

**ASSESSMENT OF TEACHERS' UNDERSTANDING OF
CRITERION RELATED VALIDITY IN SECONDARY
SCHOOLS IN OWERRI EDUCATION ZONE 1
OF IMO STATE**

Amadi, Victoria Chinyere PhD
Dept. of Physical Science Education
Imo State University, Owerri

&

Acholonu, Vivian Nwachinyere PhD
DEPT. of Life Science Education
Imo State University, Owerri

Introduction

Education is one of the basic ingredients of life and the most important instrument for any form of social engineering and moral re-generation in any society. Keta in Amadi (2012) is of the opinion that any society that toys with its education stands the risk of going into extinction because it toys with its future and what the future may bring along with it because the aims, objectives and aspiration of any society can only be realized through the provision of relevant education. The attraction which education enjoys stems from the fact that it equips one for life (Ahmed 2009). According to Anugom and Obioha (2010) the society promotes its members through education which is seen as instrument for societal transformation. Hence for education to effectively have its way in transforming the society, the teachers have a great role to play because they are expected to be architects of the future for the whole society.

Several authors have given their perspectives on who a teacher is. According to Asiabaka and Emenalo (2011), the teacher is a person who had undergone approved professional training in education at appropriate levels capable of imparting knowledge, attitudes and skills to the learner. The teacher is also a learner, who learns from the students, their parents and members of the community and from their colleagues. Mezieobi, Fubara and Mezieobi (2013), states that a teacher or school teacher is a person who provides education for pupils (children) and students (adults). The teacher is the main agent for effective learning in students, a link between the society and the students. To the learners, he represents the society and should be a role model of emulation. To the society, he should translate the ideas, intentions, and desires of the society to the learners. Anybody who wishes to become a teacher must first obtain specialized professional qualification or credentials

from a college or university. The role of a teacher among many others embraces his being, as an academic guru character trainer, member of school staff, member of the society, a leader and curriculum developer. Assessing teachers is a good measure of knowing their effectiveness in carrying out their duties in the school. This assessment can be in their understanding of criterion related validity which can help them pass valid judgment when evaluating students' performance in the school (Black and Dockrell, 2011).

Criterion related validity according to Nworgu (2006) is the type of validity concerned with the degree to which the performance of an instrument can estimate or predict the performance in other situation(s). Criterion related validity is the degree to which scores obtained in test correlate with scores obtained by the same testees in a standard equivalent test (Nkwocha, 2015). The measures from the instrument are referred to as the predictor variable or (predictor), whereas the performance in another situation which the instrument is supposed to predict is called the criterion variable (or criterion). There are two sub classes of criterion related validity based on the time interval between the predictor variable and the criterion variable. These are concurrent validity and predictive validity. In the former, the criterion or the yardstick used to see whether the test is acceptable or not is taken simultaneously with the new test. In predictive validity the criterion test is taken in future. For time economy many researchers prefer to use concurrent criterion related validity process.

Gustafsson (2013) explains that criterion related validity is one of the objectives of evaluation which aim at predicting success in a specific area of learning. It is the criterion that determines whether an aptitude test is valid or not. The teachers' good understanding of it can help make the evaluation of student in school easy. In the seventies, Schmidt and Hunter in Black and Dockrell (2011) examined the variability in criterion validity coefficients for teachers' assessment tests and found that much of this variability could be attributed to such statistical artifacts as sampling error, differences in criterion and test reliabilities, and differences in range restrictions. They also explained that the results of several studies by Schmidt, Hunter, and their colleagues indicated that the variability in the validity of teachers' assessment tests across work settings, specific job requirements, etc. is much smaller and undermined the argument that criterion-related validity coefficients for teachers' assessment tests are always highly situation specific and cannot be generalized at all. However, that the refutation of an argument (i.e., that a criterion validity evidence cannot be generalized), even if it is completely successful, does not prove the opposite of the argument (i.e., that the evidence can be generalized).

Even though the research on validity generalization indicates that much of the variability in criterion validity coefficients is attributable to

statistical artifacts, there is some variability that cannot be explained in this way (Black and Dockrell, 2011). The importance of this residual variability in assessment has not been determined to the extent that the residual unexplained variability of teachers reflects their important differences and the validity generalization not justified. A challenge, however, more fundamental than the problems inherent in generalizing criterion-related evidence, is the development of good criterion-related validity evidence in any particular situation (Lotanna, 2012). Before we can do much with generalization, we have to get criterion-related evidence, positive or negative, that is worth generalizing.

Put simply, criterion are statements describing elements of a lesson that is significant in determining whether or not the lesson objectives are met. Many teachers have shallow knowledge and understanding of criterion related validity due to lack of in-service training/workshop for teachers. The success of curriculum is hinged upon its effective implementation at classroom level and the teacher is central to this (Amadi 2012). It is therefore imperative to explore the understanding of criterion related validity by Secondary School Teachers for the purpose of achieving education objectives.

The status of the present day Nigerian education system seems it's not enjoying the good standard witnessed in the past. This can be seen in many areas of teaching and learning situation including teachers, lack of understanding of subject matter in various areas of students' evaluation. It is disheartening that teachers' assessment in terms of competence can no longer be exalted for excellence because their expectations have been cut short which may be due to poor understanding of criterion related validity. They may also lack criteria and experience in the area of test construction which help in assessing students performance to know their strengths and weaknesses. When a teacher is not well grounded with good understanding of criterion related validity, his/her assessment processes will not be valid and reliable. These problems prompted the researchers to carry out this study on assessment of teachers' understanding of criterion related validity in secondary schools, the pick foundation stage for students as regards their career in life. Specifically, the purpose of this study is to explore the understanding of criterion related validity by Secondary School Teachers for the purpose of achieving education objectives.

