



Predictive Validity of Basic Education Certificate Examination on Senior Secondary Certificate Examination in English Language in Public Secondary Schools in Rivers State

Obilor, Ezezi Isaac¹ & Okah-Tim, Elegant Joy²

**Department of Educational Foundations
Faculty of Education
Rivers State University, Nkpolu-Oroworukwo, Port Harcourt, Nigeria
[1isaac.obilor@ust.edu.ng](mailto:isaac.obilor@ust.edu.ng); [2okahtimelekantjoy@gmail.com](mailto:okahtimelekantjoy@gmail.com)**

ABSTRACT

The study assessed the predictive validity of BECE on SSCE in English Language in Public Secondary Schools in Rivers State. Specifically, the study sought to determine whether students' performance in BECE English Language could predict their performance in SSCE English Language in Rivers State (2015-2020). The study employed a correlational design. The study population is 1,225 students of three public secondary schools across the three Senatorial Districts in Rivers State who registered and sat for the Basic Education Certificate Examination (BECE) in 2015, 2016, and 2017. A sample of 562 Basic Nine students was used for the study. Purposive sampling technique was used to select the sample. Three research questions were answered and three corresponding hypotheses were tested at 0.05 significance level. Data was collected directly from school principals and the Rivers State Ministry of Education. The collected data was analysed using a simple regression statistical technique. The findings of the study showed that students' performance in 2015/2016/2017 BECE English Language could not significantly predict performance in 2018/2019/2020 SSCE English Language. It was recommended that the Ministry of Education in Rivers State should employ qualified and competent English Language teachers in both junior and senior secondary schools to enhance performance.

Keywords: BECE, examination, predictive, regression analysis, SSCE, validity

INTRODUCTION

An effective, goal-oriented teaching-learning sequence contains clearly understood objectives, productive classroom activities, and sufficient feedback to make students aware of the strengths and weaknesses of their performances. Examination is a relevant factor to both instructional objectives and classroom learning activities and is an indispensable element in the learning process. It is useful for gathering data or information needed for various interests. The collected data can be used to decide the content and methods of instruction, make decisions about classroom climate, help communicate what is important, and assign grades (Darling-Hammond, 2006).

Examination is also used in "selecting, controlling or motivating students, and to satisfy public expectations as to standards and accountability" (Biggs, 2003; p.141). In the field of education, school examination measures the process that judges or determines the degree of students' performance in a

subject by comparing it to a given or set standard. The quality of the process is mostly determined by grades as seen in the Basic Education Examination (BECE) and Senior Secondary Certificate Examinations (SSCE) carried out in Nigeria. This type of examination will test the knowledge of each student. So, here with the grades, the quality or validity of these examinations can be ascertained.

Students who performed well in BECE are expected to also perform well in SSCE conducted by the West African Examination Council (WAEC), National Examination Council (NECO) or National Business and Technical Examination Board (NABTEB). This can be determined by ascertaining the validity of the BECE using their examination results. In the school setting, emphasis is placed highly on the outcome of the examination (termly/yearly and end of course) which is a reflection of the cognitive aspect of their learning as the evaluation mode. Energy will not be dissipated to examine the incomprehensiveness of the evaluation mode but rather to examine the extent to which one can rely on the examination results. Examination in broad perspective is an instrument for testing, assessment, evaluation and accreditation. It is used for selection, placement, certification and promotion. Thus, in schools, factories, industries and every human endeavour, examination is a potent instrument for the judgment of knowledge or competence. Establishing the predictive validity of the Basic Education Certificate Examination on student's performance in the Senior Secondary Certificate Examination would go a long way in fulfilling one important use of evaluation; which is for placement and certification. The fact remains that the modes of selecting candidates for admission and certification in various programmes require constant examination. This is to ensure the credibility of each criterion.

Obinne and Amali (2014) explained that test is one of the devices of evaluation in schools and testing concerns the specific performance of a student in terms of given objectives. Testing is a fundamental part of teaching and learning process used, not only for ranking students at the end of the teaching-learning process, but to guide teaching aid in the development of curriculum, as well as in assessment of learning difficulties and level of mastery among students.

Assessment is a process that involves documenting knowledge, skills, attitudes and beliefs, in measurable terms, intending to make improvements, not just to making judgments. It is a process of describing, collecting, recording, scoring and interpreting information about learning. In education, assessment is widely recognized as an ongoing process aimed at understanding and improving student learning. Assessment is concerned with converting expectations to results. It can be a process by which information is collected through the use of tests, interviews, questionnaires or observation (Weir, 2005).

Traditionally assessment is intended to find out and report on what has been learnt thus its relation with classroom activities. Assessment is integral to teaching and learning activities in school and mediates the interaction between teachers and students in the classroom. Assessment can be defined as all activities that teachers and students undertake to get information that can be used to alter teaching and learning. This includes teacher observation and analysis of student work (homework, tests, essays, reports, practical procedures and classroom discussion of issues). All these are concerned with sampling what a student may or may not know.

Kellaghan and Stufflebean (2003) stated that evaluation is the process of collecting, reviewing and using data, for improvement in the current performance and grading, for example, in a classroom activity. It provides feedback on the performance of students and ways to enhance their performance in future. This feedback is based on observation and their scores. More so, assessment can be a tool for comparing a student's achievement with other students or with a set of standards (Howard & Donaghue 2015). It refers to consideration of evidence in the light of value standards and in terms of the particular situations and the goals, which the group or individuals are striving to attain. According to Kizlik (2010), educational assessment can, and should, however, be used as an ongoing management and learning tool to improve learning, articulate the purpose of the educational system, identify and collect relevant information, generate ideas that are valuable and useful to learners in their lives and professions, analyse and interpret information for learners which will be used for classroom management or classroom decision making. Assessments also are used to identify individual student's weaknesses and strengths so that educators can provide specialized academic support in educational programs. In addition, assessments are developed by individuals, including teachers, district administrators, universities, State Ministry of Education and

public examination bodies. In classroom assessment, since teachers themselves develop, administer and analyse the questions, they are more likely to apply the results of the assessment to their own teaching. Therefore, it provides feedback on the effectiveness of instruction and gives students a measure of their progress.

Shohamy (2001) highlighted that assessment is important because it motivates students' learning. It has been observed that most students tend to focus their energies on the best or most expeditious way to pass their tests. Based on this knowledge, assessment strategies can be used to manipulate the kinds of learning that take place. For example, assessment strategies that focus predominantly on the recall of knowledge will likely promote superficial learning. On the other hand, if assessment strategies that demand critical thinking or creative problem-solving are employed, there's the likelihood of realizing a higher level of student performance or achievement. In addition, good assessment can help students become more effective self-directed learners (Darling-Hammond 2006). Well-designed assessment strategies also play a critical role in educational decision-making and are a vital component of ongoing quality improvement processes at the lesson, course and curriculum levels.

Concerns about the quality of education have to do with teaching and learning, but a lot more to do with the nature of examination, especially high-stakes external examinations such as the BECE and SSCE. This supports the argument that if teaching to the test can affect learning, it is important to ensure that the intended knowledge and skills are what the tests direct students to practice as they prepare to take the tests. In that case, teaching to the test will produce the desired effect on students' learning (Ghana National Association of Teachers, 2006).

For educational assessments carried out in secondary schools to be complete, students' works must be graded. Grading is assigning scores of students with numbers or other symbols to characteristics of the objects of interest according to some specified rules to reflect quantities of properties. Kanjee and Sayed (2013) noted that in the formal education sector, the assessment system comprises school-based testing and the national matriculation examinations, with the primary purpose being selection to the next level of education. A test will serve as the vehicle used to observe an attribute whether in a written test or an observation or an oral question or an assessment intended to measure the respondents' knowledge or other abilities (Weir, 2005). If the test is the vehicle then the test score is the indication of what was observed through the test and can also be quantitative and qualitative.

McAlpine (2002) stated that a good test should possess validity, reliability, objectivity, objective baseness, comprehensiveness, discriminating power, practicability, comparability and also utility. Objectivity is when a test is free from personal biases in interpreting its scope as well as in scoring the responses. It can be increased by using more objective type test items and the answers are scored according to standard answers provided. Objective baseness is that a test should be based on pre-determined objectives. And a test setter should have definite idea about the objective behind each item. Comprehensiveness is that the test should cover the whole syllabus, due importance should be given to all the relevant learning materials, and the test should cover all the anticipated objectives. Validity is the degree to which a test measures what it is to measure (Obilor, 2018).

The reliability of a test refers to the degree of consistency with which it measures what it intends to measure. The discriminating power of the test is its power to distinguish between the upper and lower groups who took the test: The test should have different difficulty levels of questions. The practicality of the test depends on administration, scoring, interpretative ease and economy. Comparability is when a test when scores resulting from its use can be interpreted in terms of a common base that has a natural or accepted meaning. In other words, comparisons can be made among different people taking the test. Lastly, the utility of a test provides the test condition that would facilitate the realization of the purpose for which it is meant. The BECE and SSCE possess all these attributes and are standard measures for the assessment of educational achievements in secondary schools in Nigeria.

A test with a high validity also has to be reliable and the score should be consistent in both cases (Shohamy, 2001). In educational assessment, validity refers to the extent to which an assessment instrument accurately measures what it is intended to measure. Therefore, for an assessment tool to be useful in determining a student's current knowledge level or in predicting a student's future academic

performance, such an instrument must have validity (Obilor & Miwari, 2022). Validity ensures that assessment tasks and associated criteria effectively measure students' attainments of the intended learning outcomes at an appropriate level. It is the degree to which an instrument measures what it purports to measure (Lucke, 2005). Since assessments are designed for a variety of purposes, it is not surprising that there are different types of validity. Lievens (2002) identified different types of validity as Construct, Translation (face and content validity) and Criterion-related (predictive, concurrent, convergent and discriminant validity). He described validity from the point of operationalization. That is, translating a concept into a functioning and operating reality.

