

Unit-III



CHARACTERISTICS OF A GOOD TEST

Good measuring Instrument??



- ∞ Gives an accurate estimate of the ability being measured.
- ∞ Measures without errors and gives true scores



Qualities



Characteristics related to Error.

Validity

Reliability

Objectivity

Norms

Practicability

Characteristics related to Usability

Ease of administration

Ease of Scoring

Ease of interpretation

Economy

Interesting

VALIDITY ??



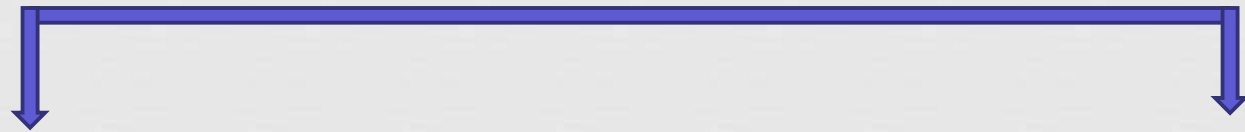
- ∞ The degree to which a test actually measures what it intends to measure is called its validity
- ∞ Related to the question of **“What does the test measure?”**
- ∞ Extend to which the measuring device is useful for a given purpose.

“Truthfulness of the Test”



∞ A test is valid when the performance measured corresponds to the same performance as otherwise independently measured or objectively defined (Comparing the data obtained from the test (**instrument**) with standard measures (**independent criteria**))

Types of Validity



∞ Logical/ Judgmental

∞ Face Validity

∞ Content Validity

∞ Construct Validity

∞ Empirical/Criterion related

∞ Predictive Validity

∞ Concurrent Validity

Factors affecting Validity



☞ Lack of validity due to the factors related to the test

☞ Ambiguity in specifying the procedures for responding, wording of an item, difficulty level of items, wrong sampling, lack of clarity



Factors affecting Validity



❧ Lack of validity due to the Nature of content of the test

(Specific Objectives)

❧ Lack of validity due to the responses of the test takers

(Emotional disturbances, lack of mental preparation, response set etc)



Approaches to find validity.

- ∞ Logical Validity
- ∞ Deductive Validity
- ∞ Inductive Validity
- ∞ Empirical Validity



RELIABILITY ??



- ☞ The extent that repeated measurements give **consistent results** for the individual is called its reliability
- ☞ Covers several aspects of “**Consistency of scores**”
- ☞ The measures of reliability characterizes the test when administered under **standard conditions and given to a group similar to the normative sample..**

RELIABILITY ??



- Concerned with the degree of consistency- can be expressed in terms of a **correlation of coefficient**.
- Adequacy and objectivity of a test-** two important aspects



Factors influencing Reliability

- ∞ Length of the Test-
- ∞ Variability of the group-
- ∞ Ability level of the subjects-
- ∞ Range of measuring instrument-
- ∞ Objectivity of scoring-
- ∞ Scoring technique-
- ∞ Difficulty level of the test-
- ∞ Ambiguity-
- ∞ Testing conditions-

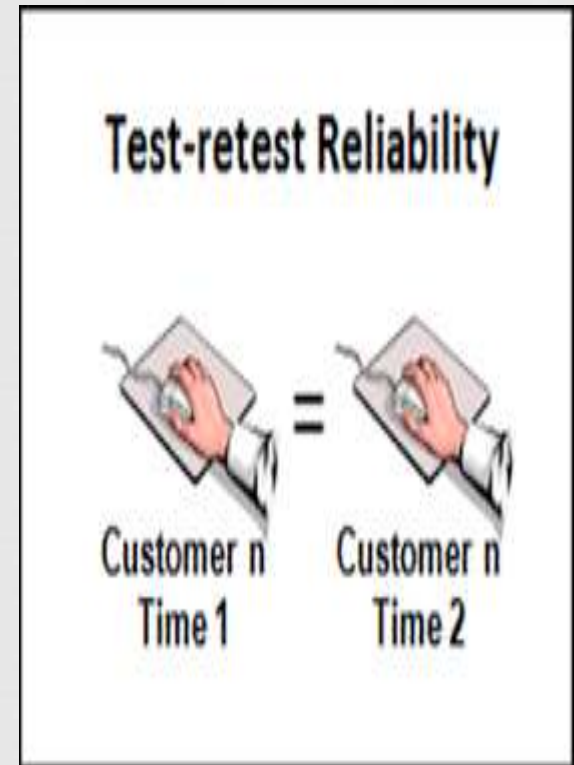
Approaches to find validity.

∞ Test- retest

Reliability

∞ Equivalent-forms

∞ Internal consistency



Approaches to find validity.



Split half method

Reliability of full test = $\frac{2 \times \text{Reliability on first } 1/2 \text{ test}}{1 + \text{Reliability on second } 1/2 \text{ test}}$

Kuder Richardson method (KR-20 and KR-21)

$$\text{KR-21: } r = \frac{n}{n-1} \left[1 - \frac{\sum p_i q_i}{Sx^2} \right]$$

OBJECTIVITY ??



- ☞ The degree to which a test's results are obtained the same by scoring different scorers without influences of their biases or beliefs on scoring is known as objectivity.
- ☞ Most standardized tests of aptitude and achievement tests are high in objectivity.
- ☞ In essay-type tests requiring judgmental scoring, different persons get different results or even the same person can get different results at different times

OBJECTIVITY ??



- ∞ The objectivity of a test is determined by carefully studying the administration and scoring procedures
- ∞ Objective-type tests such as true/false, multiple-choice, and so on are developed to overcome the lack of objectivity in tests.
- ∞ Objectivity in essay-type tests, may be increased by careful phrasing of questions and by a standard set of rules for scoring

ASPECTS OF OBJECTIVITY

∞ Objectivity of Scoring:

∞ Objectivity of Test Items:

