

PREDICTIVE VALIDITY OF UNIFIED EXAMINATION FOR ACADEMIC PERFORMANCE IN SENIOR SECONDARY SCHOOL CERTIFICATE EXAMINATION IN EKITI- STATE

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This research sought to examine the predictive validity of SSII unified examination on the students' performance in senior secondary school certificate examination in Ekiti State. The population for the study consisted of all SSII students who participated in unified examination in Ekiti State in year 2010/2011 and participated in senior secondary school certifies Examination in year 2011/2012 respectively. The sample consisted of four hundred students (400) who were randomly selected from four (4) secondary school in Ado Ekiti, the capital city of Ekiti State. The instrument used was a self design profoma which was validated by Test and measurement experts used to collect the unified examination results of the sampled students and their corresponding SSCE results for 2011/2012. The scores were correlated using regression analysis and chi- square. The findings indicated that the correlation between SSII unified examination and SSCE were significant for three subjects (Yoruba, Economics and Biology) out of the five subject selected for the research work. The hypothesis is rejected. However, students' performance in SSII unified English and Mathematics did not correlate significantly with their corresponding performance in SSCE. The hypothesis on the performance of students in boarding and non-boarding school showed a significant difference in the performance of student in boarding than day student. Based on the findings of this study, it is recommended that:

- Boarding school should be re-introduced into all school in Ekiti-State, especially in the senior secondary school level.
- Unified examination should be sustained to perform the formative evaluation role of students' academic programme.

Key words: Unified Examination, Predictive Validity, Performance, Examination.

INTRODUCTION

The poor performance of students in the senior secondary school certificate examination (SSCE) and the consequence deficiency in the SSCE results has been a matter of great concern to all parents and patriotic Nigerians. Parents are concerned about the outcome of examination because the results have great social consequences and implications not only to the candidates and their families but also to the nation as a whole. Examination results immediately and distantly affect the society in matters of social welfare, economy, politics, culture, religious value, educational advancement, science and technology. It is note worthy that Ekiti State Government has been paying a huge amount of money to facilitate the participation of students in SS3 in school certificate examination conducted by WAEC yearly. However, the students' performance has not been encouraging in their performances in the external examinations in the past years. In a bid to reposition and improve the standard of education at all levels in Ekiti State, the unified examination for senior secondary school II (SS2) was introduced as a common examination that cut across all senior secondary school II (SS2) in Ekiti - State. Unified examination comes at the end of third term of the second year of senior secondary school in Ekiti-State. It is only those students that passed the unified examination that would be promoted to senior secondary school III (SS3) to register for senior school certificate examination. The essence of the unified examination is to make the best selection of students out of the so many that sat for unified with special emphasis on English language and Mathematics. The unified examination for SS2 student was to help avoid yearly economic wastage of funds for indolent students and prepare the serious students ahead of their certificate examination in the succeeding year. The unified examination which was first of its kind in the south west Nigeria has served as