Construct validity is the appropriate truth of the conclusion that the operationalization accurately reflects its construct. It is defined by Obilor and Miwari (2022) as how well a test or experiment measures up to its claims. It is the degree to which an instrument measures some theoretical trait or psychological variable. Construct validity is the appropriateness of inferences made based on observations or measurements (test scores). It examines the question: Does the measure behave like the theory says a measure of that construct should behave? It evaluates whether a measurement tool represents the thing we are interested in measuring. Construct validity is central to establishing the overall validity of a measure as the extent to which test performance can be interpreted in terms of certain psychological constructs. A construct is a psychological trait which is assumed to exist to explain some aspects of human behaviour which include creativity and validation, the nature and strength of all factors that can influence such a performance test.

Translation validity is relatively a new concept given to both face and content validity. The focus is to find out whether the operationalization is a good reflection of the construct. Face validity even though the weakest, focuses on operationalization to find out "on its face" if the test is a good translation of the construct. The quality of face validity assessment can be improved considerably by making it more systematic. Lievens (2002) explained content validity as checking the operationalization against the relevant content domain for the construct. That is, how well the content covered in the course is reflected in the test items. This should include domain specification and the definition of the target group. This validity addresses the basic question: Is the measure of a test representative of the content of the property being measured?

Criterion-related validity is also known as empirical validity because it employs empirical techniques in studying the relationship between scores on a test and some outside criteria. Criterion related validity aims at prediction and generalization from one score to another. It is divided into predictive validity, concurrent validity, convergent validity and discriminant validity. Concurrent validity is the degree to which scores on a test are related to the scores on an already established test administered at the same time or to some other valid criterion available. When a test is capable of doing the same job as some other tests, easier or faster, the concurrent validity is established, and in most cases, the new test will be utilized instead of the older tests.

According to McIntire and Miller (2005), concurrent validity and predictive validity are two approaches to criterion validity. Criterion validity describes how a test effectively estimates an examinee's performance on some outcome measure(s). The outcome measure, called a criterion, is the main variable of interest in the analysis. The test scores are truly useful if they can provide a basis for precise prediction of some criteria. Concurrent validity is similar to predictive validity, as both of them are commonly interpreted as correlations between a test and the relevant criteria. Concurrent validity and predictive validity are only different in the time that the two tests are measured. Concurrent validity is determined by establishing a relationship or discrimination between a test and the relevant criteria in the present time, predictive validity is the ability of a test to predict the relevant criteria in the future. In other words, predictive validity is concerned with the attempt to forecast an outcome based on data or information considered relevant to the observed event. A high correlation, therefore, would provide evidence of predictive validity and vice-versa.

Predictive validity is considered the extent to which a score on a scale or test predicts scores on some future criterion measure. Afolabi (2012) described predictive validity as the degree of correlation between the scores on a test and some other measures that the test is designed to predict. Similarly, Faleye (2015)

believes that predictive validity is the extent to which a test could accurately forecast the extent to which a person would perform in a future related activity. Most educational and employment tests are used to predict future performance, so, predictive validity is regarded as essential in these fields. Studies on predictive validity usually take the criterion scores, and compare them with the predictor scores in similar subjects. A high correlation indicates that the selection procedure worked perfectly, a low correlation signifies that there is something wrong with the approach. According to Faleye (2015), when predictive validity is being mentioned the issue with which an examination could accurately forecast candidates' future performance in related tasks is envisaged. The scores obtained by students from their internal examinations, for example, continuous assessment and mock examination, entry or qualifying examination results could be used to predict their future performance (Adeyemi, 2008). Also, the prediction of the Senior School Certificate Examination results from the Basic Education Certificate Examination results in Nigeria.

In Nigeria, achievement at any level of education is crowned with certification for those who complete the course of study with good academic records. Thus, at the end of secondary school education, students are expected to sit for public examinations such as the West African Senior School Certificate Examination (WASSCE), conducted by the West African Examinations Council (WAEC), Senior School Certificate Examination (SSCE), conducted by the National Examinations Council (NECO), and the National Technical and Business Certificate Examinations (NTCE/NBCE) conducted by the National Business and Technical Examination Board (NABTEB).

Obioma and Salau (2007) stated that at the end of secondary school education, students are expected to sit for public examinations such as the West African Senior School Certificate Examination (WASSCE), Senior School Certificate Examination (SSCE), and the National Technical and Business Certificate Examinations (NTCE/NBCE). The pre-requisite for sitting for any of the above-mentioned external examinations is a satisfactory completion of the nine years of primary education which is concluded with the Basic Education Certificate Examination (BECE). Possession of minimum of credits/passes in five subjects including English Language and Mathematics qualifies a graduate of 9-year UBE who sat for the JSCE for admission into the 3-year Senior Secondary School programme. In April, 2011, the Junior School Certificate Examination (JSCE) was renamed Basic Education Certificate Examination (BECE) (FGN, 2014).

