



THE RELATIONSHIP BETWEEN POST UTME AND UTME SCORES OF STUDENTS ADMITTED INTO UNIVERSITIES IN NIGERIA

Etaga Harrison O¹. Etaga Njideka C.² and Aforika Kenekwkwu F.¹

¹Department of Statistics, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.

Email: ho.etaga@unizik.edu.ng

²Department of Educational Foundations, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.

ABSTRACT: *Until recently entrance examination and admission into Nigerian Universities were decentralized. Individual universities conducted entrance examinations and admission into their various universities. This decentralization of university admission brought about numerous problems among which were multiple admission of a student at the detriment of other students who have not gained admission, irregularities and malpractices. To address these problems JAMB was introduced in 1977 in order to centralize and coordinate university admissions in Nigeria. For almost three decades of JAMB conducting entrance examination and admissions in Nigeria universities (1997-2006), the body has faced a lot of criticisms by most scholars and leaders in the country. JAMB conduct was seen as an inconsistent and incompetent entrance examination in Nigeria universities. Due to the perceived lapses in the JAMB conducted examination which was characterized by examination malpractices which made the result of candidates doubtful, Nigerian Universities decided to conduct another screening test which is called Post UTME for the candidates who were able to score from 180 and above. Therefore, there is need to find out the degree of correlations between candidates' scores in UTME and Post-UTME in order to determine whether the introduction of the Post-UTME by Nigerian universities is justifiable or not. Data were collected for five years 2010-2014 and were analyzed using correlation analysis. The result showed that candidates' scores in Jamb don't actually represent their true scores or ability. There is a weak relationship that existed between candidates' scores in JAMB and their corresponding score in PUTME. In the period under study. The results of the research work imply that: Jamb scores of candidates differ from their corresponding scores in PUTME. It is better to maintain the two examination so as to act as check and balance for the screening of candidates seeking admission into the universities.*

KEYWORDS: Correlation, Post-UTME, UTME, JAMB scores, Admission, Nigeria

INTRODUCTION

In formal, British –styled education, there are three levels: primary, secondary and tertiary education. It is tertiary education that confers an elite status on a citizen. To proceed to tertiary (higher) education, examinations are taken as part of the requirements. The university is seen as instrument of change and national development. As a result of the importance of university education, there have been a great longing for it because the universities are the only institutions where one is legally allowed to possess higher degrees such as Postgraduate, Diplomas, Masters and PhDs in various professional and academic fields as at then.



Selection Examination were conducted and results can be used in numerous ways and it vary from one state to the other based on the historical peculiarities, the reason for which the results are intended and issues addressed. Some of the reasons are for educational assessment, gender inequality, scarcity of resources, under development and the need for advancement in science and technology. It was because of these problems and the need to use a fair means of selection for admission to ensure balanced distribution of available spaces that prompted the Federal Government to establish a unified method of selection.

The guidelines for admission into the National Higher Institutions are contained in the brochure of the Joint Admissions and Matriculation Board (JAMB) which gives comprehensive information on courses and entry requirements, such as “O” level credit passes in relevant subjects as well as the minimum cut-off mark for the desired course of study in the Unified Tertiary Matriculation Examination (UTME). The cut-off marks for selection vary from one institution to another depending on the competitive nature of the desired course of study.

Responsibility of JAMB at the beginning was to conduct entrance examination and regulate admission into Nigerian universities every year. This was thereafter widened to cater for polytechnics and colleges of education. The examination conducted by JAMB was called University Matriculation Examination (UME) presently known as Unified Tertiary Matriculation Examination (UTME). Until recently entrance examination and admission into Nigerian universities were decentralized. Individual universities conducted entrance examinations and admission into their various universities. This decentralization of university admission brought about numerous problems among which were multiple admission of a student at the detriment of other students who have not gained admission, irregularities and malpractices.

To address these problems JAMB was introduced in 1977 in order to centralize and coordinate university admissions in Nigeria. For almost three decades of JAMB conducting entrance examination and admissions in Nigeria universities (1997-2006), the body has faced a lot of criticisms by most prestigious scholars and esteem leaders in the country. JAMB conduct was seen as an inconsistent and incompetent entrance examination in Nigeria universities being produced yearly by the Ivory towers of knowledge.

