RELATIONSHIP BETWEEN 2012 PLACEMENT EXAMINATION (JSCE) ON 2014 SENIOR SCHOOL CERTIFICATE QUALIFYING EXAMINATION (SSCQE) IN DAWAKIN- KUDU EDUCATION ZONE, KANO STATE.

BY

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SPS/13/MED/00108

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CERTIFICATION

I certify that this research work was conducted, written and compiled by me. I also certify that to the best of my knowledge this research work has never been presented wholly or partially for a ward of any degree or for publication elsewhere

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DEDICATION

The researcher dedicate this research work to entire member of my family and to my loving spouses.

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ABSTRACT

This study employed a correlation research designed to investigate the relationship between of 2012 Placement examination (JSCE) on 2014 Senior School Certificate Qualifying Examination (SSCQE) in Dawakin-Kudu Education Zone, Kano State. The objective of this work was to find out if there is any relationship between "JSCE" (2012) and "SSCQE" (2014) in Mathematics, English Language and Civic Education, it also find whether the "JSCE" (2012) and "SSCQE" (2014) Correlations in (Mathematics, English Language and Civic Education) are in-variant across gender. In this study (4) research questions was raised with the corresponding null hypotheses. Cluster 2- stage sampling technique was used to select a sample size of 357 out of 10,615 populations. Students data collection form (SDCF) was used. The data collected was analyzed using statistical package for software system (SPSS), version 20, and Pearson product moment correlation coefficient (r) technique was used at 0.05 significant level. The findings: That there was a significant relationship in 2012 JSCE and 2014 SSCQE in Mathematics across the gender (at r = 0.135, P=0.010). Nevertheless, the relationship was not found in correlation of JSCE and SSCQE in English Language, at (r = -0.029, P= 0.581). More so, correlation of JSCE and SSCQE in Civic Education was significant at (r = 0.135, P = 0.010.). It is therefore recommended that, Ministry of Education has to provide enough and competent English teachers in both junior and senior level. School head should provide an intervention strategies such as planning extra lesson to boys School in order to fill the garb across gender.

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LIST OF ABBREVIATIONS

JSCE: Junior secondary school examination

SSCQE: Senior Secondary Certificate Qualifier Exam.

K E R D: This refers to Kano educational resources department.

W.A.S.S.C.E: West African Senior Secondary Certificate Examination.

SSCE: Senior Secondary Certificate Examination

S P S S: Statistical Package for Software System.

PSLE: Primary school leaving Exams

FTSEE: Form two Secondary Education Exams

SAT: Scholastic Aptitude Tests

GRE: Graduate Record Examination

CSEE: Certificate of Secondary Education Exams

AAUW: American Association of University Women

STM: Science, Technology and Mathematics

JAA: Junior Achievement Armenia.

C E: Civic Education.

A C E: Armenia Civic Education.

NERDC: National Education Research Development Council.

MCES: Mock Examination Scores.

INUEEE: Iranian National University Entrance English Examination

OPERATIONAL DEFINITION OF THE TERMS

Placement Examination: This refers to the examination written by JSSIII students, developed by KERD for the purpose of evaluation, certification and placement appropriately.

Qualifier Examination: Used to be called SSCQE, It is an external examination conducted by KERD at the end of SSII session, being criteria for Kano State Government sponsorship for W.A.S.S.C.E. and S.S.C.E.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In Nigeria, secondary education is provided at two levels, the nine years Basic Education curriculum, within the span of 9 years and new senior secondary school curriculum in three year span, (NERDC, 2008 b). The curriculum at the Junior Secondary School comprise of both pre-vocational and academic. It shall be tuition free, universal, and compulsory, teaching basic subjects will enable pupils to acquire further knowledge, skills, and places with greater emphasis on science, technology and business particularly art and craft. To ensure a solid base for future manpower development, the curriculum of the national policy on education prescribes a wide range of subjects that must be offered, leading to variety of courses and career choices at the senior secondary level. Thus, every student most offer a minimum of ten (10) and a maximum of thirteen (13) subjects including the core subjects and one subject from each of the pre-vocational and non- vocational subjects (NPE2004). In line with the recommendations of the Nigerian Educational Research and Development Council, what the students learn at the JSS level will lay the foundation for the students SS education and it should be systematically connected to it. This continuity in the educational process is the essence of the educational system in Nigeria. It is therefore assumed that a student who is admitted into the Senior School Class (SS1) possesses the basic skills to cope with the challenges of schooling at that level (NERDC, 2008).

The above stated position however may not necessarily reflect what is happening at the secondary school level as observed by Adeyemi (2008), that some students who

were promoted to SSI because they obtained acceptable grades at the JSCE later failed at the SSCE. Therefore, the broad goal of secondary school education as listed in the National policy on education (NPE, 2004) shall be to prepare the individual for (a) useful living within the society, and (b) Higher Education. These targets seem meaningless without fashioning ways of evaluating and predicting individual students' knowledge, skills, intelligence, achievement, aptitude and ability. The basic education and senior school system brought fundamental changes in classification of subjects in to core subject and elective ones and their mode of evaluation, for instance, English Language, Mathematics and Civic Education are classified as core subjects to all shade of students in junior secondary school and senior secondary school students (NERDC, 2008 b).This will enable students to attained acceptable standard in the use of English Language, numeracy and social skills. Also, the evaluation of students is based on the end of courses examination conducted by Ministry of Education (KERD).

Placement examination (JSCE) which developed by KERD is taken at the end of JSS III, if a student passed (JSCE) he/she is allowed to proceed to senior Secondary level, and placed on a different shade of classification as Sciences, Art or commercial. Placement examination (JSCE), was initially called Junior Secondary Certificates Examination (JSCE) it was started with 6-3-3 4 system 1983.

The senior secondary certificate qualifying examination (SSCQE) was given at the end of SS II, represent a terminal evaluation of the individual student on completion of the training. Qualifying Examination was the replacement of Mock Examination conducted before 1990s.The relationship between the variables, Placement examination (JSCE) serves as examination that qualifies students to be placed

appropriately in Senior Secondary level, it affects their performance at the SSCE level when wrongly placed. Another relationship between Junior School Certificates Examination (JSCE) and Senior Secondary Certificate Qualifier Examination. (SSCQE) is that, every student must pass through JSS before taken SSCQE. They also serve as process of evaluation, and certification of students. This implies that a student sat for JSCE 2011/2012 session he is entitled to sit for SSCQE by 2013/2014 academic year. And this points was conceded (Umar G. Gombe, Personal Communication, June 12th , 2015).

1.2 Statement of Problems

Placement examination is a terminal examination which is usually taken at the end of Junior Secondary School Education. It allow student to be placed into appropriate career choice.

Placement examination was introduce to serve as a final examination for student moving from Junior Secondary School to Senior Secondary School level. It is expected that, student passed the examination are well prepared for the academic challenges ahead of time. However, it could be a good predictor of academic result, yet there have been deficit studies conducted to ascertain the relationship of placement examination for the subsequent examination such as Senior School Certificate Qualifying Examination (SSCQE).

The paucity of such studies, is what make the researcher to examine the relationship between placement and qualifying examination in Mathematics, English Language and Civic Education in Dawakin Kudu Education zone Kano State. In addition, the above mention subjects are key dependent variables of the study. In line with the

Nigerian Educational Research and Development Council, categories the upper Basic Education curriculum structure include core compulsory subject**:**

English Language, Mathematics One major Nigeria Language (Hausa, Igbo, or Yoruba),Basic Science. Civic Education. Social Studies, Cultural and Creative Arts (CCA),Islamic Religious Studies /Christian Religious Studies, Physical and Health Education (P.H.E),French Language, Basic Technology, and Computer studies /ICT. (NERDC, 2008 b).

1.3 Objectives of the Study

For the purpose of this study, the following objectives are drawn:

1. To find out if there is any relationship between 2012 "JSCE" and 2014 "SSCQE" in mathematics.
2. To find out if there is any relationship between 2012"JSCE" and 2014"SSCQE" in English Language.
3. To find out if there is any relationship between 2012"JSCE"and 2014"SSCQE" in Civic Education.
4. To find out whether 2012"JSCE"results and 2014"SSCQE"Correlations (in mathematics, English and civic education) are in-variant for male and female.

1.4 Research Questions

To guide this study the following research questions are formulated.

1. Is there any significant relationship between 2012"JSCE"and 2014"SSCQE'in mathematics?
2. Is there any relationship between 2012"JSCE"and 2012"SSCQE' result in English Language?
3. Is there any relationship between 2012"JSCE"and 2014"SSCQE' result in civic

education?

4. Is the 'JSCE' 2012 and 2014'SSCQE correlations (in mathematics, English and civic education) are in- variant for male and female?

1.5 Research Hypotheses

In order to find answers to the research questions, the following hypotheses were formulated

1. H_O1: There is no significant relationship between "JSCE"2012 and 2014 "SSCQE" in mathematics.
2. H_O2: There is no significant relationship between "JSCE"2012 and 2014 SSCQE in English Language.
3. H_O3: There is no significant relationship between "JSCE"2012 and 2014"SSCQE"in Civic Education.
4. H04: The"JSCE"2012 and 2014"SSCQE"correlation (in mathematics, English and civic education) are in -variant across the gender. .

1.6 Significance of the Study

It may serve to further confirm the relationship between the 2012 examination on 2014 senior school certificate examination. The findings of this research would benefit the following: Government policy makers, Agencies, students, teachers, future researchers , curriculum planners, and so on.

Policy makers

Among the beneficiaries of this study are policy makers which include Kano Education Resource Department. The finding of this study may enable the Government to strictly hold criterion for government sponsorship of WAEC/NECO Policy makers may decide to provide the validity and reliability of JSCE so as to

Predict it's counterpart exams. In addition, the finding may help in decision making, allocation of resources and other activities.

Agencies

Non- governmental organization may benefit with this study through many ways Which include, having the fact that these two exams are related to each other, meaning that, JSCE has a significant relation with SSCQE, these will enable the agencies to double their effort in supporting education, either by given scholarship to less privilege student or even an orphan student, if it is otherwise, N.G.O will support the education system of the state.

Student researcher

Student researcher may benefit with this study in build up the existing knowledge, by considering the study as additional review of literature, more so, it may provide base for further researcher effort in similar or related area of interest to any student researcher, it may help to know their strength and weakness for taking action. It also motivates the learner to know where to devote more time, example focus on related literature.

School head/ teachers

Are among the beneficiaries of these investigation, when used JSCE and SSCQE result to have information on students interest and personality so they can be placed in appropriate subject combination in senior secondary level, similarly, this research effort may help in discovered the extent to which their instructional objective, content of the lesson was covered, and improvement of instructional strategies.

Future Researcher

A number of research was conducted in finding the relationship between two exams, some conducted on the predictive validity of JSCE and SSCQE, while others study the relation between MOCK and SSCE, with same subject and other with different subject. This finding may enable the future researcher to fill the garb or conduct a research on the topic suggested by this researcher.

Curriculum planners

Curriculum planners, also benefit with this study by creating awareness on the need and improvement of teaching and learning at all level of education as a way of addressing poor academic achievements in the subsequent level of education, It also draw their attention toward renewal of scheme of work concurrently.

1.7 Scope and Delimitation of the Study

The study was limited to only government secondary school (GSS&GGSS) that ran both JSS & SS classes in the same environment within the zone under study. The investigation for relationship of 'JSCE" on 'SSCQE" was also limited to "JSCE"2012 academic year with its correspondence of 2014"SSCQE" 2014. This was mainly due to the availability of data on subjects, time and money factors as well as case of data analysis concerned. Also, this study was limited to Dawakin Kudu Zone, due to proximity of the area as sub-urban (Rural/Urban) and was the largest zone in Kano Educational Zone and located under three (3) Local Government Areas viz: Dawakin Kudu, Warawa, and Kumbotso. Accessibility of required data and adequate subject for the study necessitated the choice of Zone. The research was limited to the study on three subjects: English Language, Mathematics and Civic Education.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter presents a review of related literature on some major areas of the problems under investigation, which consist of conceptual background, theoretical frame work, review of related empirical studies, summary and uniqueness of the study.

2.2 Conceptual Framework

2.2.1 The Concept of Tests

A test is, in its simplest terms, a sample of behavior. The behavior being tested, sometimes called the construct, may include a person's learning, potential to learn, or current mental state. In addition, a test is usually standardized so that extraneous and irrelevant factors can be ruled out when evaluating test results. This standardization typically includes the format and style of the test booklets and answer documents, administration time, allowable administration accommodations, permissible modes of administration as well as other factors that might impact a person's responding (Van Sickle, 2008).

Anikweze (2010) defines tests as "Any kind of device for measuring ability, achievement, interest and other traits, in educational context. He also stressed that tests is trail run through a process or equipment of find out if it works. Such tests serve as basis for evaluating or judging something or somebody in term of presence of certain qualities, attributes, or capabilities. He also view it as set of question, task, or problems intended to measure on individual‘s knowledge, skills, aptitude, intelligence and achievement etc (Anikweze, 2013).

Peter (2007) outlines the various purpose or goal of classroom testing which include curriculum evaluation, motivation of students, placement and promotion, ability grouping, diagnoses and remedial work, identification and study of exceptional children. Continues assessment, guidance and counseling students, educational research or data collection purpose and assessing students' performance or achievement in various subjects. The conduct of any examination is to satisfy one or more purpose which it intends to fulfills.

2.2.2 Type of Tests

There are several types of tests that students, teachers, or parents might encounter in an educationally setting. These tests are varying and sometimes overlapping. And one can classify tests in many different ways including but not limited to: group, individual, intelligence, aptitude, vocational, clinical, and achievement. (Vansickle, 2008).The nature or type of tests is determined by the particular purpose of measurement, therefore, it classified based on:-The basis of type of questions (e.g. Essay, Objective, Short answer type which comprise of alternative response type, marching type.

The following are types of tests on different based (Sidhu, 2005).

1. Type of tests or tests base on Administration of tests, example:
    A. Individual tests
    B. Group tests
    C. Speed and power tests.
2. Type of tests base on Standardization, example:
    A. Teacher made tests
    B. Standardized tests
3. Type tests base on Scoring, example :

A. Amenable to qualitative scoring.

B. Stencil or punch-board scoring.

C. Amenable to machine scoring.

4. Type of tests base on traits example:

A. Intelligence tests

B. Tests of Special abilities

C. Personality tests.

D. Achievement tests

The above classifications highlighted a broad idea of the extensive field of testing. In such way as to know the degree of success attained by the students in a specific area of learning, achievement test are to be apply, achievement tests are employed to know the partial and final achievement of students in various subjects and activities..In other view, Anikweze (2013), defined achievement test as an ability test designed to measure what the individual has learned to do as a result of planned instruction and he further classified it into two types: teacher made test and standardized tests.

Teacher Made Tests

Teacher made tests (TMT) are those achievement tests prepared by classroom teachers. Anikweze, (2010) defined Teacher made tests (TMT) as those achievement tests prepared by classroom teachers. Four categories of test are used by teachers for assessing the achievement of their instruction and for differentiating and certifying their pupil. The major types are: free response or essay test and structured response or objective test. Sub categories of these types will be treated below. The two other types of tests that are useful for assessment depending on the purpose of the teacher are quiz or oral test and performance or skills tests. The various categories of tests contribute

either separately or in concert to serve the purpose of Teacher Made Tests.

Characteristics of a Teacher made test

Anikweze, (2013). Highlighted the characteristics of Teacher made tests in comparing Teacher made tests and standardized tests, content based on particular requirements of the school or the individual class. It is based on a small area of knowledge or skill; Frequency depends on the teacher. Constructed by one teacher or sometimes in cooperation with one or two teachers with limited resources; hence questionable reliability and validity.

There is no item analysis; reliability is unreported. Test are based on individual teacher`s effort and limited expertise; hence reliability ranges from low to moderate.

Standardized Tests:

Standardized tests on the other hand, are constructed by a group of individual who are specialized in test construction rather than by a single person. (Sidhu, 2005) outline some distinctive feature of standardized test.

Here are some ways in which standardized tests differ from tests that the individual teacher would prepare for his own class.

The standardized test is based on the general content and objectives common to many schools all over the country, whereas the teachers own test can be adapted to content and objective specific to his own situation.

The standardized test deals with large segment of knowledge or skills, whereas the teacher made test can be prepared in relation to any specific limited topic.

The standardized test is developed with the help of professional writers, reviewers, and editors of test items, whereas the teacher made test usually relies upon the skill of one or two teachers.

It provides norms for various groups that are broadly representative of performance throughout the country, while teacher's own test lack this external point of reference. Sidhu, (2005).

Examples of standardized achievement test- intelligence test, Wechsler Adult intelligence test, differential Aptitude test, Kaufman Adolescent and Adult test, WAEC May/Jun, Nov/Dec and junior WAEC produce by West African Examination council (WAEC). Post U.T.M.E. by University Matriculation Examination (UME), SSCE May/Jun, Nov/Dec, JSCE, set by National Examination Council (NECO) also Federal Common Entrance Examination (FCEE) made by NECO, and JSCE and SSCQE are made by KERD.

2.2.3 Validity

According to the Standards for Educational and Psychological Testing, published in (1999) by the American Educational Research Association, American Psychological Association and the National Council on Measurement in Education, validity is defined as the extent to which empirical evidence and theory lend support to the interpretation and inferences made about test scores for particular uses. Validity is considered the most fundamental component of developing and evaluating educational and psychological tests. (Abubakar, 2014)

The validity of a test refers to whether the test measure what it is intended to measure A valid test must measure accurately and consistently what it is designed to measure and nothing else. A valid test must satisfy both the Edumetric and the psychometric function of evaluation.

This implies that the test should be able to measure the achievements of the learners discriminate them according to their demonstrated abilities and at the same time, be

appropriate for predicting subsequent outcome Anikweze, (2013).

The validity of Test concerns what the test measure and how well it does so, it tells us what can be inferred from test scores. In this connection, we should guard against accepting the test name as an index of what the test measure. Anastasi (2010).

Kasuga, (2009). Defines the validity of examination as the extent to which it produces result of the type its objective prescribed, they also suggest that a tests has high RELATIONSHIP for academic selection if most examinees are ordered at the end of training much the same way as they were rank by examination during selection.

Factors that affect the validity of tests

To ensure the validity of tests set for leaner's teachers should give serious consideration to the following factors that influence the validity of teats. Failure to do so might imply wasting the learners' time writing test that are technically worthless. The factors are:

Comprehensiveness: Tests in relation to content area covered. This factor suggest that a test should cover a representatives sample of all the materials taught by the teacher and Learnt by the pupil.

Appropriateness: Test with reference to the standard of tastes. A test that is valid for Senior Secondary III students cannot be equally valid for junior Secondary School l learner. At least, the vocabulary level of the question may be a handicap to the J.S. students and in any case, there is a big difference the syllabuses of two categories of students even though the concepts may be related.

The range of ability of Testees: Is another factor for consideration. Heterogeneity by age, ability, knowledge and industry may give erroneous idea of test validity since it is

based on test results. For ‘teaching test' it is advisable to pitch the difficulty level of the items with a range of very easy to very difficult so that most learner will have the opportunity to test success. At the same time, the university potential in the class will still find questions that will excite their thought processes.

The relevance of traits: With reference to prognostic use (predictive validity) of tests, the relevance of traits or characteristics emphasized by the test must be clearly established.

Choice of Items: Related of items to anticipated outcomes of instruction should be considered in items of the process objective of instruction according to Bloom and others (1956); example, a test of reading may be based on ability to pronounce difficult words and thereby neglect other aspects of reading ability such as fluency and understanding of what is read. According to Thorndike and Hagen (1995), "validity is always specific to a particular curriculum or a particular job". Hence one can always ask the question: validity for what?

Reliability of the test: Is yet another factor to be considered .Both the reliability of the predictor and that of the criterion should be high enough to guarantee the validity of the tests (Anikweze, 2013).

2.2.4 Types of Validity

Ukwuiji (2009), the validity of a test is most important attribute of a test and concerns with what the tests measures and how well it does so. It also identified different type of validity as content, criterion (concurrent and predictive). In addition, Kurpius and Stanfford, (2006) Opined that are three main type of validity: Content validity, Construct validity and Criterion related validity. Anikweze, (2013) opined that validity classify in to Content, Construct and Criterion related validity. There are three main type of validity, namely; content, construct, and criterion related validity (borg,

1983,Osuala, 2007, Rust and Golombok, 2009).

Content Validity: This refers to comprehensiveness of the instrument in covering the content area that has been treated during instruction. It also implies the adequacy with which the test items appropriately and representatively sample the content area to be measured. Technically, content validity is obtained by the test setter being guided by an operational blueprint which shows the distribution of the test items by process objectives and by content areas. Anikweze, (2010). Similarly, Content validity is describes the extent to which a test measure domain of tasks under consideration. It is also defined as a tests capability to effectively measure or cover the prescribed topic and instructional objectives is expected to cover during the course of instruction (Anikweze, 2013). Opinion of authors does not differ on what content validity is meant to be, they only differ on the type of content validity. Ibrahim, (2014) has opined that face validity and logical validity are type under the content validity, he used to cite an example at this juncture, whenever he sets his Exams, he used to forward it to Prof. Isyaku. For face validity, being a test expert, he gave it the value judgment. According to (Peter 2007), the purpose of face validation is to establish the appropriateness of the instrument in relation to purpose and population of the study.

They include:

- Structure of the instrument in items of construction and well thought out format. Clarity of items.
- Appropriateness of difficulty level for the respondent,
- Correct spelling of difficult words,
- Spacing of items between lines.
- Adequacy of instruction on the instrument,

- Reasonableness of items in relation to the perceived purpose of the instrument,
- Legibility of print out.
- Attractiveness of paper used, and
- Other criteria that satisfy face validity.

On the other hand, logical validity defines as a test capability to adequately cover the test blue print or the table of specification (Anikweze, 2013), and observe that logical validity yields quantitative evidence of content validity.

Construct Validity: Is the second type of validity**,** is an abstract concept or attribute, it is a complex of mental images and impressions systematically synthesized to aid the mind in further speculation (Anikweze, 2010). In another view constructs validity define as the theoretical or hypothetical validity of a test. It also defined Validity as the extent to which a test performance can be interpreted in term of certain psychological construct.

There are two approaches in finding the evidence in this type of validity. The first approach is to demonstrate that the items on the instrument are inter-related and do measure the same construct. In this case a researcher can use either inter items correlation or factor analysis. The second approach is to demonstrate that the instrument behaves as the researcher would expect a measure of the construct to behave. Anastasi, (2010).

Criterion Related Validity

This study has much concerned with this type; criterion related validity is concerned with the relationship between the scores from one instrument (predictor) and some other independent measure (criterion). There are two variant of criterion related validity. The first type of criterion related validity is the concurrent validity;

concurrent validity serves as evidence that there is a strong relationship between test scores and some criterion measured at the same time. This implies the administration of two instruments, concurrently or in approximately the same time frame. (Anastasi, 2009) defines concurrent validity as a diagnosis of existence status, also defined concurrent validity as expression of relationship between test performances and accepted contemporary criterion. The second kind of Criterion related validity which holds implication for this research effort is relationship. Claudius (2013), defines predictive validity as the extent to which a score on a scale or tests predicts scores 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 criterion variable. For example, a researcher may be interested to find out whether or not the Primary School Leaving Examination (PSLE) scores predict the Form two secondary Education Examination (FTSEE) performances. For this case, the predictor variable will be the PSLE scores which will have to be paired with their corresponding criterion variable, the FTSEE scores to determine the extent of relationship; it becomes an issue when the purpose is to use an instrument to estimate some important form of behavior that is external to the measuring instrument itself. Primarily, relationship involves correlating scores on the predictor variable with scores on the criterion variable. Another example, the university entry examination score would constitute a predictor variable while the grade-point average obtained after three years of university education would be the criterion variable.(Mc Daniel ,1994, Claudius, 2013) points out that predictive validity is established when test scores are shown to predict criterion data collected at a later time. The author gives examples of the Scholastic Aptitude Test (SAT) and the Graduate Record Examination (GRE) as

examples of instruments which are used to predict future performance.

The term prediction is generally used to refer to functional relations between an instrument and events occurring before, during, and after the instrument is applied, hence post diction, concurrent validity, and prediction. It is the nature of the problem which dictates when the two sets of measurements have to be obtained.

Predictive validity is only determined by the degree of correspondence between the two measures involved. In making decisions related to applied problems in psychology and education, Predictive validity is frequently used.

Sambo, (2005) outline the following essentials condition for prediction such as correlation, History, reliability, validity, existence of causes of a phenomenon at the time of prediction, uniformity of cause well defined phenomenon, fractionating population and clustering of variable. This study focused on the predictive purpose of examinations. Examinations which are used to predict student's future performance are referred as Predictive Examinations, in predictive examinations the current level of performance is compared to a well-defined behavioral domain expected in future after receiving specific instructions (Anikweze, 2013). 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 teacher, students, parents, employee and the society to enable valid decisions.

2.3 Theoretical Frame Work

It is pertinent to know that theoretical frame work is needed in any test research endeavor; one is at liberty to evaluate the tests by using a particular test theory provided that there is an acceptable rationale. Test theory has been describe as theory

of psychological test and measurement which provides a general collection of techniques for evaluating the development and use of specific psychological test in assessment (Ojerinde, Popoola, Ojo and Onyeneho, 2012).

Thus, test theories constitute perspectives or frameworks within which test research endeavor is couched. The literature (Lewis, 2007 and Ojerinde, Popoola, Ojo and Onyeneho, 2012) identifies four test theory. They are classical Test theory (CTT), and item response theory (IRT), common factor theory (CFT) and Test theory: A unified Treatment. But with the reference to this study, CTT and IRT were used being the widely employed in evaluating assessment.

2.3.1 Item Response Theory (IRT)

The concept of the item response function was around before 1950. The pioneering work of IRT as a theory occurred during the1950s and 1960s. Three of the pioneers were the educational testing service psychometrician Frederic M. Lord, the Danish mathematician Georg Rasch, and Austrain sociologist Paul Lazarsfeld, who pursued parallel research independently; key figures who further the progress of IRT include Benjamin Drake wright and David and rich. IRT did not become widely used until the late 1970s and 1980s.Since the beginning of the 1970's IRT has more or less replaced the role of CTT had and is now the major theoretical framework used in this field. In psychometrics, items response theory (IRT), also known as latent trait theory, strong true score theory, or modern test theory, is a paradigm for the design, analysis ,and scoring of test, questionnaires, and similar instruments measuring abilities, attitudes, or other variables. It is theory of testing based on the relationship between individuals' performances on a test item and the test takers' level of performance on an overall measure of ability that item was designed to measure. Several different statistical model are used to represent both item and test taker characteristics. (1)Unlike simpler

alternative for creating scales and evaluating questionnaire response, it does not assume that each item is equally difficult. This distinguishes IRT from, for instance, the assumption in Likert scaling that "All items are assumed to be replication of each other or in other words items are considered to be parallel instruments. (Ostini, Nering, Michael. L., 2005).

One of the major contributions of item response theory is the extension of the concept of reliability. Traditionally, reliability refers to the precision of measurement (i.e. the degree to which measurement is free from error). Traditionally, it is measured using single index defined in various ways, such as the ratio of true and observed score variance. This index is helpful in characterizing a test's average reliability, for example in order to compare two tests. But IRT make it clear that precision is not uniform across the entire range of test scores. Score at the edges of the test's range, for example, generally have more error associated with them than scores closer to the middle of the range. Adegoke (2013) further explains two point regarding IRT. One, the IRT-based item analysis consist of (1) determine sample invariant item parameter (difficulty index b, and discrimination index a) using relatively complex mathematical techniques and large sample size; and (ii) utilizing goodness of fit criteria to detect that do not fit the specified response model. Therefore, poor items are usually identified through a consideration of their discrimination indices (the value of *ai* being a low positive or even negative) and difficulty indices (item should be neither too easy nor too difficult for the group of examination being assessed). Thus, the difficulty index is a function of the average ability of the examination. IRT models are available for response options that have nominal or ordinal properties. In addition to deciding how to score the item responses, investigators must consider the dimensionality of the item pool or, more precisely, the dimensionality of the latent traits that underlie item

responses. Un-dimensional models assume that all items assess a single latent trait. Multidimensional models assume that the items assess two or more latent traits. Until recently, un-dimensional models have been easier to use and researchers have usually proceeded with this type of analysis regardless of the fit of the model to the data.

2.3.2 Classical Test Theory (CTT)

Classical Test theory (CTT) was originally the leading frame work for analyzing and developing standardized Test, CTT has been the basis for developing psychological scale and test scoring for many decades. In many cases reliability in CTT is based on parallel tests which are difficult to achieve in practice. The precision of measurement is the same for all score a particular sample. In CTT longer test are usually more reliable than shorter tests.

2.3.3 Conceptual Foundation of CTT

Classical test theory (CTT) are based on the conceptual foundation that any score obtained by individual on a test (X) is made up of two components: true score (T) and error score (E) (Stage, 2003; Kline; 2005; Kurpius and Stanfford, 2006; Anikweze, 2010). Thus, there are three types: X, T, and E. The relationship among them is expressed in the equation: X= T +E. The obtained score (X) may be quite familiar to teachers, students, or parents. It is simply the score that student earn on a test. But the other types of scores, the true score (T) and the error score (E), may be unfamiliar or even confusing to many a layman. This is because, as Kurpius and Stafford (2006) point out, "they are hypothetical concepts" whose actual value one cannot know. Being hypothetical, the true score is usually thought to be the mean score that a person would get on the same test if he/she had taken the test for an infinite number of times.

In other words, a person would get an infinite number of scores on the same test, and the average of these scores is the true score. Understood from another angle, it is still the mean score a person would get on taking two or more parallel form of a test. Thus, the true score is unchanging from one administration to another of the same test, or from one form of a test to another. Some may have more error, while others may have less error attached to their respective obtained scores. It follows then that there is error variance. The error variance attaches itself to the true score variance to yield the observed score variance. The relationship among the three types of variance is given as $\Theta^{2x} = \Theta^{2t} + \Theta^{2e}$ (Kurpius and Stanfford 2006). Secondly, error can be random or systematic. The CTT is mainly interested in dealing with the random error component of the obtained score (Kline, 2005).

The following table illustrates the relationships among the three types of scores and their corresponding variances:

Table 2.1: True, Error and Observed Scores and their sums. Mean and variances.

STUDENT	T	E	X
A	80	+2	82
B	91	-3	88
C	95	0	95
D	88	-1	87
E	85	+4	89
F	91	+3	94
G	80	-2	78
H	94	0	94
I	88	+1	89
J	85	-4	81
SUM	877	0	877
MEAN	87.7	0.0	87.7
VARIANCE	24.81	6.0	30.81
S.D	4.98	2.4	5.55

Source: Kurpius and Stanfford (2006: 104)

Types of CTT Measurement

Measurement is generally believed to the process of assigning numerals (numbers) to attributes of a persons, events or objects according to rules. Measurement operations take place every day in different places or situations. For example, suppose a tailor used a measuring tape and determined a customer size of trouser as 42 height and 34. In this situation measurement could be said to have taken place. This is because: (1) an instrument (tape) has been used, (2) a numerical value (42 heights and 34 weights) has been assigned to (3) an attribute (body) of a person. Similarly, suppose a teacher determined a student's performance on Statistics Test to be 63%. Again, in this situation, measurement has taken place. However, in the second situation, the instrument, the numerical value, the attribute and the person are statistics test, the score of 63%, achievement or learning and student, respectively. Note that it is not a person that is measured, but his /her attribute (characteristic). Also note that the three aspects of measurement (namely, an instrument, numerals and attribute) equally apply to measurement of objects and events. However, measurements could be crude, refined or something in between. The "crudeness" or otherwise of measurements depends on the presence or absence of three attributes of measurement; magnitude (or order), equi-distance (or equal interval) and absolute zero (Anikweze,2013). The attribute of measurement should not be confused with attributes of persons, events or objects mentioned earlier. The latter are simply characteristics or equality, while the former are based of classifying measurements. Accordingly, four levels/ scales have been identified. They are nomal, ordinal, interval and ratio scales (Owie, 997; Kurpius and Stafford, 2006, and Anikweze, 2013). The normal scale is a crude level of measurement. It lacks all the three attribute of measurement. Nevertheless, it is used in assessment to assign numerals to persons, events or objects for the purposes of

labeling or naming, identification and categorization. But in the ordinal scale number are assigned to reflect some order (or magnitude) in respect of possession or presence of an attribute. A typical example is rank position in examination or race e.g. 1st, 2nd 3rd, 11th, 12th 13th 14th 15th, etc. However, the scale lacks equi- distance. The scale that is better than the ordinal scale is the interval. This scale is the most commonly used scale in educational assessment. It has two attributes of measurement: magnitude (or order) and equi-distance, but lacks absolute zero. The absolute zero and the other two attribute of measurement define the fourth type of scale, the ratio scale. In this scale absolute zero is used to mean absence or lack of an attribute. Thus, it is the absolute zero that makes the ratio scale most refined and precise. Notwithstanding the precision associated with the ratio scale, it is not used in educational assessments. For this reason, Rust and Golomok (2009: 62) stated that "Classical measurement theory tell us to differentiate three types of measurement; nominal, ordinal and interval"

2.3.4 Assumptions Ramifications of CTT

The CTT frame work makes three fundamental assumptions: (1) true score and error score are not correlated, (ii) the average error score over a population of examinee is zero, and (iii) error scores on parallel tests are not correlated (Hambleton and Jones, 1993) Ramification of CTT, as explained by Kline (2005), include the following:

Standard error of measurement (SEM) is consistent across population. That is, the SE does not differ from person to person but is instead generated by large numbers of individuals taking the test, and it is subsequently generalized to the population of potential test takers. In addition, regardless of the raw test score (high, medium, or low), the standard error for each score is the same length of a test influences its reliability: As tests become longer, they become increasingly reliable this is because larger number of items better sample the universe of items and statistics (such as

mean test scores) generated by them are more stable if they are based on more items.

Item statistics are sample- dependent:

The important statistics about test items (e.g. their difficulty and discrimination indices) depend on the sample of respondents being representative of the population. Statistics generated from the sample can only be confidently generalized to the population from which the sample was drawn. The two theory played are similar functions, all of them are believed to have the ability to generate invariant estimates of item and person parameter. In other words item statistics are sample independent and vice versa. These models are built off a single ability parameter (Ɵ). This parameter is hypothetical, like CTT'S total-test true score (X) as shown above. Interestingly, the relationship between the observed score and the ability parameter IRT is the same relationship as the observed score and true score in the CTT. Another point of similarity between IRT and CTT lies in item selection. Under both frame work, selection of items for inclusion in a test depends on the intended purposes of the test. Nevertheless, it is worth noting that the CTT predates the IRT. According to Kline (2005), the CTT has been the foundation for measurement theory for over century. It is basically concerned with test-level information, in contrast to the IRT which is concerned with item-level information (Fan,1998; Baker, 2001; Adegoke, 2013). However, it should not be misconstrued that CTT is never interested in item-level information. As a matter of fact, the CTT frame work is used to examine item statistics that yield valuable item- level information (Adegoke, 2013). These two theories discuss above fit in as a frame work for this study, as CTT and IRT been the foundation for measurement, these theories of testing based on the relationship between individual performance on test item and the test takers' level of performance on an overall measure of ability that items was designed to measure, CTT and IRT are

based on test level information that is validity, reliability.

In addition, CTT in particular provide the two component of scores, true scores(T) and error scores (E), for instance if 2012 JSCE felt to predict 2014SSCQE, meaning that, there is something wrong, then the error scores has raised, but when 2012 JSCE has a relationship with 2014 SSCQE, this is normal situation, and true scores was hold, these shows the relevancy to this work with the theories.

2.4 Review of Empirical Related Literature to the Study

The Study was to investigate the relationship between JSCE 2012 on SSCQE 2014 among senior school in Dawakin kudu Educational Zone, Kano State. Many researchers conducted a research that are related to the topic of the study, among which are as follows:

Edokpayi and Suleiman (2011) discovered that, the predictive strength of the junior secondary certificate (JSCC) Examination in integrated Science in predicting the performance of students in the Senior Secondary certificate (SSC) Examination in chemistry in Zaria metropolis, Nigeria was examined. The study employed the ex-post facto design. The study population comprised of 400 students from four purposely selected Secondary School in Zaria metropolis. Out of this population, a sample of 200 students was selected through the stratified random sampling technique. Data were collected through an inventory and analyzed with the use of z- test and correlation analysis. The result of the investigation revealed that the academic achievement of students in integrated science in the junior secondary school certificate (JSC) examination among the selected secondary schools in Zaria metropolis was a poor predictor of later achievement in chemistry at senior secondary school certificate (SSC) examination. It is recommended that more qualified and

competent teachers should be trained and employed to teach integrated science in Junior Secondary School and classroom teachers should try as much as possible to relate the concept of integrated science to chemistry and other basic science.

Olorunmowaju (2007)in his work Predictive validity of Kano state junior school certificate examination on NECO/SSCE among students in Nassarawa Education zone, Kano state, investigated on the number of 279 sample size, using spearman ranking order(Rho). The finding was formulated on six null hypothesis, were indicated the following finding; There is no significant relationship between KSJSC and NECO-SSC examination result in English language for all students , this finding also hold true for both male and female, science and Art students. However for commercial students, the KSJSC and NECO-SSC examination result in English language relationship was significant. There is no significant relationship between KSJSC and NECO- SSC examination results in Mathematics for male, science and Art. However, in mathematics examination results there was significant relationship for all students in commercial students.

Falaye & Afolabi (2005), on the predictive validity of junior secondary school on senior secondary school NECO result. The study was undertaken to find out whether there is significant relationship between the overall performance of students in the JSCE and their performance in the Senior School Certificate Examination (SSCE). The study constituted the sample for the study. Promotion examination scores of the students in Senior Secondary School SSS 1 and SSS 2 as well as their SSCE in six major subjects were compared with corresponding JSCE scores using correlation analysis procedures. The result shows that Osun state JSCE is a poor predictor of students' performance in the SSCE. However, JSCE English Language and Mathematics were found to have a greater capacity to predict performance in SSCE

English Language and Mathematics than all the other subjects ($r = 0.32$, $p < 0.05$ and $r = 0.22$ $p < 0.05$ respectively).Conclusion: Overall performance in JSCE across the six subjects investigated is a poor predictor of SSCE performance (except English Language and Mathematics). The trend could be due to the constraints facing the MOE which perform the role of an examination

Studies like, (Abubakar, Wokoma, Afebuame, 2012), compare the analysis between performance in Mock and Senior Secondary examination of unity schools in Rivers state. A sample of 344 students was selected from the unity schools in Rivers state in 2007/08 and 2008/09 session. Two hypotheses were formulated for the study on relationship and predictive validity of two scores from MCES and SSCE. The two score were analyzed using pearson product moment correlation coefficient and regration analysis. The result of analysis revealed a positive correlation between the scores. Also the mock examination scores (MES) could significantly be used to predict senior school certificate examination scores (SSCES). Based on the finding it was recommended that that teacher should help their students improve their MES which would ardently result in improvement of their SSCE thereby improving the failure rate of student in mathematics at the senior secondary school level.

A study conducted by (A Lavi, 2012) in an attempt to investigate the probable relationship between English scores of high school and pre-university with the English scores of the learner in (INUEEE) Iranian National University Entrance English Examination. To find out the relationship, a sample of 42 students randomly were selected out of the whole population of the pre- university students in Naghadeh, west Azerbajan. The student final English scores in grade three and pre- university 1 and 2 were collected from the school archives and all set of scores were correlated

with the students' scores on INUEEE. All the statistical analysis was done by SPSS. Results of analysis shown that all the correlation were significant at (0.01) level of significance. However, since we were indented to use these set of (high school and pre- university) scores for INUEEE scores prediction, we failed to do so due to low correlation coefficients between the variables. Therefore, we can strongly state that there is no guarantee that those students who grade high in high school and pre-university English Examination will grade high in INUEEE as well.