The Basic Education Certificate Examination (BECE) is conducted by the State Examination Development Centre (EDC) of the Ministry of Education. In Nigeria, it is administered by the state Ministry of Education in each state. Universal Basic Education Commission (UBEC, 2012) stressed that determining the actual grades of students in BECE is imperative as it will help to predict their outcomes in senior school examinations (Bolaji, 2015). Grade is the scholastic standing of a student at any given moment. Daniels and Schouten (2012) emphasized that scholastic standing could be explained as the grades obtained in a course or groups of courses taken. Thus, in predicting academic achievement, Daniel and Schouten emphasized the use of grades in examinations and reported that grades could serve as both predictive and concurrent measures. Findings made by Gay (2007) reported that high school grades could be used to predict college grades.

The senior School Certificate Examination (SSCE) result is one of the requisite qualifications for entry into any tertiary institution in Nigeria. A candidate must possess the minimum entry requirements at credit level in Mathematics and English Language with respect to SSCE before he is given admission into any tertiary institution in Nigeria. The pattern of grading candidates' score in the examination was such that the distinction grade was represented by A1 to B3. The credit grade was represented by C4 to C6. The ordinary pass grade was represented by D7 and E8 while the failure grade was represented by F9 (WAEC, 2002). The distinction and credit grades are the only requisite grades for admission into higher Education in Nigeria and candidate must have at least six credits in five subjects including Mathematics and English language in order to qualify for admission into tertiary institutions in Nigeria (JAMB, 2002). English language is the official language of Nigeria (Danladi, 2013). People have to communicate in English in whatever they do. This has made Nigeria one of the largest English-speaking populations in the world (Taiwo, 2009). English language is also an essential pre-requisite for gaining admission into the

University to study any academic discipline (Oribabor, 2014). It is central to Nigeria's educational growth because of its important role as a medium of knowledge delivery in Nigeria's educational institutions. English language remains the language of instruction in Nigerian schools mainly at the upper primary school level, secondary school and beyond. The Federal Republic of Nigeria on National Policy on Education (2013) clearly stated the function of the English language as a school subject in Nigerian schools. It provides that, in the first three years of primary education of a Nigerian child, the indigenous language (the language of the environment) can be used for class instruction while English is retained as a core subject. From the fourth year in primary school, English language should be the language of instruction apart from its status as a core subject of study.

The policy further specifies that every school child should be made to learn English language and any other Nigerian languages apart from the native language of the immediate environment in the junior secondary school. At the senior secondary level students are required to study four core subjects compulsorily in addition to elective subjects in four offered areas. The core compulsory subjects include English language as the first followed by Mathematics, then others.

In Nigeria, students' performance is judged in core subjects which include English Language, Mathematics, Basic Science, Civic Education, Agricultural Science, and Computer at the BECE, while at the SSCE, the core subjects are English Language, Mathematics, Civic Education, Marketing and Data Processing (Opara, Onyekuru & Njoku, 2015). This study focuses on English Language and Mathematics which are core subjects in both the BECE and SSCE.

In a study by Adeyemi (2006), the correlation research design was adopted. The population of the study comprised all the 257 secondary schools in Taraba State. Out of this population, a sample of 206 schools was selected through the stratified random sampling technique. Data collected was analysed with the use of z-test, correlation analysis and multiple regression. The findings revealed that the JSCE examinations were a good predictor of performance at the SSCE examination. Since the performance level was generally low in both examinations, it was recommended that the State government should intensify efforts to ensure better teaching and learning strategies in schools through effective supervision and monitoring.

Dike and Garba (2017) investigated the academic achievement of students in Integrated Science at Junior Secondary School (JSS) as a predictor of their later achievement in Biology at the Senior Secondary School (SSS) in Soba, Kaduna State, Nigeria. A random sampling technique was used to select 5 senior secondary schools from the 10 government senior secondary schools in the study area. The sample comprised of 842 students selected from 1013 students. The study adopted the descriptive survey research design. Secondary data was obtained from the selected schools. The research questions were answered by the statistical mean while the hypotheses were analysed using the chi-square and cross tabulation statistics. The findings of the study revealed that achievement of students in Integrated Science significantly predict their later achievement in Biology at SSCE irrespective of their gender. It was recommended among others that career counsellors should consult students' past records in Integrated Science before advising them to offer science.

The Federal Republic of Nigeria (2004) asserted that each student must pass English Language and Mathematics at BECE before being admitted into the Senior Secondary School. The problem is, do passes in English language and at the Basic Education Certificate Examination guarantee passes in English language at the Senior School Certificate Examination? This study sought to answer this puzzle.

