

PREDICTIVE VALIDITY OF UME SCORES IN DELTA STATE UNIVERSITY, ABRAKA, NIGERIA

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ABSTRACT

This study examined the predictive validity of UME scores in relation to students' performance in first year university examination. Five hypotheses were formulated and tested in the course of the study. The correlational research design was used. A sample of 200 students who were in 100 level in 2004/2005 academic session was selected from a population of 600 students using proportional stratified random sampling technique. An inventory *was* used to collect data from both the admission officer and the various departments. The data were analyzed with the aid of the Pearson Product Moment Correlation Coefficient. The resulting correlation coefficient and coefficient of determination were 0.60 and 0.36 respectively. The result revealed that the UME scores correlates highly with performance in first year university examination. The study concludes that UME is a good predictor of student performance in the first year university examination. It was recommended that the UME should not be scrapped and the conduct should be improved upon.

INTRODUCTION

Education is universally recognized as one of the instruments for social, political, scientific and technological development. This is the reason why no society can afford to toy with the education of its citizenry as this will result in a snail speed development (Azikiwe, 2000). In the 1960's, very few people were seeking admission into higher institutions and those who were admitted got it through hard work Any person who found himself/herself there was therefore considered intelligent and academically superior to his/her peers (Erigha, 2001). Up till 1978, every university was conducting its own entrance examination for those who seek admission into it. This system of admission made some candidates get admission to two or more universities at a time and it was criticized that the qualifying examination organized by the individual universities were associated with leakages and cheating. These problems *couple* with education imbalance in some states of the federation, made the Federal Military Government of Nigeria to establish the Joint Admission and Matriculation Board (JAMB) in 1978. The Board conducted the first matriculation examination for entry into all Degree awarding institutions in Nigeria in 1978 (JAMB. 2006).

Since 2000's these Degree awarding institutions have lost confidence in the UME scores and have complained about the poor performance of students in their first year university examination though they were admitted with very high UME scores. The 2004/2005 academic session was the last set of UME students admitted with out screening test to Delta State University Abraka. Since this is the last it became necessary to ascertain the predictive validity of UME scores in DELSU in 2004/2005 with particular reference to the department of Vocational and Technical Education.

Hassan (1993) views Predictive Validity as the process of determining the extent in which test performance is related to some other valued measure of performance. Cohen (2000)

commented that empirical evidence in support of criteria related validity include a comparison of performance on the test against performance on outside criteria such as grades, class rank, other tests and teacher's ratings.

Several studies have been conducted on predictive measurements (Adejare 1999, Faloye and Afolabi 2004, Adeyemo, 2001, Adebayo 2002, Omonigho, 2001). In most of these studies, there is no evidence that the predictive validity of UME scores in relations to DELSU students was verified, hence this study was undertaken to ascertain the predictive validity of UME scores in Delta State University Abraka.

Research Hypotheses

The following hypotheses were formulated for testing in the course of the study.

- H₁: There is no significant difference between student's UME scores and first year CGPA in Agric science Education.
- H₂: There is no significant difference between student's UME scores and first year CGPA in Business Education.
- H₃: There is no significant difference between student's UME scores and first year CGPA in Home Economics Education.
- H₄: There is no significant difference between student's UME scores and first year CGPA in Technical Education.
- H₅: There is no significant difference between student's UME scores and first year CGPA in Vocational and Technical Education Department.

Method

The correlation research design was used for the study. This method was used because it is most appropriate for the study. The 100 level students of the vocational and technical education department in the faculty of education in 2004/2005 academic session formed the population of the study. The vocational and technical education department includes Agricultural Science Education, Business education. Home economics education and Technical education units.

A sample of 200-100 level students was selected from the population using the stratified random sampling technique. 50 students were so selected from each of the four units of the department. An inventory was used to collect data for the study. The inventory requested among other things, data on UME scores and 100 level cumulative grade point average (CGPA) of the sampled students. The data collected was analyzed with the aid of Pearson Product moment correlation formulae.

RESULTS AND DISCUSSION

Table 1: Summary of Pearson Product moment correlation coefficient for the different subject options.

Option	Coefficient of correlation (r)
Agricultural Science Education	0.63
Business Education	0.58
Home economics Education	0.52
Technical Education	0.67
Overall (Department)	0.60

Table 1 shows that there is positive correlation between UME scores and first year performance of the different subject options called the units and the overall of the sampled involved in the study.

The predictive strength of the UME scores in predicting performance at the first year of university examination was examined. Though the correlation coefficient varied from one subject option to another, they are all within the same range.

The correlation coefficient of technical education is highest. This is as a result of the science nature of the courses. The correlation coefficient of agricultural education is next to that of technical education. The science oriented nature of the courses accounted for the high coefficient of correlation.

The correlation coefficient of Business education and some economics are 0.58 and 0.52 respectively. The business education correlation coefficient IS high as the UME subjects are Social Science subjects and the courses are more of social sciences. One important revelation from the correlation coefficient is that all the subject options were correlation coefficient that range from 0.52 to 0.67; which shows that the UME scores is still a good predictor of first year university examination performance.

In all, this study revealed that UME scores in the four subject options correlated significantly with first year university examination performance. These subjects are taken by students of enough intelligence and/or all round ability. It thus follows that students of this category win tend to perform consistently well provided the examination possesses some validity. Related to this factor is the quantitative nature of these subjects whereby subjectivity reduced to the minimum. This is so because good students who possess mathematical skills will demonstrate high achievement consistently.

The result of this study is in agreement and disagreement with that of Abdullahi (1983). The study agreed with him in area of chemistry, Economics and Physics and disagreed with him in Biology and Geography.

Table 2: coefficient of Determination for the different subject options

Option	r^2
Agric science Education	0.39
Business Education	0.33
Home economics Education	0.27
Technical Education	0.44
Overall	0.36

Table 2 shows that 39% of the performance in the first year university examination can be accounted for by the performance in UME. For business education it is 33% while Home economics is 27%. 44% of the performance in technical education can be predicted by performance in UME. In the department it shows that 36% of the performance in the first-year examination can be predicted by performance in UME.

CONCLUSION

The study found out that UME score correlates highly with performance in first-year university examination. It is therefore concluded that UME scores is a good predictor of the

students' first-year performance.

RECOMMENDATION

Arising from the conclusion it was recommended that UME should not be scrapped but that the conduct of the examination should be improved upon.

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