In the same vein these works indicated the empirical evidences on the relationship between the predictor and criterion of this study, and also this study investigate the likely relationship between student result in JSCE 2012 on SSCQE 2014 results in English Language, Mathematics and civic education.

2.4.1 Academic Achievement in English Language, Mathematics and Civic Education across Gender

Teaching and learning are carried out with the aim of achieving specific objective. At the end of a successful teaching and learning programmed, the teacher tries to determine the extent to which the set down objective have been attained. This is done with the aid of an instrument called tests. The performance of the learners in the tests is indication of the success or otherwise of the teaching/learning programmed. The performance is expressed in scores or grade and is an indication of the learner's academic achievement. A number studies were made on academic achievement across gender specifically in Mathematics, English language and civic education, in addition, the work of (Muhammad and Halima, 2014) also emphasized as in their studies that examined differences in the performances in STM education between Male and Female graduate of Sa'adatu Rimi College of Education. The population of study

consist of graduates majoring subject from 2005 to 2012 academic session, statistic shows that about 610 students graduate within the period under consideration.

A combination of simple and simplified random sampling technique were used to select a sample of 200 (150 male and 50 female) among the graduate. The design of the study was expost - facto and the examination result of the sample were obtained from the exams office of the college. Two hypotheses were tested through the use of t-test for independent sample. Result of the data analysis revealed that there was significant difference in the performance of male and female graduate in physics, no significant difference was found in the performance of male and female graduate in chemistry. Based on finding of the study, recommendations were proffered among which were: Female student should encouraged pursuing more mathematics related course through remedial programmed. Government should provide incentive to achieving female students in science courses to serve as morale booster. Similarly, the second study was cross national studies of educational attainment at the university level supported the view that girl appear to perform less well than boys in STM Subjects. The choice of occupation also influences girls' performance in the STM Subjects (Mohammed and Halima, 2014).

Rufa'i (2007) describes gender as a social construct used in classifying role and relationship of men and women in a given culture. As children, girls are expected to play with dolls and other toys that develop verbal and social skills while boys play with block, video games and other toys that encourage spatial visualization. Later, during adolescence, girls take fewer Mathematics and science courses than boys, perhaps because of stereotypes of Mathematics and science as masculine subjects and because of less encouragement from teachers, peers and parents.

In the same vein also students' scores in English language in JSCE is a weak predictor of their achievement in English language in SSCE. This study also revealed that there is a significant correlation between male students' achievement in JSCE and their achievement in SSCE and a significant positive correlation between female students' achievement in NECO-JSCE and their achievement in NECO-SSCE. Finally, gender was found to be a significant predictive moderator of students' achievement in NECO-SSCE. The predictive strength of JSCE on SSCE conducted by NECO is significantly moderated by gender in all the subjects under investigation. Kolawole and Udoh (2012), studied Head Circumference as a Predictor of Aptitude Performance in Mathematics where they indicated that, Mathematics is the tool in the development of science -based knowledge such as technology, industry and even for sound analytical reasoning in daily living in this communication age.

Enemona (2014) in their difference works describe the relationship between knowledge of Mathematics and the related subjects. Mathematics is the bed-rock of any technological discipline that students may decide to pursue in the future. But the present low level of performance in this subject does not offer much hope for success in such technological pursuits (Daily Trust, 2011:14th April).In Africa, Ogunsiji and Fakeye,(2009) argue that English language plays the fundamental roles of being the means of instruction in Nigerian schools from primary to tertiary level. The knowledge of the contents of school subjects is transferred to the students at all levels of education via English language medium. It therefore follows that how well students would fare in academic achievement depends largely on their level of proficiency in English language which is the medium of instruction. They assert that their results showed that "there is a significant impact of English language proficiency on students' overall academic achievement and that English language proficiency of the students

has a significant positive relationship with their overall academic achievement." Accordingly, the relation between English language proficiency and academic achievement was examined in their study, and a significant connection was found between proficiency and grade point averages (GPA) of academic achievement. Similarly, the results revealed significant correlation between English language proficiency and achievement in English speaking and writing subjects. Socioeconomic status also was positively correlated with academic achievement for both the Asian and Hispanic students in this study. Students with limited English language skills have also been studied in post-secondary institutions.

Wille, (2006), examined the predictive value of English and Spanish proficiency, home language use, immigration status, gender, place of geographic residence, and mother's Education on the GPA of ninth-grade Mexican-American and Puerto Rican high school students. Interestingly, both gender and immigrant status significantly predicted GPA. Females earned significantly higher GPAs than the males in this study. Gender differences may be explained by the differences found in the school behavior of girls and boys, as behavior can affect the academic performance of all students. Despite the challenges of immigration, the Hispanic students who were born outside the United States had significantly higher levels of academic achievement than students who were born in the United States. He also suggested that a positive relation between the effects of poor social and school environments and the length of time needed to adapt to new culture, among the Mexican. Americans, higher English proficiency was correlated with lower academic performance. This was not true for the Puerto Ricans in the study. The reform process in Armenia includes the development and improvement of social studies curriculum and instruction in public

schools. In the last decade only a few research projects have been conducted in Armenia to identify the status of social studies teaching and learning in schools. In 2002-03, Junior Achievement Armenia (JAA), Commissioned Van Dusen Consulting, Inc. (VDC) to conduct a comprehensive external Formative evaluation of the JAA Civics Education program and to assess their program implementation, summarize curricular the general satisfaction with the civics instruction, and determine necessary tasks to improve the civic education program (JAA. 2004).

All experts identify the ultimate goal of civic education as the preparation of citizens for democratic society, and that the knowledge transferred through various educational processes should contribute, enhance, and strengthen democratic values. Civic education should develop learner's intellectual skills such as analysis, evaluation, synthesis, multiple perspectives, critical thinking, and in-depth understanding of political, social, and economic issues. "Recent political events and the attention to world-wide issues have opened the door to increased focus on citizenship, rights and responsibilities, comparative governments, the role of religion, foreign and domestic policy, global responsibility, and the need for understanding from multiple cultural and economic perspectives. Service learning, with a civic mission focus, has become a mainstay in many school programs" (Kidwell, 2005).

2.5 Summary and Uniqueness of Study

These chapter consist the following: Conceptual framework which includes the definition of Tests, Type of Tests, uses and its characteristics, were formulated at the beginning of this chapter. Literature from various scholars was observed on how they perceive the concept of validity, type of validity Theoretical frame work through which Classical Test Theory and Items Respond Theory were used, review of

empirical related literature of Academic achievement in English Language, Mathematics and civic education across gender. The review was show the availability of vast body of literature in this area helped the researcher to undertake the work.

Although numerous studies on relationship were made but this research was Extended to Placement examination (JSCE 2012) as the predictors variables and senior secondary Certificates Qualifying Examination (SSCQE) as the criterion variables. And restricted to senior schools that operate both JSS and SS classes at one ground and used three (3) subject as key variables bring about the uniqueness of the study. Similarly, the variation of this study from the finding of previous studies was making the study unique.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter focuses on the research design, population of the study, sample size and sampling technique, the remaining areas such as instrumentation, data collection procedure and data analysis procedures were elaborated.

3.2 Research Design

The study employed a correlational research design being one of the component of survey design, in addition, the design was opted as for the data is continuous and fulfill other requirement for the design to be employed. Sambo, (2005) stated that co-relational design is an extension of statistics group comparison design. A correlation between two variables implies that what is true of one of the two variables can be used as a basis of assuming and predicting what is likely to be true about the other variables.

In this work two variables correlated, the "JSCE 2012"in English Language, mathematics and civic education and "SSCQE 2014" Predictor and criterion variables respectively, the most common quantitative measure of correlation is the Pearson product-moment correlation coefficient. The study constituted twenty two (22) boys and ten (10) girls senior schools that were available at the period of this research, the students were in the average age of seventeen to eighteen years, and they have suburban characteristics, and two tail test was used for this research with the level of significance at 0.05.

3.3 Population and Sample

3.3.1 Population of the Study

The target population of this study comprised of all senior school students in Dawakin Kudu Education Zone, Kano State, and the accessible population of the work are students who wrote "JSCE"2012 and "SSCQE2014 academic year. The study considered the total population of 5,243 Students sat for JSCE2012, which consist of (3,451 boys and 1792 girls students), while the population of 5,372 students proceeded to SS II and wrote "SSCQE" in 2014, more so, 3,743 number represent boys students with 1,629 number represent girls students. The study covers Dawakin Kudu Zone.

The zone has thirty two (32) public senior secondary schools that run both JSS and SS classes in the same school environment. These schools are categorized across gender. The students were in the average age of adolescences period.

Table 3.1: Population of the study across the local Government, Schools, Tests and gender.

Local Govt.	School	JSCE		SSCQE		Total
		Boys	Girls	Boys	Girls	
Kumbotso	18	2272	1351	2524	1232	7,379
Dawakin kudu	10	996	441	971	397	2,805
Warawa	4	143	90	152	46	431
TOTAL	32	3411	1882	3647	1675	10,615
TOTAL	32	5,293		5,322		10,615

Source: (KERDigest2013)

Furthermore, the table shows the local government, number of schools under study, Population of JSCE and SSCQE across the gender which add up the population under Investigation.

3.3.2 Sample of the Study

A sample size of three hundred and fifty seven (357) was used in the study based on Research Advisors (2006) table for determination of sample size.

Table 3.2: Distribution of Sample by cluster, no. Students and Sample size

S/N	Cluster	N	No. of Students from Selected School	Sample Size
		M	2320	141
1.	Kumbotso	F	2012	122
		M	396	24
2.	D/Kudu	F	728	45
		M	295	17
3.	Warawa	F	136	8
	Total		**5887**	**357**

Source: (KERDigest2013)

The above table shows the cluster, sample of student across gender and sample size. First stage sampling unit are three local government under study consist of Kumbotso, Dawakin Kudu and Warawa. The second stage sampling unit are sample of students (male and female).In kumbotso local government 2320 male and 2012 female with 141 and 122 sample size respectively.

In Dawakin kudu local government 396 male 728 female with 24,45 sample size constituted, in the last local government 295 were male while 136 are female with 17 and 8 sample size, which give up the total sample size of **357.**

3.4 Sampling Technique

In selecting sample for this study, the researcher used two (2) stage cluster sampling, in this technique a group of population element, constitutes the sampling unit, instead of a single element of the population, such sampling technique is known as "cluster sampling. In this work local governments in the zonal Education under study are the primary sampling unit (PSU) or first stage unit, the schools are secondary sampling

unit (SSU) or second unit of clusters. Furthermore, convenience sampling was used in selecting fourteen (15) schools out of thirty two (32) schools, and systematic sampling used in selecting participants from fourteen schools which add up the total of sample size of the study.

3.5 Instrumentation

Considering the nature of the study, the instrument used in this work is examination questions of two tests, Placement examination (JSCE) and Senior school certificate qualifying examination(SSCQE) as an independent variable (predictor) and dependent variable (criterion) respectively.

Placement examination (JSCE)

Placement examination was initially called junior school certificates Examination (JSCE) to transit from one level of education system to the next, pupil have to undergo selection or achievement examination to determine their suitability for the level they are transiting into. KERD play a dominant role in conducting the various transiting examination, which are as follows:

To transit from the ninth year of basic education class to the senior secondary, the JSCE is conducted for candidates in their third year of junior secondary school. While each of the federation and FCT conducted the BECE for its candidate. Nevertheless, in Kano State. "JSCE" which developed by KERD was started as a result of commencement of 6-3-3 4 System 1983; later the name was change to JSCE due to revision of the National curriculum. If student passed "JSCE" they are allowed to proceed to senior secondary level, and place to different shade of classification as science, Art and commercial. Candidate is deemed to have passed the JSCE if he/she have passes in six subjects including English and Mathematics.

The grading system is as follows:

A - Distinction

B - Credit

C - Pass

F - Fail

SSCQE Exams

The senior school certificate qualifying examination (SSCQE) which is former Mock examination having been constructed to match previous real examination (otezie,2010), SSCQ Examination is a formative assessment whose chief function is to provide feedback, through it, students, teachers and parents alike are given indication of the degree to which students have mastered a subject. Poor performance in a significant percentage may signal problems in a subject (Abibakar and Nwokocha, 2009). It is tested in written or practical form. And is assume that students who have passed SSCQE would also pass senior school certificate examination (SSCE), hence, it is regarded as predictor of final SSCE. It was conducted before the 1994 and these points were conceded (Umar G. Gombe, personal communication, June 12, 2015).

3.6 Procedure for Data Collection

Initially, the investigator obtained an introduction letter from Education Department, Bayero University, Kano, to Kano Educational Resources Department (KERD) seeking permission for going round to the various senior secondary schools for data collection. The main data used for study constituted the students' results in JSCE and SSCQE. These results were collected officially from recognized examination body (KERD).To obtain these data, a simple format (students' Data Collection form)was used to collect the students' academic information that comprises year, serial number of the respondents, school code, sex, respondents JSCE Grade and SSCQE Grade.

