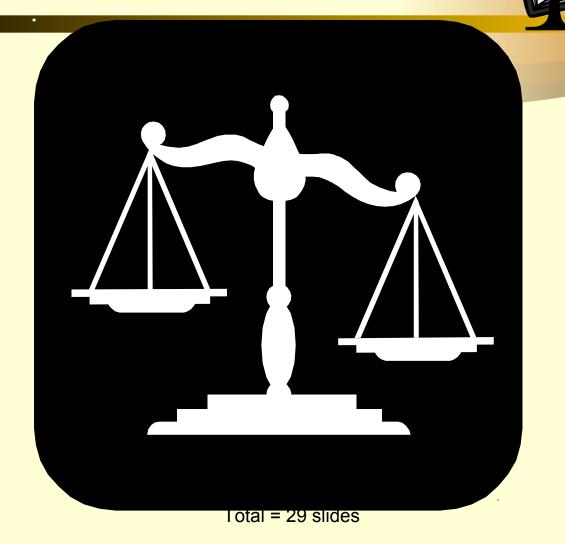
### Sociology 201: Social Research Design

14. Mid-term review

# Ney concept is: MEASUREMENT

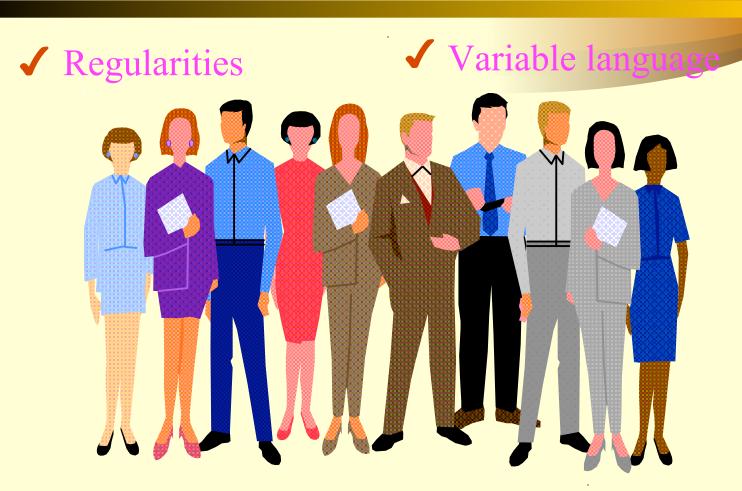


# Errors in Inquiry

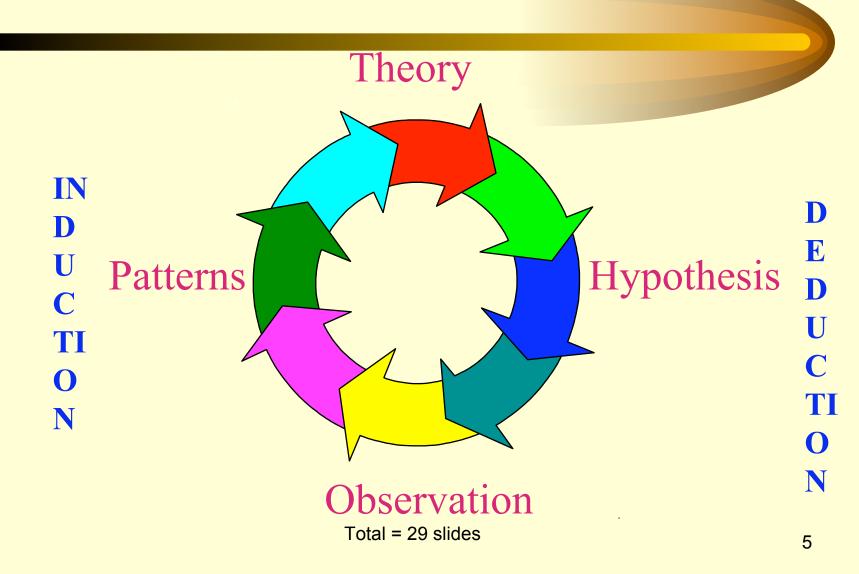
- Inaccurate observations
- Overgeneralization
- Selective observation
- Deduced information
- Illogical reasoning
- Ego-involvement in understanding



