

Quantitative Research Overview

Variables

Quantitative Overview

- Text calls this experimental research
- Often called empirical research
- Focuses on numbers and analysis
- More like “hard” science
- More likely to fit NCLB’s definition of “scientifically-based research”

Disadvantages

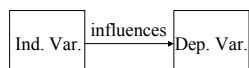
- Often, simplifying assumptions are made to enable analysis
 - Results may not resemble the “messy reality” of schools
- May lack insight
 - Understand what is so, but not understand *why* it is so

Variables

- A critical concept in research
- “A characteristic that can assume any one of several values, for example, cognitive ability, height, aptitude, teaching method.”
 - (Fraenkel & Wallen, 2000, p. 673)
- Don’t confuse different values of a variable with the variable itself
- Much research looks for relationships between variables

Types of variables

- Quantitative vs. categorical
- Manipulated vs. outcome
- Independent vs. dependent



- Extraneous variables

Homework

- Find 2 articles that report original quantitative research
- Should come from a scholarly journal
 - See resource on class web site to help make this distinction
- Avoid opinion pieces

Homework (continued)

- Turn in copy of each article
- Identify all variables in the report and type
 - Independent vs dependent
- Identify all levels of each variable
- Try to identify some extraneous variables
- Due next week