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Full Length Research

Predictive validity of academic entry requirements into federal universities in Nigeria

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The study investigated the predictive strength of academic entry requirements on students' cumulative grade point average in Nigerian Federal Universities. A sample of 2400 graduate students' results was considered for the study via multistage sampling technique. A researcher-designed Proforma titled "University Students Academic Records Inventory" (USARI) served as the instrument which was face validated by experts in educational measurement and evaluation. Five research questions and five hypotheses were formulated to guide the study. The data obtained were analyzed via multiple regressions. The study showed that SSCE, UTME and POST-UTME when taken separately, do not significantly predict students CGPA in the Faculty of Arts/Humanities and Faculty of Education. The study also revealed that SSCE significantly predicts students CGPA in the Faculty of Engineering/Technology when considered alone while, UTME and POST-UTME when taken separately do not significantly predict students CGPA in the Faculty of Engineering/Technology. Furthermore, when SSCE, UTME and POST-UTME are taken separately, it was also found out that SSCE and UTME were not statistically significant predictors of students CGPA at .05 level of probability in the Faculty of Management Sciences while POST-UTME was a statistically significant predictor of students CGPA in the Faculty of Management Sciences. Also, SSCE and UTME when considered separately significantly predict students CGPA in the Faculty of Sciences while the POST-UTME variable does not significantly predict students CGPA in the Faculty of Sciences. It was then recommended that teachers, WAEC, JAMB and Universities as stakeholders should take a deeper look into how examinations is conducted in terms of focus and emphasis vis-à-vis the actual skills and competences the universities do emphasize. Also authorities in charge of the development, administration and conduction of the various examinations should improve on the quality of the items that are used for the testing of the candidates in the various examinations. Finally, the implications of the results and suggestions for further studies were also made.

Key words: Prediction, validity, academic entry requirement, grade points, universities.

INTRODUCTION

This report is geared towards presenting the second part of a study earlier conducted by the researcher on the same issue, with the title "Influence of Academic Entry Requirement into Federal Universities in Nigeria" but, this time, focusing on the predictive strength of the academic entry requirements such as Senior Secondary Certificate Examination (SSCE), Unified Tertiary Matriculation Examination (UTME) and POST-UTME variables separately. The first part considered the variables jointly, i.e. the combined influence of the predictors (independent variables) on the criterion (dependent) variable (students' Cumulative Grade Point Average-CGPA). A second reason for this split in report is the fact that all the information gathered in the course of this investigation cannot be presented in one single article report because of the volume of information, since it will be beyond the desired number of pages required for publication in a journal article. Nevertheless, a brief explanation of the concept predictive validity, key terms in this report will suffice.

The concept "predictive validity" comes from the words 'prediction' and 'validation'. Michael (1982) sees

'prediction' as an effort to ascertain what will occur concerning an outcome or event not yet observed. Cronbach (1971) observes that 'validation' consists of checking the test score against some other observation that serves as the criterion. Glaser (1960) classified prediction into three types namely classification, selection and guidance. Classification is the assignment of the individual into category to which he/she best belongs and where he/she has the highest potential for self-expression. Selection involves the categorization of individuals in a way that would indicate the probability of success on a desired task while guidance provide information regarding abilities, interest and the chance of success in reaching various goals.

Consequently, predictive validity could be described as a situation when the purpose is to use an instrument to estimate some important form of behaviour that is external to the measuring instrument itself, the latter being referred to as the criterion (Nunnally, 1971). In essence, predictive validity is concerned with the usefulness of the test score in predicting some future performance (Kpolovie, 2010). What then is the problem of this study? Become a mind boggling question at this juncture that requires elucidation.

The decay in the Nigerian educational system calls for attention. The search for academic excellence in Nigerian universities continues with mix feelings among stokeholds' such as parents, companies, firms and even the government (Asaolu, 2003). This is evidenced by the public opinion about the standard of the students graduating from the universities. More disturbing is the common observation that many graduates from certain universities are being rejected by the labour market because of low academic competence. Some educationists have argued that the incompetence of many university students is precipitated by the selection procedure of Joint admissions and matriculation Board (JAMB) which fails to control the number and quality of candidates being admitted into the universities annually (Oluwatayo, 2003). The problem has been blamed on the Board's system of admission (Adeyemo, 2003). Consequently, in order to minimize the challenges faced by the various universities as perceived by their various authorities as been caused by JAMB in the country, various institutions, institutionalized what is popularly called post-JAMB or post UTME or Aptitude test or screening test depending on the user. It is hoped that the introduction of the screening test by the various institution will help sieve effectively the quality and quantity of candidate that are seeking admonitions into the various institutions ensuring that only candidate with the minimum entry requirement for the pursuit of any programme or course is considered. Unfortunately, the introduction of the screening test has not solved the problem which has made some individuals in our society to call for its scraping.

Investigation into the predictive ability of public examinations on students' future academic achievement in various contexts is well known. Useful summaries of the results of the large number of predictive studies that have been undertaken elsewhere over the past several decades can be found in Morgan (1989); Hezlett et al. (2001); Gonnela et al. (2004); Rothstein (2004); Geiser and Santelices (2007); among others. On the local scene, notable individual researches on the subject include Ohuche (1974), Ojerinde (1975), Obeamata (1974), Alonge (1986), Adegboye (1997) and Gbore (2006) to mention but a few. Going by these researches, there is little or no empirical evidence on a national scale in Nigeria on the academic entry requirements of SSCE, UTME and POST-UTME as Predictors of Students Cumulative Grade Point Average (CGPA) in Federal Universities in Nigeria and this study was designed to fill this gap.

Nevertheless, there have been conflicting findings on the predictive strength of academic entry requirements in predicting students' cumulative grade point average (CGPA) at the end of their (students) university training (Aghenta, 1981 and Omonijo, 2001). The problem of this study therefore was to determine the predictive strength of academic entry requirements such as SSCE, UTME and POST- UTME (Aptitude or Screening test) on Students Cumulative Grade Point Average (CGPA) in Federal Universities in Nigeria. To this end the objectives are to:

i. Determine the relative influence of each of the predictor variables (SSCE, UTME and POST-UTME) on students CGPA in the Faculty of Arts/Humanities.
ii. Determine the relative influence of each of the predictor variables (SSCE, UTME and POST-UTME) on students CGPA in the Faculty of Education.
iii. Determine the relative influence of each of the predictor variables (SSCE, UTME and POST-UTME) on students CGPA in the Faculty of Engineering/Technology.
iv. Determine the relative influence of each of the predictor variables (SSCE, UTME and POST-UTME) on students CGPA in the Faculty of Management Sciences.
v. Determine the relative influence of each of the predictor variables (SSCE, UTME and POST-UTME) on students CGPA in the Faculty of Sciences.

These objectives were changed to research questions as follows:

i. To what extent does performance in each of SSCE, UTME and POST-UTME relatively predicts students CGPA in the Faculty of Arts/Humanities?
ii. To what extent does performance in each of SSCE, UTME and POST-UTME relatively predicts students CGPA in the Faculty of Education?
iii. To what extent does performance in each of SSCE, UTME and POST-UTME relatively predicts students

CGPA in the Faculty of Engineering/Technology?
iii. To what extent does performance in each of SSCE, UTME and POST-UTME relatively predicts students CGPA in the Faculty of Management Sciences?
iv. To what extent does performance in each of SSCE, UTME and POST-UTME relatively predicts students CGPA in the Faculty of Sciences?

To answer the above questions, each was then transformed into a null hypothesis and tested at .05 level of significance:

i. The prediction of students CGPA by each of their performance in SSCE, UTME and POST-UTME in the Faculty of Arts/Humanities is not statistically significant.
ii. The prediction of students CGPA by each of their performance in SSCE, UTME and POST-UTME in the Faculty of Education is not statistically significant.
iii. The prediction of students CGPA by each of their performance in SSCE, UTME and POST-UTME in the Faculty of Engineering/Technology is not statistically significant.
iv. The prediction of students CGPA by each of their performance in SSCE, UTME and POST-UTME in the Faculty of Management Sciences is not statistically significant.
v. The prediction of students CGPA by each of their performance in SSCE, UTME and POST-UTME in the Faculty of Sciences is not statistically significant.