3.7 Procedure for Data Analysis

Due to the difference in the grading system of JSCE and SSCQE results the researcher grading the two results for easy statistical operation, SSCQE used a "9" point grading system as opposed to the "4" point grading system employed on "JSCE".

The collected grading scale was compared with "JSCE" in order to make them uniform and adaptable to computer analysis.

Table 3.3: **Harmonized Grading Scales**

JSCE Grade	SSCQE Grade	Harmonized Grade	Level	Weighted
0 – 39	F9	F	Fail	1
40 – 49	E8 & D7	P	Pass	2
50 - 69	C6, C5, C4, & B3	C	Credit	3
70 & Above	B2 & A1	A	Distinction	4

The stated hypotheses were tested using Pearson's Product Moment Correlation technique. For accurate and reliable data analysis, data collected was processed and analyzed using statistical package for software system. (SPSS) Version 20.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This research study examined the relationship between Placement examination (JSCE) on Senior Schools Certificate Qualifying Examination (SSCQE) among the secondary school students in Dawakin-Kudu Educational Zone, Kano State. Data was collected and represent both sex, in mathematics, English Language and civic education. Collected data was analyzed using Pearson product moment correlation coefficient, and the chapter focused on summary of result, data analysis, summary of finding and discussion.

4.1 Data Presentation

Ratio data of students' grades in "2012JSCE" and "2014SSCQE" was collected in mathematics, English Language, and civic education for correlation analysis; such variables are from selected schools to represent the different cluster of the study, in addition, the result obtained was used to test the formulated hypotheses, while data analysis results was presented in tables.

4.2 Hypotheses Testing

In this research four hypotheses were tested.

Hypothesis One: There is no significance relationship between "JSCE" 2012 and "SSCQE 2014 in Mathematics. In attempt to test the above Hypothesis for mathematics, Pearson product moment correlation coefficient was used.

Table 4.1: Correlation of SSCQE and JSCE in Mathematics

Variable	Maths SSCQE	Maths JSCE
Mathematics Qualifier	1	0.135**
Mathematics JSCE	0.135**	1

**. Correlation is significant at the 0.05 level (2-tailed), N =360, DF = 358, Correlation was hold between Mathematics JSCE and Mathematics Qualifier results, the results show that a positive correlation was found at (r= 0.135, p=.0.010), indicating a strong significant relationship in mathematics JSCE, and had a significant impact in mathematics performance in qualifying exams. Therefore, the hypothetical statement here: there is no significant relationship between JSCE 2012 and SSCQE 2014 in mathematics was rejected, meaning that there was significant relationship observed between JSCE and SSCQE result.

Hypothesis Two: There is no significance relationship between "JSCE" 2012 and "SSCQE" 2014 in English Language. The data to test the above Ho2 were computed using SPSS version 20.

Table 4.2: Correlation of SSCQE and JSCE in English

Variable	English Qual.	English JSCE
English Qualifier	**1**	**-0.029**
English JSCE	**-0 .029**	**1**

*correlation is not significant at the 0.05 level (2-tailed), N=360, DF=358, A Pearson product moment correlation coefficient used for relationship between English JSCE and English qualifier results, was computed and the result shows that a negative correlation was found (r= **-0 .029**, p= 0.581), indicating that English JSCE had no significant impact on English SSCQE performance. Therefore, hypothesis stated that: there is no significant relationship between JSCE (2012) and SSCQE (2014) in English, so the statement was true, now the null hypothesis was accepted.

Hypotheses Three: "There is no significance relationship between "JSCE" (2012)

and "SSCQE" (2014) in Civic Education". To provide a test of this Formulated null hypothesis for "JSCE" and "SSCQE", grade in civic education were computed.

Table 4.3: Correlation of SSCQE and JSCE in Civic Education

Variable	Civic Edu. JSCE	Civic Edu. Qualifier
Civic Educ. Qualify	1	0.135*
Civic Educ. JSCE	0.135*	1

*. Correlation is significant at the 0.05 level (2-tailed), N =360, DF = 358,

A Pearson product moment correlation for relationship between civic education" JSCE" and Civic Education "SSCQE" was computed and the result showed a positive correlation as seen in the table (r= 0.135, p 0.010) indicating a significant relationship that civic education JSCE has an impact on civic education SSCQE performance.

Therefore, hypothesis that said "there is no significant relationship between JSCE (2012) and SSCQE (2014) in Civic Education" was rejected, hence, the alternate hypothesis was accepted, and so, there is a significant relationship between 2012 JSCE and 2014 SSCQE in Civic Education.

Hypothesis Four:

The 2012 JSCE and 2014SSCQE correlations in (Mathematics, English Language and Civic Education) are in-variant across the gender to test the above stated (Ho4) null hypothesis, the weighted grade were correlated using Pearson product correlation coefficient, as compared below:

Boys (181) JSCE results versus Boys (181) SSCQE results in mathematics.

Boys (181) JSCE results versus Boys (181) SSCQE results in English Language.

Boys (181) JSCE results versus Boys (181) SSCQE result in civic education and

Girls (176) JSCE results versus Girls (176) SSCQE result in mathematics.

Girls (176) JSCE results versus Girls (176) SSCQE results in English Language.

Girls (176) JSCE results versus Girls (176) SSCQE result in civic education.

Table 4.4: Correlation of JSCE and SSCQE in Mathematics, English and Civic Education across gender.

Variable	Boys (r-value)	p	Girls (r-value)	P
JSCE Mathematics vs. SSCQE Mathematics	0 .067	0.367	0.219**	0.003
JSCE English Language vs. SSCQE English Language	-0.051	0.491	0.111	0.139
JSCE Civic Education vs. SSCQE Civic Education	-0.002	0.981	0 .275**	0.000

Table 4.4 presents the comparison results of Ho4 for correlation of JSCE and SSCQE in (Mathematics, English Language, and Civic Education) across gender. In boys JSCE versus boys SSCQE results in mathematics, the relationship was not significant at r = 0.067, P = 0.367. In girls JSCE versus girls SSCQE in mathematics, the relationship was significant at r = 0.219, P = 0.003.

In the same vein, Boys JSCE versus Boys SSCQE result in English Language present no relationship at r = value of -0.051, P = 0.491, as in Girls JSCE versus Girls SSCQE in English Language, the result is the same at r = value of 0. 111, P= 0.139. Moreover, in Boys JSCE versus Boys SSCQE in civic education, relationship was not significant, but in girls JSCE versus Girls SSCQE a relationship was found at r- value of 0 .275, P = 0.000.

As a result of the above correlations of JSCE and SSCQE in girls mathematics, the correlation are in-variant, so indicated the significant impact of girls JSCE on girls

SSCQE in mathematics. In English Language for all students correlation are in-variant (similar). Meanings that no relationship was found between the subjects across the gender, in addition, girls JSCE versus girls SSCQE in civic education shows a significant relationship, that is the correlation are in-variant. With all above correlations, deduced that, in null hypothesis (Ho4|) six (6) correlations was computed, out of six (6), two(2) are in-variant that is boys JSCE versus boys SSCQE in English Language, as well as girls JSCE versus girls SSCQE results in English Language. While four (4) correlations are variant which consist of boys JSCE versus boys SSCQE in mathematics, boys JSCE versus boys SSCQE in civic education and girls JSCE versus girls SSCQE result in mathematics, girls JSCE versus girls SSCQE in civic education.

4.3 Summary of the Findings

The major findings of this study included the following.

1. The positive relationship between performances in mathematics was found significant in 2012 JSCE and 2014 SSCQE for all students.
2. That there is no relationship found in English Language 2012 JSCE and 2014 SSCQE for all students.
3. That there is a significant relationship between 2012 JSCE and 2014 SSCQE in civic Education for all students.
4. The results for boys' shows that no correlation was found, indicating 2012 JSCE in mathematics, English language and civic Education does not predict 2014 SSCQE in mathematics, English language and civic Education. However, for Girls, 2012 JSCE shows positive correlation between 2012 JSCE mathematics and 2014 SSCQE mathematics, at (r= 0.291, P=003) as well as 2012 JSCE and 2014 SSCQE in Civic Education at (r= 0.275, P=0.000), indicating significant

correlations that 2012 JSCE mathematics predict 2014 SSCQE mathematics and 2012 JSCE civic Education predict 2014 SSCQE in civic Education, the result shows that boys appear to perform less well than girls in mathematics, English and civic education. Moreover, 2012 JSCE and 2014 SSCQE correlations in (mathematics, English language and civic Education) are in-variant in English language and variant in girls mathematics and civic Education.

4.4 Discussions

The study assessed investigated the relationship between Placement examination (JSCE) on Senior School Qualifying Examination (SSCQE) in Dawakin Kudu Zonal Education area; it concentrates on the relationship between performances in Mathematics, English Language, and Civic education. Based on the finding in table 4.1, it could be understood that a significant relationship in mathematics JSCE, had a significant impact in mathematics SSCQE. Therefore, the hypothetical statement here, there is no significant relationship between 2012 JSCE and 2014 SSCQE in mathematics, is rejected, meaning that significance relationship was observed between JSCE mathematics and SSCQE mathematics at ($r = 0.135$, $p = 0.010$). Furthermore, The findings in table 4.2, stated that Pearson product moment correlation coefficient used for relationship between English JSCE and English SSCQE correlation, was computed and the result shows a negative correlation coefficients at ($r = -0.029$, $p = 0.581$) indicating no significant impact on English results. Therefore, hypothesis stated that. There is no significant relationship between JSCE (2012) and SSCQE (2014) in English Language, so the statement was true, now the null hypothesis was accepted. More so, as finding in table 4.3.relationship between Civic Education" JSCE" and "SSCQE results" was computed and the result

showed a positive correlation as seen in the table (at r = 0.135, p0.010), indicating a significant relationship in civic education JSCE and has an impact on SSCQE civic education, therefore, hypothesis that stated; "there is no significant relationship between 2012JSCE and 2014SSCQE in Civic Education" was rejected, hence, there was a significant relationship between JSCE and SSCQE in Civic Education. On table 4.4, presents the comparison results of Ho4 for correlation of JSCE and SSCQE in (Mathematics, English Language, and Civic Education) across gender. In Boys JSCE versus Boys SSCQE in mathematics, the relationship was not significant at (r = 0.067, P = 0.367). In Girls JSCE versus Girls SSCQE in Mathematics, the relationship was significant at (r = 0.219, P = 0.003).

In addition, Boys JSCE versus Boys SSCQE result in English Language present no relationship at (r = value of -0.051, P = 0.491), as in Girls JSCE versus Girls SSCQE in English Language, the result is the same at (r = 0. 111, P = 0.139). Moreover, in Boys JSCE versus Boys SSCQE in civic education, relationship was not significant, but in Girls JSCE versus Girls SSCQE the relationship was found at (r= 0 .275, P = 0.000). As a result of the above correlations of JSCE and SSCQE in Girls mathematics and English language for all students, the correlation are in-variant, Meaning that the correlation of JSCE and SSCE in mathematics (Ho1) shows a significant relation, which is similar with the correlation in (Ho4) that is 2012 JSCE and 2014 SSCQE correlations in (mathematics and civic education) are in-variant across gender. Furthermore, in Ho2 correlation in English language shows no relation for all students, which is in-variant with the (Ho4), that is 2012 JSCE and 2014 SSCQE correlation in (English Language) are also in-variant across gender, as indicated in (Ho2).

In summary, the null hypothesis that stated 2012 JSCE and 2014 SSCQE correlations in (mathematics, English Language and civic education) are in-variant in English Language and variant in Girls mathematics and civic education. With all above correlation deduced that in (Ho4) six (6) correlation was computed were (2) are in-variant while four (4) are variant.

At this juncture, the finding shows relation with outcomes of previous finding. In another related studied on relationship of Junior Secondary School Certificate Examination (1998-2000) in Mathematics-SSCE (2001-2003) in Cross River State by Ikwong (2005) revealed that, relationship between the performance of students in Mathematics JSCE and SSCE was statistically significant ($r = 0.46$, $P< 0.01$). He discovered that the correlation co-efficient between performance of male and female students in Mathematics JSCE and SSCE were found to be significant ($r=0.24$, $P>0.05$ and $r = 0.31$, $P<0.05$). He therefore, concluded that JSCE is a valid predictor of performance in Mathematics SSCE. This was similar to the finding of hypothesis one of this study were shows a significant relationship of JSCE results on SSCQE results in Mathematics at ($r =0.135$, $p= 0.010$).

However, hypothesis two in this study shows no significant relationship between the correlation, so Ho2 was rejected for all students' results in JSCE English and predicts no significant relationship in SSCQE. Nevertheless, the results obtained by Edokpayi and Suleiman (2011) discovered that, the predictive strength of the junior secondary certificate (JSCC) Examination in integrated Science in predicting the performance of students in the Senior Secondary certificate (SSC) Examination in chemistry in Zaria metropolis, Nigeria was examined. The study employed the ex-post facto design. The study population comprised of 400 students from four purposely selected Secondary

School in Zaria metropolis. Out of this population, a sample of 200 students was selected through the stratified random sampling technique. Data were collected through an inventory and analyzed with the use of z- test and correlation analysis. The result of the investigation revealed that the academic achievement of students in integrated science in the junior secondary school certificate (JSC) examination among the selected secondary schools in Zaria metropolis was a poor predictor of later achievement in chemistry at senior secondary school certificate (SSC) examination. It is recommended that more qualified and competent teachers should be trained and employed to teach integrated science in junior secondary school and classroom teachers should try as much as possible to relate the concept of integrated science to chemistry and other basic science.

