



Original Research Article

Predictive validity of continuous assessment scores on end of semester examination scores among undergraduate students in Ondo State

Fegha Evelyn Ilogho, (Ph.D)

Abstract

Department of Guidance and
Counselling, Adekunle Ajasin
University, Akungba-Akoko, Ondo
State, Nigeria.

E-mail: feghaevelyn@gmail.com

The study investigated the predictive validity of continuous assessment scores on end of semester examination scores among undergraduate students of Adekunle Ajasin University Akungba-Akoko (AAUA) Ondo State. Two null offered direction to the study using an ex. post factory research design. The population of the study comprised all undergraduate students of the faculty of education AAUA. Random sampling technique was employed in selecting a sample of 320 students from two departments in the faculty of Education of 100 and 200 levels. A proforma was used as an instrument for data collection. Regression analysis and t-test were used in testing the null hypothesis at 0.05 level of significance. The finding revealed that there was a significant relationship between continuous assessment scores and end of semester examination scores and performance of education undergraduate students ($r=0.712$, $p<0.05$). Again there was significant influence of the level of students on the predictive validity of the continuous assessment scores on end of the semester examination performance of undergraduate students ($Rsq= 0.379$ & 0.473 , 0.386 & 0.163 , 0.236 & 0.431 , $p< 0.05$). The result indicated that 100 level students had better continuous assessment scores than 200 level students. Continuous assessment scores predicts final scores in end of semester examination. Therefore, it was recommended that undergraduate students should be encouraged to pay serious attention to their continuous assessment scores in other to get good performance in their end of semester final grade.

Keywords: Predictive validity, continuous assessment scores, examination, end of semester examinations scores.

INTRODUCTION

Assessment is one of the most important elements in the educational process in the world. It needs collection of data with a view to determining value judgment about the quality of a person, object, group or event (Ajuonuma, 2006). It is an act of examining students to know how much of knowledge, skills and attitudes they have learnt. The importance of assessment cannot be overemphasized as Federal Government of Nigeria (FGN: 2004) stated that educational assessment at all levels of education would be liberalized by basing them in whole or in part on Continuous assessment (CA). In Recognition of this policy statement, National University

Commission (NUC) allotted 30% of the total scored of the university grading system to continuous assessment and 70% to end of semester examination.

Assessment allows the teacher to determine the level of achievement of students provide feedback about the total development of the child to parents, student and government.

The attitudes of students and their psychological needs call for a continuous assessment of such needs and trials in order to enable the students to understand themselves better and also enable teachers to enhance their teaching methods, assist parents and guidance to

understand their children so as to enhance decision-making realistic.

Continuous assessment (CA) is the process of finding out what the students has achieved from learning experiences in respect to knowledge (cognitive) thinking, reasoning (psychomotor) character development (affective). CA is a type of educational assessment that evaluates student progress through out a prescribed course of study which could be periodic, systematic and cumulative. Information received from CA could help in educational and vocational placement of students. Student weaknesses, strength, abilities and capabilities are a feedback from CA and could help to predict performances of students if properly monitored. Samiullah and Anjum (2017) described CA as a system of assessment which carried out at predetermined intervals. Continuous assessment of learner's progress is seen as a process where intervals for the purpose of monitoring and enhancing the total performance of students and the teaching-learning process. According to Osokoya (2006), CA is defined as the overall learning experiences gained as a result of skills, knowledge and character development of students. The final grading of learners in the cognitive, affective and psychomotor domain of learning systematically takes account of all the performances during a given period of schooling (Egbule, 2002).

Continuous assessment starts from decision taken by the teacher on the first day of school and end with the decisions that the teacher make on the learners regarding end of the year / semester grade.

End of semester examination is an examination taken at the end of a stipulated period, maybe 15-16 weeks in the university. In every educational system, examinations are taken to determine the extent of learner's knowledge and achievement in a particular subject or course of study. University education in Nigeria is offered in two semesters each of four, five or six year's duration depending on the field of study. At each semester, undergraduate students undergo continuous assessment and end of semester examination (Faremi and Faremi, 2020). The scores obtained at each end of semester examination are referred to end of semester examination scores. The total grade A-F is obtained through the addition of the CA scores and the end of semester examination scores.

