ASSESSMENT OF TEACHERS' ATTITUDE TOWARDS VALIDATION OF NON-STANDARDIZED ACHIEVEMENT TEST IN SECONDARY SCHOOLS IN BORNO STATE, NIGERIA

BY

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A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY ZARIA, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER DEGREE IN MEASUREMENT AND EVALUATION

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April, 2018

DECLARATION

I Emmanuel Daniel Kaigama declare that, the Dissertation entitled ASSESSMENT OF TEACHERS' ATTITUDE TOWARDS VALIDATION OF NON-STANDARDIZED ACHIEVEMENT TEST IN SECONDARY SCHOOLS IN BORNO STATE, NIGERIA has been written by me in the Department of Educational Psychology and Counselling. The information derived from the literature has been duly acknowledged in the text and a list of reference provided. No part of this dissertation was previously presented for another degree or diploma at any university.

_____ Date_____

Emmanuel Daniel Kaigama

CERTIFICATION

This dissertation entitled ASSESSMENT OF TEACHERS' ATTITUDE TOWARDS VALIDATION OF NON-STANDARDIZED ACHIEVEMENT TEST IN SECONDARY SCHOOLS IN BORNO STATE, NIGERIA by Emmanuel Daniel Kaigama meets the regulations governing the award of the master's degree in Measurement and Evaluation of Ahmadu Bello UniversityZaria, and is approved for its contributions to knowledge and literary presentation.

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DEDICATION

This dissertation is dedicated to my parents Mr. and Mrs. Emmanuel Netvandaya Kaigama, and my sisters Murna and Rachael.

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All glory goes to God for the gift of life and the opportunity to undertake this study. Words are not enough to express God guidance and protection. The researcher is grateful to his supervisors: Dr. M.O Ibrahim and Dr. A.I Mohammed, for taking their time to read and correct this work. The researcher appreciates their commitments to the work.

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ABSTRACT

This study assessed teachers' attitude towards validation of non-standardized achievement test in secondary schools in Borno State, Nigeria. Three objectives, three research questions and two null hypotheses were formulated. This was tested at 0.05 level of significance alpha. The U-test (Mann Whitney) was use to test hypothesis one while H-test was used to test hypothesis two. Survey research design was used for the study with the population of 8100 teachers within the four educational zones in Borno State. Proportionalsampling techniques was used to select 447 teachers. The analysis of the obtained data revealed that most teachers in Borno State have negative attitude towards validation of non-standardized achievement test. 267 teachers out of 432 had negative attitude only 165 teachers have positive attitude towards validation of non-standardized achievement test.There was significant difference in validation of non-standardized achievement testbetween teachers with difference qualification in secondary schools in Borno State (H=34.837, P =0.001). The study also revealed that significant difference do not exist in validation of non-standardized achievement test between experience and inexperience teachers in secondary schools in Borno State (U=1.065, P= 0.287). Base on these findings it was concluded that teachers in Borno State have negative attitude towards validation of non-standardized achievementtest, teacher qualification influence validation of non-standardized achievement test in secondary schools in Borno State while years of experience did not influence validation of non-standardized achievement test. It was recommended that Seminar and workshops should be organized on regular bases for teachers to upgrade and update their proficiency skill in test construction and validation and to motivate them.

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OPERATIONAL DEFINITION OF TERMS

Attitude: predisposition of teachers to respond positively or negatively towards validation of test.

Non-standardized Achievement test: test designed by a teacher to assess students on what he/she taught in class with respect to the content area covered.

Validation: activity undertaken by teacher to find out the suitability of test to measure students' performance in secondary schools.

Teacher Qualification: certificate obtained by the respondents in Education.

Teacher Experience:years of teaching service of respondents with the requisite knowledge obtained thereof.

Experience Teacher: teachers who have been teachingin secondary school for six years and above.

Inexperience Teacher:teachers who have been teaching in secondary school for less than six years.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

There is an increased desire for school effectiveness and improvement at all levels of education in Nigeria. Assessment is one of the key variables in the school system that improve teaching and learning, therefore it demands that non-standardized achievement test, that is teacher made test should be valid and reliable to measure students' real knowledge and skills and not test wiseness or test taking abilities (Ugwu, 2012). Non-standardized achievement testis used by teachers for formative and summative purposes. They serve formative purpose when the results are used to monitor the progress of teaching and learning and summative purpose when the results are used for grading, promotion and certification. In Nigeria, teachers are required to adopt continuous assessment mode of evaluation and the most commonly used techniques are written tests. The instrument for this assessment is expected to be valid and reliable. The extent to which secondary school teachers use valid assessment instruments depends on their attitude towards validation to ensure quality in classroom assessment (Alufohai & Akinlosotu, 2016).

At the secondary school level, non-standardized achievement testis adopted in operation of continuous assessment mode of evaluation by the teachers. It is an instrument used by teachers to evaluate students' progress and

the achievements of learners in educational institutions with the aim of getting the true possible picture of each learner's ability and helping each student to develop his/her abilities to the fullest. Tukur, Hamafyelto and Hamafyelto (2015) defined non-standardized achievement test as test prepared by teacher to measure the outcomes and content of local curriculum. It is a tool designed to solve the problem or requirement of the class for which it is prepared. Ugwu (2012) submitted that non-standardized achievement testaccomplishes two major objectives. The first is to discriminate among individuals according to their degree of achievements. This form of testing is known as the norm-referenced testing, and it is designed to rank students in order of achievement from high to low, so that decisions can be made with greater confidence. The second objective of non-standardized achievement test is to determine the extent to which an individual reaches the set standards. This form of testing is called criterion reference testing. In this study, the form of test being considered is the norm-referenced test which is an instrument for evaluating the learning outcome in schools. In norm-referenced test, a number of properties are required to make such examinations appropriate and acceptable.

The Federal Republic of Nigeria FRN (2014) stipulated that non-standardized achievement test shall be liberalized to be used as whole for assessment of the progress of each individual learner. In section 5 of national policy on education, FRN (2014) further recognized the importance of non-standardized achievement test in assessing learners of junior and senior

secondary schools it states succinctly that the assessment should be based on non-standardized achievement test constructed by teachers. However, education in Nigeria is in the concurrent list; therefore, the Federal Ministry of Education ensures the maintenance of national standard while State Ministries of Education implement the policy relying on their disaggregated variable manpower and technical expertise. This is an internal mechanism for assuring quality in secondary schools. In the entire process of quality assurance in assessment, the issue of validity is paramount and critical.

Mohammed, Shafeeq, Al-hudawi, Lokman and Nail (2015) submitted that validity is a concept that should be fully understood by teachers in any effort to improve quality of Non-standardized achievementtest. It is the most important technical quality of an assessment instrument. Validity is a general term that refers to the extent to which an instrument measures what it claims to measure. This definition implies that for an instrument to be valid, it must measure what it purports to measure and nothing else. Validity also refers to the appropriateness of inferences drawn from test scores or other assessment instruments. According to Robert and Alison (2017), test validity refers to the extent to which the inferences and conclusions made on the basis of scores earned on measuring are appropriate and meaningful. This definition implies that validity is expressed in degrees from low, moderate to high. It is not measured but inferred from available evidence and depends on many types of evidence. Validity requires that an instrument is reliable, but an instrument can

be reliable without being valid. Most literature such as (Robert & Alison, 2017) identified different types of validity based on scope, relevance, predictive quality and association. These types of validity are content validity, construct validity, criterion-related validity and face validity. However, content validity is considered to be of most importance for non-standardized achievementtest. Also important is criterion-related validity since teachers not only conduct assessment for learning and of learning, but also prepare students for the next level.

Content validity requires the judgments of experts to determine if the test is representative of knowledge and skills that are supposed to be measured. This involves consistency between curriculum content, test objectives and content of the test. The degree of content validity depends on the coverage of the tests of necessary objectives and content as well as adequate sampling of important curriculum content. This is what Amaechi and Sayita (2016) refers to as item relevance and content coverage. Item relevance and content coverage help in providing evidence from which valid inferences can be drawn. Constructing table of specifications is one of the practical ways of achieving content validity of a test. On the other hand, predictive validity is the extent to which a students' current performance on a test estimates the students' later performance on a criterion measure. Although face validity is not a type of validity in the technical sense, it is the degree to which an instrument appears to measure what it measures. It is usually confused with content validity by teachers. Important

evidence of validity to be sought by teachers is content-related evidence and criterion-related evidence.

It has been argued that the traditional conception of validity is fragmented and incomplete because it fails to take into account evidence of the meaning of scores as a basis of action and the social consequences of the use of scores (Panahi, 2014). Messick in Panahi (2014) viewed modern concept of validity as a unified concept, which lays more emphasis on the use of a test. He identifies six aspects of validity that are implicit in the notion of validity as a unified concept. The six aspects are content, substantive, structure, generalizability, external factors and consequential. The six aspects are viewed as interdependent and complementary forms of validity evidence and not separate entities. These imply that evidence for assessing validity should include evidence of content relevance and representativeness, extent to which scores are consistent with theoretical predictions, evidence on extent to which scores and their interpretations generalize to and across groups, settings and tasks. Other evidences are the fidelity of scoring structure to the structure of the construct being assessed; evidence from criterion-related studies, and consequential aspects of test use and score interpretation especially issues relating to bias and fairness.

Teacher qualification and experience are key attributes that aid a person's chances to be suitable for a job. A qualified person is the one who is

fully certified and holds the equivalent of a major in the field being taught. In education, qualification of teachers is important indicators of their knowledge and competence in teaching. Adu and Wiki (2013) opined that a teaching qualification is one of the academic and professional degrees that enable a person to become a registered teacher. It however has limited utility in analyzing how well-prepared teachers are for what they have to teach in schools. More detailed knowledge of the courses they have taken during their training needs to be compared to the actual content and skills required to teach in the school.

1.2 Statement of the Problem

In curriculum implementation in Nigerian education system, teachers' attitude towards validation of test is one of the most important factors in the implementation of continuous assessment in schools. This is because teachers are the major implementers of the curriculum at the classroom level. However, most teachers in secondary schools in Borno State are unwilling to undertake some validation practices such as covering the content of instructional objective taught in class, taking decision on appropriate test format to use, considering the age ability of testees when setting questions, using short sentences to set questions, consulting the test books before writing tests, setting questions to cover all the requisite domain, specifying the degree of accuracy for full marks, ascribing scores for each item, assembling of questions based on content and skill measures, setting questions with regard to time available and submitting their test to their principals for vetting. Where a number of teachers are

knowledgeable about the need to undertake these practices, some consider it a laborious and uninteresting task. Consequently, some of them shy away from undertaking the various practices involved. Nowadays teachers in secondary schools just decide within a few minutes to construct the test while the students are waiting for the examination. What is worrisome about this act is that students, often times, perform better in the various classroom-based achievement tests constructed and administered by their teachers but when they sit for standardized tests such as West African Examination Council (WAEC), National Examination Council (NECO), National Business and Technical Examination Board (NABTEB) and others, they mostly fail. Therefore, determining teachers' attitude towards validation of non-standardizedachievement test in secondary schools in Borno State is the problem of this study.

1.3 Objectives of the Study`

The specific objectives of the study were to:

1. find out the attitude of teachers towards validation of non-standardized achievement testin secondary schools in Borno State.
2. examinethe influence of teachers' qualification on validation of non-standardized achievement test in secondary schools in Borno State.
3. examine the influence of teachers experience on validation of non-standardized achievement test in secondary schools in Borno State.

