M.A(Education)-Semester II

Paper Name- Measurement and Evaluation
Unit -III
Topic- Validity and its types

Dr. Rashmi Srivastava

Department of Educational Studies

Mahatma Gandhi Central University, Motihari, Bihar

What is Validity

Validity simply means that a test instrument is accurately measuring what it's supposed to.

Or

Validity is the extent to which a test measures what it claims to measure. It's Vital for a test to be valid in order for the results to be accurately applied and Interpreted.

Types of Validity

- 1. Face Validity-related to the test overall appearance
- Content Validity-related to the objectives and their sampling
- 3. Construct Validity-theory underlying the target
- 4. Criterion Related Validity-concrete criteria in the real world
- Concurrent Validity-corelated with another measure already validated
- ii. Predictive Validity-capable of anticipating some later measure

Content Validity

Bollen (1989) defined content validity as —a qualitative type of validity where the domain of the concept is made clear and the analyst judges whether the measures fully represent the domain (p.185). Content Validity refers to the connections between the test items and the subjects-related tasks. The test should evaluate only the content related to the field of study in a manner sufficiently representative, relevant, and comprehensible.

☐ Construct Validity

It implies using the construct correctly (concepts, ideas, notions). Construct validity seeks agreement between a theoretical concept and a specific measuring device or procedure. For example, a test of intelligence nowadays must includes measures of multiple intelligences, rather than just logical-mathematical and linguistic ability measures.

☐ Face Validity

Like content validity, face validity is determined by a review of the items and not through the use of statistical analyses. Unlike content validity, face validity is not investigated through formal procedures. Instead, anyone who looks over the test, including examinees, may develop an informal opinion as to whether or not the test is measuring what it is supposed to measure. While it is clearly of some value to have the test appear to be valid, face validity alone is insufficient for establishing that the test is measuring what it claims to measure.

Criterion Related Validity

Also referred to as Instrumental validity, it states that the criteria should be clearly defined by the teacher in advance. It has to take into account other teacher's criteria to be standardized and it also needs to demonstrate the accuracy of a measure or procedure which has already been demonstrated to be valid.

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 before the test is administered. Once the tests have been scored, the relationship between the examinees status as either masters or non masters and their performance (example, pass or fall) is estimated based on the test is classifying examinees correctly. The stronger the correlation is, the greater the concurrent validity of the test is.

☐ Predictive Validity

This is another statistical approach to validity that estimates ,the relationship of test scores to an examinee's future performance as a master or non master. Predictive validity considers the questions, How well does the test predict examinees future status as masters or non master?" For this type of validity, the correlation that computed is based on the test results and the examinee's later performance .this type of validity is especially useful for test purposes such as selection or admissions.

Factor Affecting measuring Test of Validity

- History Events that besides the treatment (events in the environment).
- Maturation- Physical or psychological changes in the participants.
- ► Testing- Effect or experience with the pretest -become test wise.
- Instrumentation- Learning gain might be observed from pre to post test simply due to nature of the instrument .Particularly a problem in observation studies when observers more likely to give ratings based on Expectation (Conscious and Subconscious)
- ► Statistical regression Tendency for Participant whose scores fall at either extreme on a variable to score nearer the mean when measured a second time.
- ▶ Differential Selection Effect of treatment confounded with other factors because of differential selection of participant ,problem in non random samples.

- Experimental Mortality- Participant lost from the study, attrition.
- Selection- Maturation Interaction -Similar to differential selection except maturation the confounding variables.
- Experimental Treatment Diffusion-Treatment is perceived as highly desirable and members of control group seek access.

References -

- American educational research Association ,Psychological Association and National Council on Measurement in Education(1999). Standards for Educational Psychological Testing. Washington, DC: American Educational Research Association.
- Bollen, K. A. (1989). Structural Equations with Latent Variables (pp. 179-225). John Wiley & Sons.
- Best, J.W. & Kahn, J. V. (2007). Research in education (9thed.). New Delhi: Prentice hall of India Pvt. Ltd.
- ► Edward, A. L. (1975). *Techniques of Attitude Scale Construction*. Bombay: Vakils, Feffer and Simons Private Ltd.
- Festinger, I. & Karz, D. (1953). *Analysis of qualitative material, Research method in behaviour sciences*. New York: Holt, Rinchart and Winston.

- Gerrett, H. E., & Woodworth, R.S. (2008). Statistics in Psychology and Education. New Delhi: Surject publications.
- Karlinger, F. N. (1973). Foundation of Behavioural research. New Delhi: Surject Publication.
- ► Test Validity retrieved from 04/04/2020 http://www.proftesting.com/test_topics/pdfs/test_quality_validity.pdf
- Validity and Reliability in Social Science Research retrieved From 04/04/2020 https://www3.nd.edu/~ggoertz/sgameth/Drost2011.pdf/

Thank You