PREDICTIVE VALIDITY OF UNIFIED TERTIARY MATRICULATION EXAMINATION (UTME) ON POST-UNIFIED TERTIARY MATRICULATION EXAMINATION SCORES (UTME) IN NIGERIA

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ABSTRACT

The restriction on all the tertiary institutions that they should conduct post unified tertiary matriculation examination (PUTME) as a prerequisite for admission has generated a lot of anxiety among admission seekers in Nigeria. This study investigates the predictive validity of unified tertiary matriculation examination (UTME) on the post-unified tertiary matriculation examination (PUTME). To carry out the study, two research questions were answered using mean, standard deviation and correlation coefficient while the hypothesis was tested using dependent t-test statistic. Eta square was computed to indicate the magnitude of difference between the two groups. The design of the study was ex-post-facto research design. The study made use of already existing data collected from the sample of 692 candidates in the two dependent examinations. The result showed that there is a statistical significant difference in the mean performance of students in unified tertiary matriculation examination (UTME) and post unified tertiary matriculation examination (PUTME) scores. The mean of candidates in the UTME is higher than their mean score in PUTME. The standard deviation of candidates in UTME is lesser than that of PUTME. Sequel to this, it was inferred that UTME is more susceptible to examination malpractice than PUTME. Moreover, the correlation coefficient computed between UTME and PUTME scores was very low showing evidence of unpredictable validity between the two examinations. Based on these results, it was recommended that UTME and PUTME scores should continue to be used to admit students into universities. Precisely, PUTME should continue to exist in universities because it reduces malpractice to the barest minimum and hence reduces the rate of admitting substandard and unqualified students into universities. It was also recommended that candidates who scored very high in UTME examination but scored very low in PUTME should be denied university admission.

Keywords: Unified tertiary matriculation examination (UTME), post-unified tertiary matriculation examination (PUTME, predictive validity, performance, malpractice, university.)
Introduction

The importance of education to the social economic growth and development of any nation is immeasurable. However there can never be any functional education without high and credible standard which must be sustained for any meaningful development in a society. Since the inception of university education, the government of Nigeria has been trying her best to ensure that academic standard is maintained in the university system. The increasing complexity of the Nigerian society as a result of social changes has had adverse effects on the curriculum implementation at all levels of education. The federal government has introduced some novel practices to contend with some pressures in education sector by establishing some agencies. Joint Admissions and Matriculation Board (JAMB) is an agency charged with the dual responsibility of testing and placement of suitably qualified candidates into the nation’s tertiary institutions. It was established as a response to the problems of multiple applications, multiple admissions as well as the absence of standardization in addition to lack of uniformity in admission guidelines which hitherto beset tertiary institutions. The entrance examination conducted by JAMB is tagged university matriculation examination (UME) redefined recently as unified tertiary matriculation examination (UTME). Joint Admission and Matriculations Board (JAMB) is therefore the Nigeria’s official entrance examination board for tertiary level institutions. The examinations being administered are available for most students who choose to apply to public and private Polytechnics, Colleges of Education and Universities. Most of these candidates must have already concluded their external examinations, administered either by the West African Examinations Council (WAEC) or the National Examinations Council (NECO). Hitherto every existing university conducted her own concessional examination and admitted her students. However, this system of admission revealed serious limitations and quite often leads to wastage of resources. For a candidate to be qualified for admission into 100 level of a chosen course in any of the institutions, he/she must obtain an acceptable level of performance in the Unified Tertiary Matriculation Examination (UTME) in the subjects relevant to the proposed course of study. The required UTME subjects for all the respective courses are set out in the JAMB brochure.

In Nigeria, university students are expected to be sound academically. They are expected to have sat for the Senior Secondary School Certificate Examinations (SSCE) as an achievement test and passed at the minimum requirement and have also presented themselves for Joint Admission and Matriculation Board (JAMB) examination as a selection test and passed at acceptable cut-off point before being offered admission into the University (Salim, 2006). Despite these public examinations that Nigerian undergraduates do go through, academic performance among university students are far below expectations most especially in the last one and half decades. Many students hardly pass all their first year courses, majority of those who successfully do so, have poor grades. Greater percentage of university graduates in Nigeria today fall below Second Class Upper division; the number of spillover students in various departments are on a high increase. The situation is now worse as those who even manage to graduate are not productive in the labour market because they fail to meet the expectation of the employers (Ajaja, 2012). It is presumed that if the enrolment process is devoid of error, the enrollee should be error free, and the entire system should therefore be free of error. Can this poor performance of students be attributable to deficient enrolment process?

Despite stringent measures and strategies employed by the Nigerian government to ensure that educational standards are maintained at university level, students whom after passing through all these vigorous examinations still perform far below expectations. The high rate of poor academic achievement among undergraduate is not unconnected with the channel through which they found themselves into the University System. Ebiri (2010) observed that using UTME alone as a yardstick for admission of students into Nigerian universities has led to intake of poor calibre of candidates who are characterized by high failure rate, increase in examination malpractice, high spillovers and the production of poor quality output that are neither self-reliant nor able to contribute effectively in the world of work.
Ironically, as the demand for University Education now is higher than ever before, the quality of students admitted, and graduates produced in Nigerian Universities today is on high decline. A good number of people see the introduction of post-unified tertiary matriculation examination (PUTME) as a means of improving the quality of candidates admitted into the University system which will also improve the quality of graduates produced. Selection of best candidates for university education will also make teaching and learning easier as the best student is usually an individual who is focused and disciplined; subsequently, the university management will find it easier to manage the disciplined and focused students who always have set goals to achieve.

Since higher education has become a valuable commodity to the extent that it can affect salary, job security and power to influence society, a fair and transparent admissions system is therefore expedient for all applicants. One major challenge facing the use of selection examination for placement into tertiary institutions in Nigeria is the scourge of examination malpractice. It has to a large extent militated against the objectives for which the selection examinations were set to achieve such as ensuring that suitable and qualified candidates are offered admission into institutions of higher learning. Examination malpractice is a broad name for all forms of misconduct, which include, cheating, copying, spying; being in possession of unauthorized materials, impersonation, among others. A frightening dimension is the involvement of parents, guardians and examination officials in this unwholesome act. This singular act of examination malpractice can seriously affect the predictive validity of unified tertiary matriculation examination (UTME). Predictive validity is the effectiveness of a test in predicting the examinees’ future performance on a given task. Universities and other tertiary institutions are expected to conduct PUTME after UTME in form of aptitude test to determine the degree of the candidate’s suitability for admission. Emaikwu (2014) sees aptitude test as a test that determines person’s capability to acquire proficiency under appropriate conditions, that is, his potentials at present as revealed by his performance on selected test. It is useful in schools for assigning students to courses which best suit their abilities. The task of aptitude test is to distinguish between those who will manage easily at school from those who will find it difficult. Hence aptitude test stands to expose those who are most likely to do well in a future course and to reject those that are likely to fail.

JAMB has tried to avert the ugly situation of examination malpractice through the help of security agents. JAMB has also used different number systems and codes for different combinations to discourage mass cheating. A lot of cancellations of results have been made to no avail. It is quite obvious that JAMB as an examination body cannot solve this problem alone because of many factors that come into play. Nwafor and Onuoha (2011) identified many factors that cause examination malpractice in Nigerian tertiary institutions such as psychological stress due to fear of failure, inadequate preparation for examination, general high level of corruption in the society, lack of dedication on the part of teachers, laxity on the part of students; lack of discipline and low ability of students. Examination malpractice has consistently remained a bane of Nigerian educational system. Many have asserted that the academic certificate being issued to graduates in Nigeria is no more valuable than the pieces of papers on which they are printed. Examination malpractice is an illegal behaviour by a candidate before, during or after examination so that he/she can attain success easily and cheaply. This means that the task of eradicating examination malpractice does not only depend on JAMB but on individuals, organization, institutions, and the general society at large. The implication of this mess is the seemingly unreliable and unpredictable UTME scores, meaning that candidates, who are not qualified to gain admission, find themselves in the four walls of higher institutions of learning. It was as a result of these ugly events that PUTME was introduced into the Nigerian University system.

In 2005 the former Nigerian president, Olusegun Obasanjo accused JAMB of corrupt practices which had affected the standard of education in Nigeria. His statement attracted a lot of actions and reactions which in effect rendered UTME incapable of being a yardstick to rely upon as true reflection of candidates’ performance.
Sequel to this, he recommended that further screening be conducted for candidates who had the accepted cut-off point for university admission in UTME. The Federal Government of Nigeria under the leadership of President Olusegun Obasanjo introduced the policy of PUTME screening by universities in 2005, through the then minister of Education Mrs. Chinwe Obaji. This policy made it compulsory for all tertiary institutions to screen candidates after their UTME results and before giving admission. Under this policy, candidates who scored between 180-200 points and above are shortlisted by JAMB and their names and scores sent to their universities of choice which would screen them again using aptitude test, oral interviews or even another examination (Mozimo, 2010). Mrs. Chinwe Obaji, the then Minister of Education observed that some candidates who scored 280 and above in the UTME could not score 20% in PUTME screening. According to her, these candidates must have engaged in cheating during UTME and so could not pass the PUTME because there was no room to cheat or impersonate during PUTME. She maintains that PUTME conducted by various tertiary institutions is good because there is so much examination malpractice in UTME.

Many Universities that compared the scores of students in UTME and PUTME observed that some candidates, who scored very high in UTME, recorded very low scores in PUTME screening (Hudu, 2009; Busayo, 2010). Since the inception and up till the present times JAMB examinations have remained about the most turbulent examinations in Nigeria. The PUTME screening exercise was faced, and is still facing numerous oppositions. The oppositions came from students, parents, and ward who could not guarantee their admission. JAMB officials were also not happy for they felt PUTME might expose their shortcoming (Ifedili & Ifedili, 2010).

Few research reports have indicated that there was no significant correlation between the UTME scores obtained by students and their performances in class after they had been admitted. The University of Education, Kere-Ekiti conducted PUTME and a sample of five hundred candidates was drawn. The summary of the PUTME screening test revealed that out of the sampled 200 candidates who scored 200 and above in UTME, only 87 scored 40% and above in the PUTME essay screening test, representing 43.5%. This implies that 113 of the sampled candidates representing 56.5% who failed the PUTME screening would have been admitted automatically, if PUTME was not in place for further screening that exposed their lapses (Busaya, 2010). He also noted that PUTME screening especially the essay examination has helped to expose the inadequacies of some candidates. Many who scored 200 and above in UTME performed below expectation in the essay test. Prior to the introduction of PUTME screening, all candidates who scored 200 and above in UTME, secured admission almost automatically into the University of their choice. However, with the advent of PUTME, deficiencies of the candidates are exposed, especially when they are asked to write. Bosaya (2010) in his findings concluded that PUTME screening is a necessity for determining the suitability of candidates for admission into tertiary institutions in Nigeria. He further suggested that PUTME screening should include both objective and essay questions to determine the competence of candidates in both areas.

In a similar study conducted by Ifedili & Ifedili (2010) on an assessment of PUTME also revealed that in the 2005/2006 academic session, only 11.66% of those who passed UTME at the acceptable points were able to pass the PUTME screening test at 50% above. This is to say that 88.34% failed the PUTME screening test in University of Benin.

In a similar study, Nwanze (2009) also observed that the best five (5) UTME scores did not score up to 40% in the PUTME; only two (2) candidates from the JAMB merit list, out of 26 passed the PUTME screening Test. In the Department of Law, he observed that the best sixteen (16) candidates failed the PUTME test, in Pharmacy; the best fifteen (15) scores in PUTME were not on the merit list. He therefore emphasized that universities should be allowed to conduct their own entrance test since JAMB can no longer conduct credible examinations.
Bamiro (2010) observed that out of 30 students admitted into the Faculty of Technology at University Ibadan, 23 were asked to withdraw at the end of their first year. These were students who scored well above 250 in the UTME. He argued that the use of UTME scores as basis for admission had done more damage than good to the education sector in Nigeria. In the same manner, a survey conducted at the University of Lagos and some other Federal Universities on the quality of first semester results shows that students who had First Class grade in their First Year in various departments had UTME scores averaging between 235 and 265, but students with higher scores in the range of 289 and above ended up with Third Class and at best Second Class Lower. The PUTME is expected to serve as a check and balance to ensure that only brilliant students with credible results gain admission into the universities as a way of sanitizing public examinations in particular and the university system in general (Hudu, 2009).

