Teachers' Testing Skills and Test Credibility in Public Secondary Schools in Uyo Educational Zone of Akwa Ibom State, Nigeria

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Abstract

This study investigated teachers testing skills and test credibility in public schools with the aim of determining if teachers' area of specialization and teacher's qualification statistically significantly influence test credibility. The survey research design was adopted for the study. 200 teachers were selected from the universal teachers' population of 2054 in the study area through stratified random sampling technique. A self-administered questionnaire containing thirty (30) items four-option Likert questionnaire titled "Test credibility and teacher testing skills questionnaire (TCTSQ)" was used for data collection. Two research hypotheses were formulated and tested at 0.05 level of significance. Data were analyzed using one-way ANOVA statistical analysis technique. The results revealed no significant influence of teachers' area of specialization on application of test items credibility in terms of test items preparation, and test items scoring. However, there was a significant influence on test administration, test security and test administrator integrity. There is no significant influence of teachers' qualification on test credibility in terms of test preparation and scoring. This is contrary to the significant influence of teachers' qualification on test credibility observed in terms of test administration, test security and test administrator integrity. The post hoc result indicates that, teachers with Bachelor Degree are not statistically significantly better in test administration, test security and the test administrator integrity than teachers with NCE/HND certificates. However, holders of Bachelor Degree were statistically significantly better than holders of Masters' Degree in terms of test administration skills. Test credibility in public secondary schools is directly influenced by the testing skills of teachers. Therefore, enhancing teachers' testing skills through targeted, ongoing professional development, and institutional support is essential for improving the credibility of test.

Keywords: Credibility, Test, Validity, Item Security, Teachers-Made

Introduction

Test plays essential roles in the educational systems as it results are key indicators of academic progress. A test is seen as a natural extension of classroom

work, providing teacher and students with useful information that can serve each as basis for improvement (Andrew, 1983). Test is often conducted to measure the examinees' knowledge, skill, aptitude, physical fitness, classification, social development, emotional maturity and mastery of some concepts or achievements in a specific area (Asim, Ekuri & Eni, 2013). According to Thayn (2010), poor quality test items used for testing students' achievement may constitute potent threat to test credibility. Joshua (2005) highlighted that, the score a student obtains from a test, symbolizes the students' ability, which is a function of the quality of the test item taken. The use of test for candidates' selection has become a global issue not only because of population increase but to pick the best ones out of the population (McAllister & Guidice, 2012). This is why test has wider impacts on all stages of learning processes (Gensee & Upshur, 1996; Jabbarifar, 2009), with a gradual transition from paper-based test to computer-based test. In a study by Ngozi and Chika (2013) classroom-based achievement test have been extensively used in Nigerian secondary school especially after the introduction of continuous assessment test in 1985. Therefore, test results are bases for making decision on the students as well as evaluating the entire teaching and learning process for societal growth.

Testing in the school system is done for purposes of assessment, to assign students grades, to improve performance, and to rank students' abilities where standardized tests. By deploying testing effectively, students' strengths and weaknesses can be identified. In general, tests seek to determine what the students have learned. Educators create tests to measure students' understanding of specific content, the ability to apply critical thinking skills, and skill level growth. Boud (2000); Evans (2016) explains test in schools is confronted with challenges that represent multiple and sometimes contradictory responsibilities: whereas test is meant to inform students' learning even as it sorts students into grades based on their performance to determine those who pass and those who fail.

Some educators are frequently tasked with proper test item construction, while others are challenged with the security of test items and testing materials from the time of test construction to the time of decision-making (Plank *et al*., 2001; Mulkey, 2018; Danner, 2018). The credibility of test items was discovered to be responsible for the fairness of the decision made from test results (Forni, 2002; Ocon, 2007; Irvine, 2018). Test credibility deals with the values the eventual recipients and users of the results of the test placed on the results with respect to the grades obtained, certificates issued, or

the issuing institutions. Therefore, test credibility seeks objectivity where individuals are accountable to attain dispositions such as creativity, leadership, imagination, and grades. This gives rise to test item security as one of the key indicators of test credibility (Carden, 2016; Mulkey, 2018). The process of protecting test items and materials so that the results from unfair manipulations gives credibility to the test results. Besides fairness, the accuracy of test items which is a function of the professional competency and integrity of the test administrator and grader also contributes to test credibility (Gervasi, 2016; Roediger *et al.,* 2021).