1.4 Research Questions

In view of the problem of the study, the following research questions were used to guide the study.

1. What is the attitude of teachers towards validation of non-standardized achievement test in secondary schools in Borno State?
2. What is the influence of teachers' qualification on validation of non-standardized achievementtest in secondary schools in Borno State?
3. What is the influence of teachersexperience onvalidation of non-standardizedachievement test in secondary schools in Borno State?

1.5 Research Hypotheses

As part of the investigation of the problem of this study, the following null hypotheses were propounded.

1. There is no significant difference in validation of non-standardized achievementtest between teachersof different qualifications in secondary schools in Borno State, Nigeria.
2. There is no significant difference invalidation of non-standardizedachievement test between experience and inexperience teachers in

1.6 Basic Assumptions of the Study

In this study, the following assumptions are made:

1. That most teachers' have negative attitude towards validation of non-standardized achievement test in secondary schools.
2. That teachers' qualification affects validation of non-standardized achievement test in secondary schools.
3. That teachers' experience affectsvalidation ofnon-standardized achievement test in secondary schools.

1.7 Significance of the Study

This research is undertaken with the intention that the findings will be added to the pool of knowledge already available in the area of non-standardized achievement test in secondary schools. Its findings are expected to be of immense help to teachers, ministry of education, educational administrators, researchers, and curriculum designers.

Secondary school teachers are expected to borrow a leaf from the steps involved in test validation to improve their tests. This study highlights the importance of validation to teachers to enable them ensure a judicious covering of the content of the subject matter to be examined. This study will therefore, provoke the minds of our teachers towards the use of recommended and set down guidelines and strategies for test construction, especially in the writing of multiple choice items. It will be useful for teachers in the evaluation of teaching, the improvement of instructional techniques, and the revision of curriculum content. It will provide them with information on the adequacy with which essential content is being covered. It will provide useful information that will

help teachers to develop habits of validation of tests used to measure the achievement of learners to discriminate against them according to their demonstrated abilities, and at the same time be able to predict subsequent outcomes.The findings of this work are beneficial to teachers in Borno State, because they will use it as a reference point to help them avoid errors in tests construction that impair validity of test. It will expose them to the need for rigorous preparation of the test that will ensure the assessment of learning outcomes. Those who are already familiar with principles and criteria of test validation will be able to apply some to improve on the quality of their questions. The result will help them to assess their area of strength and weakness in validation of non-standardized achievement test. The result will help them to assess their area of strength and weakness in validation of non-standardized achievement test.This study is significant to school administrators in Borno State who make use of tests as way of maintaining quality control over their schools. The school administrator by having a clear understanding of what it takes to construct valid tests from the findings of this work would carry out a periodic monitoring of non-standardized achievement test to ensure that they adhere strictly to tests construction principles when planning and developing questions to measure the intended learning outcomes.

This study adds value to the area of non-standardized achievementtest because those who are interested in the study of teachers' attitude towards validation of non-standardize achievement test will find this work useful as a

source of literature. Guidance and counsellors in schools will make use of this study as the state of non-standardized achievementtest and its implications for teaching and learning would be understood. With the findings, the guidance councellor will be in a better position to guide and counsel teachers on best ways to approach teaching and learning especially on how to validate questions that will be use to assess students learning outcome. They will also ensure that schools keep tests item bank for teachers to make reference to when developing non-standardized achievementtest.

Curriculum development experts in Borno State will benefit from this work because it will give them insight into the validity of test use in secondary schools in Borno State especially non-standardized achievement test in secondary schools and see if there is the need to embark on massive training and retraining exercise for teachers especially in the area of validation in order to enhance teaching and learning. Ministry of Education will benefit from this study because the study willexpose the nature of questions use in schools and its conformity to technical guidelines of test construction. The results of this study will spur the state government to organize training workshop for teachers in the state to update their knowledge on test construction and validation. The study will give the federal ministry of education information to intensify their effort to harmonize the implementation strategies for continuous assessment particularly in ensuring validity of instruments used by teachers for assessing learning.

1.8 Scope/ Delimitation of the Study

The study attempts to investigate teachers' attitude towards validation of non-standardized achievementtest in secondary schools in Borno State, Nigeria. Public secondary schools' teachers in Borno State constitute the scope of the study. The uniform manners in which public secondary schools operate in Borno State make them suitable for a study which is representative of public secondary schools in Nigeria. The study was limited to validity of non-standardized achievement testconstruct by teacher in secondary schools in Borno State because it provides teacher with information about the extent to which instructional objective taught in class was achieved.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter focuses on the review of related literature under the following headings:

2.2.1 Conceptual Framework

2.2.1 Concept of validation.

2.2.2 Concept of Non-standardized achievement test.

2.2.3 Concept of attitude.

2.2.4 Concept of qualification.

2.2.5 Concept of experience.

2.2.6 Teachers' attitude and validation of non-standardized achievement test.

2.2.7 Teachers' qualification and validation of non-standardized achievement test.

2.2.8 Teachers experience and validation of non-standardized achievement test.

2.3 Theoretical Framework

2.3.1 Classical test theory by Lord and Novick.

2.3.2 Latent trait test theory by Thorndike

2.3.3 Item Response theory by wainer

2.4 Review of Empirical Studies

2.5 Summary

2.2 Conceptual Framework

Conceptual framework provides the reader with clear understanding of the phenomena under study.

2.2.1 Concept of Validation

Validation is the process of accumulating evidence to support inferences drawn from test (Mustapha 2015). It is the kind of activity the teachers undertake to find out whether a test has the properties of validity and reliability. Validity in general refers to the extent to which an instrument measures what it claims to measure. This definition implies that for an instrument to be valid, it must measure what it purports to measure and nothing else. Validity also refers to the appropriateness of inferences drawn from test scores or other assessment instruments. According to Amaechi and Sayita (2016) validity referred to the degree to which inferences made which are based on test scores are meaningful, useful and appropriate. This definition implies that validity is expressed in degrees from low to moderate to high. It is not measured but inferred from available evidence and depends on many types of evidence. Panahi (2014) defined validity as an integrated evaluative judgment of the degree to which empirical evidence and theoretical rationale support the adequacy and appropriateness of inferences and actions based on test scores and other modes of assessment. Panahi (2014) pointed out that validity is a matter of degree, not absolutely valid or absolutely invalid. Anyanmu and Onwuakpa (2015) stated that the validity of a test is the degree to which an instrument measures the trait

or theoretical construct that it is intended to be measured. Similarly, Mohammed, Shafeeq, Al-hudawi, Lokman and Nail (2015) explained that validity is the level of confidence which an examinee's test score could be used to infer the ability under measurement possessed by the examinee. Anikweze (2013) posited that a valid test ensures that questions are set from all parts of the syllabus. This emphasizes the need to ensure adequate coverage of subject areas and the instructional objectives which students' learning center on. Validity is made up of four categories. They are:

i. Content Validity: It is the extent to which test items consist of representative samples of the subject matter and the objectives that the test is designed to measure. Nwaogazie (2014) opined that content validity is demonstrated by showing how well the content of the test samples the class situation or subject matter about which conclusions are to be drawn. Content validity of a test involves adequate coverage of the subject matter and behavioural objectives in a particular syllabus by an instrument. Muhammed (2015) described content validity as the degree to which the items of an instrument measures a representative of the subject matter content and the instructional objectives.

Hamafyelto, Tukur and Stephen (2015) stated that the content or subject matter is the topic to be treated while instructional objectives are the changes to be sought in the students. An instrument of measurement

such as a test should provide results which are representative of topics and behaviours we want to determine. Odo and Ugwoji (2016) defined content validity as the art of testing all that the students are supposed to have studied, that is topics and behavioral objectives and not just other things. Nwagu (2013) asserted that test blue print or table of specifications is employed to ensure a systematic coverage of the topics and the instructional objectives in order to produce content valid test. Ngozi (2013) stated that a table of specifications is a two-way chart with the topics listed along the left column and the objectives along the top row. This ensures easy computation of the weight of each topic or objectives of the test. Anikweze (2013) claimed that content validity is also called curricula, rational or logical validity and it is most suited for achievement tests since achievement tests are designed to measure how well the examinee has mastered a specific course of the study.

ii. Face Validity: This is not really a true estimate of content validity, but it gives a quick idea about the content validity of a test. Nwaogazie (2014) saw face validity as the extent to which a test superficially looks like a test on the subject it intends to measure. This type of validity helps in sustaining the motivation of the users of the test. A mathematics test should contain mathematical symbols. John (2015) opined that face validity is the extent to which a test looks as if it would measure what it is intended to measure, and therefore, refers to the facial appearance of

the test. It is concerned with how experts and students consider any instrument whether the items vocabulary and instructions appear too difficult for what SSI students will take instead of SS II students for whom it was meant for.

Chime (2012) opined that face validity of an instrument is achieved by giving copies of that instrument to specialist in the area as well as experts in measurement and evaluation for their assessment. These experts should be requested to vet items of the instrument in terms of clarity of words, language difficulty, and relevance to the course content. The final version of the instrument must incorporate their recommendations. Students are happy and motivated when they are administered with instruments which appeal to them in terms of difficulty and relevance.

iii. Construct Validity: this is used to refer to those abstract psychological traits such as emotion, anxiety, aggression and intelligence. Nwaogazie (2014) explained that construct validity refers to the accuracy with which an instrument describes an individual in terms of some psychological traits.

Also, Chime (2012) saw construct validity of a test as the extent to which the test measures a psychological construct or trait which it is supposed to measure. Similarly, Murat, Ajda, Nasser, Mansour, Maher (2016) defined construct validity as how well a test measures the

psychological or theoretical construct adequately. Maruf and Aliyu (2015) stated that the extent to which performance in a test reveals possession of a specified psychological construct is also construct validity. Ugwu (2012) holds that some of the methods used in estimating construct validity of measuring instruments are internal consistency, age differentiation and correlation with other tests. The developers of such tests are Standford Binet scales; Wechslar scales used age differentiation as the major criterion in validating them. To show whether their scores exhibited a progressive increase with advancing age, these tests were matched against students' chronological ages. The reason for this was based on the idea that since abilities increase with age from childhood, it implies that test scores should also show such increase if the test is valid. Therefore, if test scores do not increase with age, it shows that the test is not a valid measure of ability it was designed to measure. The method of internal consistency entails that student scores in sub tests are correlated with their scores in the total tests. This is homogeneity test. Any sub test that correlates poorly with the total test is discarded because it does not measure the same general traits as the total test. As the sub test correlate more with the total test, the degree of homogeneity of test will increase.

Another technique involves the correlating of students' scores in a new test with their scores in an earlier similar test and if the coefficient of correlation is high it indicates that the new test measures the same

general area of behaviors as the earlier one (Wieland, Durach, Kembro, & Treiblmaier, 2017).

iv. Criterion-related Validity: Two sets of scores are of interest in criterion related validity. These scores are the predictor scores and the criterion scores. Amajuoyi; Eme and Udoh (2013) stated that students' scores in a test that intend to predict a particular achievement, aptitude or behaviour are the predictor scores. Scores from non-standardized tests are useful to predict students' achievement in the JSSCE/SSCE.