Since examination is expected to reveal the true latent ability of examinees, it is expected that those candidates scoring high grades in the UTME would be able to perform brilliantly well during the PUTME and even during the undergraduate training programme. The discriminatory power of a test could be seen as ability of the test to discriminate impartially, objectively and honestly along the intellectual ability continuum of individuals being examined. In a situation where contrary to expectation happens, the experts would raise probing questions of how and why? Therefore, this study compares candidates’ performance in unified tertiary matriculation examination (UTME) and post-unified tertiary matriculation examination (UTME) in Nigeria to ascertain the predictive validity between the two dependent examination scores.

**Statement of the Problem**

There have been arguments on whether to continue or discontinue with the post unified tertiary matriculation examination (PUTME) in Nigeria. The questions asked over the years about PUTME are numerous and include inter-alia:

(i) What future does PUTME screening holds?
(ii) Should candidates be made to go through two examinations before being admitted into university?
(iii) Should parents, guardians or sponsors be made to pay for JAMB examination and then pay money again for PUTME test?
(iv) Is it not mere waste of resources?
(v) Has there been any significant difference in the mean performance of students in both examinations?

As a result of these questions, it becomes imperative to carry out a statistical analysis of candidates’ performance in UTME and PUTME conducted in 2012/2013 academic session in Nigeria to check if there is a statistical significant difference in the mean performance of candidates in the two dependent examinations.

**Research questions**

1. What is the mean performance of candidates in unified tertiary matriculation examination (UTME) and post unified tertiary matriculation examination (PUTME)?
2. What is the correlation coefficient between the scores of candidates in unified tertiary matriculation examination (UTME) and their post unified tertiary matriculation examination (PUTME) scores?

**Research Hypotheses**

1. There is no significant difference in the mean performance of candidates in unified tertiary matriculation examination (UTME) and post unified tertiary matriculation examination (PUTME).
Research Methodology
The design of the study is ex-post-facto research design. The ex-post facto research design was used because both the cause and the effect had already occurred while the data involved in the study were as collected from the source without any manipulation. A sample size of 692 candidates who applied for admission was randomly selected from University of Agriculture Makurdi, in Benue State. A simple random sampling technique was used to obtain the data for the study. The data for 2012/2013 session of candidates who took UTME and PUTME which comprised nine colleges were sampled. The data collected were original records and all information collected from them are from the original sources and thus adjudged to be correct, authentic and reliable. It is assumed that the sample drawn is from a normal population. The study made use of already existing data collected from two dependent examinations. The researcher chose this institution for reasons like familiarity of data source to the researcher and availability of data when requested with little or no hesitation. No validation of instrument was carried out since the instruments used for data collection were original records and all information collected from them are from the original sources and thus adjudged to be correct, authentic and reliable. This agrees with the recommendation of Thorndike and Hagen (1987).

The research questions posed were answered using mean, standard deviation, correlation coefficient, coefficients of determination and alienation. The hypothesis framed was tested using a repeated measure or dependent t-test statistic. Due to the large volume of sample size, the analysis of this research has to be done with statistical packages. Two statistical packages Microsoft excel and SPSS were used. The Microsoft excel package was used in data transformation into percentages, while the SPSS statistical software was used to run paired sample t-test on the data collected.

Presentation of results
Research Question 1: What is the mean performance of candidates in unified tertiary matriculation examination (UTME) and post unified tertiary matriculation examination (PUTME)?
Table 1: Paired Sample Mean and Standard Deviation of UTME and PUTME Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTME Score</td>
<td>48.9137</td>
<td>692</td>
<td>7.13110</td>
<td>0.27108</td>
</tr>
<tr>
<td>PUTME Score</td>
<td>38.3497</td>
<td>692</td>
<td>9.85050</td>
<td>0.37446</td>
</tr>
</tbody>
</table>

The Table 1 shows that the mean performance of candidates in unified tertiary matriculation examination (UTME) is 48.9137 with a standard deviation of 7.13110 while the mean score of candidates in post unified tertiary matriculation examination (PUTME) is 38.3497 with a standard deviation of 9.85050. The mean performance of candidates in the UTME is higher than the mean performance of candidates in PUTME. The standard deviation of candidates in UTME is lesser than that of PUTME and this shows that the performance of candidates in UTME is more homogeneous than in PUTME. Recall that out of the 692 candidates sampled, 490 representing 71% of the sample, scored less than 30% in PUTME, an indication of abysmal and woeful performance by candidates even when they hitherto scored above 200% in UTME. This scenario portrays an existence of examination malpractice among candidates during UTME.