Test credibility is critical in making valid inferences about human behaviour (Ong, 2010; Anderson and Nelson, 2011). Therefore, test credibility and civility are aspects of characteristics of test items, which have day-to-day relevance for developing the educational community. For test results to guide in making valid discussions about the students, the aspect of test credibility is important and worth studying. Similarly, students' performance should reflect similar grades, on the same test, and similar results should be obtained by groups of comparable candidates using the test on other occasions, even when marked by different examiners. This kind of output can only be achieved when the test and testing process is credible (Croco *et al*., 2018; Gyli, 2018). Test credibility is a necessary component that ensures quality control before, during, and after testing. Some basic guidelines in test credibility are:

i) Ensure restricted access to test items from the time of test construction to the publishing of test results.

ii) Timely collation of testing materials from custodian to enable test commence at the appropriate time stipulated.

iii) Avoidance of unnecessary talks in test halls, as unnecessary remarks, instruction or threat can develop test anxiety in the students.

iv) The professional qualification of administrators and graders must be considered.

v) Moderation of test items for administration based on laid down standards.

vi) The integrity of test administrator and graders (marker) must be considered.

Gronlund and Linn (1990), explain that tests can be successfully administered by any conscientious teacher or test administrator, as long as the prescribed testing procedures are rigorously followed. They maintain that test administration becomes

simple if the pupils are motivated to do their best, test administration directions are followed closely, time is accurately kept, any significant events that might influence test scores are recorded, and testing materials are collected promptly. However, in Nigeria, there are no standard practice to ensure test credibility of teacher-made test. This is because different approaches are deployed by various examination bodies and other stakeholders in secondary school-based testing process. In addition, too many professionals from different professions are found teaching in the secondary schools. According to Adieze (1986) and Koledoye (2011) non-qualified and non-professional teachers in teaching profession are killing the credibility of the profession because they are not really teachers. They regarded them as" birds of passage" that create unnecessary vacuum whenever they do not see greener pasture and better prospect in the profession they were originally trained for.

In general, the reviewed literature had demonstrated the significance of test items credibility in educational system as well as the proliferation of teaching profession by other professions. Therefore, it is important to conduct research to determine the influence of testing skills acquired through area of specialization and academic qualifications on test credibility in public secondary schools in Uyo Educational Zone, Akwa Ibom State. This will be of tremendously significance to the educators and other stakeholders who made and adopt decisions from test results, with attendant effects on students, institutions and ultimately on our society. The Uyo Educational Zone play host on diversity of teachers being the Zone that schools in the Akwa Ibom State Capital are located. In the light of the above, this study is designed to investigate the following:

1. How do teachers' area of specialization influence test credibility in public secondary schools in Uyo Educational Zone of Akwa Ibom State?
2. Does teachers' highest academic qualification influence the credibility of test in public schools in Akwa Ibom State?

Statement of Hypotheses

Ho_1: Teachers' area of specialization (discipline) does not have significance influence on test credibility in public schools in Akwa Ibom State (with respect to test preparation, administration, scoring/grading, secure custody of the test script and integrity of the test administrator).

HO₂: Teachers' highest academic qualification does not significantly influence test credibility in public schools (with respect to test preparation, administration, scoring/grading, secure custody of the test script and integrity of the test administrator).