Ukamaka (2012) revealed that criterion related validity is demonstrated by comparing the test scores with one or more external variables considered to provide a direct measure of the characteristics or behaviour in question. Nwaogazie (2014) defined criterion related validity as the extent to which a persons' score on a criterion measure can be estimated from those persons score. Panahi (2014) saw criterion related validity as the ability of a test to measure an individuals' behaviour on some other variable called a criterion. There are two types of criterion related validity, namely: predictive and concurrent validity.

a. Predictive Validity: When an individual's score in a test is used to predict his future performance in another test which measures a similar criterion, the test is said to have predictive validity. Nwaogazie (2014) supported that predictive validity estimated tries to verify whether a

persons' test score allows an accurate estimation of that persons' score on a criterion measure administered some time in future. Ukamaka (2012) showed that the correlation coefficient estimated of the two set of scores is regarded as the predictive validity index. This means the second test that is correlated with the first one is given after a long-time interval.

Nwagu (2013) claimed that to determine this type of validity, a test normally administered to students and marked. The scores of this test are called predictor scores. The students, are followed up and at the end of the programme, their achievement or performance scores called criterion scores are correlated with the predictor scores using Pearson product moment correlation (r). The higher the predictive validity index, the more effective the test is in predicting the test in question.

b. Concurrent Validity: This is another type of criterion related validity. It is indispensable for tests used in diagnosis of existing status. This is the most appropriate test used in most psychological tests. A test is said to have concurrent validity when there is a correlation between the scores obtained by the group examinees in the test and scores they got in the criterion test which they took within the same period (Ukamaka, 2012). It should be noted that the two tests to be correlated are taken concurrently. The correlation coefficient obtained is called concurrent validity index.

Ugwu (2012) stated that concurrent validity and predictive validity are similar in which predictor scores match against the criterion score. Panahi (2014) recorded that in concurrent validity, both criterion scores and predictor scores are obtained at approximately the same time while in predictive validity, the criterion scores are obtained long after the predictor scores are obtained. Also, predictive validity is relevant for use in predicting future achievement or performance while concurrent validity is relevant for tests used in the diagnosis of existing issues.

Writing the test item does not produce an item ready to be tested until it is validated. Ugwu (2012) gave steps involved in test validation of non-standardized test.

1. Defining the Objective:This is the first and the most important step in test validation. Nwaogazie (2014) stated that in the validation of test the objectives upon which the test is being constructed need to be defined in specific behavioural terms and classified according to levels of instructional domains based on Marzano taxonomy (2016) which include knowledge retrieval, comprehension, analysis and knowledge utilization. The levels of cognitive domain to be reflected in the objectives depend on the mental stage or ability of the students.
2. Specifying the Content to be Cover:This is the second step of validation of tests. Ugwu (2012) stated that specifying the content to be covered in a test is important because it is the vehicle through which the process

objectives are to be achieved. The content of the test should be selected from the sections of the relevant curriculum. The number of questions to be set per proportion of the content area depends on the volume of work which itself is dependent upon the number of weeks spent on teaching it.

3. Preparing Test Blue-print:This is a two-dimensional table which aligns the content area of a course with the levels of instructional objectives. Percentage presenting the number of items out of the total items for the test is assigned in advance to each level of instructional objectives and content area. Maruf and Aliyu (2015) Saw table of specification as an activity which enumerates the information and cognitive tasks on which examinees are to be assessed. Nwaogazie (2014) pointed out that the condition should be fulfilled in order to construct a test blue-print which will adequately guide in developing a test that truly represents its contents and objectives.

These conditions include:

i. The proportion of the test items to each content area should correspond to the proportionate emphasis in terms of the amount of time spent in teaching the topic and it depends on how voluminous or vast the topic is. In this case, a topic taught in two weeks will contribute more questions than the topic taught in one week. Also, the proportion of the test items set at each cognitive level should correspond to the importance the

teacher ascribes to the cognitive level appropriate for the mental level of his students. Indeed, the decisions made by the teacher inallocating the questions on a test are necessarily subjective ones. The basic principles being that the test should maintain the same balance in relative emphasis on both content and objectives which the teacher has been trying to achieve through instructions.

ii. The test maker must choose the types of test items which will be most appropriate to constitute the test. He will decide whether to use objective questions or essay. The decision on type of items to use depends to a large extent, on the process objectives to be measured, the content area concerned, the skill of the teacher in constructing the different types of test, the time available for the test validation and the time available for answering the questions by the testees.

iii. The test maker must decide on the total number of items for objective questions. Many items are required but essay questions require few test items. The larger the content area and process objectives to be measured by a test, the larger the test items. The time available for testing is a practical factor that limits the number of items on a test. However, the number of items should depend on the following factors:

   a. The types of items used on the test
   b. The age and educational level of the testees
   c. The ability level of the testees

d. The length and complexity of the items.

e. The types of process objectives being measured or tested`

f. The amount of computation or quantitative thinking required by the items.

g. The test maker must determine the difficult levels of test items.

4. Writing Test Items: Writing of test items is based on the table of specifications or test blue-print. Ugwu (2012) wrote that precautionary measures should be taken to ensure that when the items are eventually reviewed (and consequently faulty items are discarded) there will still be enough good items left to make up a complete test. Mohammed, Shafeeq, Al-hudawi, Lokman and Nail(2015) showed that apart from setting many more questions that demanded by each section of the test blue print, item writers should:

    a. Avoid the use of long and involved statement.

    b. Specify the degree of accuracy required for full marks.

    c. Avoid extraneous clues.

    d. Avoid giving clues to the answer of one item in another item statement.

    e. Avoid using negative statements and double negatives.

    Ugwu (2012) recorded that after the items have been written, instructions should be provided to guide the testees. These instructions should include the number of questions to be answered from each section (if

sectionalized); the mode of response presentation, the scoring weights of each item, the type of writing materials to be used, and the maximum amount of time allowed for the test.

5. Face Validation of Test Items:This has to do with distributing copies of the test, its table of specifications and the syllabus upon which it is based to test experts and subject specialists. The resource persons are expected to vet the items in terms of relevance content and objectives appropriateness to the class level, and clarity of words. The test writer then reviews the items in the light of the flaws indicated by the resource persons (Ukamaka, 2012).

2.2.2 Concept of Non-standardized Achievement Test

A non-standardized achievement test is the test prepared by the teacher for his specific class, based on what he/she has taught. Fives and Didonato-Bamas (2013) opined that non-standardized achievement test at secondary school level serves many purposes such as motivation of learning; this is so because tests seem to influence and sometimes determine when, what and how students study. This explains why every student bends down to study and to revise his note once the teacher proposes a date for administering a test. Furthermore, feedback from well constructed non-standardized achievement test can help to improve students' performance either through corrections made by the teacher, or by the learners' effort to cover the lapses that account for failure.

Diagnosis of instruction; this applied as pretest to identify a rational starting point of instructions. Such a test is used to establish approximately what the learners already know and what further they need to know. In the absence of pretest, the teacher stands the risk of flying blind (Anikweze, 2013).

Non-standardized achievement testis often applied as diagnostic tools during instructions to discover students' weaknesses and sources of difficulties in order to plan for remedial help, and in defining teaching objectives (Kizlik, 2014). The teachers' methods of evaluation are often pointers to important objectives of instructions as well as pointers to skills, abilities, and knowledge inherent in the subject matter. In specifying instructional objectives, teachers sometimes start with clauses such as: at the end of this lesson, students will be able to or after going through the exercise pupils will demonstrate understanding. Good teachers usually try to square up their teaching objectives with evaluation tasks almost on one to one basis and differentiate students; this way teachers arrive at logical conclusions to the differentiation of students particularly for purposes of streaming either along lines of career prospects, for example science, arts and technical groups or a long line of intellectual ability, for example above average, average and below average groups. Critics may find faults with this idea of segregating learners of the same grade into groups whatever the line of delineation may be but differentiating based on reliable tests

(not just one test) has its relative advantages for graduated sequence of instructions to learners and for individualized attention.

Ugwuanyi and Nwosu (2012) identified the importance of non-standardized achievement test in a school setup as a tool teacher use to inculcate the spirit of hard work, increase zeal to study in the candidates, makes the candidate active participant in teaching cum learning, ensures viability of teaching method, discovers learning difficulties encountered by students, identifies students with special skills for placement purposes and for administrative decision about students. Ugwu (2012) pointed out some of the deficiencies commonly associated with non-standardizedachievement test in secondary schools, such as ambiguous questions. When a statement or word can be interpreted in two or more ways, we have ambiguity. For example, in essay tests, words such as discuss and explain may be ambiguous in that different pupils interpret these words differently. Students should not be required to guess at an answer because the question is ambiguous. The question should be worded in such a way that it is interpreted in the same way by all students. Differential performance should be the result of differences in knowledge of the subject matter, not of interpretation of the items. Excessive wording; often times, teachers think that the more wording there is in a question, the clearer it will be to students. This is not always so. In fact, the more precise and clear-cut the wording, the greater the probability that the student will not be confused. Lack

of appropriate emphasis; Most often, non-standardized achievement test do not cover the objectives stressed and taught by the teacher and do not reflect proportionately teachers judgments the importance of those objectives. Frequently, non-standardized achievement test are heavily loaded with items that only test the students' ability to recall specific facts and information use of inappropriate item formats; some teachers use different item formats solely because they feel that change or diversity is desirable. But the need for diversity should not govern the type of items to be used. Teachers should be selective and choose the format that is most effective for measuring a particular objective.

Chime (2012) suggested seven reasons why teachers must consider the validity of non-standardized achievement test. They are predictions of future success/performance of learners, discover how well and reliable the predictions can be, solving educational problems. For instance, only valid tests can serve as reliable reference points for the promotion of learners to higher classes. Furthermore, only valid tests can give dependable evidence of individual differences among learners, to guide against unnecessary and baseless assumptions about learners' performance. Judgments based on the result from valid tests cannot be contradicted because they are based on reliable empirical evidence. Results from valid tests assist teachers in objective grading of learners leading to effective teaching that are partly based on group differentiation and partly on individual differentiation. Graduated sequences of instructions, confirm whether or not desired changes have occurred from teachers'

instructions. Only valid tests give accurate measurements of the change in learners consequent upon their attainment of instructional objectives. Any decisions that are taken based on the results of invalid tests also stand invalidated and to provide a reliable basis for the comparison of a teacher's effort in a particular class with other classes of the same standard taught by different teachers. This means that all the learners of the same standard who were taught similar content by different teachers must take the same valid test

2.2.3 The Concept of Attitude

The term attitude refers to one's feeling, thoughts and predispositions to behave in some particular manner towards certain phenomena (Crano & Gardi kiotis, 2015). Attitude is best expressed when individuals make statements about their feeling or opinion about certain object, issues or things. Rouven, Daniel, Svein (2015) saw attitude as relatively enduring organization of beliefs around an object or situation and predisposition to respond in a particular way towards specific objects. Garba (2011) defined attitude as favourableness or unfavourableness of peoples' reactions or disposition towards some idea. Attitude is not as a result of careful thinking and deliberation; it is instead motivated by emotions which have some reasons behind them. Vishal (2014) described attitude as an internal state that influences the choice of personal action made by an individual. Markkus (2016) named attitude as one of numerous implicit states or dispositions constructed by psychologists to explain why people react in certain ways in the presence of certain stimuli. Attitude is a

relatively enduring organization of beliefs, feelings, and behavioral tendencies towards socially significant objects, groups, and events. Markkus (2016) said that an individual does not have an attitude unless he or she responds evaluatively to an entity on an affective, cognitive, or behavioural basis. An evaluative response can then produce a psychological tendency to respond with a particular degree of evaluation towards an attitude object. An attitude towards the object has been formed after this tendency to respond has been established. Some researchers argue against a common definition of attitude as acquired or learned. In their views this idea of attitude as learned should not be included in the definition of the attitude construct. Instead, they believe that a definition of attitude should allow for the possibility that some attitudes are unlearned because they derive at least partially from a biological base.

Social psychology has many definitions for attitude concept. Raymond, Einer and Natasha (2015) described attitude as a disposition to respond favorably or unfavorably to an object, person, institution or event. Vishal (2014) defined attitude as an enduring organization of motivational, emotional, perceptual, and cognitive processes with respect to some aspect of the individuals' world. These definitions emphasize the enduring nature of attitudes and their close relationship to individuals' behaviour. Veresova and Dana (2016) stated that attitudes have three components:

i. Cognitive, which represents a person's information or beliefs about the object.

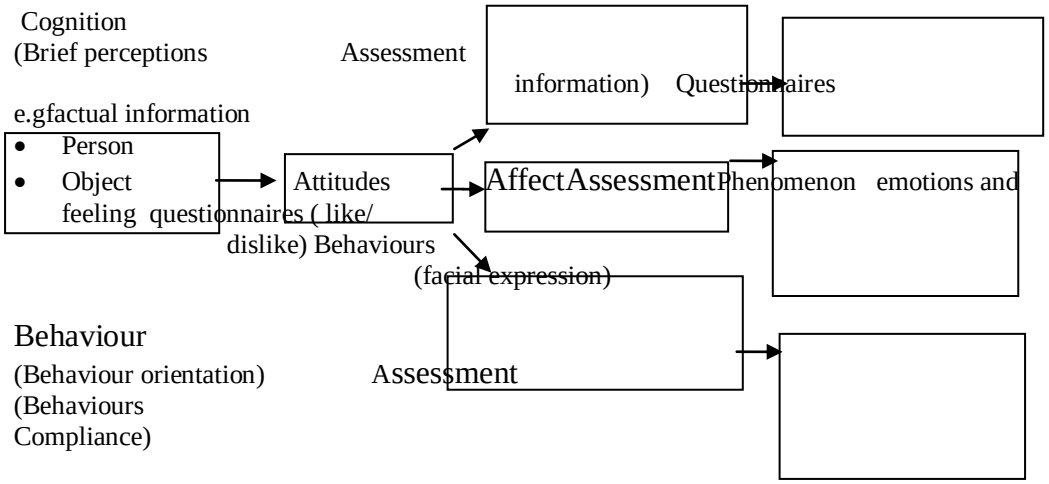
ii. Affective, which deals with a person's feelings of like or dislike towards the object

iii. Behavioral or operational, which refers to a person's tendency to behave in a certain waytowards the object.

The cognitive component provides the knowledge about the object or person. The sources of knowledge could be direct or indirect. The affective or evaluative component determines the feelings, either that of like or dislike. The operational component includes a predisposition to react favorably or otherwise. Thus, an attitude is a function of antecedent stimulus conditions and in turn, as determinant of observable behaviour that follows. When certain stimulus event occurs, the result is attitude arousal, and in turn, the internal responses constituting the aroused attitude may cause certain observable behaviours to occur. When the three components are positively interconnected the individual has positive attitude towards the concerned object, person or situation. The reverse is also the case if the components are negatively connected or interconnected. Garba (2011) saw attitude as a form or appearance that an individual assumes to gain or achieve an egocentric preference, whether it is accepted or manifestation of power or other self-centered needs. Azuka, Durajeiye, Okwuoza, Jekayinfa (2013) said attitude may also be considered as a primitive attribute to the preservation of the self of the ego. Dagnew (2012) classified attitude as implicit and explicit attitude which are unconscious and conscious attitude. He goes onto say that the formation of attitude is the belief

that attitudes are acquired or learn, just like any other habit. It is not inherited. As people acquire information and facts, they also acquire feelings and values associated with these facts. Dagnew (2011) asserted that once the attitudes are formed, the individual is no longer passive. The individual begins to process new information in terms of what he has learnt. He tends to reject inconsistent information and accept more readily information consistent with his attitude. Thus, well established attitudes tend to be extremely resistant to change.

Schematic Conception of Attitude



Source: Lawrence (2014) Page 102

It is very important to note however, that not all of the three predispositions need necessarily became activated by an attitude object or situation. Which one is activated depends on the particular situation within which a particular attitude object is encountered. This is why Banerjee and Behera (2014) stated that for certain types of research, it may be sufficient to use single response as the index of an individual's attitude. To understand the characteristic of attitude, it is necessary to know how attitudes are formed and the type of functions they perform.

Arturo et al, (2012) showed that attitude is acquired through the principles of learning. The major determinant of attitude is individual needs, information, group affliction and personality. Deboer (2011) stated that attitude is also shaped by the information to which the individual is exposed. The

validity of the attitude held by people will depend to a large extent on how sufficiently well informed they are. The nature of our sources of information is also crucial to the formation of valid attitude. Arturo et al (2012) said that for all individual's facts are frequently mediated by either people as authorities or the amount of discrepancy between facts and the individual's belief will be dependent upon the validity of assertions of authorities.

Garba (2011) revealed that group afflictions also determine an individuals' attitude. Barwal (2011) opined that many of the attitudes of the individual have their source and their support in the groups to which an individual gives his allegiance. Attitudes therefore tend to reflect the beliefs, values, and norms of groups. Anikweze (2013) said that personality also determines an individual's attitude among the members of various social groups. Diversity could be noticed in the midst of uniformity.

Azuka, Durojaye, Okwuoza and Jekayinfa (2013) described a theoretical distinction between attitudes and beliefs using a scale labeled affective on the one end and cognitive on the other. Attitude would be placed closer to the affective end of the scale while beliefs would lie towards the fact or cognition end. Azuka, Durojaye, Okwuoza and Jekayinfa (2013) further illustrated the distinction between attitudes and beliefs by stating that when clear distinction between rightness-wrongness, correctness, incorrectness, probability and improbability cannot be obtained, and evaluations are simply based upon the individual's feelings towards the object, then the investigator is dealing with

attitudes. Moreover, Barwal (2011) pointed out that attitudes sometimes are being confused with the concept of personality trait. There are some differences and some similarities between these two concepts. Like attitude, personality trait is a hypothetical construct that cannot be assessed by direct observation; it must be inferred from measurable responses. Attitudes differ from personality traits in the nature their responses. These responses are evaluative and are directed to some object or target for example a person, institution, policy or event. Personality traits are not necessarily evaluative, and they focus on the individual himself or herself and not on any particular external target as attitudes do. These responses can be used to differentiate between individuals and to classify different personality types. Moreover, attitudes that are unimportant for the individual are viewed as more changeable than traits (Minaketan & Anupama, (2014). Attitudes are evaluative by nature and these evaluations can change when new information about the object becomes available.

2.2.4 Concept of Teacher Qualification

Teacher qualification is a certification that qualifies a teacher to apply for ajob in his/her area of specialization. A teacher qualification is enough to covey his competency or level of expertise in a particular subject. Anikweze (2015) defined teacher qualification as an attributethat a teacher mustmeet or complywithtofit him fora job. Amaechi and Sayita (2016) viewed teacher qualification as an officialrecord of achievementawarded on

thesuccessfulcompletion of a courseof training or passing of an exam. Dele (2015) maintained that teacher qualification is the capacity, knowledge or skill that matches or suits an occasion or makes a teacher eligible for a duty, office, position, privilege or status. Igberadja (2016) saw teacher qualification as denoted fitness through fulfillment of necessary conditions such as attainment of an oath, completion of required schooling or acquisition of a degree or diploma. Teacher qualification is the academic professions that enable someone to become a registered teacher(Hammimah, Daisy, Arulappen, Sanitah & Buerah, 2015). Teacher qualification is categorized according to their level and type of education. Level of education can be referred to formal schooling in tertiary education such as Diploma, National Certificate in Education (NCE), National High Diploma (HND, degree, and master and doctorate degrees.

2.2.5 Concept of Teacher Experience

The concept of what constitutes teacher experience varies greatly across the scant literature. Gichuhi (2013) defined experience as the number of years a teacher has taught. Anikweze (2015) held that experienced teachers are those who have taught for many years, are able to motivate students and hold their attention, know how to manage their classrooms effectively, and can change course in the middle of a lesson to take advantage of unforeseen opportunities to enhance students' learning. In the literature, however, the definition of experienced teachers seems to hinge principally on the number of years taught;

most common, studies identify experienced teachers as those who have approximately 6 years or more of classroom experience (Imo, 2012).

The impact of experience is strongest during the first few years of teaching; after that, marginal returns diminish. Most successful schools have a healthy combination of experienced teachers and new teachers. The experienced teachers give the schools stability and serve as mentors to the new teachers. The new teachers bring fresh ideas and enthusiasm. Experience is certainly important but interestingly enough some studies have shown that the benefits of experience become evident after just a few years of teaching and seem to peak at four or five years. Teachers don't necessarily become more effective the longer they remain in the classroom. Many occupations recognize employees' years of experience as a relevant factor in human resource policies, including compensation systems, benefits packages, and promotion decisions. The idea is that experience, gained over time, enhances the knowledge, skills, and productivity of workers. Basically, there are two categories of teacher experience. These are: novice teacher and experience teacher. Novice teachers are relatively easily defined as those with little or no classroom experience. They are often student teachers or teachers who have less than 2 years of teaching experience (Afolabi, 2013).

2.2.6 Teachers Attitude and Validation of Non-standardized achievement Test

DeBoer, Piji and Minnaert (2011) reported that secondary school teachers have been found to have a tendency to demonstrate a negative attitude towards validation because their perceived that the issue of validation is meant for WAEC staff. Adamu, Josephen and Kamar (2015) discovered that teachers set questions based on the concept they are familiar with instead of using the scheme of work designed specifically for teaching instructions. Anikweze (2015) asserted that teachers feel reluctant until it is about an hour to examinations before they set examination questions on recent instructional objectives taught within the week. Rufina, Abubakar and Stephen (2015) and Osaze (2016) revealed that teachers concentrate on lower levels of the cognitive domain remembering, understanding and application. Nwagu (2014) found out that the quality of test produce by secondary school teachers' is poor. This is because most teachers adopt unorthodox procedures in test construction and as such, produce tests that are deficient because they do not adopt the approved procedures of building validity into their tests.

Mohammed and Sally (2015) claimed that teachers exhibited a low understanding of the table of specifications.The analysis revealed that majority of teachers never attended courses concerning tables of specifications and were unable to build a comprehensive table of specification of subjects they teach. That is why most of the teachers did not refer to the table of specification while

building instruments for assessment. These indicate that teachers' lack basic knowledge in designing a standard table of specification and they lack awareness of the table of specification. Amaechi and Sayita (2016) found out that teachers have some knowledge of content related evidence, procedures for ensuring coverage and adequate sampling of content and objectives as well as correlating students' scores in two measures for predictive validation. The study also showed that teachers lack adequate knowledge of criterion-related evidence of validity, concept of face validity and sources in validity of test scores irrespective of their academic disciplines, years of experience and rank. Gichuhi (2013) posited that secondary school teachers constructing test items do not adequately employ blooms cognitive levels objectives in constructing their test items. Luke (2014) claimed that teachers do not adequately make use of action verbs in constructing test items.