Statement of the Problem

The Basic Education Certificate Examination serves as the yardstick for admission into the Senior Secondary School. Thus, it is expected that a student who is admitted possesses the abilities and skills necessary to cope with the academic challenges of the Senior Secondary School (SSS). However, it is common knowledge that performance in the various SSCE subjects has been low for quite a long time (WAEC, 2010-2015 Chief Examiners Reports), For instance, in the 2014 and 2015 WAEC, the percentage of candidates that obtained credit pass in five subjects and above, including English Language and Mathematics was 31.28 and 38.68 per cent respectively (Adenipekun, 2016), although these same students obtained acceptable grades in the BECE, and were consequently admitted to SSS I. Other results

from the National Bureau of Statistics (2019) show that the percentage of candidates who obtained credit passes in English Language in 2016, 2017, and 2018, was 52.27, 53.32, and 54.37 per cent respectively. The poor performance of students at the SSCE touches on the validity of the BECE as an adequate benchmark to judge students' capacity to cope effectively with SSS work which has a direct impact on their performance in the SSCE. It is pertinent, therefore, to investigate the reasons for this poor performance in the SSCE by surveying the predictive validity of the BECE, which is the prerequisite for admission into senior secondary schools. This study sought to investigate the predictive validity of the Basic Education Certificate Examination (BECE) on the Senior School Certificate Examination (SSCE) in English Language in Public Secondary Schools in Rivers State to find solutions to the poor performance of students in English language in the Senior School Certificate Examination.

Purpose of the Study

The purpose of the study is to assess the predictive validity of the Basic Education Certificate Examination (BECE) on the Senior School Certificate Examination (SSCE) in English language in public secondary schools in Rivers State. The specific objectives of the study are to:

- 1) Find out whether students' performance in the 2015 BECE English language could predict their performance in the 2018 SSCE English language in Rivers State.
- 2) Find out whether students' performance in the 2016 BECE English language could predict their performance in the 2019 SSCE English language in Rivers State.
- 3) Find out whether students' performance in the 2017 BECE English language could predict their performance in the 2020 SSCE English language in Rivers State.

Research Questions

The following questions served as guides to the entire investigation:

- 1) To what extent does students' performance in the 2015 BECE English language predict their performance in the 2018 SSCE English language in Rivers State?
- 2) To what extent does students' performance in the 2016 BECE English language predict their performance in the 2019 SSCE English language in Rivers State?
- 3) To what extent does students' performance in the 2017 BECE English language predict their performance in the 2020 SSCE English language in Rivers State?

Hypotheses

The following null hypotheses were tested at the 0.05 level of significance.

1. Students' performance in 2015 BECE English language does not significantly predict their performance in the 2018 SSCE English language in Rivers State.
2. Students' performance in 2016 BECE English language does not significantly predict their performance in the 2019 SSCE English language in Rivers State.
3. Students' performance in 2017 BECE English language does not significantly predict their performance in the 2020 SSCE English language in Rivers State.

METHODOLOGY

The correlational research design was used for this study. A correlational study seeks to ascertain relationships between two or more variables (Tan, 2014). Findings from correlational studies enable researchers to predict dependent variables (predictor variables) from the independent variables (criterion variables). This design is most appropriate because the researcher sought to find out if success in English language in BECE could predict success in English language in SSCE.

The population for the study is 1,225 which comprised students from three public secondary schools across the three Senatorial Districts in Rivers State who registered and sat for the Basic Education Certificate Examination (BECE) in 2015, 2016, 2017 in English Language (Source: Rivers State, Ministry of Education Records, 2022).

The sample size for this study is 562 Basic Nine students. Purposive sampling technique was used to compose the sample made up of only students who sat for the Basic Education Certificate Examination (BECE) in 2015, 2016, and 2017 and also the Senior School Certificate Examination (SSCE) in 2018, 2019, and 2020 in the same public secondary schools in Rivers State. This is shown in the table below.

Table 1: Sample Size of the Distribution

Year	Sample Size
2015/2018	172
2016/2019	182
2017/2020	208
Total	562

However, three public schools were randomly selected from the three Senatorial Districts of Rivers State for the Study. The selected schools are Western Ahoada County Grammar School, Ahoada representing Rivers West, Government Army Secondary School, Elele representing Rivers East, and Community Secondary School, Kira Tai, representing Rivers South-East.

Data for this study was documented students' BECE and SSCE results from Rivers State Ministry of Education and West African Examination Council respectively. The BECE students' scores are for years 2015, 2016 and 2017 while the SSCE scores are for years 2018, 2019 and 2020. The scores of the students were organized by computing the average of the range of scores of each grade as prescribed by BECE and SSCE. Students' results for BECE and SSCE are normally presented in qualitative formats using A (Distinction), C (Credit), P (Pass) and F (Fail) for the BECE, and A1, B2, B3 corresponding to (Distinction, Very Good, and Good respectively) C4, C5, C6 (corresponding to Credit); D7, E8 (corresponding to pass); and F9 (corresponding to Fail) for the SSCE.

These formats could not allow for a numerical range that would enable comparison of performances, thus for scoring, BECE grades of A, C, P and F were awarded 4, 3, 2 and 1; and the SSCE grades of A1, B2, B3, C4, C5, C6, D7, E8 and F9 were arranged in clusters of A1, B2 and B3 to be represented by 4, C4, C5 and C6 by 3, D7 and E8 by 2 and F9 by 1. Thus, an aggregate score that is amenable to data analysis was obtained for each student.

