

POLS 5377 Scope & Method of Political Science

Week 3 Conducting Research

Reliability and Validity

Babbie E. (2016) *The Practice of Social Science*, Chapter 5 (pp. 145-152)

Key Question:

- * How to judge measurement quality?

Outline

- * Reliability
- * Validity

Precision and Accuracy

- * Social scientists try to observe and measure everything in the world, although there is often no single way to interpret the reality
- * When measuring the reality, we require the measurement to be precise and accurate.
- * In social science, when judging the quality of a research, we consider two criteria:
 - * Reliability
 - * Validity

Reliability

- * Reliability: the quality of measurement method that suggests the same data would have been collected each time in repeated observations of the same phenomenon
- * Reliability does not ensure accuracy.
- * Subjectivity of researchers is a threat of reliability.

Improving Reliability

- * **Test-Retest Method**
 - * To make the same measurement more than once.
- * **Split-Half Method**
 - * using two or more items to measure the same concept. If the results of the two items are consistent, the measure is reliable.
- * **Established Measures**
 - * Use measures previously shown to be reliable.

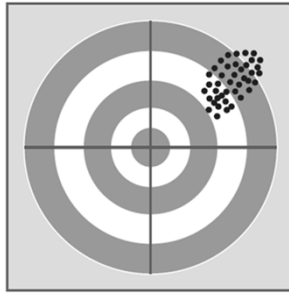
Improving Reliability

- * Reliability of research workers
 - * Clarity, specificity, training, and practice can prevent much unreliability
 - * State the research design section in detail
 - * It's especially important for qualitative research

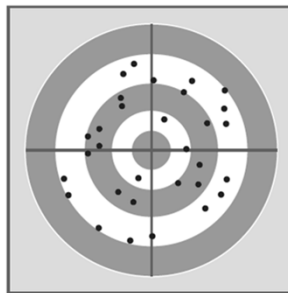
Validity

- * Validity – a term describing a measure that accurately reflects the concept it is intended to measure.
- * Face Validity – the quality of an indicator that makes it a reasonable measure of some variable.
- * Criterion-Related Validity (or predictive validity) – the degree to which a measure relates to some external criterion.
- * Construct Validity – the degree to which a measure relates to other variables as expected within a system of theoretical relationships.
- * Content Validity – the degree to which a measure covers the range of meanings included within a concept.

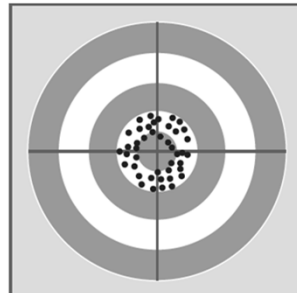
Reliability and Validity



Reliable but not valid



Valid but not reliable



Valid *and* reliable

The End