

UTME Scores as Predictor of Academic Performance (CGPA) in Tertiary Institution in Akwa Ibom State and Cross River State, Nigeria

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ABSTRACT

The study investigated whether UTME Scores are predictor of Student Academic Performance (CGPA) in Tertiary Institutions in Akwa Ibom State and Cross River State. To achieve this purpose three research questions and three hypotheses were formulated and tested with simple linear regression analysis. The study adopted correlational design. The sample of the study were made up of two thousand, eight hundred and fifty (2,850) drawn through simple random sampling. The data for the study were collected from admissions office of the two universities. The result revealed that all the three null hypotheses were rejected, indicating that UTME scores do significantly predict students' academic performance CGPA. Based on these findings, some recommendations were made to include improving on computer based method of conducting their examination. This will help to curb the high rate of examination malpractice in the system.

Key Words: *UTME, Jamb Examination, predictor of academic, student academic performance, predictor variable of higher institution*

INTRODUCTION

The development of formal examination involving written answers to a series of prepared questions dates back to imperial china, who used it in the 2nd century B.C. to select recruits into their civic service. The modern examination as it is known today was developed at the oxford university as a result of the examination status of 1500. Following the establishment of primary, secondary and tertiary education in Nigeria, WAEC was introduced in 1952 as a means of placement, certification and admitting candidates in higher institutions. This process was on and each higher institution in the country such as university college, Ibadan which was established in 1948 and others that followed subsequently like university of Nigeria, Nsuka- 1960, Ahmadu Bello University Zaria- 1961 and University of Ife -1960

were responsible for their concessional examination and admission of its students before the establishment of Joint Admission and Matriculation Board (JAMB) in 1978 due to inadequacies in admission processes by individual universities.

Asien and Lawal (2007) explained that, individual universities evolved their admission processes, which relied essentially on their peculiar guidelines and standards. A condition that basically led to so many applications by candidates who are seeking admission into the various institutions, before Joint Admission and Matriculation Board (JAMB) was established, prospective candidates to participate in exams were about 30,000.

In recent time the number has risen to over a million. However, due to examination malpractice, quest for higher education, population explosion, there is need to ensure quality education. According to Idiong(2023) quality education will bring about good nation building of Nigeria. The overall admission of candidate into any institution in Nigeria is guided by the figures approved by NUC that agrees to that 70:30 Science/Arts ratio proposed by JAMB. Mark (2016) explained that the cut-off point by JAMB is minimum of 180 for universities admission. He further states that some individual universities set their own cut-off point.

Thus, it become necessary to investigate if UTME is a predictor of academic performance (CGPA) of students in tertiary institution in Akwa Ibom State and Cross River State, Nigeria.

STATEMENT OF THE PROBLEM

There is competition in the admission to study in Nigeria Universities. For a candidate to be admitted into Nigeria University to study any first degree programme, the candidate must have been subjected to series of screening.

However, available records from JAMB according to Mallami (2007) indicates that the performance of candidates in JAMB examination have been very poor for over a period of 5 years. For instance the UTME of 2007, 2008, 2009 and 2010 performance of candidates have mostly been below 50% in their overall achievement each year.

Researches show that WASSCE, UTME and PUTME vary among Universities and even among departments of the same University. However, this study revealed that the general examinations in Nigeria even the UTME have feeble positive correlation with students' academic performance in the Universities. Ifidili and Fidili (2010) observed that candidate who performed poorly in the UME performed better in their first year results in the Universities.

Moreso since JAMB established individuals, corporate bodies and various level of government have blamed the JAMB on immense corrupt practices. The problem of this study therefore is to examine if UTME scores is a predictor of academic performance (CGPA) of students' in tertiary institution in Akwa Ibom State and Cross River State.

AIM AND OBJECTIVES OF THE STUDY

The aim of this study is to ascertain if UTME scores are good predictor of academic performance as measured by CGPA in tertiary institution in Akwa Ibom State and Cross River State. Particularly, the study aims to

- (i) Determine the extent UTME scores predict students' academic performance (CGPA) in faculty of Education in Uniuyo and Unical.
- (ii) Ascertain the extent UTME scores predict students' performance (CGPA) in faculty of Arts in Uniuyo and Unical.
- (iii) Investigate the extent UMTE scores predict students' academic performance (CGPA) in faculty of social science in Uniuyo and Unical.

RESEARCH QUESTIONS

The following research questions were formulated to guide the study.