The results used for this study are secondary data obtained from official documents domiciled in the Rivers State Ministry of Education, Port Harcourt and West African Examination Council Headquarters, Lagos. They are the results of students who wrote English language in BECE in 2015, 2016, and 2017 and SSCE in 2018, 2019, and 2020. Since these results were sourced from the Rivers State Ministry of Education and West African Examinations Council, this study did not carry out any reliability analysis as the BECE and SSCE students' results in English Language were obtained from reliable standardized examinations conducted by the Rivers State Ministry of Education and West African Examinations Council.

Methods of data analysis include frequency count, percentage and simple linear regression model. The basic regression equation employed in the study is:

$$Y_i = \beta_0 + \beta_1 X_i + \mu_i$$

Where

y_i = Results of the students that sat for SSCE English language in public senior secondary schools in Rivers State.

x_i = Results of the students that sat for BECE English language in public junior secondary schools in Rivers State.

β_0 and β_1 = Parameters to be estimated.

μ_i = Error or residual term generated from the linear regression.

The dependent variables are the SSCE scores in English language conducted by the West African Examination Council for 2018, 2019 and 2020, while the independent variables are the BECE scores in English language conducted by the Rivers State Ministry of Education for 2015, 2016 and 2017.

RESULTS

Research Question 1: *To what extent does students’ performance in 2015 BECE English language predict their performance in the 2018 SSCE English language in Rivers State?*

Table 2: Extent of Prediction of Students’ Performance in the 2015 BECE English Language on 2018 SSCE English Language

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.035	.001	-.001	.63045

Predictors (Constant): BECE 2015 English Language

Dependent Variable: SSCE 2018 English Language

The results in Table 1 show the extent of prediction of students’ performance in the 2015 BECE English language on the 2018 SSCE English language. Results from Table 2 show an R of 0.035 and R² of 0.001. The R² of 0.001 means that 0.1% of variance in 2018 SSCE English language performance was predicted by students' 2015 BECE English language performance in Rivers State.

Research Question 2: *To what extent does students’ performance in the 2016 BECE English language predict their performance in their 2019 SSCE English language in Rivers State?*

Table 3: Extent of Prediction of Students’ Performance in the 2016 BECE English Language on 2019 SSCE English Language

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.002	.000	-.005	.56034

Predictors (Constant): BECE 2016 English Language

Dependent Variable: SSCE 2019 English Language

The results in Table 3 reveal the extent of prediction of students’ performance in the 2016 BECE English language on their 2019 SSCE English language. Results from Table 3 show an R of 0.002 and R² of 0.000. The R² of 0.000 means that 0.00% of variance in 2019 SSCE English language performance was predicted by students' 2016 BECE English language performance in Rivers State.

Research Question 3: *To what extent does students’ performance in 2017 BECE English Language predict their performance in 2020 SSCE English Language in Rivers State?*

Table 4: Extent of Prediction of Students’ Performance in the 2017 BECE English Language on 2020 SSCE English Language

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.415	.172	.036	.03554

Predictors (Constant): BECE 2017 English language

Dependent Variable: SSCE 2020 English language

The results in Table 4 show the extent of prediction of students’ performance in the 2017 BECE English language on their 2020 SSCE English language. Results show an R of 0.436 and R² of 0.172. The R² of 0.172 means that 17.2% of variance in 2017 SSCE English Language performance was predicted by students' 2020 BECE English Language performance in Rivers State.

Hypothesis 1: Students’ performance in 2015 BECE English language does not significantly predict their performance in the 2018 SSCE English language in Rivers State.

Table 5: Test of Significance of Standardized Regression Coefficient (r) for Students’ Performance in 2015 BECE English Language and 2018 SSCE English Language

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	3.054	.155		19.647	.000
BECE 2015	0.040	.047	.035	.841	.401

Dependent Variable: SSCE 2018 English Language

The results in Table 5 test the significance of the standardized regression coefficient (R) for students’ performance in the 2015 BECE English language and 2018 SSCE English language. It revealed that a Beta (β) value of 0.040 produced a t-value of 0.841 which is not significant at $p = 0.401 > \alpha = 0.05$. Thus, the null hypothesis that "students' performance in 2015 BECE English language does not significantly predict their performance in 2018 SSCE English language is not rejected. This means that students’ performance in the 2015 BECE English language could not significantly predict their performance in the 2018 SSCE English language in Rivers State. The regression equation for the prediction of the SSCE English language scores is $Y' = 0.040x + 3.054$ where ‘x’ is the BECE English language raw score and Y’ is the SSCE English language raw score for each candidate.

Hypothesis 2: Students’ performance in 2016 BECE English language does not significantly predict their performance in the 2019 SSCE English language in Rivers State.