Teachers' Factors and Test Credibility

Teacher-made test has been criticized over the years for lack of proper psychometric properties of the test and require competent person at all stages from preparation to decision making. In a review of empirical studies, Frank, Isaac and Francis (2019) carry out an investigation on teachers' test construction skills of senior High School (SHS) teachers in Cap Coast Metropolis using a qualitative document analysis of terminal examination data in Integrated Science, Mathematics and Social Studies in three randomly selected SHS in the Cap Coast Metropolis. The result revealed that teachers have limited skills in test construction. Rufia, Hamman, Tukur and Stephen (2015) assessed the relationship between teachers' competences in test construction and test quality, with the aim of identifying the area of competence using 75 Commerce teachers in Borno State Senior Secondary Schools. Two research questions were answered and null hypothesis tested. Descriptive statistics and contingency coefficient was used to test whether there was a significant relationship between Commerce teachers' competences and test credibility of the examination questions. The result shows significant relationship between Commerce teachers' competences and test credibility.

The quality of education of a Nation could be determined by the quality of her teachers. The most important factor in improving student's achievement in school is by employing seasoned qualified teachers in all schools (Abe, 2014). In a study carried out by Koledoye (2011) on the effect of teacher academic qualification on students' performance at secondary school level. The result shows that, teachers with higher academic qualification have more knowledge of the subject matter, competence and skills of teaching and have more impact on the teaching learning process (Fenstermacher and Richardson, 2005). The quality of performance of students in a school is conditioned by the qualification of teachers. Huang & Moon (2009) documents that teacher qualification accounted for approximately 40 to 60 percent of the variance in average of students' achievement in assessment.

Maundu (1986), Owoeye and Yara (2011), Abe and Adu (2013) and Wike (2013) held the assertion that, professional teachers are those whose academic certificates can afford them register with the Teachers' Registration Council. Such qualification include: postgraduate Certificate in Education, professional Diploma in Education, Nigeria Certificate in Education (NCE), Bachelor of Education (B.Ed), B.Sc.Ed, B.A.Ed and M.Ed. There professional knowledge, skills, techniques and aptitudes are different from the general education, which produces B.Sc, B.A, M.Sc and Ph.D. Koledoye (2011) carried out a study on the effect of teacher academic qualification on students' performance at secondary school level.

Another school of taught asserted that teacher's area of specializations have significant influence on the credibility of teacher–made test. For instance, ISBE (2002) explained that, teachers should have hands-on training in teaching and assessment for them to be competent teachers. The availability of professional teachers in our schools is grossly low (Nwachukwu, 1990; Impara et.al., 1991; Ngada, 2008; Ingersoil, 2013). This is because most people teaching in secondary schools never had passion for teaching and some do not have the foundation. Consequently, their input on the job would be very low resulting from lack dedication or technical know-how demanded by the job.

Methodology

Research Design

The study adopted the survey research design. Survey research design according to Ali (2006) is a descriptive study which uses a sample of a definite population of an investigation to document, describe and explain what is existent or the present status of phenomena investigated.

Area of the Study

The research was carried out in Akwa Ibom State, Nigeria, using public secondary schools in Uyo Educational Zone. The State is among those classified as educationally advantage States in the country, as many of her citizens are exposed to all levels of education with literacy rate of 78.84% (National Bureau of Statistics, 2017).

Population

The Uyo Educational Zone in Akwa Ibom Sate comprises schools in several Local Government Areas, including Uyo, Etinan, Itu, Nsit Ubium, Uruan, Ibesikpo Asutan, and Ibiono Ibom with a population of 3,343 teachers (MED, 2013).

Sample and Sampling Technique

The representative sample of 200 Mathematics teachers were randomly selected from ten public secondary schools in Uyo Educational Zone of Akwa Ibom State. In selecting the sample size, from the population of teachers in Uyo Educational Zone. The stratified sampling technique was first adopted to select 610 Mathematics teachers from population. Toro Yamene formulate was used to estimate the minimum sample size, however, simple random sampling was deployed to select 200 Mathematics teachers, which is more than the minimum estimated sample size.