Research Question 2: What is the correlation coefficient between the scores of candidates in unified tertiary matriculation examination (UTME) and their post unified tertiary matriculation examination (PUTME) scores?
Table 2: Paired Sample Correlation Coefficients between UTME and PUTME Scores

<table>
<thead>
<tr>
<th>Pair</th>
<th>N</th>
<th>Correlation, Coefficient</th>
<th>Coefficient of determination, $\Gamma^2$</th>
<th>Coefficient of Non-determination</th>
<th>Coefficient of Alienation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTME PUTME</td>
<td>692</td>
<td>0.268</td>
<td>0.07182 = 7%</td>
<td>0.9282 = 93%</td>
<td>0.9634 = 96%</td>
</tr>
</tbody>
</table>

From Table 2, the correlation coefficient which reveals both magnitude and direction of the relationship between the two variables is 0.268. The coefficient of determination which serves as an indicator of the assumed percentage of factors associated with the two variables being correlated is $0.07182 \times 7\%$. The proportion of the variance not determined by or associated with the variance is called the coefficient of non-determination and from Table 2 it is 0.9282 = 93%. From Table 2, also the coefficient of alienation which indicates the degree of lack of relationship is 0.9634 = 96%. While the correlation coefficient which indicates the degree of relationship between the two variables in this case is very low, the coefficient of alienation which indicates the degree of lack of relationship between UTME and PUTME is very high, i.e., 96%.

Research Hypothesis

1. There is no significant difference in the mean performance of candidates in unified tertiary matriculation examination (UTME) and post unified tertiary matriculation examination (PUTME).

Table 4: Paired Samples Test between UTME Score & PUTME Score

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>UTME Score &amp; PUTME Score</th>
<th>95% Confidence...</th>
<th></th>
<th>Degree of Freedom</th>
<th>Sig.(2-tailed)</th>
<th>t-critical</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$t$-cal</td>
<td></td>
<td>691</td>
<td>.000</td>
<td>1.96</td>
</tr>
</tbody>
</table>

Table 4 shows that the $t$ - calculated value of 26.467 exceeded that of $t$-critical value of 1.96. Moreover; the probability value obtained is 0.000 which is less than the alpha value of 0.05 (i.e. $P < 0.05$), therefore the null hypothesis is rejected. This implies that there is a significant difference in the mean performance of candidates in unified tertiary matriculation examination (UTME) and post unified tertiary matriculation examination (PUTME) at 5% level of significance. From Table 1, the mean performance of candidates in the UTME is higher than the mean performance of candidates in PUTME. Also from Table 1, the standard deviation of candidates in UTME is lesser than that of PUTME and this shows that the performance of candidates in UTME is more homogeneous than their performance in PUTME. Sequel to this, it can be inferred that UTME is more susceptible to examination malpractice than PUTME.

There is the need to calculate the effect size for this dependent sample $t$-test statistic which yielded a statistical significant result. Effect size statistics provide an indication of the magnitude of the differences between the two
groups being statistically compared. The procedure for calculating \( \text{eta squared} \) for the dependent t-test statistics in Table 4 is provided by the formula: 
\[
\text{eta squared} = \frac{t^2}{t^2 + (n-1)}
\]

From Table 4, the t-calculated is 26.467, DF = n-1=692-1=691, the eta squared could be calculated by replacing these values in the given formula.

Hence the \( \text{eta squared} = \frac{(26.467)^2}{(26.467)^2 + (692-1)} = 0.54239 \)

The guidelines for interpreting the value of \( \text{eta squared} \) are: 0.01 = small effect, 0.06 = moderate effect, 0.14 = large effect. In this hypothesis, we can see that the eta value of 0.54239 is a large effect size. Expressed as a percentage, we have (i.e. multiply the effect size by 100), 54.24%. In other words, effect size statistics which provides an indication of the magnitude of the differences between the two groups being statistically compared is 54.24 per cent.