Prediction simply means the possibility of the outcome of future events. Prediction of examination can be used for selection of students who will succeed in future academic process (Omirin and Ale, 2008). Prediction of examination helps teachers to have feedback on the progress of students and their instructions.

Validity is the extent to which an instrument, a test or examination measures what it is intended to measure. Predictive validity is a type of validity which refers to the degree to which the test measures can predict with all dimensions of the same construct that are being

measured at some time in the future (Devilleis, 2006). It can predict the ability of measuring instrument to focus future performance in a related task.

Many researchers have been carried out on predictive validity such as: Chukwuemeka (2015), predictive validity of primary school examination on future academic performance in post primary schools, predictive value of junior secondary school examination on performance in senior secondary school (. Others are; predictive of senior secondary school examination on performance at university level. Predictive validity of first-year cgpa and final classification of degree in Nigeria universities (Chukwuemeka, 2015). Most of the outcomes of these researches show a positive results, hence the reason for the study.

The main objective of this study is to investigate the relative importance of CA scores to end of semester examinations scores in predicting the actual academic performance of undergraduate students in education. Simply one should expect significant correlations between scores obtained from CA and end of semester examination. If you score high in CA, the student is expected to score high in end of semester examinations thereby making students to perform better. Therefore, the study is designed to determine the relationship between CA scores and end of semester examination scores of undergraduate students in Education, AAUA.

Research Hypotheses

1. There is no significant relationship between continuous assessment scores and end of semester examination scores.
2. There is no significant difference between the predictive efficiency of continuous assessment scores and end of semester examination scores with respect to their level of study.

METHODOLOGY

The study employed expert factor design. The scores of continuous assessment and end of semester examination scores are the Independent variables while the levels of students made up the dependent variable.

The population of the study comprises all students in the faculty of education, AAUA.

A sample size of 320 students was drawn through random sampling technique of 2 departments in the faculty of education AAUA (Guidance and Counseling, and Arts Education). The 100 and 200 level students' scores were obtained from official records in the selected departments through the use of a proforma. The statistical tool used was regression analysis at 0.05 level of significance for all estimated parameters.

Table 1. Summary table of the correlation between Continuous Assessment scores and end of semester examination.

Continuous Assessment		
	Pearson correlation	.712*
Examination Scores	Sig.(2-tailed)	.000
	N	320

Table 2. 100 level Guidance.

	Value	Sig.Value
R squared	0.379	
F.test	8.043	0.007

Table 3. 200 level Education students (Guidance and Counselling & Arts Edu Departments).

	Value	Sig.Value
R squared	0.473	
F-test	13.803	0.001

Table 4. The Model for 100 level Education students (G&C and Arts Edu).

	Coefficient	T-test	Sig.Value
Constant	24.777	6.503	0.000
CA	0.664	2.836	0.007

Table 5. The Model for 200 level Education students (G&C and Arts Education).

	Coefficient	T-test	Sig.Value
Constant	22.539	4.939	0.000
CA	0.939	3.715	0.001

Hypothesis One: There is no significant relationship between continuous assessment scores and end of semester examination scores.

The Table 1 revealed the correlation between Continuous Assessment and Examination scores. The value (0.712) shows a strong positive relationship between C.A and end of semester examination scores. This means there is a significant relationship between C.A scores and examination scores. That is, as CA increases examination scores also increases, hence hypothesis one is rejected.

Hypothesis Two: There is no significant difference between the predictive efficiency of continuous assessment scores and end of semester examination

scores with respect to their level of study. (Table 2 and 3)

R squared measures the predictive ability of CA in examination scores. The value of (0.379) and (0.473) indicates that CA predicts about 37.9% and 47.3% of the variation in the examination scores for 100 level Guidance and Counseling students and 200 level Guidance and Counseling students respectively. The significant value of the F-test (0.007) and 0.001) is less than 0.05 level of significance. This implies that CA scores predict students' scores in the end of semester examinations and it is significant. (Table 4 and 5)

The above result showed that linear relationship between CA and Examination scores of 100 level education students. The constant value (24.777 and 22.539) indicates that at zero CA, 100 level students are

expected to have a score of 24.777 in the examinations while 200 level Education students are expected to have a score of 22.539. The coefficient value for CA (0.664 and 0.939) shows that for every unit increase in CA score, there are an increase of 0.664 in examination scores for 100 level students and an increase of 0.939 for 200 level students. The sig. values for the T-test is significant.