In order to achieve the purpose of the study, the following research questions and hypothesis guided the study.

1. What are the mean rating scores of secondary school teachers' understanding of criterion related validity?

2. What are the mean rating scores of the total male and total female secondary school teachers' understanding of criterion related validity?

There is no significant difference in the mean rating scores of male and female secondary schools teachers on their understanding of criterion related validity.

Method

Survey research design was employed in carrying out this study. This is because of the researchers' interest of their finding out the Secondary School Teachers understanding of criterion related validity. The target population of this study consisted of all the 2934 Secondary School Teachers in the 69 secondary schools in Owerri education zone II of Imo state (which comprises of 813 male and 2921 female) (SEMB, 2015). The sample consisted of 300 teachers comprising 98 male and 202 female that was drawn through multistage sampling technique involving simple random sampling, proportionate stratified sampling and cluster sampling. The instrument for data collection is a researchers' made rating scale titled "Assessment of Teachers' understanding of Criterion Related Validity" (ATUCREV), which consist of 10 item constructed on modified 4-point Likert type scale of Strongly Agree (SA) 4 points, Agree (A) 3 points, Disagree (D) 2 points and Strongly Disagree (SD) 1 point. To establish both face and content validity of the instrument, it was given to three experts in the field of educational measurement and evaluation. To ensure reliability of the instrument, a pilot study was carried out with the teachers from non-sampled schools. The internal consistency was established using cronbach alpha which yielded reliability coefficient Of 0.86 after which the main study was carried out. The research questions were analyzed using mean and standard deviation and the hypothesis was tested using t-test at 0.05 level of significance.

The acceptable mean is 2.50 for the 4 point rating scale therefore; mean scores from 2.50 and above indicated agreement while mean scores below 2.50 indicated disagreement of the item in the rating scale.

Results

Table 1: Mean and standard deviation score of teachers' responses on their understanding of criterion related validity.

S/N	Item statements	General 300		Male 98		Female 202	
		X	SD	X	SD	X	SD
1	Poor understanding of subject matter	2.53	0.42	2.60	0.41	2.46	0.43

	defeats the objective of a good test development standard.						
2	Poor understanding of the rational for test development makes it difficult to assess students properly.	2.64	0.26	2.62	0.24	2.66	0.28
3	Poor knowledge of test development by teachers negatively affects criterion related validity.	2.80	0.40	2.82	0.38	2.78	0.41
4	The assessment practices employed by the teachers do not meet the required standard for development and administration of test.	2.76	0.42	2.79	0.40	2.73	0.44
5	Lack of assessment tools cripples effective assessment and thereby reduce criterion related validity to nothing.	2.60	0.32	2.64	0.31	2.56	0.32
6	Students were exposed to assessment relevant to the subject matter.	2.10	0.24	2.12	0.24	2.08	0.23
7	Improper management of assessment facility responsible for the dearth of tool for proper assessment	2.54	0.34	2.56	0.33	2.52	0.35
8	Assessment facilities are indispensable towards proper effective criterion related validity	2.85	0.40	2.88	0.38	2.82	0.42
9	Students were exposed to variety of teaching strategies/ techniques and variety of assessment process/style.	2.28	0.23	2.26	0.24	2.30	0.21
10	Lack of in-service training/ workshop for teachers has subjected criterion related validity to great abuse.	2.78	0.36	2.80	0.35	2.76	0.38
	Grand Mean	2.59	0.34	2.61	0.33	2.57	0.35

N=300.

In response to research question I and II, table I indicates that the measure of the overall teachers understanding of criterion related validity is high than the acceptable mean of 2.50 that was set. This implies that majority of the teachers' have poor understanding of criterion related validity. The table also shows that the scores of males and females have similar (poor) understanding of criterion related validity.

Table 2: Analysis of result concerning the hypothesis.

There is no significant difference in the Male and Female teachers understanding of criterion related validity.

Gender	N	X	SD	df	t-cal	t-crit
Male	98	2.61	0.33	298	0.15	1.96
Female	202	2.57	0.35			

($P < 0.05$)

Table 2 shows a t-calculated value of 0.15 which is less than t-critical value of 1.96; hence the null hypothesis is not rejected. This implies that there is no significant difference between the mean responses of male and female teachers on their understanding of criterion-related validity.

Discussion

The study reveals poor understanding of subject matter, poor knowledge of test development processes, poor understanding of the rationale for test development and assessment process by teachers and lack of in-service training/seminar workshop for teachers. This reveals that the measure of overall teachers' understanding of criterion related validity is poor. The null hypothesis as regards no significant difference in the male and female teachers understanding of criterion related validity is not rejected. This is in agreement with the findings of Lotanna, 2012 that a challenge, more fundamental than the problems inherent in generalizing criterion-related evidence, is the development of good criterion-related validity evidence in any particular situation.

Furthermore, the study showed that students were not exposed to assessment relevant to subject matter. The teachers' ability of having good understanding of criterion related validity will help make the evaluation of students in school easier.

Conclusion

Poor knowledge and understanding of criterion related validity will reduce teachers' assessment of students to nothing. We cannot continue in this manner of paying lip service to teaching if qualitative and functional assessment processes are not exhibited or carried out by teachers. Training should be given to teachers to impart the necessary teaching and assessment skill, so that the use of criterion related validity in evaluation of students will not be subjected to great abuse.

Recommendations

- Teachers should be encouraged through workshops and seminars on the importance of criterion related validity and how it helps in predicting students' success in a specific area of learning.
- Policies should be put on teachers employment to control employment of people that have no teaching qualification, no understanding of criterion related validity, so that evaluation of students will not be subjected to abuse.

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