Abubakar, Wokoma, Afebuame, (2012) also supported the study, were he compare the analysis between performance in Mock and Senior Secondary examination of unity schools in Rivers state. A sample of 344 students was selected from the unity schools in Rivers state in 2007/08 and 2008/09 session. Two hypotheses were formulated for the study on relationship and relationship of two scores from MCES and SSCE. The two score were analyzed using Pearson product moment correlation coefficient and regression analysis. The result of analysis revealed a positive correlation between the scores. Also the mock examination scores (MES) could significantly be used to predict senior school certificate examination scores (SSCES). Based on the finding it was recommended that that teacher should help their students improve their MES which would ardently result in improvement of their SSCE thereby improving the failure rate of student in mathematics at the senior secondary school level.

More so, in relation to the original research question, the results finding provided the answers, as research question number one stated: Is there any significant relationship between "JSCE" (2012) and "SSCQE' (2014) in Mathematics? These investigations express that, there was significant relationship between JSCE result and SSCQE result in Mathematics, (at $r = 0.135$, $P < 0.010$). Research question 2& 3 as stated: Is there any relationship between "JSCE" (2012) and "SSCQE' (2014) in English Language? And in civic education respectively, with regard to these research questions, correlation indicated that there is no significant relation between 2012 JSCE and 2014 SSCQE in English Language for all students, this shows that JSCE results is poor predictor on SSCQE in English Language.

Similarly, Peter (2007) in his work relationship of Kano state junior school certificate examination on NECO/SSCE among students in Nassarawa Education zone, Kano state, investigated on the number of 279 sample size, using spearman ranking order (Rho). The finding was formulated on six null hypothesis, were indicated the following finding; There is no significant relationship between KSJSC and NECO-SSC examination result in English language for all students , this finding also hold true for both male and female, science and Art students.

However for commercial students, the KSJSC and NECO-SSC examination result in English language relationship was significant. There is no significant relationship between KSJSC and NECO- SSC examination results in Mathematics for male, science and Art. However, in mathematics examination results there was significant relationship for all students in commercial students. Poor performance in this study more especially in English Language was observed due to a number of construct among which are use of local language in the classroom which lead to inability of

students to understand the examination questions, among other causes of mass failure in SSCQE English Language, the exam was set up to standard of SSCE (WAEC and NECO).

Political malady is another contemporary issue that affect failing or passing of student in SSCQE But in Civic Education JSCE and SSCQE indicate significant relationship, and predict the performance in Girls SSCQE civic education. The last hypothesis computed six (6) correlation, where two (2) are in-variant while four (4) are variant. In addition, the work of (Muhammad and Halima, 2014) also emphasized as in their studies that examined differences in the performances in STM education between Male and Female Graduate of Sa'adatu Rimi College of Education.

The population of study consists of graduates majoring subject from 2005 to 2012 academic session, statistic shows that about 610 students graduate within the period under consideration. A combination of simple and stratified random sampling technique were used to select a sample of 200 (150 male and 50 female) among the graduate. The design of the study was expost - facto and two hypotheses were tested through the use of t-test for independent sample. Result of the data analysis revealed that there was significant difference in the performance of male and female graduate in physics, no significant difference was found in the performance of male and female graduate in chemistry. Based on finding of the study, recommendations were proffered among which were: Female student should encouraged pursuing more mathematics related course through remedial programmed. Government should provide incentive to achieving female students in science courses to serve as morale booster. Similarly, the second study was cross national studies of educational attainment at the university level supported the view that girl appear to perform less well than boys in STM

Subjects. The choice of occupation also influences girls' performance in the STM Subjects (Mohammed and Halima, 2014).

The correspondent research question; is the 2012 JSCE and '2014 SSCQE correlations in (Mathematics, English and Civic Education) are in- variant for male and female? The correlations of Ho4 of this study answered the research question categorically. From the Foregoing, the above findings on the RELATIONSHIP of 2012 JSCE are valid predictor of student's performance on 2014 SSCQE in Girls Mathematics and Girls Civic Education. Meanwhile, 2012 JSCE was poor predictor on 2014 SSCQE in English Language for all students, Boys civic education and Boys mathematics among Senior School students in Dawakin- Kudu Education Zone, Kano State. In the process of this study, the researcher encounter number of short coming, this included the hardship or difficulties in accepting introductory letter from KERD. He also experience a missing result from some examination officers, which make it necessary to went back to the KERD in order to fill the missing gap. In addition some principal felt to cooperate instantly, and some examination officers found it difficult to assist me being the time was the examination session.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

This chapter focused on summary, conclusion, recommendations for practice and for further studies.

5.2 Summary

The study investigated the relationship between Placement examination (2012 JSCE) on Senior School Certificate Qualifying Examination (2014 SSCQE) in Dawakin Kudu Education Zone, Kano State. It employed a correlational research design, review of findings related to the study was carried out, and the tasks conceptualize the following: Concept of the Test, type of Tests, validity, types of validity. Theoretical frame work under which CTT and IRT was used, and A combination of two (2) stage cluster sampling, convenience sample and systematic sampling technique were used to select a sample size of 357 (181Boys and 176 Girls) which drawn out of 10,615 populations., meanwhile data was collected using Student Data Collection Form (SDCF). Students' weighted grades in mathematics, English Language and Civic Education was analyzed using Pearson Product Moment correlation coefficient. Formulated hypotheses were tested sequentially. Comprehensive discussion was made based on the emerged findings of this study in relation to previous finding of related studies. Credible explanation was adduced for finding of this study.

5.3 Conclusion

Conclusively, this research study examined the relationship between Placement Examination (2012 JSCE) on Senior Schools Certificate Qualifying Examination (2014 SSCQE) in Dawakin-Kudu Education Zone, Kano State. The research work

adds to the field of study that the Placement examination is good predictor for girls in Mathematics and Civic education, meaning relationship was hold, while in boys shows that no correlation was found, indicating 2012 JSCE in (mathematics, English language and civic Education) does not predict 2014 SSCQE in mathematics, English language and civic Education. Nevertheless, 2012 JSCE and 2014 SSCQE correlations in (mathematics, English Language and Civic Education) are in-variant in English language and variant in girls Mathematics and Civic Education.

5.4 Recommendations

5.4.1 Recommendations from the Study

Based on the findings of this study, the research made the following recommendations for practices.

Ministry of Education has to provide enough and competent English Language teachers in both junior secondary and senior school level. Kano Educational Resource Department (K.E.RD) should ensure that students grade in JSCE was combined with information about the attitude, interest and personal characteristics to place them appropriately, in a suitable subject area. This will improve the predictive value of JSCE Exams.

KERD should ensure that JSCE exams has to the quality of been reliable and valid.

School principal should combine students' grade in JSCE with information on their attitude, interest, problem solving style, reaction to frustration and other personality characteristics before placing them on relevant courses. This will help students to maximize their potential and excel in mathematics, English Language and Civic Education from JSS to SS Class.

School authority should ensure platform such as club and societies, orientation, career

talk that encourages healthy competition among students to do well and excel in Mathematics, English Language and civic education. in JSS and SS.

Mathematics, English Language and civic education teachers should improvise effective instructional strategies that would facilitate mastery of skill and knowledge, in order to improve students' academic performance. Students should be properly guided and counseled by teachers on their future academic and vocational career prospects.

5.4.2 Recommendations for Further Studies

The following topics are proposed as new investigation areas for further research to be carried out by any interested researcher:

Relationship between Transitional examination on JSCE Examination students in Dawakin Kudu Educational zone in Kano or any other Local Government Educational Zone Kano State.

Relationship between JSCE result on SSCQE results in relation to School type, among senior secondary school in Kano Municipal Educational zone. This study covered only Government Schools, therefore a similar study is recommended for private and voluntary schools.

Relationship of JSCE results on SSCE among senior secondary school students in Bichi Education zone Kano.

Quality of "JSCE" On SSCQE performance in Mathematics, English, Civic Education, among students in Dala Education Zone.

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APPENDIX ONE

Department of Education
P.M.B. 3011
Kano State
Head Prof: Talatu M. Garba
Email: talatufm24@gmail.com
Date :29/04/015

B.U.K.
Bayero University, Kano

Dear Sir,

LETTER OF INTRODUCTION

This is to certify that: IDRIS ABDULLAHI with Registration Number: SPS/13/MED/00108 is our student in the Department of Education. Bayero University, Kano.

Kindly render any assistance he/she may require from you.

DEPARTMENT OF EDUCATION
APR 2015

for

Prof Talatu Musa Garba
Head of Department

APPENDIX TWO

Department of Education
P.M.B. 3011
Kano State
Head Prof: Talatu M. Garba
Email: talatufm24@gmail.com
Date :29/04/015

B.U.K.
Bayero University, Kano

Dear Sir,

MIN. OF EDUC.
DKERD SEC.
RECEIVED
SIGN DATE 6/5/15

LETTER OF INTRODUCTION

This is to certify that: IDRIS ABDULLAHI with Registration Number: SPS/13/MED/00108 is our student in the Department of Education. Bayero University, Kano.

Kindly render any assistance he/she may require from you.

Research Topic :- Predictive validity of "BECE" and "SSCE" result among the student under Dawakin Kudu Education zone, Kano State.

for

Prof Talatu Musa Garba
Head of Department

Approved.
Dec.
12/5/15

APPENDIX THREE

Target Population across the Local Government under study

S/N	Schools	JSCE 2011/2012/ 2012/ 2013	SSCQE 2013/2014/ 2014/ 2015	School Type
	GASS D/Kudu	151	145	M
	GGSS D/Kudu	120	92	F
	GSS D/Kudu	188	151	M
	GSS Tsakuwa	92	70	M
	GSS T/Yamma	148	118	M
	GSS Kumbotso	180	189	M
	GGSS Kumbotso	60	54	F
	GSS D/Maliki	118	152	M
	GGSS Medile	111	69	F
	GSS Ja'oji	244	178	M
	GSS Shekar Barde	492	501	M
	GGSS Shekar Barde	382	358	F
	GGSS Chiranchi	240	364	F
	GGSS Panshekara	176	198	F
	GSS Panshekara	220	132	M
	GSS Kayi	160	156	M
	GSS Danbare	52	83	M
	GSS Chalawa	32	30	M
	GSS Naibawa	325	354	M
	GSS Mariri	201	315	M

GGSS Audu Mariri	19	206	F
GSS Yankatsari	112	107	M
GSS Yar Gaya	153	186	M
GGSS Yar Gaya	253	265	F
GGSS Gano	63	40	F
GSS Gano	142	162	M
GSS Warawa	90	95	M
GSS Tanagar	46	93	M
GSS Gogel	47	60	M
GGSS Wailari	291	237	F
GSS Dawakiji	158	150	M
Total	**5,293**	**5,322**	

Source: (K.E.R.D Evaluation Unit)

APPENDIX FOUR

Selected Schools using Convenience Sampling from Three Clusters First Cluster

S/N	SCHOOL	SEX	STUDENT	PARTICIPANT
	G.S.S Tamburawan Yamma	M	266	17
	G.S.S Kumbotso	M	369	24
	G.S.S Dan Maliki	M	270	17
	G.S.S Jaoji	M	422	27
	G.S.S Shekar Barde	M	993	65
	G.G.S.S Kumbotso	F	114	7
	G.G.S.S Medile	F	180	12
	G.G.S.S Sheka	F	740	48
	G.G.S.S Chiranchi	F	604	39
	G.G.S.S Panshekara	F	374	24
	Second Cluster			
	G.G.S.S Dawakin Kudu	F	212	13
	G.G.S.S Yar Gaya	F	516	33
	G.A.S.S Dawakin Kudu	M	296	19
	Third Cluster			
	G.S.S Warawa	M	295	12
	GGSS Gano	F	136	8
	GRAND TOTAL		**5887**	**357**

APPENDIX FIVE

Required Sample Size

Population Size	Confidence Margin of Error				Confidence Margin of Errors			
	5.0%	3.5%	2.5%	1.0%	5.0%	3.5%	2.5%	1.0%
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	591	952	1984	524	879	1288	2173

3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	9211	610	1147	1960	5165
10,000	370	727	1332	9899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1505	8574	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1357	9603	663	1354	2654	16584
300,000,000	384	784	1357	9603	663	1354	2654	16586

APPENDIX SIX

STUDENT DATA COLLECTION

Department: _____ Course: _____

S/N	REG. NO.	SEX	SSCE MATHS ENTRY GRADE			RESULT OBTAINED			YEAR GRADUATED
			WAEC	NECO	OTHERS	ND I	ND II	Final Grade	

APPENDIX SEVEN

Students Data Collection From (SDCF) Proforma

School: _____ Session: _____

S/N	School Code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
1.			**MAT**	**ENG**	**C/Ed**	**MAT**	**ENG**	**C/Ed**
2.			**C4**	**D7**	**D7**	**C**	**C**	**C**
3.								
4.								
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APPENDIX EIGHT

Students Data Collection Form (SDCF) Proforma

School: GGSS Kumbotso **Session: 2013/2014 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	011308	Female	**C6**	**C6**	**A1**	**F**	**P**	**P**
2.	011308	Female	B2	B3	A1	F	P	F
3.	011308	Female	C6	C6	A1	C	C	C
4.	011308	Female	C5	C5	A1	C	C	C
5.	011308	Female	C6	C4	A1	C	C	C
6.	011308	Female	C4	B3	A1	F	P	C
7.	011308	Female	C4	C6	A1	C	F	C