MATERIALS AND METHODS

This study was basically a correlational research. Hence, the correlational research design of multiple regression design was used for the study. Kpolovie (2010) described correlational research as a research adopted for investigation of the magnitude and direction or nature (positive or negative) of relationship that exists between a dependent variable (criterion variable) and one or more independent variables (predictor variables). Multiple prediction design is a higher order correlational research design that extends the least-squares association principle to the study of relationship between one dependent variable and two or more independent variable. The researcher gathered two sets of data (scores) already existing concerning the subjects of this study. The two sets of data came from the academic entry requirements of university admission and students CGPA. Finally, the two sets of scores were regressed using multiple regression statistics to determine the influence of CGPA from the combined performances of the respondents SSCE, UTME and POST-UTME scores. Furthermore, the coefficient of multiple determinations between the predictors combined and the criterion was also determined. The present study therefore, was a multiple regression design of a correlational research.

The study area was Nigeria, specifically, the thirty six Federal universities in the country. Besides, the thirty six Federal universities in the country, there are 37 state universities and 45 private universities in the country presently. The population for this study comprised all students who graduated from all the 36 Federal universities as at 2009/2010 academic session. The population of students that graduated was marginally put at 64,041 graduates in the 2009/2010 academic year. (Source, Websites of individual Universities). A sample of 2,400 graduate students' results constituted the sample for the study. To reach the sample size of 2400 graduate students' results, multistage sampling technique was employed as follows: from each of the geopolitical zones of Nigeria, 2 federal universities were random chosen, totalling 12 universities. From each university, 5 faculties were purposely selected namely: Faculty of Education, Faculty of Arts/Humanities, Faculty of Sciences, Faculty of Management/Social sciences and Faculty of Engineering/Technology. And from each faculty the results of forty (40) graduates were randomly chosen in a manner that cuts across the departments of the faculty. This gave a total of 200 graduates' students' results per university. Thus, a total of 2400 graduate students' results from 12 universities were used for the study. In addition, it should be noted that elements of purposive sampling technique was also employed especially in the selection of faculties and students results. This is because only students with O' level results from WAEC conducted School Certificate Examination were selected and accepted for study in this research. This means that graduate students O' level results from NECO, NABTEB etc were not considered. The instrument for this study was a researcher-designed Proforma titled "University Students Academic Records Inventory" (USARI). The Proforma for the collection of SSCE scores of the respondents for each university and each faculty and department consists of the names of the respondents to facilitate correct identification, the letter scores for five subjects relevant to the course of study as accepted by the department/faculty/university. It also consisted of the score points assigned to each letter score by the researcher and the total of the score points obtained from the summation of the five subjects relevant to the area of study. The Proforma for the collection of the UME scores of the respondents also consists of their names for proper identification and the aggregate score obtained from the four subjects writing by the respondents in the examination. In the case of the Proforma for the collection of POST-UME scores, consists also of the names of the respondents, their aggregate score in the POST-UME examination, the Z-score of the aggregate score and the T-score of the Z-score. In the same vein, the Proforma for the collection of the dependent variable (criterion variable), consisted of the respondents names, matriculation numbers, their CGPA scores at the end of their programme, Z-score for each CGPA score and the

T-score for each Z-score.

The conversion of the POST-UME scores and CGPA scores to T-scores are based on the premises of the fact that these scores for each respondents are from different institution with different assessment mechanisms and grading/scoring systems or patterns which are not the same in all ramification and therefore, the respondents have written different examinations conducted by different universities with different dispositions especially in terms of scoring and assessment and thus the need to convert the POST-UME scores and the CGPA scores to a standard score (i.e. with a common mean and standard deviations) for effective and correct comparison. Furthermore, each Proforma consist of the following items; name of university, faculty, department and discipline/course of study. This information is so needed to enable the researcher group the respondents correctly on the basis of faculties and universities which was the basis of analysis in this study. The Proforma was given to two experts in measurement and evaluation for the face and content validity. The reliability of SSCE, UME and POST-UME have been studied and established by many researchers (Ojerinde, 1986; Obinna, 2006).

The data for this study was collected directly by the researcher from the exams and records department/unit of the various universities selected for this study after obtaining the necessary approval. The inventory Proforma designed for the collection of data was used by the researcher. Since the data obtained and subsequently used in this study consists of SSCE results of the students the following scoring and coding format was used.