Similarly, Chinelo and Osaze (2016) investigated the reliability and content validity of teacher made tests constructed by mathematic teachers and confirmed that teachers use tests that are of poor item quality and deficient in content validity. Anikweze (2015) lend credence to this when he said that teachers give thought to the instrument validation partially out of ignorance of validation measures and partially due to poor skill in test construction meant for assessment for learning. McCashlin (2012) showed that teachers have generally negative attitude towards validation. Alufohai and Alinloso (2016) revealed that majority of teachers perceive continuous assessment practice as systematic,

comprehensiveness system of evaluation but have inadequate knowledge of its cumulative and guidance-oriented characteristic. They further stated that teachers' attitude towards continuous assessment practice is negative skewed. Hamimah, Daisy, Arulapen, and Buerah (2016) maintained that teachers' have positive perception of classroom assessment. Furthermore, Mohammed and Sally (2015) revealed that teachers exhibit a low level of validity because they lack basic knowledge in designing a standard table of specifications and lack awareness of the importance of the table of specifications.

Adeneyi (2013) reported that a higher proportion of the pre-service mathematics teachers seem to display positive attitudes towards most validation practices and their attitudes toward some validation practice tend to be either negative or neutral. Egeruoh (2012) stated that assignment are the continuous assessments techniques frequently used to assess students while the attitude of teachers toward validation of tests varied depending on the capabilities of the teachers and support from the school.Newell (2012) stated that teacher-made tests usually measure only a limited part of a subject area, they do not cover a broad range of abilities and they rely too heavily on memorized facts and procedures.

Ngozi (2013) observed that most teachers in secondary schools cannot validate multiple choice test items. Onyechere (2014) asserted further that some teachers construct poor tests while some continue to duplicate test items because they lack test construction skills. However, Byabato and Kisamo

(2014) held that the implementation of school based continuous assessment is not properly carried out by teachers as many problems such as: lack of teachers' integrity (favouritism and inflation of marks), lack of uniformity in both the assessment tools used and procedures for continuous assessment recording and reporting were evident. In general, teachers showed little or no in-depth capacity of assessment practices. Marcus and Ayibatunde (2014) in their work discovered that many science teachers are not professionally qualified and as such lack the skills to construct and administer continuous assessment test in secondary schools. Schafer (2011) asserted that most teachers want to use constructed-response assessments because they believe this kind of testing is best to ascertain students' understanding. Baker (2013) found out that most teachers are aware of a variety of test construction skills. Dosumu (2011) discussed that most of the classroom-based assessment instruments in Nigeria secondary schools lack validity and reliability because they are poorly constructed. Agu, Chika and Aloysius (2013) observed that most of the assessment instruments used for continuous assessments and end of term examinations in secondary schools contain ambiguous and misleading questions which may be the cause of the students' failure in examinations.

2.2.7 Teachers Qualification and Validation of Non-standardized achievement Test

Many researchers and educationists have identified teachers who contribute to the poor assessment strategy at secondary school level.

Hamimah, Daisy, Arulappen, Sanitah and Buerah (2015) observed that significant mean difference existed on academic qualification in which teachers that have bachelor and master's degrees have the highest competence in classroom assessment. The findings also revealed that teachers have high perception, but they have least competency in item analysis. Silfi (2013) stated that teachers without specialization in education can destroy the effectiveness of any carefully selected or well organized curricular with inadequate and unenthusiastic introduction. Igberadja (2016) confirmed that teachers who teach in schools are those yet to be grounded in the philosophy, goal, content and methodology related to subjects. Teachers who acquired grade II qualifications decades back are still using obsolete assessment strategies. By their training and orientation, most teachers in secondary schools have only basic teaching training qualifications. Such qualifications do not equip them adequately with construction skills.

Adu and Wiki (2013) reported that teachers' qualifications such as degrees in areas of specialization are very significant and positively correlated with his/her effectiveness in carrying out duties. Rufina, Abubakar and Stephen (2015) investigated teachers' competence in test construction and content validity of teacher made tests in Borno State. The research showed no significant relationship between teachers' qualifications and their knowledge in test construction. Dele (2015) buttressed this by saying that qualification is most important among other critical factors in learning situations. Richardson

(2011) suggested that no one gives what he/she does not possess. He continued that no matter how good a course curriculum is, if we do not have well trained, qualified and motivated teachers we may not achieve the desired goals. Olalube (2015) opined that academically qualified teachers are less satisfied with the evaluation processes of students than the professionally qualified teachers'.

Furthermore Garba (2015) opined that teachers with positive attitude towards validation are those who have high qualifications. Owoeye and Yara (2011) concluded that there was significant correlation between teacher qualifications and mode of their assessment in Kenya. Gichuhi (2013) established that teachers' who have high qualification are more practically oriented than those who have low qualification. Darling-Hammond (2012) wrote that findings related to teacher qualifications (N.C.E, ND, H.N.D, Bsc and M.Ed) are inconclusive. Some studies suggested positive effects of advanced degree. Gibbon and Odili (2014) asserted that qualified teachers concentrate on the most appropriate ways to validate tests to students who differ in their abilities prior knowledge and backgrounds. Jugbo (2015) revealed that at the high school level, students taught by teachers with degrees (Bsc) had significantly higher test scores than students taught by NCE holders.

Jugbo (2015) submitted that teachers with high qualifications show greater concern for test validation than teachers with lower qualifications in education. Anikweze (2013) indicated that there is no significant difference between teachers' qualification in terms of establishing validity of test. Ngozi

(2013) observed that most teachers with Nigerian Certificate in Education show negative attitude towards validation of tests due to inadequate training during pre-service on test construction. Ololube (2011) evaluated competencies of professional and non-professional teachers in Nigeria. He reported that professional teachers tend to construct various effective evaluative instruments more than the non-professional teachers. Ololube (2015) found that academically qualified teachers were less satisfied with the evaluation processes of students than the professionally qualified teachers. By implication, the professional teachers were satisfied because they had competence in knowledge and skills in handling evaluation situations in the classrooms.

2.2.8 TeachersYears of Experience and Validation of Non-standardized achievement Test

The importance of experienced teachers in schools has been highlighted by many researchers. Odili (2014) stated that teachers experience did not significantly influence their competences in test construction and use of assessment outcomes. On the other hand, Nneji (2013) posited that teaching experience and professional training was thefactors that affect mathematic teachers' attitudes toward assessment practices. Adebowole (2014) indicated in his work that non-uniform strategy of implementing continuous assessment policy provisions is independent of factors like teaching experience and shows no significant difference in the score of respondents. Jugbo (2015) revealed that significant differences exist among teachers segregated according to their

experience. Olalube (2011) reported that experienced teachers tend to construct various effective evaluative instruments more than non-experienced teachers. Kinyua and Okunya (2014) discovered that the experience of teacher training on test construction and analysis and use of Bloom's taxonomy have an effect on validity and reliability of tests. Dosumu (2011) observed that the more experienced a teacher is, the more he begins to understand and appreciate some important test construction skills.

Amaechi and Sayita (2016) group teachers into two levels of teaching experience (below 6 years and more than 6 years) their findings revealed that experienced teachers' competence in test construction was not significantly more subject-oriented than that of first-year teachers. Adeyemi (2010) claimed that there was a significant relationship between teachers' teaching experience and students' learning outcomes as measured by their performance in SSCE examination. The result showed that schools which have more teachers with teaching experience of more than 12 years performed better than those teachers who have less than 12 years of teaching experience.

Stobart (2010) contended that the first three years in the teaching profession is equally crucial in building a quality teacher workforce, and that teacher working conditions outline key features of the workplace and it enhances teacher quality, retention and effectiveness. Darling -Hommond (2012) contended that effects of experience are visible when teachers with less than five years experience are included in the study.

2.3 Theoretical Framework

Korashy (1995) defined theoretical framework as a network of reasoning that embodies theories, concept assumptions about some observed events or phenomena, and explanations as to how these events and phenomena are related to each other. This study is based on classical test theory by Lord and Novick (1968), Latent trait theory of test validation by Thorndike (1980), Item Response Theory by Wainer (1989) because the theorieswas base on test construction that estimate the reliability and validity of test.

2.3.1 Classical Test Theory: According to Lord and Novick (1968) the classical test theory is based on the assumption that a student's observed score (X) is the simple sum of his true score (T) and Error Score (E). The true score (T) reflects the true amount of the attribute which the student possesses at the time of measurement, while the Error score (E), indicates the effects of extraneous influences on the measurement process at the time of measurement. The equation for the classical test theory as given by Keats is X=T+E. It is a deterministic theory for minimizing the error of measurement of a test. It provides a strong basis for constructing a norm-referenced test. According to Nkpone (2001), the classical approach to item difficulties uses proportion of persons attempting the item who are successful. The classical test theory of reliability estimation is dependent on the particular examinee sample. Wood (1990) stated that in classical test theory, the contribution of each item to the test reliability and validity depends on what other items are in the test.

2.3.2 Latent Trait Test Theory: Thorndike (1980) stated that in the latent trait test theory, a test score is interpreted as a scale value on a vertical scale of the latent trait, rather than being expressed in normative terms in relation to some reference groups or persons. This model expresses a sample free one-dimensional trait scale along which every student's position can be estimated.

Tests constructed under the guiding principle of scale value model aim at estimating a student's location on a vertical scale in relation to anchor points previously set. Wood (1990) and Korashy (1995) stated that in latent trait model, reliability is replaced with the concept of standard error or precision of measurement. "Unlike the classical reliability estimates, the standard error of measurement is independent of the particular examinee sample and it is an indication of the amount of error in ability estimate at different points of the ability continuum". According to Uebersax (1993), latent trait models allow:

i. Precise measurement of the difficulty or easiness of each item.

ii. Determination of the association of each item with the construct being measured.

iii. Determination of items that are biased in the sense of having different meaning or measurement characteristics in different sub-populations.

iv. The design of a test with the fewest items necessary to measure the construct with requisite accuracy.

v. Measurement oftest accuracy at different levels of respondent ability.

vi. The design of an adaptive test where answers to preceding items determine which items are subsequently administered with the aim of producing the shortest overall test.

Thorndike (1980) however stated that tests which are constructed, validated and interpreted on the basis of the latent trait test theory are called criterion-referenced tests.

Statistics normally applied in assessing the internal validity of a test in classical test theory are the item biserial (Wood, 1990). Due to the magnitude of this item statistics depend on the ability distribution of the sample but it has the disadvantage of being sample, dependent (Douglas, 1990). In the case of latent trait theory, the internal validity of a test is assessed in terms of the statistical fit of each item to the theory. The analysis of fit is a check on internal validity. If the fit statistics of an item is acceptable, then the item is valid (Korashy, 1995; Inainer, Morgan &Gustfson, 1980).

2.3.3 Item Response Theory

The aim of Item response theory (IRT) is to understand the reliability of the tests (Wainer,1989) in measuring latent traits, such as ability, item characteristics improve curves can be modeled for each individual item, showing the items difficulty and discrimination. The use of item response theory principles can be applied to many different types of models to help increase the reliability of it items and tests. Some of the common model include the normal o-give model (Thurstone, 1927), Rasch one paraPmeter logistic model (Rasch 1960), two and

three parameter logistic model (Lord &Novick, 1968). These models have been further developed to include models such as the rating scale model (Rasch, 1960), the graded response models (Samejima, 1969), the partial credit model and multiple-choice models (Thissen& Steinberg, 1984), the original multiple choice model was derived by Bock (1972), which takes the Multivariate logistic transformation of the nominal model to analyze item parameters. The model was developed by Samejima (1969), which added a latent response category referred to don't know (DK) (Thissen &Steinberg, 1984) extended the model further to include trace lines for the incorrect alternatives on the item response model.The present study adopts those theories.

