
Understanding Validity for Teachers Activity: What is Criterion-Related Validity?

This activity will help you answer the essential question:

- What is Criterion-Related Validity?
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Activity 3: What is Criterion-Related Validity?

You may complete this activity individually or in groups.

Part 1

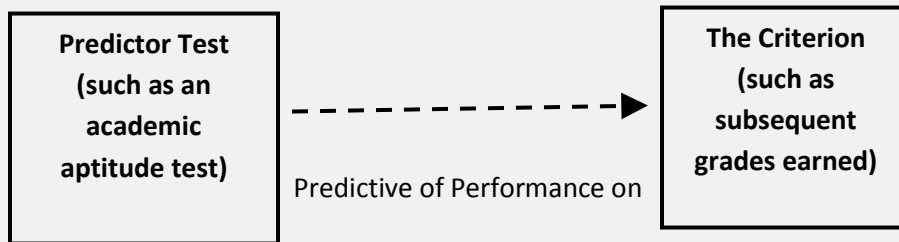
Read the following definition and explanation of Criterion-Related Evidence of Validity and look at the illustration. Answer the following question:

- What are the assessments used in your school or district that utilize Criterion-Related Evidence of Validity?

The degree to which a student's performance on a test accurately predicts the student's performance on an external criterion. (Popham, Validity: Assessment's Cornerstone)

If a high school student scores high on an academic aptitude test, how accurate is a score-based prediction that the student will do well in college? And if a college student scores poorly on an advanced aptitude test such as the Graduate Record Examination or the Miller Analogies Test, will the student surely stumble in graduate school? Well, the validity evidence used to support the accuracy of these sorts of predictive inferences is known as criterion-related evidence of validity. (Popham, Validity: Assessment's Cornerstone)

Figure 1. The Usual Situation in Which Criterion-Related Evidence of Validity Is Sought



(Popham, Validity: Assessment's Cornerstone)

Part 2

As you learned from the Module, there are two types of Criterion-Related Validity, Predictive and Concurrent. Read the three excerpts and then answer the following question:

- If you are a teacher who is using the results of an academic aptitude test to arrive at score-based inferences about your students' subsequent academic performance, what type of validity coefficients would you prefer to find in the test's technical manual – concurrent or predictive? Why?

Predictive Validity

Another statistical approach to validity is predictive validity. This approach is similar to concurrent validity, in that it measures the relationship between examinees' performances on the test and their actual status as masters or non-masters. However, with predictive validity, it is the relationship of test scores to an examinee's future performance as a master or non-master that is estimated. In other words, predictive validity considers the question, "How well does the test predict examinees' future status as masters or non-masters?" For this type of validity, the correlation that is computed is between the examinees' classifications as master or non-master based on the test and their later performance, perhaps on the job. This type of validity is especially useful for test purposes such as selection or admissions. (Professional Testing, Inc.)

Concurrent Validity

Another important method for investigating the validity of a test is concurrent validity. Concurrent validity is a statistical method using correlation, rather than a logical method. Examinees who are known to be either masters or non-masters on the content measured by the test are identified, and the test is administered to them under realistic exam conditions. Once the tests have been scored, the relationship is estimated between the examinees' known status as either masters or non-masters and their classification as masters or non-masters (i.e., pass or fail) based on the test. This type of validity provides evidence that the test is classifying examinees correctly. The stronger the correlation is, the greater the concurrent validity of the test is. (Professional Testing, Inc.)

Is concurrent evidence apt to be as meaningful as predictive evidence? Assuming all other factors are equal, predictive evidence ought to be far more persuasive than concurrent evidence. However, concurrent evidence is clearly better than none at all. (Popham, Validity: Assessment's Cornerstone)