Instrument for Data Collection

In order to elicit information from teacher-based assessment of test items credibility questionnaire (TATCQ) was design. The questionnaire consisted of two section. Section A was used to collect the demographic variable of the teacher. While section B was to obtain information from the teachers and it was constructed using four-point rating scale of strongly agreed (SD), Agree (A), Disagree (D) Strongly Disagree (DA) with interval values of 4, 3, 2 and1 respectively were used for data collection and the second instrument used for the study was Mathematics Achievement Test (MAT) is made up of one section of thirty items of four-option multiple–choice test which was used to obtain data on students' performance and teachers skill in test construction and administration. The instrument was validated and using Cronbach alpha method, the reliability estimate. The reliability estimates range from 0.78 to 0.83 which was considered high enough to justify the use of the instrument.

Results

Ho$_1$: Teachers' Area of specialization does not have significance influence test credibility in public schools in Akwa Ibom State (with respect to test preparation, administration, and scoring/grading, secure custody of the test script and integrity of the test administrator).

To test hypothesis1, the one-way analysis of variance (ANOVA) statistical analysis tool was used. Table 1 is the general description of the research variables showing the mean and standard deviation of the influence of teachers' area of specialization on test credibility in public schools. The influence test credibility based by teachers' area of specialization (Science/Engineering, Art/Social Science and Education) indicates that, of the 200 teachers studied, 65 specialized in Art/social science related courses; 56 in Science/Engineering and 79 in Education related course.

Table 1: Group mean and standard deviation of teachers' area of specialization on test credibility in public schools

Sub- variables	S/N	Group	N	X	SD
Test preparation	1	Art/Social Science	65	6.28	1.61
	2	Education	79	6,09	1.68
	3	Science/Engineering	56	5.98	1.77
		Total	200	6.12	1.68
Test Administration	1	Art/Social Science	65	7.57	3.47
	2	Education	79	7.61	2.95
	3	Science/Engineering	56	8.88	2.91
		Total	200	7.95	3.16
Test Scoring	1	Art/Social Science	65	10.68	3.07
	2	Education	79	10.39	2.79
	3	Science/Engineering	56	9.09	3.25
		Total	200	10.12	3.07
Test security	1	Art/Social Science	65	10.05	2.70
	2	Education	79	10.10	2.44
	3	Science/Engineering	56	9.37	3.27
		Total	200	9.88	2.78
Test integrity	1	Art/Social Science	65	6.51	2.38
	2	Education	79	6.81	2.48
	3	Science/Engineering	56	8.16	2.88
		Total	200	7.09	2.65

Post hoc test

Dependent Variable	(I) Specialization	(J) Specialization	Mean Difference	Std Error	Sig
	Art/social sciences	Education	-0.038	0.5226	0.942
Test Administration		Science/Engineering	*-1.305	0.5690	0.023
	Education	Art/Social Science	0.038	0.5226	0.942
		Science/Engineering	*-1.267	0.5452	0.021
	Science/Engineering	Art/Social Science	*1.306	0.5690	0.023
		Education	*1.267	0.5452	0.021
	Art/Social Science	Education	0.285	0.5053	0.574
		Science/Engineering	*1.588	0.5501	0.004
Test Security	Education	Art/Social Science	-285	0.5053	0.574
		Science/Engineering	*1.303	0.5271	0.014
	Science/Engineering	Art/Social Science	*-1.588	0.5501	0.004

		Education	*-1.303	0.5271	0.014
	Art/Social Science	Education	-0.302	0.4302	0.483
		Science/Engineering	*-1.653	0.4684	0.001
Test Integrity	Education	Art/Social Science	0.302	0.4031	0.843
		Science/Engineering	*-1.351	0.4487	0.03
	Science/Engineering	Art/Social Science	*1.653	0.4684	0.001
		Education	*1.351	0.4487	0.003

Table 2: Result of analysis of variance (ANOVA) of the influence of teachers Area of specialization on test credibility in public secondary school