This problem was so alarming during the year of 2006 when JAMB released 2006 UME results. In consideration of the attendant criticisms to resupply that year’s result, universities decided for further screening of students who were qualified by JAMB between the score of 180 to 200. This further screening was called Post UTME. This Post UTME has now enjoyed wide patronage by all tertiary institutions in the country because of some obvious reasons; one major reason was that student who score high mark in UTME conducted by JAMB at times score low marks in Post UTME which is organized by individual universities (Makanjuola, 2005; Nwanze, 2005; Oluwatayo, 2003; & Omodara, 2003) speaking in support of why Post UTME must be retained, Obasajo (2006) as cited in Osakuade (2011) saw it as a way of repositioning universities education. Obaji (2005) saw it as a way of improving the quality of students. Munko (2007) opined that it is a way of bringing about sustainability in the advancement of the frontiers of autonomy of universities. Afenikhe (2007) believed it will guarantee improvement in students’ performance and reduce students’ involvement in examination-related misdemeanour.



The high rate of poor academic achievement among undergraduates is not unconnected to the channel through which they gain entry into the university Ebiri (2010), observed that using JAMB as a yardstick for admission of students into Nigerian universities has led to the intake of poor candidates, characterized by high failure rate, increase in examination malpractice, high spill over and the production of poor quality output that are neither self-reliant nor able to contribute effectively in the employment world.

Salim (2006) stated that students are expected to have sat for the Senior Secondary Certificate Examination (SSCE) and passed the minimums requirement and presented themselves for the Joint Admission and Matriculation Board (JAMB) Examination as a selection test and pass at acceptable cut off point before been offered admission into the university.

In addition to these claims and counter-claims, several studies on the predictive validity of UTME confirmed its low predictive power as stated by Omodara, (2004) and Oluwatayo, (2003). Negative and inverse correlation of UTME scores with some external criterions was also investigated by Adeyemo (2008). Several empirical studies conducted to investigate the problem have given their support for the sustainability to the Post-UTME for its effectiveness in selecting credible and best candidates into Nigerian universities. Well-constructed examination questions (items) with the appropriate psychometric properties (validity, reliability, objectivity, usability, difficulty and discriminating indices) and flawless administration and scoring, have the potential of generating defensible data that can be used for decision making stated by (Stiggins, 2006; Cohen, Swerdlik & Sturman, 2013). Indeed, valid and reliable examination results have practical utility in education such as certification after completing a prescribed course of study as stated by (Owolabi, 2004), job selection and guidance and counselling (Alonge, 2015), diagnosing learning difficulties in the classroom (Black & William, 1998), selection of candidates for higher educational programmes (Kolawole, 2014; Bandele, 2015). Conversely, invalid and unreliable examination results have the tendency of misleading decision making and destroying the purpose of the examination. In recent years, validity is viewed in terms of the appropriateness, correctness, meaningfulness and usefulness of the specific inferences that researchers make based on the data collected or the degree to which evidence supports any inferences that a researcher makes based on the data collected using a particular instrument (Fraenkel, Wallen & Hyun, 2015).

Umo and Uezendu (2010) examined the relationship between UME scores and post UME score at the University of Nsukka 2006/2007. Low correlation was obtained.

Busayo (2010) tried to compare the scores of UME and post UME students of the University of Education (TUNEDIK) Ikere Ekiti and reported that 56.5 % of people who passed UME later failed post UME. Chike, Ifedie and Ifedili (2010), conducted the assessment of UME and post UME at the University of Benin, his major findings showed the supremacy of post UME over UME. On the other hand, Ajaja (2010), examined the influence of post-UME on the achievement of science education students in Delta State University, his findings showed that no significance difference in the CGPA was found between UME and post-UME scores of the sampled students. There was a decline in the performance of students admitted with post-UME screening. Many students hardly pass all their first-year courses and majority of those who successfully do so usually have poor grades. A great percentage of university graduates in Nigeria fall below second-class upper division and the number of spillover students in various departments are equally high. The situation gets worse as those who manage to graduate are not productive in the labour market because they are unable to meet the expectations of the



employers. Ogedengbe (2000) mentioned that JAMB results are far from reflecting the true relative abilities of candidates, Ogedengbe further said that candidates admitted into the Nigerian Universities through JAMB, many of whom were credited with high scores such as 260 or 270, or more are being forced to withdraw due to intolerable poor academic performance. Oluwatayo (2003), discovered that UME had low predictive strength on undergraduate performance.