Table 6: Test of Significance of Standardized Regression Coefficient (r) for Students’ Performance in 2016 BECE English Language and 2019 SSCE English Language

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	3.012	.211		14.309	.000
BECE 2016	0.002	.065	.002	.036	.971

Dependent Variable: SSCE 2019 English Language

The results from Table 6 reveal that a Beta (β) value of 0.002 produced a t-value of 0.036 which is not significant at $p = 0.971 > \alpha = 0.05$. Thus, the null hypothesis that "students' performance in 2016 BECE English language does not significantly predict their performance in 2019 SSCE English language" is not rejected. This means that students’ performance in the 2016 BECE English language could not significantly predict their performance in the 2019 SSCE English language in Rivers State. The regression equation for the prediction of the SSCE English language scores is $Y' = 0.002x + 3.012$ where ‘x’ is the BECE English language raw score and Y’ is the SSCE English language for each candidate.

Hypothesis 3: Students’ performance in 2017 BECE English language does not significantly predict their performance in the 2020 SSCE English language in Rivers State.

Table 6: Test of Significance of Standardized Regression Coefficient (r) for Students’ Performance in 2017 BECE English Language and 2020 SSCE English Language

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	1.012	.111		9.117	.000
BECE 2017	.212	.065	.002	3.262	.171

Dependent Variable: SSCE 2020 English Language

Also, the result from Table 6 reveals that a Beta (β) value of 0.212 produced a t-value of 3.262 which is not significant at $p = 0.171 > \alpha = 0.05$. Thus, the null hypothesis that "students' performance in 2017 BECE English Language does not significantly predict their performance in 2020 SSCE English language" is not rejected. This means that students' performance in the 2017 BECE English language could not significantly predict their performance in the 2020 SSCE English language in Rivers State. The regression equation for the prediction of the SSCE English language scores is $Y' = 0.212x + 1.012$ where 'x' is the BECE English language raw score and Y' is the SSCE English language raw score for each candidate.

DISCUSSION OF FINDINGS

Students' performances in 2015, 2016 and 2017 BECE English Language were not predictors of their respective performances in the 2018, 2019 and 2020 SSCE English Language as shown in Tables 1, 2 and 3 respectively. The result also showed that BECE contributed 0.1%, 0.00%, and 17.2% to the variability in SSCE English Language performance in Rivers State. This is further revealed in the test of hypotheses as shown in Tables 4, 5 and 6 indicating that students' performance in the 2015, 2016, and 2017 BECE English Language could not significantly predict their performance in SSCE 2018, 2019, and 2020 English Language. The studies by Udo (2011); and Ugwuda and Abonyi (2013) agreed with the present study as they found that JSCE English Language is not a significant predictor of SSCE English Language performance. However, in their study "Prediction of Students' Performance in Senior School Certificate Examination English Language from the Junior School Certificate Examination Performance in Obio/Akpor Local Government Area", Asuru and Njigwum (2020) found that students' performance in JSCE English language was a weak predictor of performance in SSCE English language.

CONCLUSION

The findings of this study revealed that students' performance in 2015/2016/2017 BECE English Language does not significantly predict performance in 2018/2019/2020 SSCE English Language in Rivers State.

RECOMMENDATIONS

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

4. The State Ministry of Education in Rivers State should endeavour to employ qualified English Language teachers to improve students' performance.
5. Teachers should ensure that students cover the various curricula in English Language before they sit for BECE and SSCE.

REFERENCES

- Adenipekun, O. I. (2016). West African Examination Council Annual Report
- Adeyemi, T.O. (2006). Predicting Students' Performance in the Senior Secondary Certificate Examinations from Performance in the Junior Secondary Certificate Examinations in Ondo State, Nigeria. *African Journal of Education Studies in Mathematics and Sciences*. 4(1), 41-51.
- Adeyemi, T. O. (2008). Predicting students' performance in senior secondary certificate examinations from junior secondary certificate examinations in Ondo State, Nigeria. *Humanity and Social Science Journal*, 3(1), 26 - 36.
- Afolabi, E. R. I. (2012). Tests and Measurement: A Tale Bearer or True Witness? *Inaugural lecture series* 253. Obafemi Awolowo University, Ile-Ife. Nigeria.
- Afolabi, E. R. I. (2012). *Validity of Tests in Educational Tests and Measurement*. Ile-Ife: Obafemi Awolowo University Press.
- Asuru, V.A. & Ngigwum, A. S. (2020). *Predicting Students' performance in SSCE English Language from their performance in JSCE English Language*. National Mathematics Advisory Panel. (2008). The final report of the National Mathematics Advisory Panel.
- Biggs, J. (2003). *Teaching for quality learning at University*. Berkshire: Open University Press