a unique method of measuring the academic standard of students and a veritable way of assessing the efficiency of teachers. It is on the basis of this assumption that the researchers want to find out if the unified examination has in anyway contribute to success in the SSCE in Ekiti-State. Predictive validity on the other hand is defined as the extent to which a score on a scale or test predicts success on some criterion measure. It is quantified by the correlation coefficient between two sets of paired measurements obtained for the same target population to indicate the degree of linear relationship between two variables the predictor variable and the criterion variable. The term prediction is generally used to refer to functional relations between instrument and events occurring before, during and after the instruments is applied Morgan (2001) in Sotco, etal (2013) is of the view that there is a possibility of having finer participants in the criterion variable than those who were involved in the original instrument. Lemma (2004) opined that in cases where only a few brilliant get selected is not too different. The chance of predictions may be high or lower depending on validity of the predictive examination. Predictive examinations are of great value as they provide pre-requisite information to teachers, students, parents, employee and the society to enable valid decisions. In the research conducted by Sotco. Ck, Eugenia JK, Dorice T.E, Ernest SK in Tanzania (2013), they found out that some of the scholars that had earlier work on predictive studies discovered that while some studies could predict success, others have poorly predicted. Omirin and Ale (2008), in their research found out that mock examination is a good predictor of success in English and Mathematics senior school certificate examination. The CSEE for science subjects were strong predictors of students' performance in Technical Colleges (Sambayukha,(2001). The form six examinations had better selection validities for university entry for science students than the matriculation examination was a better predictor for Arts students than science students (lemma, 2004). In the research conducted by Alonge(1983), he found out that mock mathematics Examination helped significantly in predicting academic performance of students in WASCE Examinations. Conversely Ojerinde (1974) stated that many problems are embedded in the approach of using score or grade for assessing academic performance, one of it is that teachers may be biased. On the contrary Adebayo (2002) found no significant relationship between students overall performance in the JSC and SSCE Examinations. Generally, Secondary school examination scores poorly predicted students' university academic achievements (Obioma and Salau 2007).The aforementioned are a few of predictive studies from empirical research. However, considering the advantages of school based assessment techniques like the mock examination, continuous assessment scores which forms part of the mark for the overall assessment of students' performances at the end of their course. Most researchers agreed that high school mark is the best predictor of academic success. Based on the assertion made above this research work is to find out the predictive validity of unified examination for performance in senior school certificate examination in Ekiti- State.

Statement of the Problem

The poor performance of students in SSCE final examination calls for attention hence the need for this type of research work to find out if the unified examination actually prepared the students for the SSCE examination. The problem of this study therefore is to find out if there exist any relationships between SSII unified Examination and SSCE Examination in Ekiti-State.

Research Hypotheses

HO1:-There is no significant relationship between the students performance in SSII unified examination and their corresponding performance in SSCE.

HO2:-There is no significant difference in the performance of students in the boarding school and their corresponding performance in non-boarding school in unified Examinations and the senior secondary school certificate Examination (SSCE).

Materials and Methods

This study employed a co relational analysis and ex-post facto method. Across-sectional survey was used in obtaining the trends of students performance in SS2 unified examination and senior school certificate Examination in Ekiti-State. Expost-Facto was used because all the cause and effect had already occurred while the data involved in the study were as they were collected from the source without manipulation.

The population consisted of all SSII students who participated in unified examination in Ekiti-State in year 2010/2011 and participated in senior secondary school certificate examination in year 2011/2012 respectively. The sample consisted of four hundred (400) students from four (4) secondary school which was randomly selected from the population.

Instrument

The instrument used was a self design profoma used to collect the unified examination results scores of the four hundred (400) students for 2010/2011 and the corresponding 2011/2012 senior secondary school (SSCE) results. The scores of the students who took the unified and their SSCE were correlated using Regression Analysis and Chi-square. Oral interview was also conducted to elicit information from teachers.

Validity of Instrument

The instrument used was a self made profoma which was facially validated by Tests and measurement experts.

Method of data collection

The researcher personally went to the Ministry of Education to collect the unified results of the students and their senior school certificate examination results of the same set of students.

RESULTS

Test of Hypotheses

HO1:-There is no significant relationship between the students' performance in SSII Unified Examination and their corresponding performance in the senior secondary school certificate Examination (SSCE).

Table1:-Regression Analysis showing the relationship between students' performance in unified SSII Examination and SSCE.

	Model	β	Std error	beta	t	Sig.T	R	R ²	F
English	Constant	4.593	.210		21.830	.000			
	Unified exam	-.011	.042	-.020	-.0270	.787	.020	.000	.073
mathematics	Constant	5.721	.376		15.218	.000			
	Unified exam	.096	.079	.089	1.219	.224	.089	.008	1.486
Yoruba	Constant	4.091	.271						
	Unified exam	.265	.068	.274	3.881	.000	.274*	.075	15.059
Economics	Constant	3.221	.421		7.646	.000			
	Unified exam	.236	.075	.225	3.144	.002	.225*	.051	9.885
Biology	Constant	1.734	.374		4.641	.000	.461*	.212	49.816
	Unified exam	.433	.061	.461	7.058	.000			