Table 1 show the letter grades and score points that were given to each letter grades obtained in each subjects by each respondents in this study. The score points employed is the reversed stanine used by the examination body. Nevertheless, it should be noted that the five subjects including Mathematics and English language which is the minimum subjects' number requirement for each candidate pursuing any programme into any university in Nigeria was considered. These five subjects were the once selected by the university in the course of admitting the students as the subjects relevant to the course of study. Furthermore, a summative approach was adopted, that is, the score points for each of the five subjects considered were added so as to obtain a single score for each respondent as far as their SSCE performance were concerned. In addition, the UME scores which are usually an aggregate of four subjects was considered as it is. However, the POST-UTME scores of the respondents from the various universities were converted to a standard score such as the T-score (which has a mean of 50 and standard deviation of 10) especially for the analysis. This was done by applying the formula, $T = 10Z + 50$ such that each score obtained by the respondents was first converted to a Z-score via the formula $Z = (X - Mean)/SD$. The letter X stands for the individual score, mean is the average score for the respondents' scores and SD is the standard deviation of the entire scores. In the same vein, the CGPA score obtained by the students at the end of their programme by 2009/2010 academic year was also converted to T-scores as well. These are based on the premises that different universities may have set different examinations with different psychometric and item statistics (difficulty index, discriminative index and possibly option distracter index). In order to equalize these noticeable and observable differences that may infringe on the results of the investigation, a standard score was necessary. For data analysis, multiple regression was deployed via a statistical package.

RESULTS

Research question 1

To what extent does performance in each of SSCE, UTME and POST-UTME relatively predicts students CGPA in the Faculty of Arts/Humanities?

Hypothesis 1

The prediction of students CGPA by each of their performance in SSCE, UTME and POST-UTME in the Faculty of Arts/Humanities is not statistically significant.

Table 2 showed the regression coefficients or weights from the multiple regression analysis. Both the unstandardized and the standardized regression coefficients, the standard error of the estimates, t-ratio and the level of significance for each of the independent variables have been presented. A cursory view of the table shows that the standardized regression coefficients (β-weights) range from -.007 to .015. Those of the unstandardized coefficients are from -0.002 to 0.044. The errors of the estimates are minimal, ranging from 0.016 to 0.132 while the t-ratio values are from -0.143 to 0.330.

Also, from the table, the t-ratio of all the three independent variables was not significant predictors (as $P > 0.05$) of students CGPA in the faculty of Arts/Humanities. Since all the independent variables are not statistically significant, the consequence is the acceptance of the null hypothesis. This means that SSCE, UTME and POST-UTME when considered separately do not significantly predict students CGPA in the faculty of Arts/Humanities.

A further analysis of the test result showed that SSCE is the strongest predictor. This is followed by POST-UTME and then UTME. Indeed, the prediction equation is as follows:

Students CGPA = 50.690 + 0.044SSCE - 0.030PUTME - 0.002UTME

Table 1. SSCE grades and Score points.

SSCE	
Letter Grades	Score points
A1	9
B2	8
B3	7
C4	6
C5	5
C6	4

Table 2. Summary of multiple regression analysis of the relative contributions of each of the independent variables (SSCE, UTME and POST-UTME) to the prediction of students CGPA in the faculty of Arts/Humanities.

Variables	B	SEb	Beta (β)	t-ratio	P-value
SSCE	0.044	0.132	0.015	0.330	0.742**
UTME	-0.002	0.016	-0.007	-0.143	0.886**
PUTME	-0.030	0.046	-0.030	-0.646	0.519**

****Not significant, P > .05 probability level. b = Unstandardized Coefficients. SEb = Standard error of estimate for unstandardized coefficients. Beta (β) = Standardized Coefficients.

From this equation, it could be seen that variables such as Post Unified Tertiary Matriculation Examination (PUTME) and Unified Tertiary Matriculation Examination (UTME) predicted students CGPA in a negative dimension. Also their level of contributions to the prediction of students CGPA was very low with UTME as the least.

Research question 2

To what extent does performance in each of SSCE, UTME and POST-UTME relatively predicts students CGPA in the Faculty of Education?