Sub-variables	Source of variation	SS	Df	MS	F	Sig
Test Preparation	Between Groups	2.743	2	1.371	0.484	0.617
	Within Groups	558.377	197	2.834		
	Total	561.120	199			
Test Administration	Between Groups	66.601	2	33.301	3.419	0.035*
	Within Groups	1981.889	197	9.741		
	Total	1985.500	199			
	Between Groups	19.944	2	9.972	1.290	0.278
Test scoring	Within Groups	1523.176	197	7.732		
	Total	1543.120	199			
	Between Groups	85.516	2	42.758	4.696	0.010*
Test security	Within Groups	1793.604	197	9.105		
	Total	1879.120	199			
	Between Groups	92.428	2	46.214	7.003	0.001*

| Test Integrity | Within Groups | 1299.952 | 197 | 6.599 |
| | Total | 1392.380 | 199 | |

P>0.05, critical value F= 3.0

Table 3: Post hoc on teachers' area of specialization and test credibility

The mean difference is significant at 0.05 level

Table 2: is the ANOVA for the influence of teachers' area of specialization on test credibility in public secondary schools. The result obtained from the analysis are presented in Table 1-3. Table 1 present the group means and standard deviation based on area of specialization on test credibility in public schools. Table 2 present result of ANOVA showing the influence of teachers' area of specialization on test credibility in public schools. While Table 5 present the result of Fisher's LSD multiple comparison analysis of teachers' area of specialization on their credibility with respect to test administration, test security and integrity of test administrator.

The result of the analysis in Table 2 show that the calculated F-value for test preparation (.48) and test scoring (1.29) are each less than the critical F-value of 3.01 at .05 level of significance with 2 and 197 degree of freedom. This implies that the null hypothesis one was retain or upheld with regards to test administration and test scoring. This means that there was no significant influence of teachers' area of specialization on test credibility.

However, on Table 2 also, the calculated F-value for test administration (3.42*), test security (4.69*) and test administrator integrity ((7.00*) are each greater than the critical F-vale of 3.1 at .05 alpha level with 2 and 197 degree of freedom. This implies that the null hypothesis one HO_1 was rejected its alternative accepted with regards to test administration, test security and test administrator integrity. This means there was a significant influence of teacher's area of specialization on test credibility, with respect to test administration, test security and test administrator integrity.

Given the significant F-value for to test administration, test security and test administrator integrity shown on Table 2 a detailed multiple comparison using Fisher's Least Significant Difference (LSD), was done to determine

exactly which of the group (Art/Social Science, Education and Science /Engineering) differed significantly from each other with regards to the test administration, test security and integrity of the test administrator. The result of the analysis is presented on Table3.

From Table 3, significant Fisher's t-value of -1.305* shows there is a significant difference in test administration between Art/social science and those of Science and Engineering, 1.267* between Education and Science/Engineering, 1.306* between Science/Engineering and Art/social Science, 1.267* for Science/ Engineering with those in Education and 1.588* between Art/Social science. Table3 also shows significant Fisher's t value of 1.303* shows that there is a significant difference in test security between Education and Science/Engineering, -1.588* between Science and Art, -1.303* between Science and Education. Table 3 showed a significant Fisher's t- value of -1.653*implying that there is a significant difference in the test administrator integrity between Art/social science and Science /Engineering, -1.351* between Education and Science/Engineering, 1.653* between Science/Engineering and Art/Social Science and 1.351* between Science/Engineering and Education

HO₂: Teachers' highest academic qualification does not significantly influence the credibility of test in public schools in Akwa Ibom State (with respect to test preparation, administration, and scoring/grading, secure custody of the test script and integrity of the test administrator).