2.4 Review of Empirical Studies

Previous studies have been carried out on the assessment of teachers' attitude towards validation of non-standardized achievement test in Nigeria using survey research design. Anikweze (2015) carried out research on teachers' attitude towards the validity instrument use for continuous assessment of basic education in north central geo-political zone of Nigeria. He adopted cross-sectional survey research with a sample of 1,500 teachers from 30% of local government areas in three randomly selected states. Findings from the study showed that there were no significant differences among teachers concerning the concept of validity based on educational qualifications. The study also indicated that only few teachers give thought to instrument validation partly out of

ignorance of validation measures and partly due to poor skills in test constructions meant for assessing learning.

Alusohai and Akinloso (2016) researched on knowledge and attitude of secondary school teachers towards assessment practices in Esan central senatorial District of Edo state. Using survey research design with a sample population of 543 teachers drawn by random sampling techniques. Findings showed that teachers' attitude towards continuous assessment practices was negatively skewed.

Adeneye and Veronica (2013) investigated the attitudes of pr-eservice science, technology and mathematics (STM) teachers towards continuous assessment practices in Nigeria within the blueprint of a descriptive survey research design in a conventional university. The sample consisted of 339 participants (156 pre-service science teachers: 83 males and 73 females; 164 pre-service mathematics teachers: 82 males and 82 females; and 19 pre-service technology teachers: 15 males and 4 females) from a conventional university in the southwest of Nigeria. Their ages ranged from 17 to 30 years with a mean age of 23.4 years and a standard deviation of 3.78. Results showed that a higher proportion of the pre-service science technology mathematics teachers seemed to display positive attitudes toward most of the continuous assessment practices while their attitudes toward some assessment practices tended to be either negative or neutral. They also found that gender and age was not the factors in pre-service science technology mathematics teachers' attitudes toward

continuous assessment practices, discipline of study was the only potent predictor of pre-service science technology mathematics teachers' attitudes towards continuous assessment practices.

Nwagu (2014) investigated content validity of teacher made geography tests used which is in secondary schools in Anambra and Enugu States, Nigeria.He adopted survey research design with sampleof 13 schools select from each of the 13 local government areas.His findings showed that about 88% of the respondents indicated that they were not using tables of specifications in designing and constructing continuous assessment tests. Findings also revealed that only 19% of teachers accepted that their test items were screened, and face validated by the vice principal before the test administration.

Chinelo and Osaze (2004 determined the reliability and content validity of mathematics tests constructed by senior secondary school mathematics teachers in Edo State, Nigeria adopted the survey research design with a sample of 32 senior secondary school SSII mathematics teachers. They observed that the content validity of the mathematics test used by mathematics teachers in Egor Local Government Area of Edo State was very low. For some tests, objectives of the syllabus were not well represented, and the weighing of items was not balanced. Furthermore, the items mainly focused on the level of the cognitive domain of Blooms taxonomy of educational objectives. Moreover, tests submitted for this study were not accompanied with a plan or table of

specifications. The teachers reported that it would take them a lot of time to write the objectives of the tests they submitted.

Amaechi and Sayita (2016) studied what teachers know about validity of classroom tests, using evidence from a university in Nigeria. The study adopted survey research design with a sample of 89 university teachers. They revealed that teachers know some aspects of content-related evidence of validity, procedure for ensuring coverage and adequate sampling of content and objectives, as well as correlating students' scores in two measures for predictive validation. These findings imply that teachers need capacity building to update their knowledge and competencies in the development and validation of assessment instruments.

In the same vein Kinyua and Okunya (2014) investigated the validity of teacher-made tests in Kenya with a sample of 42 physics teachers using classical and quasi experimental research. They declare that the experience of teachers training on test construction and analysis, level of tests, use of Blooms taxonomy have an effect on validity of tests. They suggested that teachers should regularly be refreshed with in-service training in testing to ensure good practice with regard to the construction of teacher made tests.

Rufina, Abubakar, and Stephen(2015) investigated competence in test construction and content validity of teacher-made examination questions insecondary schools inBorno State, using a study population of 75 teachers of Commerce. They showed that there was significant relationship between

teachers of Commerce competence in test construction and content validity. It was also found that teacher concentrated on the lower levels of the cognitive domain. They recommended that the state ministry of education should organize seminars/ workshops and provide in-service training for Borno State senior secondary school teachers to up-grade their knowledge in testing so as to raise the standards of test construction to cover the different categories of the cognitive domain. Also, teachers of Commerce in Borno State senior secondary schools should get used to the application of Blooms taxonomy when setting their examination questions.

Adamu, Josphen and Kamar (2015) Assess technical teachers' competencies in constructing assessment instruments in technical colleges in Gombe State. The survey research design was adopted for the study with a sample size of 96 teachers in technical colleges. The study confirmed that teachers in technical colleges in Gombe State who constructed valid assessment instruments gave dependable estimates of students' performances for educational decision making. They also observed that most of the classroom-based tests in the state lacked validity because teachers lacked test construction skills and thus cannot construct good achievement tests. Most tests used for continuous assessments and end of term examinations in secondary schools contain ambiguous and mis-leading questions. These may be the reasons for the failure of some students in the tests.

Lei, Hohammed, Shafeeg, Lokman and Naail (2015) investigated the content validity of teacher-made assessment in three Chinese Elementary Schools in Johor, Malaysia with the sample of 30 teachers. The results showed that teachers exhibited a low understanding of the table of specification. The analysis revealed that the majority of them never attended courses concerning table of specification and were unable to build a comprehensive table of specification for the subjects they teach. The findings also demonstrated that teacher-made assessment was valid in terms of content validity.However, most of the teachers did not refer to the table of specification while building instruments for assessment. This indicates that teachers lack basic knowledge in designing a standard table of specification and they lack awareness on the importance of the table of specification.

2.5 Summary of Reviewed Literature

This chapter has reviewed a number of studies in literature on the concepts of validation, attitude, qualification, years of experience, teachers' attitude and validation of non-standardized test, teachers' qualification and validation of non-standardized test, teachers' years of experience and validation of non-standardized test and the concept of non-standardized test. The researcher viewed two theories which are relevant to the present study; classical test theory and latent trait test theory. Ten relevant empirical studies were reviewed which revealed the attitude of teachers towards validation of non-standardized test among secondary schools in Nigeria. Borno State is one of the

states that have not been investigated. The researcher endeavored to bridge the gap. The present study is therefore, considered important in ensuring that the state does not lag behind in terms of statistical analysis and qualified teachers who validate their tests for measuring outcomes of instructional objectives.

Validation of tests can be seen as the systematic way of constructing tests for measuring learning outcomes. Validation of tests is important in constructing non-standardized achievement test because the result of the tests use to assess students provide the teacher and the school with some feedback to make judgments about students. Furthermore, the influence of qualification and years of experience on validation of tests remains inconclusive. This is true because some reviewed researches found these factors significant while others did not find them significant.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter deals with the procedure and methods employed in the study. Specifically, the chapter discussed the research design, population of the study, sample and sampling techniques, research instruments, validation of the instruments, Pilot study, reliability of the instruments, Procedure for data collection and Procedure for data analysis.

3.2 Research Design

The survey research design was use in conduct of this study. Because is adesign that usually prompted by the need to know what the current situation to the problem under investigation. Lending credence to this,Carrol (2013) stated that survey research design should be use when the researchers want to describe conditions of the present by using questionnaire as an instrument. Survey research designconcerned with the collection of data for the purpose of describing and interpreting existing problem (Role, 2010). It is a design in which "a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group" (Osuala, 2013).

3.3 Population of the Study

The populations of this study were teachers of public secondary schools in Borno State. In all, there are 8100 teachers within the four educational zones

in Borno State. The numbers of teachers within each of the zone were as follow Maguno zone 1415, Maiduguri zone 3150, Gwoza zone 1961 and Biu zone 1573. The study will be conducted within the four educational zones in Borno State. The breakdown of the population based on their population for both males and females are shown in the table 1 below:

Table1: Educational Zones and Population of Teachers

Educational zones	**No. of schools**	**No. of Teachers**		**Total**
	Male	**Female**		
Maguno zone	141005	410		1415
Maiduguri zone	26	1961	1189	3150
Gwoza zone	241360	602		1962
Biu zone	17981591			1573
Total	**8153082792**			**8100**

Source: Borno State Service Board, 2017

3.4 Sample and Sampling Techniques

Studying the whole population within a specific period of time will be difficult; therefore, there is the need for a representation sample as a representation of the whole population. A "sample is a small subset of the population that has been chosen to be studied" (Tukman, 2011). To get the sample for the study, proportionate sampling techniques were employed in this study. In Proportionate sample technique, the sample size of each group is proportionate to the population size of the group when viewed against the entire population.Proportionate sampling technique is used when the distribution of target population is across set of groups and also when a researcher wants to

ensure that minorities are properly represented in the population in the study. Thus, the frame of the population is organized into separate groups at the school level. In this case the population is separated into four different educational zones; Maiduguri metropolitan council educational zone, Manguno educational zone, Gwoza educational zone and Biu educational zone. The zones were further classified based on school types. This is according to Tukman (2011) opined that in educational research, proportional sampling techniques is typically used when the researcher wants to ensure that specific subgroups of people are adequately represented within the sample. The sample consisted of 447 teachers from a population of 8100 secondary schools' teachers within 81 public secondary schools in Borno State.This is in line withGall and Borg (2007) who said that the nature of presentation determines. According to them three hundred (300) and even less can be accepted for conferences and journal articles. However, for award high degree it is better for a sample size of quantitative research to be above four hundred (400).

More specifically, out of 26 public secondary schools in the Maiduguri metropolitan council educational zone which has 3,150 teachers 6 schools were proportionately sampled with 176 teachers. Out of 14 public secondary schools in Manguno educational zone which has 1,416 teachers 3 schools were proportionately drawn with 82 teachers out of 24 public secondary schools in Gwoza educational zone which has 1,967 teachers 5 schools were proportionately drawn with 96 teachers. Out of 17 public secondary schools in

Biu educational zone which has 1,567 teachers, 4 schools were proportionately drawn with 94 teachers using Balloting. These are as shown in the table 2 below

Table2: Sample Size.

Educational zones	No. ofschools Male	female	No. of Teachers	Total
Maguno zone	357	25		82
Maiduguri zone	6118	56		176
Gwoza zone	567	29		96
Biu zone	458	35		94
Total	**18301**	**146**		**447**

Source: Borno State Service Board, 2017

3.5 Instrumentation

The instrument for data collection wasteachers' attitude towards validation (TAV) adopted from Ngozi, Chika and Aloyisius (2013). The (TAV) consist 27 items organized in two sections A and B. Section A consist of two items that sought information on teachers' academic qualification and years of experience. Section B consist 25 items which sought information on validation of non-standardized achievementtest. The teachers are required to make their responses using a 4-point modified likert scale. The rating of the scale is strongly Disagree=1; Disagree =2; Agree=3 and Strongly Agree =4. The highest point the respondents can get is 4 based onfour-pointlikert scale level and there are 25 items which result to one hundred (100) points to classify the respondents into two. The researcher use the mean of attitudinal scale those respondents that has a mean rank below 50 was classified as negative attitude and those who has above are classifiedas positive attitude.

