#### VARIABLES AND PSYCHOLOGICAL MEASUREMENT

Assignment
Beins, Chapter 4, pps 81-91, 106-11
Stangor, Chapter 4 (ER) Mitchell & Jolley, Chapter 3 (ER)

Ί	erms	vou	shoul	ld	know.

Varialala	
Variable	• • • • • • • • • • • • • • • • • • • •
Predictor	
Cuitouion	
Criterion	• • • • • • • • • • • • • • • • • • • •
Independent Variable	
1	
Dependent Variable	
Operational Definition	
Operational Definition	
Measurement issues	
Subjective vs. Objective	
Measurement	
Quantitative vs Categorical	
Measurement	
Discrete vs Continuous	
Variables	

# PSY 767 Research Methods How to measure the unmeasurable: Collecting the right information right Reliability Interrater Reliability Test-retest Reliability **Internal Consistency** Validity Face Validity Content Validity Criterion Related Validity **Predictive Validity** Concurrent Validity

Construct Validity

## PSY 767 Research Methods How to measure the unmeasurable: Collecting the right information right Convergent Validity Discriminant Validity Measurement Modes Physiological Behavioral Self Reports Effective Range Floor Effect Ceiling Effect **Obtrusive Measurement** Unobtrusive Measurement **Demand Characteristics**

# PSY 767 Research Methods How to measure the unmeasurable: Collecting the right information right **Experimenter Reactivity** Subject Reactivity Concepts you should master. 1. Why should we worry about operational definitions? What is the importance of an operational definition to psychological research? 2. What is the relationship between an operational definition, a statistical hypothesis, and a measurement scale? 3. What are two key problems with using an unreliable instrument if it can be used objectively? 4. What is the relationship between an operational definition and the concept of validity?

5.	What are the techniques for assessing the construct validity of an instrument?
6.	If a measure has a limited effective range,  a. What impact would be seen in the statistical results?
	b. What impact might there be on the reliability of the measurement.
	c. What impact might there be on the validity of the instrument?
	d. What impact might there be on the internal and external validity of the research study?
7.	In a research study why would a person want to employ several measures of the same construct?

### **Application**

- 1. The following questions relate to the Holtzer et. al. article, *Chapman-Cook Speed of Reading Test: Performance of College Students* (Patten Article 28)
  - a. What are the major goals of this article?
  - b. If you had to classify this article as a reliability or validity study (or both) how would you classify it? Why?
  - c. What does the Chapman-Cook test purport to do, and how does it do it?

- d. Results and Discussion.
  - i. What is the relationship between the Chapman-Cook and the Kauffman Full Scale IQ?
  - ii. The following question relates to lines 85-95.

The authors state, 'Some information not available from tests currently used in assessment of reading and verbal intelligence may be provided by the Chapman-Cook test.' What does this mean?

iii. What limitations did the authors point out?

- iv. What limitations do you see based on the sample that the authors chose for
  - (1) The reliability study?
  - (2) The comparison of the Chapman-Cook and the other reading measures?
- e. The authors state, 'The short administration time of the Chapman-Cook test makes it attractive for quick screening of reading.' As a school psychologist, would you want to use the Chapman-Cook as a diagnostic tool? Why or why not?