Hypothesis 2

The prediction of students CGPA by each of their performance in SSCE, UTME and POST-UTME in the Faculty of Education is not statistically significant.

Table 3 showed the regression coefficients or weights from the multiple regression analysis. Both the unstandardized and the standardized regression coefficients, the standard error of the estimates, t-ratio and the level of significance for each of the independent variables have been presented. A cursory view of the table shows that the standardized regression coefficients (β-weights) range from -0.033 to 0.010. Those of the unstandardized coefficients are from -0.033 to 0.003. The errors of the estimates are minimal, ranging from 0.012 to 0.118 while the t-ratio values are from -0.711 to 0.216.

Also, from the table, the t-ratio all the three independent variables were not significant predictors (as P > 0.05) of students CGPA in the faculty of Education. Since all the independent variables are not statistically significant, the consequence is the acceptance of the null hypothesis. This means that SSCE, UTME and POST-UTME when considered separately do not significantly predict students CGPA in the faculty of Education.

A further analysis of the test result shows that UTME is the strongest predictor. This is followed by SSCE and then POST-UTME. Indeed, the prediction equation is as follows:

Students CGPA = 53.814 + 0.003UTME - 0.095SSCE - 0.033PUTME

From this equation, it could be seen that variables such as SSCE and Post Unified Tertiary Matriculation Examination (PUTME) predicted students CGPA in a negative dimension. Also their level of contributions to the prediction of students CGPA was very low with PUTME as the least.

Research question 3

To what extent does performance in each of SSCE, UTME and POST-UTME relatively predicts students CGPA in the Faculty of Engineering/Technology?

Hypothesis 3

The prediction of students CGPA by each of their performance in SSCE, UTME and POST-UTME in the Faculty of Engineering/Technology is not statistically significant.

Table 3. Summary of multiple regression analysis of the relative contributions of each of the independent variables (SSCE, UTME and POST-UTME) to the prediction of students CGPA in the faculty of Education.

Variables	B	SEb	Beta (β)	t-ratio	P-value
SSCE	-.095	.118	-.037	-.801	.424**
UTME	.003	.012	.010	.216	.829**
PUTME	-.033	.046	-.033	-.711	.477**

**Not significant, P > .05 probability level. b = Unstandardized Coefficients. SEb = Standard error of estimate for unstandardized coefficients. Beta (β) = Standardized Coefficients.

Table 4 showed the regression coefficients or weights from the multiple regression analysis. Both the unstandardized and the standardized regression coefficients, the standard error of the estimates, t-ratio and the level of significance for each of the independent variables have been presented. A perfunctory view of the table shows that the standardized regression coefficients (β-weights) range from -0.038 to 0.041. Those of the unstandardized coefficients are from -0.010 to 0.041. The errors of the estimates are minimal, ranging from 0.011 to 0.108 while the t-ratio values are from -0.830 to 0.889.

Also, from the table, the t-ratio for SSCE was significant as P < 0.05 while those of UTME and POST-UTME were not significant predictors (as P > 0.05) of students CGPA in the faculty of Engineering/Technology. Since two of the independent variables are not statistically significant, the consequence is the acceptance of the null hypothesis. This means that SSCE significantly predicts students CGPA in the faculty of Engineering/Technology while UTME and POST-UTME when considered separately do not significantly predict students CGPA in the faculty of Engineering/Technology.

A further analysis of the test result shows that SSCE is the strongest predictor. This is followed by POST-UTME and then UTME. Indeed, the prediction equation is as follows:

Students CGPA = 58.401 + 0.041PUTME - 0.258SSCE - 0.010UTME

From this equation, it could be seen that variables such as SSCE and Unified Tertiary Matriculation Examination (UTME) predicted students CGPA in a negative dimension.

Research question 4

To what extent does performance in each of SSCE, UTME and POST-UTME relatively predicts students CGPA in the Faculty of Management Sciences?

Hypothesis 4

The prediction of students CGPA by each of their performance in SSCE, UTME and POST-UTME in the Faculty of Management Sciences is not statistically significant.

