

## VALIDITY

### 1. Construct:

- Intangible collection of abstract concepts and principles
- Inferred from behaviour
- Explained by educational and psychological theory
- For example
  - Driving ability
  - Policemen competency

### 2. Validity:

- Evidence
- Presented to support or refute the meaning/ interpretation assigned to assessment results.
- Validity = construct validity
- Approach as hypothesis
- Unitary concept
- More or less
- Not an internal characteristic
- The higher the stakes, the more critical is the determination of validity
- On-going process
- Face Validity?

### 3. Sources of evidence:

- Content:
  - Examination blueprint/ test specifications
  - Sampling (adequate or not adequate)
  - Quality of items
  - Quality of test constructors
    - E.g. policemen competency, the constructor should be people who are senior in police department.
- Response process:

- Examinee familiarity
- Quality control
  - Scanning/ scoring
  - Final scores
  - Score report
- Accuracy
  - Combining different scores
  - Applying pass/ fail decision rules
  - Reporting to student/ faculty
- Internal structure:
  - Item analysis
    - Item difficulty/ discrimination
    - Inter-item correlation
    - Inter-total correlation
  - Reliability
  - Standard errors of measurement (SEM)
- Relationship to other variables
  - Correlation to other relevant variables
  - Convergent correlation – similar measures
  - Divergent correlation – dissimilar measures
  - Test-criterion relationships
    - Predictive (future)
    - Concurrent (present)
- Consequences:
  - Impact of scores/ results on student/ society
  - Consequences on learners/ future learning
    - Positive consequences more than negative
  - Reasonableness of methods to determine pass/ fail cut-off scores
  - Pass/ fail consequences
    - Classification accuracy
    - False positive/ negative

4. Threats to validity:

- Construct under-representation
  - Too few
  - Biased
  - Mismatch
  - Low reliability
- Construct irrelevant variance
  - Flawed item formats
  - Inappropriate difficulty
  - Cheating/ insecure
  - Indefensible passing-score methods