**Summary of Findings**
The results obtained from the analysis showed that:

- There is a statistical significant difference in the mean performance of candidates in UTME and PUTME.
- The mean score of candidates in UTME is greater than their mean in PUTME, that is, candidates obtained higher marks in UTME than in PUTME.
- The standard deviation of UTME is less than that of PUTME which means that the PUTME is more dispersed than PUTME.
- There are seemingly unreliable and unpredictable UTME scores meaning that candidates who were not qualified to go to universities had hitherto secured admission almost automatically into universities of their choice when PUTME was not yet introduced.
- Based on the outcome of this study, UTME is more susceptible to examination malpractice than PUTME

**Discussion of the Findings**
The Table 1 shows that the mean performance of candidates in unified tertiary matriculation examination (UTME) was 48.9137 with a standard deviation of 7.13110 while the mean score of candidates in post unified tertiary matriculation examination (PUTME) was 38.3497 with a standard deviation of 9.85050. The mean performance of candidates in the UTME is higher than the mean performance of candidates in PUTME. The standard deviation of candidates in UTME is lesser than that of PUTME. Table 4 showed that the result of the hypothesis indicated that the t-calculated value of 26.467 exceeded that of t–critical value of 1.96. Moreover; the probability value obtained is 0.000 which is less than the alpha value of 0.05 (i.e. \( P \leq 0.05 \)), therefore the null hypothesis is rejected. This implies that there is a significant difference in the mean performance of candidates in unified tertiary matriculation examination (UTME) and post unified tertiary matriculation examination (PUTME) at 5% level of significance. In other words, this shows that the mean performance of candidates in the UTME is higher than the mean performance of candidates in PUTME. From Table 1, the standard deviation of candidates in UTME is lesser than that of PUTME and this shows that the performance of candidates in UTME is more homogeneous than their performance in PUTME. We can conclude with 95% confidence that the performance of candidates in UTME is better than in PUTME.

*From Table 2, the correlation coefficient* which reveals both magnitude and direction of the relationship between UTME and PUTME scores is 0.268. The *coefficient of determination* which serves as an indicator of the
The discrepancy exiting between academic performance of candidates in UTME and PUTME is therefore not unconnected with the issue of examination malpractice in our schools. The finding of this study has shown that PUTME screening is capable of restoring the past glory to Nigerian university system. Hence the use of UTME
scores only as a basis for admission will do more damage to education in Nigeria. This therefore justifies Federal Government’s policy on implementing the PUTME screening test in universities in Nigeria.

**Conclusion**

The result of this study shows that PUTME is more effective than UTME as selection test for university admission. UTME being conducted by JAMB can continue as a primary screening exercise for university admission while PUTME will continue to be the final screening exercise. The retention of the two systems of examination is vital as UTME plays a pivotal role of ‘filtering’ which reduces the population of students that would have become an obstacle to the smooth conduct of PUTME test. More so, candidates can access information about university admission from JAMB, such information will be difficult to access if left into the hands of individual universities.

The credibility of PUTME is high because, the calibre of staff conducting the PUTME screening are usually made up of senior staff that cannot easily be bought over for a peanut and there is less contact between the candidates and those conducting the examination.

There is the need for UTME and PUTME to continue to complement each other for the optimal output to be achieved in our Universities. Since the result of this study shows that there is a significant difference in the candidates’ performance in UTME and PUTME, there is a need to continue with the PUTME screening in Nigeria to ensure that candidates who are admitted into universities are duly qualified. It can be concluded that PUTME is the ideal final screening process for university admission in Nigeria in the 21st century.

**Recommendations**

The following recommendations are made based on the findings of this study;
1. Only credible university staff who have good records of service be involved in the conduct of PUTME screening exercise.
2. The cost of PUTME screening should be affordable to candidates and should be uniform across universities in Nigeria.
3. The Federal Ministry of Education should organize workshops, seminars and conferences to enlighten the public on the importance of PUTME screening exercise.
4. The PUTME screening test should be encouraged and continued in all higher institutions of learning in Nigeria. This will help in filtering away those candidates who indulge in examination malpractices.
5. JAMB should ensure that there is tight security during UTME so as to avoid examination malpractices.
6. University authorities should ensure that PUTME is well organized and to also show transparency in the admission process.
7. Candidates who scored very high in UTME examination but scored very low in PUTME screening should be denied the university admission.

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4. Ebiri, K. (2010). Obasanjo says PUTME should be the basis for admission in universities. *Guardian, April 13, P. 49*