- Bolaji, C. (2015). A study of factors influencing students' attitude towards mathematics in the junior secondary schools. *Research Journal of Mathematics and Statistics*, 3(1) 14-22.
- Daniels, M., & Schouten, J. (2012). *Education in Europe: The screening of students' problems of assessment and prediction of academic achievement*. Cambridge: Harvard University Press.
- Danladi S. S. (2013). Language policy: Nigeria and the role of English language in the 21st century. *European Scientific Journal*, 9 (17), 57-70.
- Darling-Hammond, L. (2006). Assessing teacher education: The usefulness of multiple measures for assessing program outcomes. *Journal of Teacher Education*, 57(2), 120-138.
- Dike, N.I & Garba, M.A. (2017). Students Integrated Science Achievement as Predictor of Later Achievement in Biology in Selected Government Secondary Schools in Soba Local Government Area, Kaduna State, Nigeria. *Journal of Research and Method in Education*, 7(2), 40-49.
- Faleye, B. A. & Afolabi, E. R. I. (2005). The predictive validity of Osun State junior secondary certificate examination. *Electronic Journal of Research in Educational Psychology*, 5(1), 131-144.
- Faleye, B. A. (2015). Predictive validity of students' entry qualifications into Mathematics programme in Nigeria's Osun and Oyo states' Colleges of Education. *Journal of Education and Human Development*, 4(4) 209-217.
- Federal Republic of Nigeria (2013). *National Policy on Education* (6th edition), Lagos: NERDC press
- Federal Republic of Nigeria. (2004). *National policy on education (4th ed.)*, Lagos: Federal Government Press.
- Federal Republic of Nigeria. (2014). *National policy on education (4th ed.)*, Abuja: NERDC
- Gay, L. R. (2007). *Educational research: Competencies for analysis and application*, Upper Saddle River, New Jersey: Merrill Prentice-Hall Inc., 249-305.
- Ghana National Association of Teachers (GNAT) (2006). *CCTA forum: Time with WAEC to assess Public School Examination System*.
- International Organization for Migration (2014). *Promoting better management of migration in Nigeria: Needs assessment of the Nigerian Education Sector*. Abuja. Retrieved from <https://nigeria.iom.int/>
- Kanjee, A. & Sayed, Y. (2013). Assessment policy in post-apartheid South Africa: challenges for improving education quality and learning. *Assessment in Education: Principles, Policy & Practice*, 20(4), 442-469.
- Kellaghan, T., & Stufflebean, D.L. (2003). *International Handbook of educational evaluation*. Dordrecht: Klüver Academic Publisher.
- Kizlik, B. (2010). *Assessment Based on a Behaviourally Stated Objective*. Oxford: Oxford University Press.
- Lievens F. (2002). Factors which improved the construct validity of assessment centres: *A review of International Journal of Selection and Assessment*, 6, 141-152.
- Lievens, F. (2001). Assessors and use of assessment centre dimensions: A fresh look at a troubling issue. *Journal of Organizational Behaviour*, 22, 203-221.
- Lucke, J. F. (2005). Congeneric test theory: An extension of reliability and internal consistency to heterogeneous tests. *Applied Psychological Measurement*, 29(1), 65-81
- McIntire, S. A., & Miller, L. A. (2005). *Foundations of psychological testing* (2nd ed.). Thousand Oaks, CA: Sage Publishing.
- McAlpine, M. (2002). *Principles of Assessment*. Glasgow: University of Luton.
- Obilor, E. I. (2018). *Fundamentals of research methods and statistics in education and social sciences*. Port Harcourt: SABCOS Printers and Publishers.
- Obilor, E. I., & Miwari, G. U. (2022). Content Validity in Educational Assessment. *International Journal of Innovative Education Research*, 10(2), 57-69.
- Obioma, G & Salau, M. (2007). *The Predictive Validity of Public Examinations: A Case Study of Nigeria*. Nigerian Educational Research & Development Council (NERDC) Abuja.

- Opara, I. M., Onyekuru, B. U. & Njoku, J. U. (2015). Predictive power of school-based assessment scores on students' achievement in junior secondary certificate examination (JSCE) in English and Mathematics. *Journal of Education and Practice*, 6(9), 112-116.
- Oribabor O. A. (2014). The problems and prospects of teaching of English language in Ife central local government of Osun state. *Journal of Literature, Languages and Linguistics*, 4, 70-72.
- Shohamy, E. (2001). *The Power of Tests: A Critical Perspective on the Uses of Language Tests*. Harlow: Pearson Education.
- UBEC. (2012). *Universal Basic Education Commission*. Abuja: NERDC Press.
- Udo, E. O. (2011). Junior School Certificate Examination Results as predictors of performance in Senior School Certificate Examination. Unpublished M.Ed. Thesis. University of Port Harcourt.
- Ugwuda, O. S. & Abony, S. O. (2013). Predictive Validity of NECO Junior School Certificate Examination on students' achievement in NECO Senior School Certificate Examination. *Journal of Science Teachers Association of Nigeria*, 2, 1-15.
- West Africa Examination Council (2002). *Standards in subjects: Yaba, Lagos, December; 2-10*
- Weir, J. C. (2005). *Language testing and validation: Evidence-based approach*. New York, NY: Palgrave Macmillan.