

# Measurement

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\_\_\_\_\_ vs.

## Definitions

- \_\_\_\_\_ = Abstract definition; psychological construct  
– e.g., aggression
- \_\_\_\_\_ = Concrete definition; how you will measure the construct  
– e.g., blasting another person with loud noises
- Measurement issues = Operational

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The consistency or dependability of a measuring technique

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### Ways to test

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- **Test-retest reliability:** consistency over time
- **Interitem reliability:** consistency of items to each other
- **Interrater reliability:** agreement of observations between raters

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### Measuring

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- Cronbach's alpha > .80
- Item-total correlations > .30
- T1-T2 correlation > .70
- Intraclass correlation for raters

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### Increasing the \_\_\_\_\_ of a measure

- Standard administration
- Rerword or discard bad items
- Add items
- Train your coders

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\_\_\_\_\_ Validity  
(again)

The degree to which the study measures and manipulates the underlying psychological elements that the researcher claims to be measuring and manipulating

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\_\_\_\_\_ Validity

- The extent to which an instrument APPEARS to measure what it is supposed to measure
- Often clear-cut items
- Problem: social desirability

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Testing Construct Validity

- How does the measure relate to other measures?
- \_\_\_\_\_ **validity**: should correlate positively with similar measures
- \_\_\_\_\_ **validity**: should correlate negatively or not at all with dissimilar measures

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## \_\_\_\_\_ Validity

The extent to which the measure allows researchers to distinguish among participants on the basis of a particular criterion

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## Ways to test \_\_\_\_\_ validity

- \_\_\_\_\_ **validity**: measure distinguishes between people in the present
- \_\_\_\_\_ **validity**: measure distinguishes between people on a relevant behavior in the future

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## Two Types of Problems

- \_\_\_\_\_
  - Systematic errors that "push" scores in the desired direction
  - Needs to be resolved immediately
- \_\_\_\_\_
  - Unsystematic errors due to chance
  - Typically averages to zero with repeated use

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### Problems with

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- Scores based on expectations rather than reality = BIAS
- Scores are noted inconsistently – RANDOM ERROR
- Solutions
  - Use nonhuman recording device
  - Make observers “blind”

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### Problems with

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- Purposefully administering it differently from one group to the next = BIAS
- Unintentional differences in one test situation to another = RANDOM ERROR
- Solutions
  - Standardized instructions
  - Make administrators “blind”

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### Problems with

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- Recognizes hypothesis and wants to help or hurt you = BIAS
- Puts on a show for the observer – BIAS
- Wants to make themselves look good = BIAS
- Solutions
  - Unobtrusive measures
  - Low degree of social desirability

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