Bamiro (2008) gave a graphic illustration of the embarrassing experience at the University of Ibadan before the introduction of Post-UTME where 23 out of 30 students admitted into the Faculty of Technology were asked to withdraw at the end of their first-year for poor performance. These were students who scored well above 250 in the JAMB examination, noting that the use of UTME scores as basis for admission had done more damages than good to Nigerian educational sector.

Uhunmwangho and Ogunbadeni (2014) in their study to examine the relative strength and effectiveness of UTME as admission criteria for selection into a Nigerian university, using the UTME and Post-UTME scores of 500 candidates five Faculties in University of Benin. The results of the study revealed a low and statistically significant correlation $r = 0.088$ between UTME and Post-UTME scores. The relationship between the scores was inverse and there was a significant difference in the scores of UTME and PUTME ($t = 3.51, p < 0.05$). They concluded that, high scores in UTME did not reveal the academic performance of students.

Makanjuola (2005) in his own submission on why Post-UTME is necessary claimed that at Obafemi Awolowo University (OAU) Ile-Ife, some of the students who scored high marks in UTME did not even turn up for Post-UTME. Afemikhe (2007) believed it will guarantee improvement in students' performance and reduce students' involvement in examination related problems.

Despite good reasons given by some stakeholders in defense of Post-UTME, some scholars still spoke in defense of UTME conducted by JAMB. According to Onyechere (2005) Post-UTME screening is illegal. To him, the issue of examination malpractice in Nigeria is a universal societal problem. He believed that since public universities have limited spaces for all the candidates and the private ones are for the children of well-to-do in the country, then, the candidates would definitely be in a desperate mood to secure admission at all cost. He further warned that if our response to malpractice in UTME is to scrap JAMB, then the scrapping of WAEC, NECO and all the institutions of higher learning in the country should also be considered. Mgbake (2006) stated that students' academic success is largely a function of the amount of efforts put into study and not necessarily as a result of mode of entry into the university. Agada (2008) reported that students' study techniques and attitude to the study of a particular course among other factors influence their academic performance. Though Post-UTME has been described as a remedy to admission of incompetent candidates, it is seen in some quarters as unnecessary duplication of efforts, especially, if the candidates' scores in the two qualifying examinations, that is, UTME and Post-UTME, are not significantly different. Therefore, there is need to find out the degree of correlations between candidates' scores in UTME and Post-UTME in order to determine whether the introduction of the Post-UTME by Nigerian universities is justifiable or not. The findings of this study might help in determining the necessity or otherwise of the Post Unified Tertiary Matriculation Examination (Post-UTME) conducted by universities. The post UTME have been written in most of the Nigerian universities over the years but the problems is, the performances of students in JAMB often do



not appear to reflect their performance in post UTME. In another scenario, despite the semblances of relationship between UTME and PUTME scores at times, few investigations have been done to reinforce this view.

Therefore, there is need to find out the degree of correlations between candidates' scores in UTME and Post-UTME in order to determine whether the introduction of the Post-UTME by Nigerian universities is justifiable or not.

METHOD

The design adopted for the research is a correlation analysis. Correlation measures the degree of linear relationship between two variables. This is also a measure of the strength of association between two variables. Its value lies between minus one to plus one. The closer the value is to either minus one or plus one the stronger the relationship. A negative value indicates an inverse relationship between the variables meaning the higher the value of variable one says Y, the lower the value of the second variable, say variable X while a positive value indicate a direct relationship meaning that the higher the value of X, the higher the value of Y.