1. To what extent do UTME scores predict students' academic performance (CGPA) in faculty of education Uniuyo and Unical?
2. To what extent do UTME scores predict student's academics performance (CGPA) in faculty of Arts Uniuyo and Unical?
3. To what extent UTME scores predict students' academic performance (CGPA) in faculty of social science Uniuyo and Unical?

HYPOTHESES

The following hypotheses tested at 0.05 alpha level of significance, were formulated to guide the study;

1. UTME scores do not significantly predict students' academic performance (CGPA) in faculty of Education Uniuyo and Unical
2. UTME scores do not significantly predict students' academic performance (CGPA) in faculty of Arts Uniuyo and Unical.
3. UTME scores do not significantly predict students' academic performance (CGPA) in faculty of social science.

METHODOLOGY

The study adopted correlational research design. The population of the study consist of 28,501 candidates that wrote the UTME and chose University of Uyo and University of Calabar as their first choice Universities from 2005 to 2010. The samples size of this study is 2,850 students from three faculties of university of Uyo and university of Calabar. Proportional stratified random sampling technique was used to draw the sample of students. Since the study is a correlational of already existing data, the researchers is concerned with the source of data collection rather than the instrument. The school admission offices were the primary source for collection of relevance information that facilitated the success of this study. Consequently an inventory form was designed bythe researchers for the collection of information needed for the study; the data for this study was collected directly from admission units and various departments of the universities by the researchers after proper and formalized contract were made. The simple linear regression was used to answer all the research questions and also test the hypotheses of the study.

RESULTS

Research question one: To what extent do UTME scores predict students' academic performance (CGPA) in faculty of education in Uniuyo and Unical.

Hypotheses one: UTME scores do not significantly predict students' academic performance (CGPA)

in faculty of education in Uniuyo and Unical.

Table 1: Summary of Regression for Faculty of Education

	R	R ²	Ad:R Error of the Estimate	Standard change	R square	N
CGPA UTME	0.649	0.422	0.416	0.576	0.422	339

Table 1 shows that the simple correlation(R) of 0.6449, R² of 0.422, adjusted R of 0.416 the standard error of estimate 0.576 and R² change of 0.422 which means that the predictor (contributed significantly to the predictions) accounted for only 42.2% of the variance in student's academic performance (CGPA).

Table 2: Summary of ANOVA for Regression for Faculty of Education

sources of variance	sum of squares of	means square	f	sig.
Regression	81.133	3	27.044	
Residual	111.296	335	0.332	81.403 .000
Total	192.429	338		

* P<0.05

In table 2, the result shows that the F-calculated 81.403 (P<0.05) is significance at 0.05 level of probability. Hence, the null hypothesis is rejected. This indicates that UTME scores significantly predict students' academic performance (CGPA).

Research Question Two: To what extent do UTME scores predict students' academic performance (CGPA) in faculty of Arts in Uniuyo and Unical?

Hypothesis Two: UTME scores do not significantly predict students' academic performance (CGPA) in faculty of arts in uniuyo and unical.

Table 3: Summary of Regression for Faculty of Arts

	R	R ²	Adj.R	Standard Error of the Estimate	R square Change	N
CGPA UTME	0.685	0.468	0.5393	0.470	772	

Table 3: shows the simple correlation coefficient (R) 0.685, R² 0.470, Adjusted R 0.468, standard error the estimate 0.539, and R² change of 0.470 which means that all the predictors (actually those that contributed significantly to the predictions) accounted for 47% of the variance in students' academic performance (CGPA).

Table 4: Summary of ANOVA for Regression for Faculty of Arts

Source of Variance	sum of square	df	mean square	F	sig.	
Regression	198.067	3	66.022			
Residual	223.508	768	0.291		226.861	0.000
Total	421.575	771				

* P<0.05

Table 4, above shows that the calculated F - value of 226.861 (P<0.05) is significance at 0.05 level of probability. Therefore, the null hypothesis is rejected. This indicated that UTME score significantly predict students' academic performance (CGPA) in the faculty of Arts.

Research question three: To what extent do UTME scores predict student's academic performance (CGPA) in faculty of social science in Uniuyo and Unical?

Hypothesis three: UTME Scores do not significantly predict students' academic performance (CGPA) in faculty of social science in Uniuyo and Unical?

Table 5: Summary of regression for Faculty of Social Science

	R	R ²	Adj.R	Standard Error Estimate	R square Change	N
CGPA						
UTME	0.240	0.058	0.052	0.6379	0.058	473

* P<0.05

Table 5 shows the simple correlation coefficient (R) 0.240, R-square 0.058, Adjusted R of 0.052, the standard error the estimate of 0.6379 and R² change of 0.058 which means that all the predictors (contributed significantly to the predictions and accounted for only 5.8% of the variance in students' academic performance (CGPA)).