To test hypothesis 2, one-way analysis of variance (ANOVA) was used to determine the influence of teachers' highest academic qualification on test item credibility. Table 4 is the descriptive information on teachers' highest academic qualification considered for the study. Test credibility was determine using testing skills namely (test preparation, test administration, test scoring, test security and test integrity). The inference on the influence of teachers' highest academic qualification on test credibility was drawn from ANOVA statistical result, which shows significant statistical difference in test administration (7.503), test security (3.855) and test administrator integrity among (3.901) NCE/HND holders, Bachelor Degree holders and Master's Degree holders teaching in public secondary schools (Table 5). Other test

credibility variables were not influence significantly by teachers' academic qualification. Therefore, post-hoc test was conducted using Fisher's LSD multiple comparison analysis to identify the qualification(s) with significant influence. The post hoc result (Table 6) indicates that, teachers with Bachelor Degree are not statistically significantly better in test administration than teachers with NCE/HND certificates. However, holders of Bachelor Degree statistically significantly possess higher test administration skills than holders of Master's Degree teaching in public schools.

Table 4: Group mean and standard deviation of teachers' highest academic qualification on the credibility of test in public schools.

Sub- variables	S/N	Group	N	X	SD
Test preparation	1	NCE/HND	78	5.795	1.7235
	2	Bachelor	82	6.244	1.5836
	3	Masters	40	6.500	1.7097
		Total	200	6.120	1.6792
Test Administration	1	NCE/HND	78	8.795	3.2282
	2	Bachelor	82	7.854	3.1274
	3	Masters	40	6.500	2.5319
		Total	200	7.950	3.1582
Test Scoring	1	NCE/HND	78	10.282	2.9493
	2	Bachelor	82	9.524	2.8251
	3	Masters	40	9.825	2.2858
		Total	200	9.880	2.7847

Test Security	1	NCE/HND	78	10.359	3.2353
	2	Bachelor	82	9.463	3.0152
	3	Masters	40	11.000	2.6116
		Total	200	10.120	3.0729
Test Integrity	1	NCE/HND	78	7.244	2.8160
	2	Bachelor	82	7.439	2.6394
	3	Masters	40	6.075	2.0925
		Total	200	7.090	2.6420

Table 5: Result of analysis of variance (ANOVA) of the influence of teachers' highest academic qualification on test credibility in public secondary school

Sub-variables	Source of variation	SS	Df	MS	F	Sig
Test Preparation	Between Groups	15.280	2	7.640	2.757	0.66
	Within Groups	545.840	197	2.771		
	Total	561.120	199			
Test Administration	Between Groups	140.538	2	70.269	7.503	0.001*
	Within Groups	1844.962	197	9.365		
	Total	1985.500	199			
	Between Groups	23.099	2	11.549	1.497	0.226
Test scoring	Within Groups	1520.021	197	9.179		
	Total	1543.120	199			

	Between Groups	70.781	2	35.391 9.179	3.855	0.023*
Test security	Within Groups	1808.339	197			
	Total	1879.120	199			
	Between Groups	53.038	2	26.519 6.799	3.901	0.022*
Test Integrity	Within Groups	1339.342	197			
	Total	1392.380	199			

P>0.05, critical value F= 3.0

Table 6: LSD Post hoc test on influence of teachers' highest academic qualification on test credibility

Dependent Variable	(I) Highest Qualification	(J)Highest Qualification	Mean Difference	Std Sig	Sig
	NCE/HND	Bachelor	0.941	0.4840	0.053
		Masters	2.295*	0.5952	0.000
Test Administration	Bachelor	NCE/HND	-0.941	0.4840	0.053
		Masters	1.354*	0.5902	0.023
	Masters	NCE/HND	-2.295*	0.5952	0.000
		Bachelor	-1.354*	0.5902	0.023
	NCE/HND	Bachelor	0.896	0.4792	0.063
		Masters	-0.641	0.5892	0.273
Test Security	Bachelor	NCE/HND	-0.896	0.4792	0.063
		Masters	-1.537*	0.5843	0.009
	Masters	NCE/HND	0.641	0.5892	0.273

		Bachelor	1.537*	0.5843	0.009
	NCE/HND	Bachelor	-0.195	0.4124	0.636
		Masters	1.169*	0.5071	0.022
Test Integrity	Bachelor	NCE/HND	0.195	0.4124	0.636
		Masters	1.364*	0.5029	0.007
	Masters	NCE/HND	-1.169*	0.5071	0.022
		Bachelor	-1.364*	0.5029	0.007

