

Validity & Reliability

Validity: whether the measurement obtained truly reflects what the user intended to measure

Does the measure predict?

- Criterion-related validity: whether the measure allows for correct prediction of a criterion variable (e.g., whether tests of abilities predict performance)

What does the measure contain?

- Content validity: the content of the measure provides a good sample of the domain of behaviors that it is intended to measure (e.g., a test that is composed of questions from one chapter of a book rather than the whole book that the student was expected to know is low in content validity)

What does the measure really mean?

- Construct validity: whether the measure actually measures the construct that it is intended to measure (e.g., does the test measure situation awareness or does it really measure short-term memory storage ability?)

Reliability: the measure is repeatable; the extent to which a measure is relatively free of random error and is consistent to the scores assigned to objects or events

- Test-retest: stability over time
- Internal consistency: high correlations present in scores between different sections of a "test"
- Parallel forms: high correlations present in scores between different forms of the "test"
- Inter-rater: high correlation present in rating one measure by different people

** Definitions from *Understanding Industrial & Organizational Psychology* by Dipboye, Smith, & Howell, Harcourt Brace College Publishers, 1994.