*p<0.05

Table1 presents the relationship between the students' performance in SSII unified examination and their corresponding performance in SSCE. The result showed that the correlation between SSII unified exam and SSCE were significant for Yoruba($r=0.274$, $p<0.05$) Economics($r=0.225$, $p<0.05$) and Biology($r=0.461$, $p<0.05$) at 0.05 level. The hypotheses rejected. However, students' performance in SSII unified English($r=0.020$, $p>0.05$) and mathematics($r=0.039$, $p>0.05$) did not correlate significantly with their corresponding performance in SSCE at 0.05 level. The SSII unified exam accounted for low positive significant proportion of the variation in students' performance in SSCE. Yoruba ($r^2 = 0.051$, 5.1%) and Biology ($r^2 = 0.212$, 12.2%) in each case. The effect of unified exam on students performance in SSCE Yoruba ($t=3.881$) and Biology ($t=7.058$, $p<0.05$) were statistically significant at 0.05 level.

Hypothesis2:- There is no significant difference in the performance of students in boarding school and their corresponding performance in non-boarding school in unified Examination and the senior secondary school certificate Examination (SSCE)

Table 2a: Show that there was a significant difference in the performance of day and boarding students in Yoruba ($\chi^2 = 37.263$, $P<0.05$), Economics ($\chi^2 = 21.919$, $P<0.05$) and Biology ($\chi^2=54.080$, $P<0.05$) unified exam at 0.05 level of significance. However, boarding and non-boarding did not differ significantly in their performance in English Language ($\chi^2=4.216$, $P>0.05$) and Mathematics ($\chi^2= 11.491$, $P>0.05$) at 95% confidence level.

Tables 2b: showed that there was a significant difference in the performance of boarding and non boarding in English ($\chi^2 = 12.060$, $P<0.05$) Mathematics Economics ($\chi^2 = 179.957$, $P<0.05$), $P<0.05$). The null hypothesis is rejected. This implies that there is a significant difference in the performance of students in boarding school and their corresponding performance in non-boarding school in unified and SSCE, students in boarding school performed better than their counter parts in non-boarding school.

Table 2a: Chi-square(χ^2) analysis of boarding and non-boarding students' performance in unified exam

Subject	School type	F9	E8	D7	C6	C5	C4	B3	B2	A1	df	X ²	P
English	Non-boarding	————	8(15.4)	12(23.1)	9(17.3)	14(26.9)	————	5(9.6)	3(5.8)	1(1.9)	6	4.2	.64
	Boarding		10(7.5)	24(17.9)	32(23.9)	38(28.4)	————	17(12.7)	6(6.7)	4(3.0)		16	.7
Mathematics	Non-boarding	————	7(13.5)	8(15.4)	9(17.3)	21(40.4)	————	2(3.8)	10(7.5)	6(4.5)			
	Boarding	1(0.7)	26(19.4)	23(17.2)	34(25.4)	24(17.9)	————	10(7.5)	10(7.5)	6(4.5)	7	11.49	.119
Yoruba	Non-boarding	18(36.0)	8(16.0)	12(24.0)	6(12.0)	3(6.0)	————	2(4.0)	1(2.0)	-	6	37.26	.003
	Boarding	6(4.6)	22(16.9)	23(17.7)	37(28.5)	25(19.2)	————	10(7.7)	7(5.4)	-			
Economics	Non-boarding	9(17.6)	6(11.8)	2(3.9)	9(17.6)	11(21.6)	————	6(11.8)	4(7.8)	4(7.8)	7	21.91	.003
	Boarding	3(2.2)	15(11.2)	24(17.9)	20(14.9)	19(14.2)	————	26(19.4)	16(11.9)	11(8.2)			
Biology	Non-boarding	7(13.5)	7(13.5)	9(17.3)	16(30.8)	6(11.5)	————	2(3.8)	5(9.6)	-	7	54.08	.000
	Boarding	3(2.3)	6(4.5)	5(3.8)	13(9.8)	21(15.8)	————	40(30.1)					

*P<0.05 percentage response within row are enclosed in parentheses.

Findings and Discussion

This study examined the predictive strength of unified examination in predicting success in senior secondary school in Ekiti-State. The performance level was low in the examination. The performance varied considerably from one subject to another. While the findings tend to agree with some of the previous researches, in some case the finding disagree with some other researches.