# Foundations of Social Science



# models of explanation



### Variables & Attributes

- Gender
  - Male
  - Female
- Social Class
  - Lower Class
  - Working Class
  - Middle Class
  - Upper Class
- School Class
  - Freshman
  - Sophomore
  - Junior

- Age
- -1,2,3,4,5 etc.
- Political Orientation
- Liberal
- Middle of the road
- Conservative
- Occupation
- Sociologist
- Plumber
- Homemaker
- Lawyer
- Drug dealer
- etc.

\_\_\_

# Objectivity, subjectivity, reality



- What's real?
- Subjectivity
- Post-modernism
- Finding truth
- Objectivity
- Intersubjectivity

## Paradigms



- Models, perspectives, frames of reference, ways of seeing things
- Natural science paradigms
  - e.g., Ptolemaic,Copernican
  - Newton, Einstein

# Three major sociological paradigms

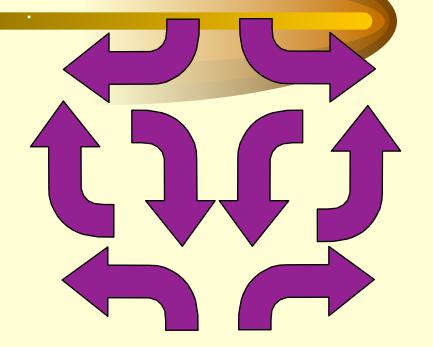


- Interactionist
- Social systems (functionalism)
- Conflict

### Causation

#### • Three criteria:

- Empirical correlation
- Time-order
- Not spurious
- False criteria
  - Not 100% correlation
  - Disproving cases don't disprove
  - Necessary and sufficient causes



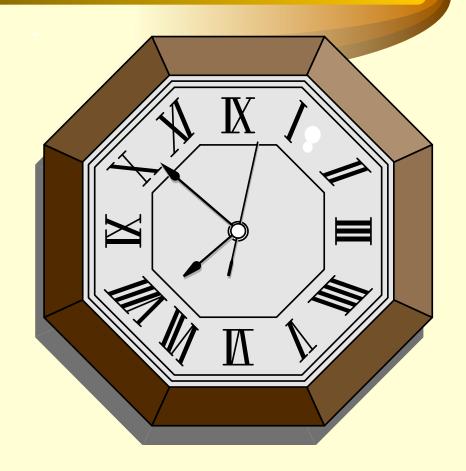
### Research Design

- Purposes:
  - exploration
  - description
  - explanation



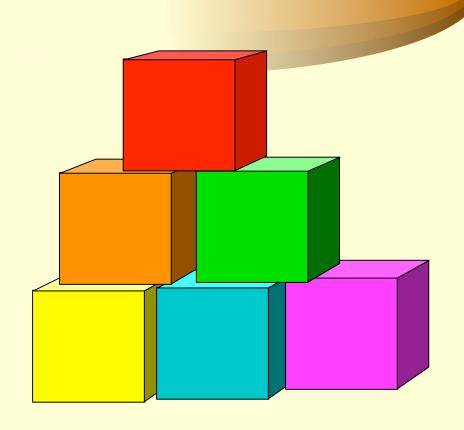
### The Time Dimension

- Cross-sectional
- Longitudinal
  - Trend
  - Cohort
  - Panel
- Approximating longitudinal



### Units of Analysis

- Individuals
- Organizations
- Social artifacts
- Reductionism
- Ecological Fallacy