The mean difference is significant at 0.05 level

Discussions of Results

On the influence of teacher area of specialization on test credibility, result indicates a relationship between that teachers' area of specialization and test credibility. Specifically, teachers' area of specialization has no significant influence on test preparation, with teachers whose specialization aligns which education, sciences/engineering and business administration demonstrating reasonable high level of alignment with curriculum standards during preparation testing. However, teachers' area of specialization has significant influence on test administration, test security and test administrator integrity. This finding underscores the importance of subject of specialization in test credibility with respect to administration, test security and test administrator integrity. This is in line with prior research finding by Impara et.al (1991) who asserted that teacher area of specialization determines their capability in test credibility. This finding also contrasted Adieze (1986) who found that non-qualified and non-professional teachers in teaching profession are killing the profession because they are not really teachers. The explanation to justify this finding is that, not all the faculties in schools offered test and measurement but teaching career has been opened to all area of specializations. Such shortcoming compromise test credibility, leading to skewed assessments of students' performance and potentially affecting instructional decisions.

On the influence of teachers' highest qualification on test credibility, the study revealed no significant influence on test credibility in terms of test preparation and scoring. This suggests that, holding higher or additional academic qualifications does not necessary translate into superior test construction and scoring practices. This implies that any teacher irrespective of qualification can prepare a test and score the test effectively. This challenges the notion that advanced degrees alone are reliable indicators of a teacher's ability to design and implement credible test. This study is in line with Gronlund et al. (1990), explain that tests can be successfully administered by any conscientious teacher or test administrator, as long as the prescribed testing procedures are rigorously followed. However, there was significant influence of teacher's highest qualification on test credibility with respect to test administration, test security and test administrator integrity. These findings align with existing literature that emphasizes the need for higher academic qualifications and professional development, such study as Koledoye (2011), whose result shows that teachers with higher academic qualification have more knowledge of the subject matter, competence and skills of teaching/testing and have more impact on the teaching learning process.

Conclusion

This study examined teachers' testing skills and credibility of test administered in public secondary schools within the Uyo Educational Zone of Akwa Ibom State, Nigeria. Teachers' skills in test preparation, administration, test scoring, and security of test materials, while test integrity was also used to aid the study. Finding revealed the teachers' area of specialization significantly influence test credibly in terms of test administration, test scoring, test security, and test integrity. Results also showed that, teachers specializing in education significantly influenced test security and test integrity. Results further show that, teachers' highest qualification has significant influence on test credibility in terms of test administration, test security and test integrity. It is evident that inadequacies in teachers' testing skills often played down on overall test credibility. The results also indicated that, where teacher possessed strong testing skills which takes into account, the variables of test preparation, test

administration, test scoring, test security and integrity were more likely to be viewed as credible educational stakeholders. Conversely, deficiencies in testing skills will not just affect integrity of a test, but contribute to inflate or deflate students' performance, negatively impacting both learning outcomes and policy decisions. Therefore, to promote more accurate measurement of student learning, support evidence-based educational planning and uphold the credibility of secondary education in the Uyo Educational Zone and beyond, there should be intentional training and re-training of teachers on testing skills.

Recommendations

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

1. Teachers should be regularly refreshed with in-service training in test construction, administration and how to secure the test before and after administration to ensure the credibility of that test.
2. Educational test and measurement expert should be empowered to properly teach testing skills to the would-be teachers to enable them apply appropriate testing skills in schools to ensure the credibility of that test and confidence in test result.
3. Graduate teachers without teaching qualification should endeavor to proceed on PGDE or PDE programme to enhance their test construction/administration and security of any of any test paper to ensure their test credibility
4. As part of criteria for appointment of teachers, applicant should be subjected to clinical test to determine their psychological relevance and balance in the field of education.

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