3.5.1 Validation of the Instrument

The content validation of the questionnaire was done by first seeking the input of the supervisors of this research. Furthermore, it was submitted to three experts in Department of Educational Psychology and Counseling Ahmadu Bello University Zaria with the research objectives for corrections based on the content validity. Content validity is the extent to which the items consist of representative samples of the subjects matter the items is designed to measure. Nwaogazie (2014) opined that content validity is demonstrated by showing how well the content of the item categorized the respondents' base on subject matters about which conclusions are to be drawn.

3.5.2 Reliability of the Instrument

To get the reliability of the instrument a pilot study was done atGovernment Day Secondary School Kwaya-Kusar, Government Day Secondary School Shani, Government Girls Secondary School Miringa, Government Girls Arabic Secondary Schools Wulari and Government Day Secondary School Delle. Those schools were not part of the sample size but there within the population, in order to ensure the consistency and stability of the instrument, a total of forty (40) teachers were selected from the schools and administered the copies of the questionnaire for the study. Thirty-eight (38) questionnaires were returned and found useable. As a standardized instrument however, there are not serious issues that called for any adjustment of the instrument. The instrument was there for fully adopted without any adjustment;

the reliability of the instrument was initially reported at 0.89. Thus, the pilot study was taken which gave an internal consistency index of 0.84 using Cronbach alpha. This reliability co-efficient was a confirmation of test of reliability by (Anikweze, 2013). Who stated that an instrument is considered reliable if it lies between 0.5 and 1, and that the closer the calculated reliability is to zero, the less reliable is the instrument, and the closer the calculated reliability co-efficient is to 1, the more reliable is the instrument. Finally, the reliability co-efficient were considered adequate for internal consistencies for the study.

3.6 Procedure for Data Collection

Letter of introduction was collected from the Department of Educational Psychology and Counseling, Ahmadu Bello University Zaria which was used to visit the sampled schools. On arrival in each of the sample schools, the introductory letter was presented by the researcher to the school principal. In some schools the principals went through the letter and introduce the researcher to the teachers while in some schools, the principals directed either the Vice Principal Academy to take the action. In some schools, a verbal permission was granted by the principals to the researcher to meet the teachers. The researcher made use of teachers who serve as research assistance. The researcher requested the assistance of the selected teachers in the sample schools after the detailed explanation on the modalities of conducting research. Only

correctly filled questionnaires were used for data analysis. Questionnaires that are not correctly filled were being discarded.

3.7 Procedure for Data Analysis

Data were analyzed using SPSS version 20. The demographic characteristics of the respondents were described in frequencies and percentages, research question one was answer using frequency and percentageswhile hypothesis one was tested with U-test (Mann Whitney) because it is the best test to compare mean scores when the variable is not normally distributed and at least of ordinal scale.Hypothesis two was tested using H-test (Kruskal Wallis) because variable is more than two and it is ordinal scale.All the hypotheses were tested at 0.05 level of significant alpha.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter deals with the analyses and discussion of results from findings of the research conducted on the assessment of teachers' attitude towards validation of non-standardized achievement test in secondary schools in Borno State, Nigeria. A total of 447 respondents were used as sample for the study. The statistical package for social science version 20 (SPSS) was used for the analysis. The first section of analyses presented the demographic characteristics of the respondents using frequencies and percentages distribution based on qualification and experience. Finally, the U-test (Mann Whitney) was used to test hypotheses one whileH-test was used to test null hypothesis two. All the null hypotheses were tested at 0.05 level of significant alpha, Summary of the findings were also presented at the end of the chapter, including the discussion of the findings.

4.2 Data presentation and analysis

Table3: Administration and Retrieval of Questionnaires

S/N	Educational Zones	Questionnaires administered	Questionnaires retrieved	Valid Questionnaires
1.	Maiduguri metropolitan	176	168	166

	council			
2.	Gwoza zone	96	94	94
3.	Biu zone	93	93	93
4.	Maguno zone	82	79	79
	Total	**447**	**434**	**432**

Source: Field work, 2017

The table showed that a total of 447 questionnaires were administered in all the educational zones of the state based on their respective sample size as calculated in chapter three (table 1). Out of the 447 administered questionnaires 13 (2.9%) questionnaires were missed while 434 (97.1%) were retrieved, 2 (3.4%) questionnaires were not correctly filled, while 432 were properly filled representing 96.6% and which were considered to valid for data analysis.

Table4: Classification of Respondents According to their Qualification

	Number of Teachers				
Qualification	**Male**	**%**	**Female**	**%**	**Total(%)**
Bsc	164	38.0	68	15.7	232(53.7)
HND	35	8.1	0	0	35(8.1)
NCE	70	16.2	71	16.4	141(32.6)
ND	13	3.0	0	0	13(3.0)
M.Ed	11	2.6	0	0	11(2.6)
Total	**293**	**67.9**	**139**	**32.1**	**432(100)**

Source: Field work 2017

The distribution of respondents according to qualification shows that 164 teachers' representing 38.0% were male teachers' with Bsc and 68 teachers' representing 15.7% were female teachers' making a total of 232 Bsc holder which is equivalent to 53.7% of respondents, 35 teachers' representing 8.1% were male teachers' with HND where no female teachers' with HND were recorded which give a total of 35 respondents which is equivalent to 8.1% of

respondents, 70 teachers' representing 16.2% were male teachers and 71 teachers' representing 16.4% were female making a total of 141 NCE holder which is equivalent to 32.6% of respondents, 13 teachers' representing 3.0% of the respondent were male teachers' with ND where no female teachers' with ND were recorded which give a total of 13 respondents which is equivalent to 3.0% of respondents and 11 respondents were male teachers' with M.Ed where no female teachers' were recorded with M.Ed which give the overall respondents of 11 which is equivalent to 2.6% of the respondents. This shows that the majority of the respondents of this study were Bsc holders and NCE because there are the dominant groups of respondents.

Table5: Classification of Respondents by their Years of Experience

Teachers'	**Male**	**%**	**Female**	**%**	**Total(%)**
Experience	91	21.1	103	23.8	194(44.9)
inexperience	195	45.1	43	10.0	238(55.1)
Total	**285**	**66.2**	**146**	**33.8**	**432(100)**

Source: Field work 2017

The table indicates that 91 of the respondents were male teachers who were experience representing 21.1% of the respondents and 103 of the respondents were female teachers representing 23.8% of the respondents which give a total of 194 respondents which is equivalent to 44.9% of the respondents who were experience. 195 respondents were male teachers who were inexperience representing 45.1% and 43 of the respondents were female teachers

who were inexperience. This gives a total of 238 respondents which is equivalent to 55.1%.

4.3 Answer to research questions one

What is the attitude of teachers towards validation of non-standardized achievement test in secondary schools in Borno State?

Table6: Teachers Attitude towards Validation of Non-standardized Achievement Test

Teachers	Frequency	Percentage
Negative	340	78.7
Positive	92	21.7

Table6 above indicated that out of 432 teachers in secondary schools in Borno State, 340 teachers representing 78.7% have negative attitude towards validation of non-standardized achievement test. Only 92 teachers presenting 21.3% have positive attitude towards validation of non-standardized achievement test. This showed that most teachers in Borno State have negative attitude towards validation of non-standardized test.

4.5 Test of Null Hypotheses

Two null hypotheses were formulated to establish possible significant differences between teachers of different qualification and years of experience towards validation of non-standardized achievement test in secondary schools in Borno State, Nigeria.

Hypothesis II: There is no significant difference in validation of non-standardized achievement test between teachers with different qualifications in secondary schools in Borno State, Nigeria.

The hypothesis was tested with H-test (Kruskal Wallis) because of multiple levels of independent variables and nature of variables. Qualification of teachers constituted independent variable while attitude towards validation of non-standardized achievement test was dependent variable used in this hypothesis. The summary of analysis was presented in table below:

Table7: H-test (Kruskal Wallis) on Influence of Teachers Qualification towards Validation of Non-standardized achievement Test in Secondary Schools in Borno State.

Qualification	N	Mean Ranks	df	χ^2	P-value
Bsc	232	134.93			
HND	35	232.26	4	34.837	0.001
NCE	141	215.79			
ND	11	291.05			
M.Ed	13	93.31			

Significant at P < 0.05 Level

Result in table 7 compared the mean attitude of teachers between teachers with different qualification towards validation of non-standardized achievement test in secondary schools in Borno State. The result revealed that there was significant difference in validation of non-standardized achievement test between teachers with various qualifications in secondary schools in Borno State in which teachers with low qualifications shown to be the one with more negative attitude compared to those teachers with high qualifications. As the mean ranks was 134.93, 232.26, 215.79, 291.05 and 93.31 for Bsc, HND, NCE, ND and M.Ed respectively. H-testwas 34.837 and P-value (0.001) was less than (<0.05) level of significant. This observation provides basis for rejection the null hypothesis.

Hypothesis III: There is no significant difference in validation of non-standardized achievement test between experience and inexperience teachers in secondary schools in Borno State, Nigeria.

This hypothesis was tested with U-test (Mann Whitney) because of two categories of experience that involve and nature of variable. Years of experience constituted the independent variable while attitude towards validation of non-standardized achievement test was dependent variable used in this hypothesis. The summary of U-test presented in Table below:

Table8: Mann Whitney (U-test) on Influence of Teachers Experience towards Validation of Non-standardized Achievement Test in Secondary Schools in Borno State.

Teachers	N	Mean Rank	U	P-value
Experience	194	209.42		
			1.065	0.287
Inexperience	238	222.27		

Significant at P < 0.05 Level

Result in the table 8 compared the mean attitude of experience and inexperience teachers toward validation of non-standardized achievement test in secondary schools in Borno State. The result showed that the experience teachers have a mean rank value of 209.42 and 222.27 for inexperience teachers respectively. The Mann Whitney (U-test) observed was 1.065 and the p-value observed was 0.287. Since the P-value of 0.287 is greater than P >0.05 level. These observations provide enough evidence for the retention of the null hypothesis. The null hypothesis that said there is no significant difference in validation of non-standardized achievement test between experience and inexperience teachers in secondary schools in Borno State will therefore be retained, since both experience and inexperience teachers did not differ in their responses towards validation of non-standardized achievement test.

4.6 Summary of Findings

The study found that:

1. Teachers in Borno State have negative attitude towards validation non-standardized achievement test (340 teachers out of 432 teachers have negative attitude only 92 teachers have positive attitude).
2. There was significant difference (H = 34.837, P = 0.001) in validation of non-standardized achievement test between teachers with different qualifications in secondary schools in Borno State.
3. There was no significant difference (U = 1.065, P = 0.287) in validation of non-standardized achievement test between experience and inexperience teachers in secondary schools in Borno State.

4.7 Discussion of findings

The purpose of this study is to assess teachers' attitude towards validation of non-standardized achievement test in secondary schools in Borno State, Nigeria. This section therefore discusses the findings of the study. In terms of the Research question and hypotheses tested in the study.