Table 6: Summary of ANOVA for Regression Faculty of Social Science

Source of Variance	sum of squares	df	mean square	F	sig.	
Regression	11.662	3	3.887			
Residual	190.89	469	0.407	9.551		0.000
Total	202.56	472				

* P<0.05

Table 6 above shows that calculated F-calculated of 9.551 is significant at 0.05 level of probability (P<0.05). therefore, the null hypothesis is rejected indicating that the UTME scores significantly predict students' academic performance (CGPA) in faculty of social science.

SUMMARY OF FINDINGS

In faculties of education, arts and social science in the University of Uyo and University of Calabar, the results indicated that UTME scores significantly predicted students' academic performance (CGPA) in all the faculties.

DISCUSSION OF FINDINGS

The results shows that UTME scores significantly predicted students' academic performance (CGPA) in faculty of education from table 1, the simple regression analysis yielded regression coefficient (R^2) of 0.422. The implication of the foregoing is that UTME scores contributed 42.2% of the total variance not by chance in predicting students' academic performance (CGPA) in the faculty of education while 57.8% of the variance is by chance. Furthermore, the ANOVA table from the simple linear regression indicated that the f-calculated 81.403 is significant at 0.05 probability level ($P < 0.05$). This implies that UTME scores were significant in predicting students' academic performance (CGPA) shown in table 2.

From the above, therefore, it is evident that UTME scores are good predictor variables. Thus, it can be used in predicting students' academic performance (CGPA) in tertiary institutions. The findings of this study is in agreement with that of Dan I. E. (2016) who found out that Joint Admission and Matriculation Board (JAMB) scores actually predict student academic performance. He concluded that student with a good grade in these three subjects: Mathematics, English Language and one Science Subject could performed highly in University Education.

The findings of this study indicated that UTME scores predicted students' academic performance (CGPA) significantly in faculty of Arts. In table 3, the simple regression analysis shown that R^2 of 0.470 was obtained. This implies that UTME scores contributed 47% of the variance not by chance in predicting students' academic performance (CGPA) in the faculty of Arts while 53% of the variance is by change. Furthermore, the ANOVA from the simple regression computed indicated that the F-ratio calculated 226.861 is significant at 0.05 probability level ($P < 0.05$). This implies that UTME scores was significant in predicating students' academic performance (CGPA) as shown in table 4. From the above therefore, it is evident that UTME scores are good predictor variable. Thus, it can be used in predicting students' academic performance (CGPA) in tertiary institutions.

The finding of this study is in agreement with that of Afemiche (2005), Nwana (2007) and Dan (2019) investigated separately the effectiveness of UTME scores in predicting student future performance. The results of the study were similar and significant at 0.05 alpha level.

The implication of the above is that the UTME scores are good predictors are in agreement with the findings of this study.

The findings of this study indicated that UTME scores influenced the prediction of students' academic performance (CGPA) significantly in faculty of social science. In table 5 the simple regression analysis shown that R^2 of 0.058 was obtained. This implies that UTME scores contributed 5.8% of the total variance not by chance in predicting students' academic performance (CGPA) in tertiary institutions and the remaining 94.2% could not be accounted for or explained.

Beside the computed ANOVA table 6 showed that the value of F-ratio calculated 9.551 is significant at 0.05 probability level ($P < 0.05$). Thus from the result, UTME scores significantly predicted students' academic performance (CGPA).

Based on these findings, UTME scores are good predictors in predicting students' academic performance (CGPA) in faculty of social science.

The finding of this study is not supported by the findings of the study carried out by Ukwuije (1990) who investigated the effectiveness of entrance examination in predicting success in universities.

For him results of such studies have been inconsistency. Similarly Hart (1965): Entuistle (1979): Tuchwan (1980): Nwana (1981): and Amajirionwu (1982): have all found that entrance examination grades have not been good predictors of success in University.

CONCLUSION

The results of this study revealed that the combination of UTME scores predicted students' academic performance (CGPA) in the three faculties.

RECOMMENDATIONS

The following recommendations have been made based on the findings

1. Government and non government agencies should always help in the provisions of infrastructural facilities that will help in teaching and learning. This will also accelerate the conduct of various examinations in school.
2. That UTME centers should be accessible and use of security operations in all the centers are inevitable to drive away touts.
3. That JAMB should improve on their computer base examination, especially in terms of network availability.

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