Table 5 showed the regression coefficients or weights from the multiple regression analysis. Both the unstandardized and the standardized regression coefficients, the standard error of the estimates, t-ratio and the level of significance for each of the independent variables have been presented. A cursory view of the table shows that the standardized regression coefficient (β-weights) for SSCE was 0.058, for UTME we had .062 and that of POST-UTME was 0.106. Those of the unstandardized coefficients are 0.131 for SSCE, 0.016 for UTME and .106 for POST-UTME. The errors of the estimates are minimal, ranging from 0.012 to 0.103 while the t-ratio values are from 1.268 to 2.326.

Also, from the table, the t-ratio for SSCE and UTME were not significant as P > 0.05 while that of POST-UTME was significant predictor (as P < 0.05) of students CGPA in the faculty of Management Sciences. Since two of the independent variables are not statistically significant, the consequence is the acceptance of the null hypothesis with respect to SSCE and UTME in the faculty of Management Sciences. This means that POST-UTME significantly predicts students CGPA in the faculty of Management Sciences while SSCE and UTME when considered separately do not significantly predict students CGPA in the faculty of Management Sciences. The prediction equation is as follows:

Students CGPA = 36.995 + 0.131SSCE + 0.016UTME + 0.106PUTME

From this equation, it could be seen that all the variables that is, SSCE, UTME and POST-UTME predicted students CGPA in a positive dimension in the faculty of Management Sciences.

Research question 5

To what extent does performance in each of SSCE, UTME and POST-UTME relatively predicts students CGPA in the Faculty of Sciences?

Hypothesis 5

The prediction of students CGPA by each of their

Table 4. Summary of multiple regression analysis of the relative contributions of each of the independent variables (SSCE, UTME and POST-UTME) to the prediction of students CGPA in the faculty of Engineering/Technology.

Variables	B	SEb	Beta (β)	t-ratio	P-value
SSCE	-.258	.108	-.109	-2.389	.017*
UTME	-.010	.011	-.038	-.830	.407**
PUTME	.041	.046	.041	.889	.374**

*****Significant, P < .05 probability level. ******Not significant, P > .05 probability level. b = Unstandardized Coefficients. SEb = Standard error of estimate for unstandardized coefficients. Beta (β) = Standardized Coefficients.

Table 5. Summary of multiple regression analysis of the relative contributions of each of the independent variables (SSCE, UTME and POST-UTME) to the prediction of students CGPA in the faculty of Management Sciences.

Variables	B	SEb	Beta (β)	t-ratio	P-value
SSCE	.131	.103	.058	1.268	.205**
UTME	.016	.012	.062	1.375	.170**
PUTME	.106	.045	.106	2.326	.020*

*****Significant, P < .05 probability level. ******Not significant, P > .05 probability level. b = Unstandardized Coefficients. SEb = Standard error of estimate for unstandardized coefficients. Beta (β) = Standardized Coefficients.

performance in SSCE, UTME and POST-UTME in the Faculty of Sciences is not statistically significant.

Table 6 showed the regression coefficients or weights from the multiple regression analysis. Both the unstandardized and the standardized regression coefficients, the standard error of the estimates, t-ratio and the level of significance for each of the independent variables have been presented. A cursory view of the table shows that the standardized regression coefficient (β-weights) for SSCE was 0.310, for UTME we had 0.211 and that of POST-UTME was -0.042. Those of the unstandardized coefficients are 0.876 for SSCE, 0.087 for UTME and -0.042 for POST-UTME. The errors of the estimates are minimal, ranging from 0.018 to 0.122 while the t-ratio values are from -1.009 to 7.190.

Also, from the table, the t-ratio for SSCE and UTME were significant as P < .05 while that of POST-UTME was not significant predictor (as P > .05) of students CGPA in the faculty of Sciences. Since two of the independent variables are statistically significant, the consequence is the rejection of the null hypothesis with respect to SSCE and UTME in the faculty of Sciences. This means that POST-UTME do not significantly predicts students CGPA in the faculty of Sciences while SSCE and UTME when considered separately significantly predict students CGPA in the faculty of Sciences. The prediction equation is as follows:

Students CGPA = 5.335 + 0.876SSCE + 0.087UTME - 0.042PUTME

From this equation, it could be seen that variables such as SSCE and UTME predicts students CGPA in the positive dimension while the variable, POST-UTME predicted students CGPA in a negative dimension and it is very low in the faculty of Sciences.