# Conceptualization



- Dimensions
- Indicators
- Reliability and validity

## Reliability techniques



#### Test-retest

- Make same measurement more than once
- If different answers, poor reliability
- Split-half
  - Randomly assign items to two groups
- Create index from each
- Both indexes should behave the same

#### Established measures

- Srole anomia, MMPI, census measures
- Research-worker reliability
  - Interviewers and coders

Validity techniques

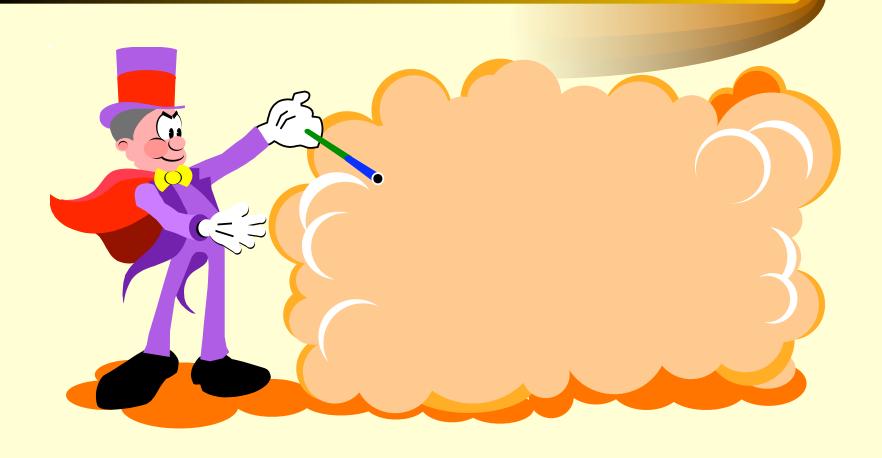
- Face validity
- Criterion-related validity
  - Also called predictive validity
  - Based on an external criterion
  - Do College Boards predict college grades?
- Content validity
  - Covers the range of meaning?
- Construct validity
  - Does the measure relate to other variables as predicted theoretically?



### Tension between Reliability and

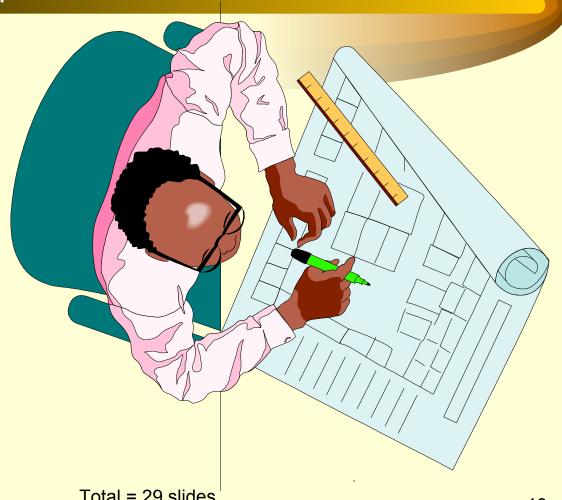


# Operationalization



## Levels of measurement

- Nominal
- Ordinal
- Interval
- Ratio

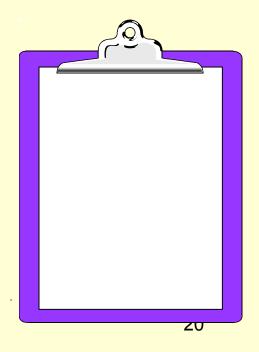


Total = 29 slides

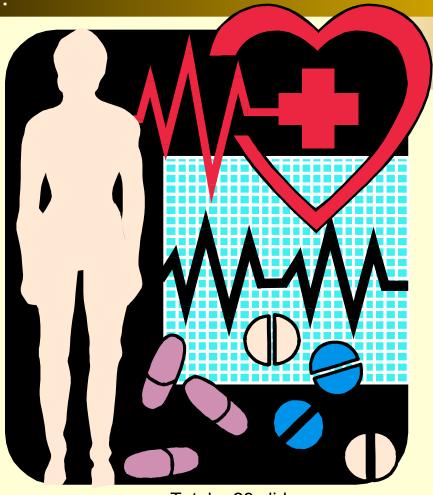
# Guidelines for asking questions

- Questions and statements
- Open-ended and closed-ended questions
- Make items clear
- Avoid double-barreled questions
- Respondents must be competent
- Questions should be relevant
- Short items are best
- Avoid negative items
- A resid bissed itames and towns