The findings in hypothesis one showed that there is no significant relationship between the students overall performance in SSII Unified examination and their corresponding performance in senior school certificate examination this result tend to disagree with the work of othuon and kish (1994) who found that the Kenya certificate of primary education had a moderate linear relationship with the Cambridge secondary certificate examination grades.

However the findings tend to agreed with the findings of Adebayo (2002) who found significant relationship between students overall performances in junior secondary school certificate examination and senior secondary school certificate examinations in Ekiti state. The school attended (Day or boarding), the hypothesis that boarding states that boarding students perform better than their counterparts in day students. This could be attributed to the fact that environment in boarding schools favour student to perform better as they are obliged to follow strict school time-tables from morning to every boarding school gives room for independent and experimental learning and student are more self reliant and are aware of time management boarding also provide opportunities for self assessment through extra -curricular activities. On the other hand, the day students are believed to spend most of their time at home watching Television or doing other things that distract their attention from studies like pingging, face booking, twittering and all there social networks .The non-significant relationships in English and mathematics senior school unified and senior secondary school examination is a worrisome trend and something urgent needed to be done. However, the results of this research may not be unrelated to the alarming rate of examination malpractice in Nigeria as a nation and in Ekiti state in particular.

Table 2b:chi-square (X^2) analysis of boarding and non-boarding student's performance in SSCE

Subject	School type	F9	E8	D7	C6	C5	C4	B3	B2	A1	df	X^2	P
English	Boarding	-	-	2(4.0)	22(44.0)	12(24.0)	10(20.0)	4(8.0)	-	-	5	12.060	.034
	Non boarding	-	1(0.7)	1(0.7)	79(59.0)	33(24.6)	19(14.2)	1(0.7)	-	-			.000
Mathematics	Boarding	-	4(8.0)	19(38.0)	22(44.0)	1(2.0)	2(4.0)	2(4.0)	-	-		127.900	.000
	Non boarding	-	-	1(0.7)	10(7.5)	2(1.5)	1(0.7)	69(51.0)	-	-			.000
Yoruba	Boarding	-	1(2.3)	1(2.3)	9(20.5)	3(6.8)	6(13.6)	15(34.1)	6(13.6)	3(6.8)		44.670	.000
	Non boarding	2(1.5)	2(1.5)	11(8.2)	37(27.6)	30(22.4)	37(27.6)	14(10.4)	1(0.7)	-			.000
Economics	Boarding	44(88.0)	5(1.0)	1(2.0)	-	-	-	-	-	-		-	.000
	Non boarding	-	-	4(3.0)	26(19.4)	33(24.6)	19(14.2)	42(31.3)	8(6.0)	2(1.5)		179.957	.000
Biology	Boarding	33(67.3)	9(18.4)	6(12.2)	1(2.0)	-	-	-	-	-	8	159.29	.000
	Non boarding	-	2(4.5)	9(6.7)	50(37.3)	26(19.4)	10(7.5)	16(211.9)	19(14)	2(1.5)		151.292	.000
*P<		0.05,											

Conclusion

The conclusion of this study is that unified examination as at the period of carrying out this research work does not predict academic performance of students in the senior secondary school examination in Ekiti-State, but with the cooperation of teachers and examination that is void of malpractice, unified examination should continue to hold in all secondary schools in Ekiti state. It was also revealed from the study that students in boarding school performed better both in Unified and SSCE examination in Ekiti-state.

Recommendations

Based on the findings of this study the following recommendations were made:

- Boarding house should be re-introduced into all schools in Ekiti-state, especially in the senior secondary school level
- Unified Examination should be sustained as already in place in SSII to serve as a formative evaluation.
- The result of unified examination should be upheld without opportunity for resist examination and students that fail should mandatory repeat the class.
- More emphasis should be placed on teaching of mathematics and English language
- A bench mark of a credit pass in English and mathematics as criteria for promotion to SSIII.
- Teachers should be honest in marking of scores, theta only credit and above are awarded to students that sincerely merit it.

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