The study area of this research is the Nnamdi Azikiwe University, located in Awka in Awka South L.G.A of Anambra State. The university admits students through the use of Jamb scores and PUTME scores. It is a multi-faculty university with different areas of specialty. The admission is organized by a central body/committee chaired by Vice Chancellor of the university.

The population of Study comprises of all admitted students into the university from 2010-2014, a period of 5 (five) years. A sample was taken which comprises of student seeking admission into the Faculty of Education in Nnamdi Azikiwe University, both males and females, who met the admission requirements and were short-listed for the post UMTE test.

The sampling technique adopted was Cluster sampling. The entire students in the university were classified into various faculties and the faculty of Education was chosen as it is the case study. Thus, the students admitted into the faculty were then selected for the analysis. The data comprises of secondary data obtained from the Admission Unit of the university. The method of data Analysis is Correlation. The Pearson correlation coefficient r , was used and the p-values computed. Any p-value less than the chosen level of significance (0.05) indicates that there exists a significant correlation between the pair of variables concerned.

RESULTS

The correlation between PUTME and UMTE was computed for the years 2010 – 2014. The analysis was done using Statistical Package for Social Sciences, Version 20.

The relationship between UTME and Post UTME scores of applicants for each year is presented in Table 1

**Table 1: Correlation result for PUTME and UMTE for 2010 for the Faculty of Education.**

	Description	Values	Decision
Jamb Score 2010 and PUTME score 2010(N, 237)	Correlation p-value	0.045 0.492	Weak Positive but Not Significant
Jamb Score 2011 and PUTME score 2011(N, 437)	Correlation p-value	-0.132 0.006	Weak Negative but Not Significant
Jamb Score 2012 and PUTME score 2012(N, 449)	Correlation p-value	-0.008 0.864	Weak Negative but Not Significant
Jamb Score 2013 and PUTME score 2013(N, 316)	Correlation p-value	-0.114 0.043	Weak Negative but Not Significant
Jamb Score 2014 and PUTME score 2014 (N, 754)	Correlation p-value	-0.045 0.220	Weak Negative but Not Significant
Jamb Score 2010-2014 and PUTME score 2010-2014 (N, 2193)	Correlation p-value	0.096 0.000	Weak positive but Significant
Jamb Score Male and PUTME score Male (N, 738)	Correlation p-value	0.089 0.016	Weak positive but Significant
Jamb Score Female and PUTME score Female (N, 1455)	Correlation p-value	0.009 0.001	Weak positive but Significant

The correlation for the year 2010 was computed as 0.045 showing that there is a weak positive relationship between Jamb score and PUTME scores for candidates in this year. This correlation value was not significant as a p-value of 0.492 was obtained which is greater than 0.05 level of significance

For 2011, the correlation value of -0.132 was obtained. This implies that there exists a weak negative correlation between Jamb score and PUTME for candidate during this year's examination. The correlation value was found to be significant, indicating that the two scores are significantly moving in the opposite direction. Thus, candidates did not justify their high jamb scores in PUTME.

During the 2012 academic session, a correlation value of -0.008 with a p-value of 0.864 was obtained. This was the worst result obtained during the course of the research work. It shows a very weak negative correlation between the variables of interest. This weak correlation value was found not to be significant.

A correlation value of -0.114 was obtained for the year 2013. A p-value of 0.043 was also obtained showing that the weak negative correlation existing between Jamb score and PUTME score for this year was significant.

In the year 2014, the negative relationship continued with a correlation value of -0.045, exactly the same value obtained for 2010 but with opposite sign. This negative correlation value was found to be non-significant with a p-value of 0.220.

For the entire period 2010 – 2014, the general correlation value is 0.096 with a p-value of 0.000 which was found to be significant



Male candidates have a correlation value of 0.089 for the years 2010 – 2014 with a p-value of 0.016. The male candidates' result was found to be significant though weak. Female candidates have a correlation value of 0.09 with a p-value of 0.001 for the period of 2010-2014. This was also found to be significant at 5% level of significance.