Research questions one revealed that teachers in have negative attitude towardsvalidation of non-standardized achievement test. Since out 432 teachers 340 teachers had negative attitude only 92 teachers have positive attitude. This finding agreed with the findings of Chindo and Osaze (2014) whose findings revealed that the validity of tests used by secondary schools' teachers in Edo state is very low. For some tests, the objectives of the syllabus were not well

represented, and the weighing of questions were not balanced, the questions mainly focused on the levels of the cognitive domain of Blooms taxonomy of educational objectives and the tests were not constructed based on tables of specifications. In addition to thisAdamu, Josphen, and Kamar, (2015)observed that most of the classroom-based tests in the state lacked validity because teachers lacked tests construction skills and thus could construct good achievement tests. Most tests used for continuous assessments and end of term examinations in secondary schools contain ambiguous and mis-leading questions which may be the reason why some of the students fail tests. This lends credence to the submissions of Alusohai and Akinloso (2016) who investigated knowledge and attitude of secondary school teachers towards assessment practices in Esan Central Senatorial District of Edo State. Their Findings revealed that teacher's attitude towards continuous assessment practices was negatively skewed. The finding is contrary to finding of Amaechi and Sayita (2016) who studied what teachers know about validity of classroom tests: Evidenced from a University in Nigeria. They revealed that teachers know some aspects of content-related evidence of validity, procedures for ensuring coverage and adequate samples of content and objectives, as well as correlating students' scores in two measures for predictive validation. Therefore, the assumption made in chapter one of this study has confirmed that most teachers' have negative attitude towards validation of non-standardized achievement test in secondary schools in Borno State.

Hypothesis one indicates that teachers there was significant difference in validation of non-standardized achievement test between teachers with different qualifications, in which teachers that have bachelor and master's degrees have shown to be the one who validate their test compared to HND, NCE and ND holders. This implies that the high the qualification the more the effectiveness of teachers in carrying out a task. These finding is in agreement with finding of Garba (2015) who stated that teachers with positive attitude towards validation are those who have high qualification. In addition to this, Owoeye and Yara (2011) submitted that there were significant correlations between teacher qualifications and the mode of their assessments in Kenya.Lending credence to the submissions of Hamimah (2016) which showed that there was a mean significant difference in academic qualification in which teachers that has bachelor and master's degrees have the highest competence in classroom assessment.Also,Alufohai and Akinlosotu (2016) concluded that discipline of study is the only potent predictor of pre-service teachers' attitudes towards continuous assessment practices.On contrary basis, Anikweze (2015) revealed that there is no significant difference among the teachers concerning the concept of validity based on educational qualifications. The study indicate that only few teachers give thought to instrument validation partly out of ignorance of validation measures and partly due to poor skills in tests construction meant for assessing learning.

The test of hypothesis two disclosed that teachers' years of experience do not influence validation of non- standardized achievement test. This is to say that in respect years of experience teachers in Borno State are not willing to validate test since both experience and inexperience teachers having the same responses. The result is in agreement with finding of Odili (2014) who evaluated the continuous assessment (CA) skill competences of secondary school teachers in Delta State and discovered that teachers' experience did not significantly influence their competences in test construction and use of assessment outcomes in the state.This finding is in disagreement withAmaechi and Sayita (2016) who group the teachers into two levels of teaching experience (below 6 years and above 6 years). The finding revealed that years of experience were significant predictors of teachers' attitude towards continuous assessment practice.Lending credence to the submissions of Darling -Hommond (2002) contended that effects of experience are visible when teachers with less than five years of experience are included in the study.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings of the present study. It also presents conclusion and recommendations based on the findings of the study and suggestion for further studies.

5.2 Summary

The study assessed the attitude of teachers towards validation of non-standardized achievement test in secondary schools in Borno State, Nigeria. Three objectives guided the study. To find out the attitude of teachers towards validation of non-standardized achievement testin secondary schools in Borno State, to examine the influence of teachers' qualifications on validation of non-standardized achievement test in secondary schools in Borno State and to examine the influence of teachers experience on validation of non-standardized achievement test in secondary schools in Borno State. Two hypotheses were tested. The significance and scope of study were discussed.

Literature related for this study were discussed under the following sub-headings concept of validation, concept of non-standardized achievement test, concept of attitude, concept teacher qualification and concept teacher experience, Teachers attitude and validation of non-standardized achievement

test, teachers' qualification and validation of non-standardized achievement test, teachers experience and validation of non-standardized achievement test, summary of literature review and the uniqueness of the study. The study was based on the theory of Lord and Novick (1968), Wainer (1989)and Thorndike (1980) which give the criteria of test construction.

Methodology of the study consisted of the design of the study, populations, sample, research instruments, procedure for data collection and method of data analysis.The population of this study was public secondary schools in Borno State. Proportionate sampling technique was use to select four hundred and forty seven teachers for the study.

The study revealed thatteachershave negative attitude towards validation of non-standardized achievement test. There was significant difference in validation of non-standardized achievement test between teachers with different qualification in secondary schools in Borno State, there was no significant differences in validation of non-standardized achievement test between experience and inexperience teachers in secondary schools in Borno State.

5.3 Conclusion

Secondary school teachers in Borno State are yet to be abreast with issue of validation of non-standardized achievement test. Hence the number of teachers with negative attitude was higher than that of teachers with positive attitude towards validation of non-standardized achievement test. Qualification

was shown to be significant of teachers' attitude towards validation of non-standardized achievement test while years of experience not significant. Base on these findings, it is concluded thatsecondary schools teachers in Borno State have negative attitude towards validation of non-standardized achievement test,|teachers'qualification influence validation of non-standardized achievement test while years experience of does not influence validation of non-standardized test.

5.4 Contribution to Knowledge

The study has contributed to the body of existing knowledge in the following ways:

1. Teachers' attitude is the determinant of validation of non-standardized test achievement test in secondary schools in Borno State.
2. Teacher qualification is the prime factor of validation of non-standardized achievement test in secondary schools in Borno state.
3. In comparing the mean response of experience and inexperience teachers, no significant difference was found in validation of non-standardized achievement test in secondary schools in Borno State.

5.5 Recommendations

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

1. Seminar and workshops should be organized on regular bases for teachers to upgrade and update their proficiency skill in test construction and validation and also motivate them.
2. Greater emphasis should be given to the production of professional assessors and evaluators to take charge of measurement and evaluation courses in teacher education institutions so that fresh graduates of education will be master' s of valid test construction.
3. Government should always make effort to engage the service of those experience teachers who have retired.

5.6 Suggestions for further study

It is suggested that research should be carried out on:

1. Teachers' attitude towards different examinations format. This is an important topic due to conflicts that arisen recently between educators and test developers.
2. Effect of teachers' qualifications on assessment and student achievement.
3. Effect of teachers' Experience on assessment and student achievement.

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APPENDIX A

Department of Educational

PsychologyFaculty of Education

Ahmadu Bello University

Date:

Dear Sir/Madam,

TEACHERS ATTITUDE TOWARDS VALIDATION

Am postgraduate student of the above institution undertaking a study titled: Assessment of Teachers Attitude towards validation of Non-standardized achievement test in Secondary Schools in Borno State, Nigeria. Here attached is the questionnaire which is designed to collect data needed for the research work. You are please requested to respond to the questions with utmost sincerity. Your responses will be treated with confidentiality.

Thank you for your anticipated cooperation.

Yours faithfully



Emmanuel Daniel Kaigama.

INSTRUCTIONS

This questionnaire consists of 25 statements about validation of test. There are no correct or incorrect responses. Read each item carefully. Use the following response scale to respond to each item.Please (√) a response for each of the 25statements.

SECTION A: BIO DATA EDUCATIONAL BACKGROUND

1. Years of experience 1-5yrs( ) 6yrs and above ( )
2. Indicate your highest qualification: Grade II ( ) NCE ( ), HND( ) BSC/B.Tech/B.Ed ( ) M.Ed ( ) Phd ( )

S/N	Items	SA	A	D	SD
1.	I outline the content covered for the term before I set questions.				
2.	I prepare a test blueprint as a guide in the test construction.				
3.	I consult standard text books in the subject as a guide whenever I am constructing questions.				
4.	I organize my test items in a logical manner.				
5.	I give clear instructions to guide the test takers on my questions.				
6.	I write test so that both high and low achievers can understand.				
7.	I set my questions with due regard to the time available for testing.				
8.	I put enough test items to cover all the requisite levels of cognitive domain.				
9.	I ascribe scores for each test item on my questions.				
10.	I set essay items that elicit creative and imaginative answers from the students.				
11.	I consider the age of learners during item writing.				
12.	I avoid gender stereotypes in the test items.				

13.	I put sufficient items to cover the appropriate instructional units.				
14.	I submit items for vetting to the Head of Department or the principal.				
15.	I submit tests meant for promotional examinations for expert editing on time.				
16.	I avoid the use of clues in multiple choice questions.				
17.	I number diagrams in tests clearly.				
18.	I avoid the use of interlocking items.				
19.	I avoid items that measure opinions.				
20.	I review draft of the test at least two times in two days before administering.				
21.	I limit essay tests to high level objectives.				
22.	I avoid overlapping alternatives in writing objective tests.				
23.	I use appropriate numbering and lettering formats in writing tests.				
24.	I avoid too long questions or phrases in item writing.				
25.	I set a test item that elicits information on one thing at a time.				

Note: the rating of this scale is strongly disagree = 1; disagree = 2 Agree =3 strongly agree = 4. The highest point the respondents can get is 4 based on the 4-point likert scale and there are 25 items which result to one hundred and twenty (100) points to classify the respondents into two. The researcher use the mean of attitudinal scale those respondents that has a mean rank below 50 was classified as negative attitude and those who has above are classified as positive attitude. This is in line with impetus of Ngozi, et al, (2013).

APPENDIX B

RELIABILITY OF TEACHERS ATTITUDE TOWARDS VALIDATION SCALE

Case Processing Summary

		N	%
Cases	Valid	38	100.0
	Excluded[a]	0	0
Total		38	100.0

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based On Standardized Items	N of items
.836	.846	30

Scale Statistics

Mean	Variance	Std. Deviation	N of items
77.77	179.410	13.394	30

APPENDIX C

INFLUENCE OF TEACHERS QUALIFICATION TOWARDS VALIDATION OF NON-STANDARDIZED ACHIEVEMENT TEST IN SECONDARY SCHOOLS IN BORNO STATE

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
TOTAL	432	70.0579	12.33819	42.00	120.00
Qualification	432	1.93	1.112	1	5

Kruskal-Wallis Test

Ranks

	Qualification	N	Mean Rank
TOTAL	BSC	232	232.26
	HND	34	134.93
	NCE	142	215.79
	ND	11	291.05
	M.Ed	13	93.31
	Total	432	

Test Statistics[a,b]

	TOTAL
PChi-Square	34.837
Df	4
Asymp. Sig.	.001

a. Kruskal Wallis Test

b. Grouping Variable: Qualification

INFLUENCE OF TEACHERS EXPERIENCE TOWARDS VALIDATION OF NON-STANDARDIZED ACHIEVEMENT TEST IN SECONDARY SCHOOLS IN BORNO STATE

Par Tests

Mann-Whitney Test

Ranks

	YrsofeExperi	N	Mean Rank	Sum of Ranks
TOTAL	EXPERIENCE	194	209.42	40627.50
	INEXPERIENCE	238	222.27	52900.50
	Total	432		

Test Statistics[a]

	TOTAL
Mann-Whitney U	2.171E4
Wilcoxon W	4.063E4
Z	-1.065
Asymp. Sig. (2-tailed)	.287

a. Grouping Variable: YrsofeExperi