School: GSS Shekar Barde **Session: 2013/14 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	0113014	Male	**C4**	**D7**	**D7**	**C**	**C**	**C**
2.	0113014	Male	A1	C6	C6	C	P	A
3.	0113014	Male	A1	F9	C6	C	C	A
4.	0113014	Male	A1	C5	C6	C	A	F
5.	0113014	Male	A1	C4	B3	P	P	C
6.	0113014	Male	A1	C6	C5	C	A\	P
7.	0113014	Male	C6	C6	F9	A	P	F
8.	0113014	Male	C6	C5	D7	C	C	C
9.	0113014	Male	A1	C6	F9	C	A	P
10.	0113014	Male	A1	F9	F9	C	C	A
11.	0113014	Male	A1	D7	F9	A	A	C
12.	0113014	Male	A1	C5	D7	C	C	P
13.	0113014	Male	C6	E8	C4	A1	C	P

14.	0113014	Male	C5	C5	B3	C	C	C
15.	0113014	Male	C6	C5	A1	C	P	C
16.	0113014	Male	B3	C5	A1	F	C	F
17.	0113014	Male	C4	C5	A1	C	C	C
18.	0113014	Male	C5	C6	C6	A	A	A
19.	0113014	Male	C4	C6	B3	C	C	A
20.	0113014	Male	C6	C6	A1	A	C	C
21.	0113014	Male	C6	B3	C4	F	P	C
22.	0113014	Male	C6	C4	C4	C	C	C
23.	0113014	Male	C6	C6	A1	P	C	A
24.	0113014	Male	C5	C5	C6	A	C	P
25.	0113014	Male	C5	C6	C4	C	C	C
26.	0113014	Male	C5	D7	C5	A	C	F
27.	0113014	Male	D7	F9	F9	C	P	P
28.	0113014	Male	D7	C6	F9	C	C	C
29.	0113014	Male	F9	F9	A1	A	A	A
30.	0113014	Male	C5	C6	A1	C	C	C
31.	0113014	Male	C4	E8	A1	C	A	C
32.	0113014	Male	C5	C6	C4	A	C	A
33.	0113014	Male	D7	F9	C4	P	C	C
34.	0113014	Male	D7	F9	B3	A	C	C
35.	0113014	Male	E8	C6	C5	C	P	C
36.	0113014	Male	B 2	D7	A1	C	C	C
37.	0113014	Male	B2	D7	A1	P	C	P
38.	0113014	Male	C4	E8	C6	P	C	A
39.	0113014	Male	E8	D7	C4	C	F	C
40.	0113014	Male	C6	A1	B2	C	P	C
41.	0113014	Male	C6	C6	A1	C	C	F
42.	0113014	Male	E8	F9	F9	C	C	A
43.	0113014	Male	C4	F9	C7	C	A	C
44.	0113014	Male	B3	C4	D7	C	C	C
45.	0113014	Male	C6	A1	C6	C	C	C

46.	0113014	Male	A1	A1	D7	C	P	C
47.	0113014	Male	B3	D7	C6	C	C	C
48.	0113014	Male	C6	C4	E8	P	C	P
49.	0113014	Male	A1	A1	C6	C	C	C
50.	0113014	Male	B3	F9	C4	C	C	C
51.	0113014	Male	F9	A1	A1	C	C	A
52.	0113014	Male	C6	E8	C5	C	C	C
53.	0113014	Male	A1	C4	A1	C	C	C
54.	0113014	Male	C5	A1	A1	C	P	C
55.	0113014	Male	B3	B3	A1	C	C	A
56.	0113014	Male	B2	C6	A1	C	C	P
57.	0113014	Male	A1	C4	E8	C	A	A
58.	0113014	Male	E8	C6	B3	A	F	C
59.	0113014	Male	C5	C4	A1	C	C	P
60.	0113014	Male	D7	C5	A1	A	C	P
61.	0113014	Male	C6	C4	C6	C	A	C
62.	0113014	Male	A1	C6	B2	C	C	C
63.	0113014	Male	C6	C4	D7	A	C	A
64.	0113014	Male	C5	C4	A1	C	C	P
65.	0113014	Male	D7	C5	A1	A	C	P

School: G.G.A.S.S SHEKA **Session: 2013/14 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	0113049	Female	**F9**	**C6**	**A1**	**P**	**C**	**C**
2.	0113049	Female	D7	F9	C4	P	C	C
3.	0113049	Female	D7	F9	B3	A	C	C
4.	0113049	Female	E8	C6	C5	C	P	C
5.	0113049	Female	B 2	D7	A1	C	C	C
6.	0113049	Female	B2	D7	A1	P	C	P
7.	0113049	Female	C4	E8	C6	P	C	A
8.	0113049	Female	E8	D7	C4	C	F	C
9.	0113049	Female	C6	A1	B2	C	P	C
10.	0113049	Female	C6	C6	A1	C	C	F
11.	0113049	Female	E8	F9	F9	C	C	A
12.	0113049	Female	C4	F9	C7	C	A	C
13.	0113049	Female	B3	C4	D7	C	C	C
14.	0113049	Female	C6	A1	C6	C	C	C
15.	0113049	Female	A1	A1	D7	C	P	C
16.	0113049	Female	B3	D7	C6	C	C	C
17.	0113049	Female	C6	C4	E8	P	C	P
18.	0113049	Female	A1	A1	C6	C	C	C
19.	0113049	Female	B3	F9	C4	C	C	C
20.	0113049	Female	F9	A1	A1	C	C	A
21.	0113049	Female	C6	E8	C5	C	C	C
22.	0113049	Female	A1	C4	A1	C	C	C
23.	0113049	Female	C5	A1	A1	C	P	C
24.	0113049	Female	B3	B3	A1	C	C	A
25.	0113049	Female	B2	C6	A1	C	C	P
26.	0113049	Female	A1	C4	E8	C	A	A
27.	0113049	Female	E8	C6	B3	A	F	C
28.	0113049	Female	C5	C4	A1	C	C	P

29.	0113049	Female	D7	C5	A1	A	C	P
30.	0113049	Female	C6	C4	C6	C	A	C
31.	0113049	Female	A1	C6	B2	C	C	C
32.	0113049	Female	C6	C4	D7	A	C	A
33.	0113049	Female	C5	A1	A1	C	P	C
34.	0113049	Female	B3	B3	A1	C	C	A
35.	0113049	Female	B2	C6	A1	C	C	P
36.	0113049	Female	A1	C4	E8	C	A	A
37.	0113049	Female	E8	C6	B3	A	F	C
38.	0113049	Female	C5	C4	A1	C	C	P
39.	0113049	Female	D7	C5	A1	A	C	P
40.	0113049	Female	C6	C4	C6	C	A	C
41.	0113049	Female	A1	C6	B2	C	C	C
42.	0113049	Female	C5	A1	A1	C	P	C
43.	0113049	Female	B3	B3	A1	C	C	A
44.	0113049	Female	B2	C6	A1	C	C	P
45.	0113049	Female	A1	C4	E8	C	A	A
46.	0113049	Female	E8	C6	B3	A	F	C

School: __G.G.S.S Panshekara. **Session: 2013/14 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	011301	Female	**F9**	**F9**	**C6**	**C**	**P**	**C**
2.	011301	Female	F9	-	F9	C	P	C
3.	011301	Female	B3	F9	A1	C	F	C
4.	011301	Female	C6	B3	D7	C	C	P
5.	011301	Female	F9	F9	F9	P	C	P
6.	011301	Female	C6	D7	A1	C	P	C
7.	011301	Female	D7	-	F9	C	P	C
8.	011301	Female	C6	F9	C5	F	C	C
9.	011301	Female	A1	F9	B3	P	P	C
10.	011301	Female	C6	C6	A1	P	C	C

11.	011301	Female	C6	C6	A1	F	C	C
12.	011301	Female	F9	F9	F9	C	C	C
13.	011301	Female	C5	F9	A1	C	P	A
14.	011301	Female	E8	F9	A1	C	C	A
15.	011301	Female	D7	F9	C6	C	C	C
16.	011301	Female	A1	F9	A1	C	C	C
17.	011301	Female	A1	F9	B3	C	C	C
18.	011301	Female	A1	F9	B3	C	C	C
19.	011301	Female	F4	F4	E8	C	P	C
20.	011301	Female	C6	F9	A1	C	C	C
21.	011301	Female	F9	F9	C5	C	P	A
22.	011301	Female	C6	F9	D7	C	A	A
23.	011301	Female	B2	E8	E8	C	C	C
24.	011301	Female	C4	F9	E8	C	C	C

School: _GSS Kumbotso **Session: 2013/14 and 2011/12**

S/N	**School code**	**Sex**	**Respondent SSCQE Grade**			**Respondent JSCE Grade**		
			MAT	**ENG**	**C/Ed**	**MAT**	**ENG**	**C/Ed**
1.	0113010	Male	**C6**	**F9**	**B3**	**A**	**P**	**A**
2.	0113010	Male	B2	F9	A1	C	F	A
3.	0113010	Male	C4	F9	C5	F4	P	C
4.	0113010	Male	C6	E8	A1	C	P	A
5.	0113010	Male	C6	F9	C4	C	P	C
6.	0113010	Male	C4	F9	B2	C	P	A
7.	0113010	Male	B2	C4	A1	P	P	A
8.	0113010	Male	C5	F9	A1	P	P	A
9.	0113010	Male	C6	F9	A1	A	A	A
10.	0113010	Male	F9	F9	F9	F	P	A
11.	0113010	Male	A1	F9	B3	C	C	C
12.	0113010	Male	C6	B2	C4	P	P	A
13.	0113010	Male	C5	C5	A1	P	C	A
14.	0113010	Male	C4	C4	B2	C	C	A
15.	0113010	Male	C4	B3	B3	C	C	C

16.	0113010	Male	A1	B2	A1	C	C	C
17.	0113010	Male	C4	D7	C4	A	A	C
18.	0113010	Male	A1	C6	B3	C	A	C
19.	0113010	Male	C6	B3	A1	C	C	A
20.	0113010	Male	A1	C4	B2	P	C	C
21.	0113010	Male	A1	B3	B3	C	C	C
22.	0113010	Male	A1	B3	B3	C	C	A
23.	0113010	Male	A1	C4	D7	A	P	C
24.	0113010	Male	A1	B3	B3	C	C	A

School: G.S.S Tamburawa Yamma **Session: 2013/14 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	0113016	Male	**C6**	**F9**	**C6**	**C**	**C**	**A**
2.	0113016	Male	C6	F9	B2	P	P	C
3.	0113016	Male	B2	F9	A1	C	P	P
4.	0113016	Male	C5	F9	C5	C	C	C
5.	0113016	Male	F9	C4	B3	C	C	C
6.	0113016	Male	F9	F9	B2	C	C	A
7.	0113016	Male	E8	F9	B3	C	C	C
8.	0113016	Male	F9	F9	B3	C	C	A
9.	0113016	Male	A1	C4	A1	C	C	C
10.	0113016	Male	E8	F9	A1	C	C	C
11.	0113016	Male	A1	C6	B3	C	C	C
12.	0113016	Male	A1	F9	B2	P	C	C
13.	0113016	Male	F9	F9	B3	C	C	C
14.	0113016	Male	F9	F9	C5	C	C	C
15.	0113016	Male	B3	B3	A1	C	C	P
16.	0113016	Male	F9	F9	D7	C	C	P
17.	0113016	Male	F9	F9	C6	F	P	A

School: _GGSS CHIRANCI **Session: 2013/14 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	0113045	Female	**B2**	**D7**	**C4**	**C**	**P**	**C**
2.	0113045	Female	A1	C5	B2	C	C	P
3.	0113045	Female	B2	C5	C4	P	F	C
4.	0113045	Female	A1	C4	C5	C	C	C
5.	0113045	Female	C4	A1	B2	C	F	A1
6.	0113045	Female	C4	D7	C4	C	F	P
7.	0113045	Female	A1	B3	C6	P	C	P
8.	0113045	Female	B2	D7	B2	C	C	C
9.	0113045	Female	A1	C6	C6	C	P	P
10.	0113045	Female	B3	C6	B3	F	P	P
11.	0113045	Female	B3	D7	A1	P	F	A
12.	0113045	Female	B2	C6	E8	C	P	F
13.	0113045	Female	A1	F	B3	C	P	C
14.	0113045	Female	C6	C5	B3	P	P	C
15.	0113045	Female	B2	E8	C6	P	P	C
16.	0113045	Female	C5	D7	A1	C	P	C
17.	0113045	Female	A1	C5	E8	C	P	C
18.	0113045	Female	A1	E8	B2	P	P	C
19.	0113045	Female	B3	C6	B2	P	P	P
20.	0113045	Female	A1	C6	C5	P	P	C
21.	0113045	Female	C4	C5	A1	P	P	C
22.	0113045	Female	A1	D7	A1	C	P	C
23.	0113045	Female	A1	F9	E8	C	P	C
24.	0113045	Female	A1	E8	A1	C	C	A
25.	0113045	Female	C6	E8	B3	C	C	P
26.	0113045	Female	C5	D7	F9	F	P	C
27.	0113045	Female	C4	E8	A1	C	C	C
28.	0113045	Female	D7	C6	B3	C	C	C
29.	0113045	Female	C5	F9	C4	C	C	P