CONCLUSION

In conclusion, it has been shown in this research work that candidates' scores in Jamb don't actually represent their true scores or ability. This is so because of the weak relationship that existed between candidates' scores in JAMB and their corresponding score in PUTME. In the period under study, the same situation was observed for all the years showing a re-occurring situation.

The results of the research work imply that: Jamb scores of candidates differ from their corresponding scores in PUTME. It is better to maintain the two examination so as to act as check and balance thing for the screening of candidates seeking admission into the universities.

From the results/finding of this research work, we can recommend that: PUTME should complement Jamb in selecting candidates for admission into Nigerian universities. The call by some quarters and the eventual scraping of PUTME should be reversed. Candidate should take both examinations serious so as to show the true ability of candidate in any examination. This will be visible if there is an improvement in the relationship between their Jamb scores and their PUTME scores. Parents should stop encouraging their children to visiting "Special Centers" for Jamb examinations as there are such centers for PUTME.

REFERENCES

- Afemikhe, O. A. (2005). Reflections on the quality of assessment in large classes in Nigeria: A paper presented at the 31st annual conference of the International Association of Educational Assessment with the theme 'Assessment and the Future of Schooling and Learning'; held at the Nicon Hilton Hotel, Abuja, Nigeria. 4th—9th September.
- Afemikhe, O.A. (2005). Selection into Nigeria University. Paper presented at the Annual Conference of International Association for Educational Assessment.
- Afemikhe, O.A. (2007), "Assessment and Educational Standard Improvement: Reflections from Nigeria". A paper presented at the 33rd Annual conference of the International Association for Educational Assessment" held at Baku, Azerbaijan. September 16th – 21st 2007.
- Ajaja, O.P. (2010), "Three Years of Post UME Screening: Influence on Science Education Students' Achievement in Delta State University", *Int J Edu Sci*, 2(1), 29-40
- Ajala, O. P. (2010). Three Years of Post UME Screening: Influence on Science Education Students' Achievement. Delta State University, Abraka. *International Journal Education Science*, 2(1), 29-40. Retrieved from http://www.krepublishers.com/02-Journals/IJES/IJES-02-0-000-10-Web/IJES_02-1000-10-Abst-PDF/IJES-02-1-29-10-031-Patrick-A-O/IJES-02-1-29-10-031



