point scale; strongly agree=4, agree=3, disagree=2, strongly disagree=1.

The students' attitudinal Questionnaire (SAQ) Section A contained bio data information about the respondents and their included there school, sex and class, while section B was made up of 20 attitudinal items, each item rated on four point scale; strongly agree=4, agree=3, disagree=2, strongly disagree=1. While Economics performance test (EPT) contained a 40-item multiple choice objective test questions out of which the respondent was instructed to choose the correct option from A-D.

The validity procedure of the instruments was ensured by giving copies to expert in tests and measurement, corrected and suggested their conformity with the principle of uni-dimensionality (facing the same direction for easy analysis). Copies of the revised instruments were administered on 20 students and teachers outside the sample and their responses collated and subjected to Pearson product moment correlation to estimate the reliability coefficient of the instruments. The value obtained for TQ, SMQ, SAQ and EPT was 0.63, 0.74, 0.81, and 0.77 respectively which was considered high enough for the study.

Research assistants were employed to administer the instruments in the various selected schools. Data collected were analyzed using analysis of variance (ANOVA) and regression tested at 0.05 level of significance.

V. RESULTS

Question 1: Will teachers' variable predict Students' academic performance in Economics?

Data were analyzed using regression as presented in table 1.

Table 1: Regression of Teachers' Attitude on Students' Academic Performances.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-180.000	35.391		-5.086	.037
	Teachers' Attitude	199.000	12.923	.996	15.399	.004

a. Dependent Variable: Students' Academic Performance

Table 1 shows teachers' attitude with beta 0.996, and p-value < 0.05, this implies that the teachers' attitude significantly predicts and influence students' academic performance with a high and positive predictive value.

Question 2: Will Teachers' Attitude Influence Students' Academic Performance in Economics?

Data were analyzed using analysis of variance (ANOVA) as presented in table 2

Table 2: ANOVA between subject effects of teachers' attitude and students' academic performance

Tests of Between-Subjects Effects
Dependent Variable: STUDENTS' PERFORMANCE

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	41411.250 ^a	8	5176.406	115.530	.000
Intercept	1009104.309	1	1009104.309	2.252E4	.000
TEACHERS' ATTITUDE	41411.250	8	5176.406	115.530	.000
Error	672.083	15	44.806		
Total	1269716.000	24			
Corrected Total	42083.333	23			

a. R Squared = .984 (Adjusted R Squared = .976)

Table 2 shows p-value < 0.005 and adjusted R squared = 0.976 which indicate that teachers attitude has a significant effect on students academic performance coupled with a strong and positive relationship between the variables.

Question 3: Will Students' Variable Predict Students' Academic Performance In Economics?

Data were analyzed using regression as presented in table 3 and 4

Table 3: regression analysis of students' motivation on students' academic performance

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.110E-15	1607.871		.000	1.000
	STUDENTS' MOTIVATION	690.000	587.112	.639	1.175	.361

a. Dependent Variable: STUDENTS_PERFORMANCE

Table 3 shows $p\text{-value} > 0.05$ and standardized coefficient $\beta = 0.639$ which indicate that their students' motivation has no significant influence on students' academic performance with a relatively low prediction power.

Table 4: regression analysis of students' attitude on students' academic performance

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-260.000	40.896		-6.358	.024
STUDENTS' ATTITUDE	313.000	14.933	.998	20.960	.002

a. Dependent Variable: STUDENTS_PERFORMANCE

Table 4 shows $p\text{-value} < 0.05$ and standardized coefficient $\beta = 0.998$ which indicate that students' attitude has a significant influence on students' academic performance with a relatively strong prediction power.

VI. DISCUSSION

The study reported here investigated teachers' and students' variable as predictors of academic performance in Economics among Senior Secondary School Students, the result in table 1 indicated that teachers' attitude predict students' academic performance with $p\text{-value} < 0.05$ and standardized coefficient β of 0.996. It was revealed that teachers' attitude has a prediction power on students' academic performance, this is in line with Babalola (2004) who ascertain that teachers' qualities has a significant effect on students academic performance.

Table 2 shows $p\text{-value} < 0.005$ and adjusted R squared=0.976 which indicate that teachers' attitude has a significant effect on students' academic performance coupled with a strong and positive relationship between the variables. Which is in line with Yara (2009) who discovered from his study that teacher attitude towards teaching has a significant relationship with students' academic achievement in Mathematics.

Table 3 shows $p\text{-value} > 0.05$ and standardized coefficient $\beta = 0.639$ which indicate that students' motivation has no significant influence on students' academic performance with a relatively low prediction power which is against the findings of sandra (2002) that students motivation significantly predict students' academic performance but in line with Babalola (2014) who submitted that students motivation does not significantly predict students' academic performance.

Table 4 shows $p\text{-value} < 0.05$ and standardized coefficient $\beta = 0.998$ which indicate that students' attitude has a significant influence on students' academic performance with a relatively strong prediction power, which is in line with Kpolovie 2014 that students attitude predicts academic performance.

VII. CONCLUSION AND RECOMMENDATIONS

Base on the findings, it was concluded that teachers' and students' attitude has a significant influence on students' academic performance and serves as a predicting factor to academic performance while students' motivation does not significantly influence or predict academic performance.

Base on the findings and conclusion, the following recommendations were made:

1. Teachers and students should improve on and manifest positive attitude toward teaching and learning to improve academic performance.
2. New teachers should be paired with experienced ones to learn basic skills that enhance learning.
3. School administrator should recruit more teachers with educational background and approve study leave to give way for self improvement.
4. School administrator should expose teachers with no educational background to educational seminars and conferences to improve their teaching skills.

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