30.	0113045	Female	C4	E8	C6	C	C	C
31.	0113045	Female	D7	D7	C4	C	P	A
32.	0113045	Female	C4	E8	C6	C	A	A
33.	0113045	Female	C6	E8	B3	C	C	P
34.	0113045	Female	C5	D7	F9	F	P	C
35.	0113045	Female	C4	E8	A1	C	C	C
36.	0113045	Female	D7	C6	B3	C	C	C
37.	0113045	Female	C5	F9	C4	C	C	P
38.	0113045	Female	D7	C6	B3	C	C	C
39.	0113045	Female	C5	F9	C4	C	C	P

School: G.S.S DAN MALIKI **Session: 2013/14 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	0113040	Male	**C6**	**C6**	**C5**	**C**	**C**	**A**
2.	0113040	Male	C6	C6	C4	C	A	C
3.	0113040	Male	C5	E8	B2	P	C	A
4.	0113040	Male	C5	F9	B3	A	C	P
5.	0113040	Male	C6	C6	B2	C	C	C
6.	0113040	Male	C6	E8	A1	C	C	P
7.	0113040	Male	E8	C5	B2	P	C	A
8.	0113040	Male	C6	C6	B2	C	C	C
9.	0113040	Male	C6	C4	B3	C	P	A
10.	0113040	Male	C4	F9	C4	C	P	A
11.	0113040	Male	F9	E8	B2	C	C	A
12.	0113040	Male	C6	D7	A1	P	C	C
13.	0113040	Male	C4	A1	A1	C	A	C
14.	0113040	Male	C6	A1	B3	C	A	C
15.	0113040	Male	C4	C4	A1	C	A	C
16.	0113040	Male	B2	C6	C5	A	A	C
17.	0113040	Male	C6	B2	C6	C	C	F

School: GSS Warawa **Session: 2013/14 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	0113014	Male	**A1**	**E8**	**C6**	**C**	**F**	**C**
2.	0113014	Male	A1	C4	C4	P	P	C
3.	0113014	Male	B3	C5	C4	C	F	C
4.	0113014	Male	B2	C4	B3	C	C	C
5.	0113014	Male	C4	B3	C6	F	P	C
6.	0113014	Male	E8	E8	C4	C	C	C
7.	0113014	Male	C4	F9	C4	P	C	A
8.	0113014	Male	C4	F9	B2	C	C	F
9.	0113014	Male	B3	F9	A1	A	C	P
10.	0113014	Male	C4	D7	F9	A	C	C
11.	0113014	Male	C5	F9	C6	A	P	A
12.	0113014	Male	C4	D7	A1	A	C	C

School: G.G S.S MAIDILE **Session: 2013/14 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	0113049	Female	**A1**	**B2**	**B2**	**A**	**A**	**A**
2.	0113049	Female	C6	B3	B2	P	C	F
3.	0113049	Female	C6	C4	C6	A	F	C
4.	0113049	Female	C4	C6	A1	C	F	F
5.	113049	Female	C6	B2	E8	C	C	C
6.	0113049	Female	E8	D7	F9	C	P	P
7.	0113049	Female	A1	F9	E8	C	A	A
8.	0113049	Female	A1	E8	C6	P	P	C
9.	0113049	Female	C4	C6	C4	P	C	P
10.	0113049	Female	F9	C5	A1	C	P	F
11.	0113049	Female	C5	D7	A1	A	A	C
12.	0113049	Female	C4	C6	C4	P	C	P

School: G. A.S. S Dawakin Kudu **Session: 2013/14 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	0113010	Male	**C6**	**E8**	**A1**	**C**	**P**	**C**
2.	0113010	Male	C6	E8	B3	P	C	P
3.	0113010	Male	B3	D7	A1	P	C	C
4.	0113010	Male	B3	C5	B2	P	C	A
5.	0113010	Male	C4	C6	A1	C	P	C
6.	0113010	Male	D7	D7	B3	C	C	C
7.	0113010	Male	C6	E8	C6	C	P	C
8.	0113010	Male	C4	F9	D7	P	C	C
9.	0113010	Male	A1	E8	A1	P	A	A
10.	0113010	Male	C6	F9	E8	C	A	P
11.	0113010	Male	F9	F9	A1	C	C	F
12.	0113010	Male	B3	F9	B2	C	F	P
13.	0113010	Male	A1	F9	C4	P	F	P
14.	0113010	Male	C4	C6	F9	P	P	F
15.	0113010	Male	A1	B3	E8	P	F	P
16.	0113010	Male	C4	E8	C4	C	F	C
17.	0113010	Male	F9	C6	D7	P	C	C
18.	0113010	Male	B3	C4	E8	P	F	P
19.	0113010	Male	A1	B2	C	C	P	P

School: G.G.S.S. YAR GAYA **Session: 2013/14 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	0113020	Female	**A1**	**C6**	**D7**	**C**	**C**	**C**
2.	0113020	Female	B2	E8	D7	P	C	C
3.	0113020	Female	C4	E8	D7	C	P	C
4.	0113020	Female	B2	C6	C6	C	P	A1
5.	0113020	Female	A1	D7	C6	C	C	C
6.	0113020	Female	B3	C5	C5	P	A	P
7.	0113020	Female	B3	D7	C5	C	C	C
8.	0113020	Female	B3	C6	C4	A	C	P
9.	0113020	Female	C4	E8	C6	A	C	A
10.	0113020	Female	B2	D7	D7	C	C	A
11.	0113020	Female	C5	F9	C6	P	C	C
12.	0113020	Female	D7	D7	C4	C	P	A
13.	0113020	Female	F9	C4	D7	P	A	C
14.	0113020	Female	B2	C4	E8	P	A	A
15.	0113020	Female	C4	C4	E8	P	C	C
16.	0113020	Female	B2	A1	C4	F	C	A
17.	0113020	Female	A1	A1	C5	P	C	C
18.	0113020	Female	B3	B3	D7	P	C	C
19.	0113020	Female	C6	B2	E8	A	C	P
20.	0113020	Female	B2	A1	D7	P	A	C
21.	0113020	Female	B3	C6	C4	A	C	P
22.	0113020	Female	C4	E8	C6	A	C	A
23.	0113020	Female	B2	D7	D7	C	C	A
24.	0113020	Female	C5	F9	C6	P	C	C
25.	0113020	Female	D7	D7	C4	C	P	A
26.	0113020	Female	F9	C4	D7	P	A	C
27.	0113020	Female	B2	C4	E8	P	A	A
28.	0113020	Female	C4	C4	E8	P	C	C
29.	0113020	Female	B2	A1	C4	F	C	A
30.	0113020	Female	A1	A1	C5	P	C	C
31.	0113020	Female	B3	B3	D7	P	C	C
32.	0113020	Female	C6	B2	E8	A	C	P
33.	0113020	Female	B2	A1	D7	P	A	C

School: G.S.S. JA'OJI **Session: 2013/14 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	0113019	Male	**D7**	**E8**	**C6**	**C**	**P**	**C**
2.	0113019	Male	C6	F9	C5	P	P	C
3.	0113019	Male	E8	F9	D7	C	C	A
4.	0113019	Male	C6	E8	C6	P	C	A
5.	0113019	Male	D7	F9	C6	C	A	A
6.	0113019	Male	C6	E8	E8	C	F	C
7.	0113019	Male	D7	F9	C4	F	C	C
8.	0113019	Male	E8	F9	C5	F	P	C
9.	0113019	Male	C6	C5	C6	C	F	C
10.	0113019	Male	C4	F9	C6	P	F	A
11.	0113019	Male	C4	F9	B3	P	C	C
12.	0113019	Male	A1	C6	A1	C	A	A
13.	0113019	Male	F9	E8	A1	C	A	A
14.	0113019	Male	A1	F9	D7	P	A	A
15.	0113019	Male	A1	E8	A1	C	A	A
16.	0113019	Male	B3	E8	C5	A	A	C
17.	0113019	Male	B2	C4	D7	P	C	C
18.	0113019	Male	A1	D7	C4	P	P	P
19.	0113019	Male	C4	F9	B3	P	C	C
20.	0113019	Male	F9	E8	A1	C	A	A
21.	0113019	Male	B3	E8	C5	A	A	C
22.	0113019	Male	B2	C4	D7	P	C	C
23.	0113019	Male	A1	D7	C4	P	P	P
24.	0113019	Male	C4	F9	B3	P	C	C
25.	0113019	Male	B3	E8	C5	A	A	C
26.	0113019	Male	B2	C4	D7	P	C	C
27.	0113019	Male	A1	D7	C4	P	P	P

School: G .G.S.S Dawakin Kudu **Session: 2013/14 and 2011/12**

S/N	School code	Sex	Respondent SSCQE Grade			Respondent JSCE Grade		
			MAT	ENG	C/Ed	MAT	ENG	C/Ed
1.	0113015	Female		C6	F9	C5	P	P
2.	0113015	Female		E8	F9	D7	C	C
3.	0113015	Female		C6	E8	C6	P	C
4.	0113015	Female		D7	F9	C6	C	A
5.	0113015	Female		C6	E8	E8	C	F
6.	0113015	Female		D7	F9	C4	F	C
7.	0113015	Female		E8	F9	C5	F	P
8.	0113015	Female		C6	C5	C6	C	F
9.	0113015	Female		C4	F9	C6	P	F
10.	0113045	Female		C4	F9	B3	P	C
11.	0113045	Female		A1	C6	A1	C	A
12.	0113045	Female		F9	E8	A1	C	A
13.	0113045	Female		A1	F9	D7	P	A

Ho1: **Correlation**

		Mathematic Qualify	Mathematic JSCE
Mathematic Qualify	Pearson Correlation	1	.135*
	Sig. (2-tailed)		.010
	N	360	360
Mathematic JSCE	Pearson Correlation	.135*	1
	Sig. (2-tailed)	.010	
	N	360	360

*. Correlation is significant at the 0.05 level (2-tailed).

H02 **Correlations**

		English Qualify	English JSCE
English Qualify	Pearson Correlation	1	.029
	Sig. (2-tailed)		.581
	N	360	360
English JSCE	Pearson Correlation	.029	1
	Sig. (2-tailed)	.581	
	N	360	360

H03 **Correlations**

		Civic Educ Qualify	Civic Educ JSCE
Civic Educ Qualify	Pearson Correlation	1	.135*
	Sig. (2-tailed)		.010
	N	360	360
Civic Educ JSCE	Pearson Correlation	.135*	1
	Sig. (2-tailed)	.010	
	N	360	360

*. Correlation is significant at the 0.05 level (2-tailed).

Ho4: Correlation

Gender			Mathematic Qualify	Mathematic JSCE	English Qualify	English JSCE	Civic Educ. Qual.	Civic Educ. JSCE
Male	Mathematic qualify	Pearson Correlation	1	.067	-.124	.015	.086	-.044
		Sig. (2-tailed)		.367	.096	.841	.251	.558
		N	181	181	181	181	181	181
	Mathematic JSCE	Pearson Correlation	.067	1	-.068	-.027	-.005	-.017
		Sig. (2-tailed)	.367		.362	.721	.943	.821
		N	181	181	181	181	181	181
	English qualify	Pearson Correlation	-.124	-.068	1	-.051	-.018	-.044
		Sig. (2-tailed)	.096	.362		.491	.808	.553
		N	181	181	181	181	181	181
	English JSCE	Pearson Correlation	.015	-.027	-.051	1	-.034	.104
		Sig. (2-tailed)	.841	.721	.491		.654	.162
		N	181	181	181	181	181	181
	Civic Educ. Qualify	Pearson Correlation	.086	-.005	-.018	-.034	1	-.002
		Sig. (2-tailed)	.251	.943	.808	.654		.981
		N	181	181	181	181	181	181
	Civic Educ. JSCE	Pearson Correlation	-.044	-.017	-.044	.104	-.002	1
		Sig. (2-tailed)	.558	.821	.553	.162	.981	
		N	181	181	181	181	181	181
Female	Mathematic qualify	Pearson Correlation	1	.219**	-.047	-.116	.042	-.090
		Sig. (2-tailed)		.003	.534	.123	.579	.232
		N	179	179	179	179	179	179
	Mathematic JSCE	Pearson Correlation	.219**	1	-.030	.127	.007	-.099
		Sig. (2-tailed)	.003		.691	.090	.923	.186
		N	179	179	179	179	179	179
	English qualify	Pearson Correlation	-.047	-.030	1	.111	.129	.067
		Sig. (2-tailed)	.534	.691		.139	.084	.371
		N	179	179	179	179	179	179
	English JSCE	Pearson Correlation	-.116	.127	.111	1	.150*	-.078
		Sig. (2-tailed)	.123	.090	.139		.045	.299
		N	179	179	179	179	179	179
	Civic Educ. qualify	Pearson Correlation	.042	.007	.129	.150*	1	.275**
		Sig. (2-tailed)	.579	.923	.084	.045		.000
		N	179	179	179	179	179	179
	Civic Educ. JSCE	Pearson Correlation	-.090	-.099	.067	-.078	.275**	1
		Sig. (2-tailed)	.232	.186	.371	.299	.000	
		N	179	179	179	179	179	179

**. Correlation is significant at the 0.01 level (2-tailed)