DISCUSSION OF FINDINGS

The result of the analysis of hypothesis one indicated that there exist a positive significant influence of Continuous Assessment scores on end of semester examination scores in Guidance and Counseling department of Adekunle Ajasin University Akungba-Akoko. The finding supported the claim of (Omirin and Ale, 2008) that there is prediction of examinations score related to their Continuous Assessment scores.

The result of hypothesis two revealed that the predictive validity of CA scores on end of semester examination scores based on student's level of study is significant. This could be as a result of negligence on the part of the students through peer influence and poor student's habit. This finding is in agreement with the findings of Ilogho and Olajubutu (2019), Osadebe (2003), Orubu (2013) and Joseph (2020) who revealed in their studies the significance of prediction on students' academic performance.

CONCLUSION

The results from the study revealed positive relationship between students CA scores and end of semester examination scores. Also, there is significant difference between students' scores in CA and end of semester examination scores based on their level of study. Therefore, it was concluded that an increase in CA leads to increase in final grade in the examination at the end of semester.

RECOMMENDATIONS

Based on the findings, the following recommendations were made:

- Continuous Assessment should be taken seriously by lecturers, students and University management.
- Feedback should be given to students to help them adjust and improve in their weak areas.
- During orientation guidance programs, students should be enlightened on the importance of CA and its resulting influence on students' academic performance.
- Guidance services should be rendered always to students in different levels of studies to enhance their performance in continuous Assessment.

REFERENCES

- Ajuonuma JO (2006). Competences possessed by lecturers in the assessment of students in the Universal Basic Education (UBE) Programme. A paper presented at the 2nd Annual National Conference of the Department of Educational Foundations, Enugu State Colleges of Education of Science and Technology. Federal Ministry of Education 2004. National Policy on Education Lagos: NERDC Press.
- Chukwuemeka E (2015). Predictive Validity of First Year GPA and Final Degree Classification among Management and Social Sciences Students. *The Int. J. Sci. Technol.* 3. 210-215.
- Devillis RE (2006). Scale Development: Theory and Application. Applied Social Science Research Method Series. Vol. 26 Newbury Park: SAGE Publishers Inc.
- Egbule JF (2002). Continuous assessment: A comprehensive guide for schools. Owerri: White and White publishers.
- Faremi YA, Faremi MF (2020). Continuous Assessment of Undergraduates as Predictor of Their Academic Performance in Educational Administration and Planning Course. *Univ. J. Educ. Res.*, 8(11), 5212-5221.
- Ilogho FE, Tayo OO (2019). Self-Concept, Gender and Study Habit as Determinants of Students' Academic Achievement in Mathematics in Akoko South West Local Government Area of Ondo State. *Asseren J. Educ. Res. Dev.*, 2536-6899.
- Joseph E (2020). The predictive validity of continuous assessment scores on end of semester examination scores in Adekunle Ajasin University. Unpublished dissertation, B.ed AAUA
- Omirin MS, Ale VM (2008). Predictive validity of English and Mathematics mock examination results of senior secondary school students' Performance in WASCE in Ekiti-State, Nigeria. *Pakistan J. Soc. Sci.*, 5, 139-141.
- Orubu MEN (2013). School Based Basement as Predictor of Students' Performance in Junior School Certificate Mathematics Examination in Delta State. *Nig. J. Educ. Res. Educ.*, 12, 37-44.
- Osadebe PU (2003). Predictive validity of junior secondary certificate examination, *J. Educ. Res. Dev.* 2(1) 183-190.
- Osokoya T (2006). Educational Historiography: Tradition, Theory and Technique. *Research Methods in Education*, 59-79.
- Samiullah IM, Anjum A (2017). Effect of continuous assessment techniques on students' performance at elementary level. *Bulletin of Educ. Res.*, 39(1): 91-100
- Strauss ME, Smith GT (2009). Construct validity: advances in theory and methodology. *Annual review of clinical psychology*, 5, 1–25. <https://doi.org/10.1146/annurev.clinpsy.032408.153639>