Total = 29 slides



# Composite Measures



Total = 29 slides

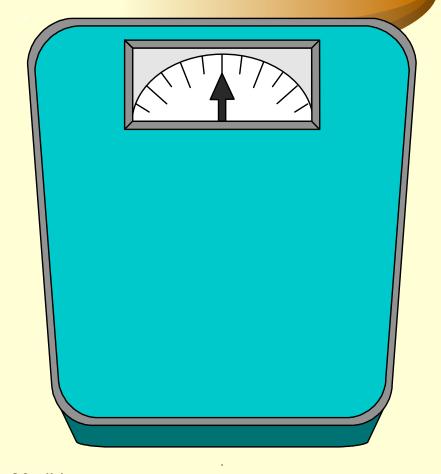
### Index construction

- Face validity
- Bivariate,
   multivariate
- Scoring
- Validation



### Scales

- Intensity structure
- Bogardus
- Thurstone
- Likert
- Guttman



# Typologies

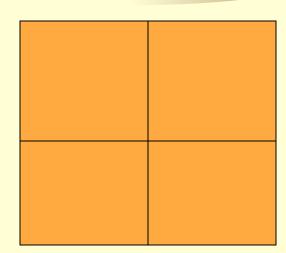
Like jazz?

Yes No

Yes

Like classical?

No



Not unidimensional

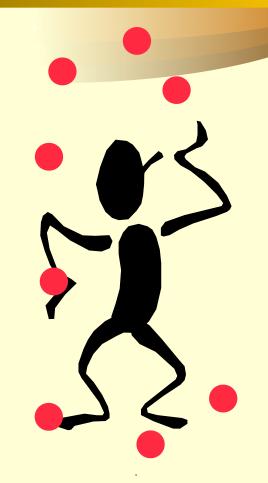
Okay for IV, not for DV

# Sampling

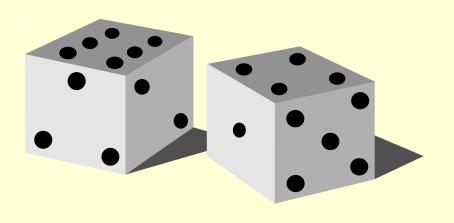


### History

- LiteraryDigest, 1936
- Gallup, 1948
- Current methods



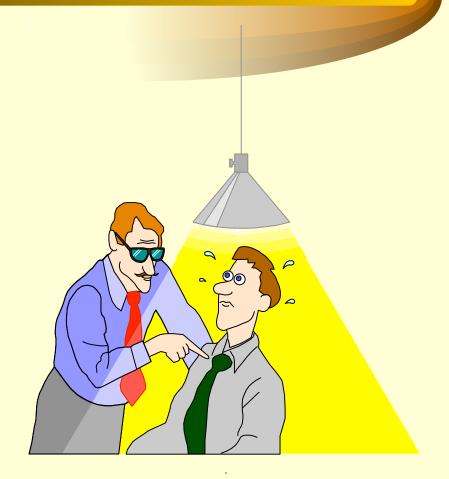
### Probability sampling



- EPSEM model
- Simple random sample
- Systematic sample
- Stratified sampling
- Cluster sample
- Weighting
- Probability
   proportionate to size

# Nonprobability sampling

- Available subjects
- Snowball sampling
- Selected precincts
- Quota sampling



### Next Time