- Alonge, M. F. (2015). Continuous assessment records and documentation of university examination. A publication of the Faculty of Education, Ekiti State University, Ado-Ekiti. 7—12.
- Bamiro, O. (2008). Examination fraud: Fast slide to doom. *Sunday Vanguard*; November 9; 12
- Bandele, S. O. (1985). Predicting success in Mathematics in the JSS of the 6-3-3-4 system in Ijero Local Government Area of Ondo State. An unpublished M.Ed. thesis, ICCE, University of Ibadan.
- Bandele, S. O. (2015). Quality assurance in examination capacity building workshop manual on enhancing institutional and human capacity for effective job delivery among academic staff of Faculty of Education, Ekiti State University, Ado-Ekiti. February 21—26.
- Black, T. & William, D. (1998). Inside the black box: Raising standards through classroom assessment. *Phi Delta: Kappa*. 80(2): 154—157. 101 © 2015 *The authors and IJLTER.ORG. All rights reserved.*
- Busayo, I.O. (2010), “Post-UME Screening Examination in Nigerian Universities: The University of Education Ikere-Ekiti (TUNEDIK) Experience”. *Library, Philosophy and Practice*
- Chika, J., Ifedili, A., & Ifedili, J.C. (2010). “An Assessment of Post-University Matriculation Examination: A Case Study of UNIBEN”. *J. Soc Sci* 22(2), 101-106
- Cohen, R. J.; Swerdlik, M. E. & Sturman, E. D. (2013). Psychological testing and assessment; An introduction to Tests and Measurement (8th edition). New York: McGraw-Hill. 240—284
- Edoziem, N. M. (1993). The growth and development of Higher Education in Nigeria. In T.Ajaji (Ed.), *Planning and Administration of Higher Education in Nigeria*. Lagos: Ibrashack press, p. 1.
- Fraenkel, J. R.; Wallen, N. E. & Hyun, H. H. (2015). How to design and evaluate research in education (9th edition). New York: McGraw-Hill. 146—165.
- Ifedile, A C. J. & Ifedile, C. J. (2010). An assessment of Post-UTME: A case study of University of Benin. *Journal of Social Science*. 20: 101—106.
- Ijaiya, N. Y. S. (2004). Agents of malpractice in Nigerian public examinations: The strongest links. *Nigerian Journal of Educational Research and Evaluation*. 5(1): 55—62.
- Kolawole, E. B. (2014). Tests and Measurement: The panacea to educational research development in Nigeria. *47th Inaugural Lecture*. Ekiti State University, Ado-Ekiti. Tuesday 26th August.
- Makanjuola, R. (2005), “Why Post-UME test is necessary”. *The Punch Newspaper*, 22nd November, 2005.
- Mgbake, S.O (2006): *Leading the self-managing school*. London: Flamer Press. National University Commission (1999). *Approved minimum academic standard*. Ibadan: University Press.
- Mimiko, F. (2006). “How Relevant is JAMB to the University Admission?” *The Highlights*, The weekly bulletin of Adekunle Ajasin University, Akungba Akoko. Vol.11 No. 8
- Muhammad, S.I. (1993). Planning and development of Higher Education in Nigeria. In T. Ajayi (Ed.). *Planning and Administration of Higher Education in Nigeria*. Lagos: Ibrashack press, p. 16
- Nwandiani, M. (1993). The challenges facing the Management of Higher Education in Nigeria. In T. Ajayi (Ed.), *Planning and Administration of Higher Education in Nigeria*. Lagos: Ibrashack press, p. 25



- Nwanze, E. (2005), “4422 out of 34,892 candidates pass Post-UME test in UNIBEN”. The Nigerian Tribune, 28th November, 2005.
- Obaji, L. (2005). ‘Post-UTME tests, Federal Government __ Minister.’ The Punch newspaper; 17th November.
- Obasa, E. Y. (2004). Malpractice in university matriculation: The way out. *Nigerian Journal of Educational Research and Evaluation*. 5(1): 63—69.
- Ogendengbe (2010). JAMB a growing natural headache, Guardian ,Thursday 9th November ,2000.
- Oluwatayo, J.A. (2003). Mode of entry and performance of Nigerian university undergraduates in science courses. Ph.D thesis, Faculty of Education, University of Ado-Ekiti
- Omodara, M.F. (2004), “A Comparative Assessment of UME and Pre-Degree Scores as Measures of Academic Performance Among University Undergraduates” *Ikere Journal of Education*, 6(1), 76-83.
- Onyechere, I. (2005). “In defense of JAMB”. Daily Sun, 28th October.
- Osakuade JO (2011). Effectiveness of University Matriculation Examination and Post-University Matriculation Examination on the academic performance of Nigerian undergraduate students. *J. Edu. Practice of International Institute for Science, Technology and Education*. 2(4), 59-66. Retrieved September 18, 2014 from <http://www.iiste.org>
- Owolabi, H. O. (2004). Public examining in Nigeria: Let the stakes extend. *Nigerian Journal of Educational Research and Evaluation*. 5(1): 97—101.
- Sonnie, E. (2004). JAMB and examination malpractices. Comet newspaper: Editorial. Wednesday, May 5.
- Stiggin, R. (2006). Assessment for learning: A key to motivation and achievement. *Phi Delta: Kappa Edge*. 2(2): 1—19.
- Ogbonnaya, R. (2005, October 11). NANS condemn Abuse of FG’s Varsities Admission Policy. *This Day*, p. 49
- Abdukarim, Y. (2005, November 11). Provost Backs post JAMB test. *This Day*, p. 49.
- Nebo, C. (2005, November 23). Post UME Test: Rip – off in Ivory tower. *Vanguard*, p15.
- Adu,I. (2006, February 9). VC extol post JAMB test. *The pointer*, p 5