DISCUSSION

The prediction of students CGPA from their performance in SSCE, UTME and POST-UTME in the Faculty of Arts/Humanities

Here SSCE, UTME and POST-UTME when taken separately, do not significantly predict students CGPA in the Faculty of Arts/Humanities. In addition, the Beta value for SSCE is 0.015, UTME is -.007 and POST-UTME is -0.030 which are all not significant but, showing that the predictive strength of SSCE thou very low is in the positive direction while that of UTME and POST-UTME are in the negative or inverse direction. This means that in the Faculty of Arts/humanities students scores in SSCE, UTME and POST-UTME by which they obtained admission into the faculty is not a true reflection of their CGPA when considered separately.

The finding of the present study is in agreement with those of Nnadi (1983), Maduabum (1984), Obioma and Salau (2007) and Margaret (2012) who in their separate work found out that student entry qualification such as SSCE, UTME and POST-UTME does not significantly predict students' CGPA. However, the studies by Ubokobong (1993), Itsuokor (1994), Ojerinde and Kolo (2007) and Adeyemi (2011) revealed findings inconsistent with the present one. These findings have revealed that SSCE, UTME and POST-UTME in their separate works have positive and significant relationship and predictive strength with CGPA and First Year Grade Point (FYGP).

Table 6. Summary of multiple regression analysis of the relative contributions of each of the independent variables (SSCE, UTME and POST-UTME) to the prediction of students CGPA in the faculty of Sciences.

Variables	B	SEb	Beta (β)	t-ratio	P-value
SSCE	.876	.122	.310	7.190	.000*
UTME	.087	.018	.211	4.934	.000*
PUTME	-.042	.042	-.042	-1.009	.314**

***Significant, P < .05 probability level. ****Not significant, P > .05 probability level. b = Unstandardized Coefficients. SEb = Standard error of estimate for unstandardized coefficients. Beta (β) = Standardized Coefficients.

The prediction of students CGPA from their performance in SSCE, UTME and POST-UTME in the Faculty of Education

The SSCE, UTME and POST-UTME scores of students in the Faculty of Education when considered separately also do not significantly predict students CGPA. In addition, the Beta value for SSCE is -0.037, UTME is 0.010 and POST-UTME is -0.033 which are all not significant but, showing that the predictive strength of UTME thou very low is in the positive direction while that of SSCE and POST-UTME are in the negative or inverse direction. This means that in the Faculty of Education students scores in SSCE, UTME and POST-UTME by which they obtained admission into the faculty is not a predictor of their CGPA when considered independently.

The finding of the study is in agreement with those of Nnadi (1983), Maduabum (1984), Obioma and Salau (2007) and Margaret (2012) who in their separate work found out that student entry qualification such as SSCE, UTME and POST-UTME does not significantly predict students' CGPA. However, the studies by Ubokobong (1993), Itsuokor (1994), Ojerinde and Kolo (2007) and Adeyemi (2011) revealed findings inconsistent with the present one. These findings have revealed that SSCE, UTME and POST-UTME in their separate works have positive and significant relationship and predictive strength with CGPA and First Year Grade Point (FYGP).

The prediction of students CGPA from their performance in SSCE, UTME and POST-UTME in the Faculty of Engineering/Technology

The result revealed that SSCE significantly predicts students CGPA in the Faculty of Engineering/Technology when considered alone while, UTME and POST-UTME on the other hand, when taken separately do not significantly predict students CGPA in the Faculty of Engineering/Technology. In addition, the Beta value for SSCE is -0.109, which is significant, UTME is -0.038 and POST-UTME is 0.041 which are both not significant. This showed that the predictive strength of POST- UTME thou very low is in the positive direction while that of SSCE and UTME are in the negative or inverse direction. This means that in the Faculty of Engineering/Technology students' scores in SSCE, UTME and POST-UTME when considered independently SSCE was found to be significant predictor of students CGPA while UTME and POST-UTME were not significant predictors of students CGPA.

The finding of the study is in agreement with those of Ubokobong (1993), Itsuokor (1994), and Obioma and Salau (2007) who in their separate work found out that student entry qualifications especially SSCE, significantly predict students' CGPA.

The prediction of students CGPA from their performance in SSCE, UTME and POST-UTME in the Faculty of Management Sciences

When SSCE, UTME and POST-UTME are taken separately, it was found out that SSCE and UTME were not statistically significant predictors of students CGPA at 0.05 level of probability in the Faculty of Management Sciences while POST-UTME was a statistically significant predictor of students CGPA in the Faculty of Management Sciences. Also, the Beta value for SSCE and UTME is 0.058 and 0.062 respectively which are both not significant. While that of POST-UTME was .106 which was significant. This shows that the predictive strength of SSCE, UTME and POST- UTME thou low are all in the positive direction. This means that in the Faculty of Management Sciences students' scores in SSCE, UTME and POST-UTME by which they obtained admission into the faculty, when considered independently POST-UTME was found to be significant predictor of students CGPA while SSCE and UTME were not significant predictors of students CGPA.

The finding of the present study is in concordance with those of Adeyemi (2011), and Ogundokun and Adeboja (2012) who in their separate work found out that student entry qualifications especially POST-UTME, significantly predict students' CGPA. However, the studies by Nze (1990) and Maduabum (1984) are in discordance with the present one. These findings have revealed that SSCE, UTME and POST-UTME in their separate works have no significant relationship and predictive strength with CGPA.

The prediction of students CGPA from their performance in SSCE, UTME and POST-UTME in the Faculty of Sciences

The finding revealed that SSCE and UTME when considered separately significantly predict students CGPA in the Faculty of Sciences while the POST-UTME variable do not significantly predict students CGPA in the Faculty of Sciences. Also, the Beta value for SSCE and UTME is 0.310 and 0.211 respectively which are both significant. While that of POST-UTME was -0.042 which was not significant. This shows that the predictive strength of SSCE and UTME are in the positive direction while that of POST-UTME which is very low is in the negative or inverse direction.

This means that in the Faculty of Sciences students' scores in SSCE, UTME and POST-UTME by which they obtained admission into the faculty when considered independently only SSCE and UTME significantly predict students CGPA while POST-UTME was not a significant predictor of students CGPA.

The present result is in agreement with some past research findings. For example, Ubokobong (1993), in a study predicting educational performance at tertiary level on the basis of secondary level performance in Nigeria found out that the good and solid background of the students boosted their performance at the tertiary level of education. Similar results were found in related studies by Akindehin (1983), Itsuokor (1994), and Ogundokun and Adeboja (2012). However, the studies by Kolawole, et al. (2011) and Margaret (2012) revealed findings inconsistent with the present one.

Their results showed that SSCE, UTME and POST-UTME in their separate works have no significant relationship and predictive strength with CGPA.

From the study it can be said that SSCE, UTME and POST-UTME when taken separately that is independently, do not significantly predict students CGPA in the Faculty of Arts/Humanities and Education. However, in the Faculty of Engineering/Technology, SSCE was a significant predictor of students' CGPA while, UTME and POST-UTME were not significant predictors of students' CGPA in the faculty. Similarly, in the Faculty of Management Sciences a reverse and mixed inconsistency observed in the Faculty of Engineering/Technology was the case as SSCE and UTME was not found to be significant predictors of students CGPA in the Faculty of Management Sciences.

Furthermore, a final conclusion that may be adduced from the findings of this research work concerns the Faculty of Sciences who's result is a direct opposite of that of the Faculty of Management Sciences. In the Faculty of Sciences, SSCE and UTME independently, statistically and significantly predict students' CGPA while POST-UTME did not statistically significantly predict students' CGPA.

In conclusion, a closer assessment of the entire findings vis-à-vis the independent variables (SSCE, UTME and POST-UTME) and dependent variable (Students' CGPA) in relation to the five faculties (Arts/Humanities, Education, Engineering/Technology, Management Sciences and Sciences) investigated in this study, Senior Secondary Certificate Examination (SSCE) can be described to be the best predictor of students' Cumulative Grade Point Average (CGPA) followed closely by Unified Tertiary Matriculation Examination (UTME) and Post Unified Tertiary Matriculation Examination (POST-UTME) coming last.

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