11. Composite Measures
• *Workbook assignments due:* 6.2 (20 pts)
• Indexes
• Scales
  – Guttman
  – Likert
  – Thurstone
  – Bogardus
• Typologies
Continuation of measurement discussion:

- conceptualization
- operationalization
- can use more than one indicator
Three types of composite measures

- Indexes
- Scales
- Typologies
Overview of differences

- Index is additive
- Scale considers structure
- Index/scale are unidimensional
- Typology is multidimensional

Total = 30 slides
Index construction

- Item selection
- Prima facie validity
- Bivariate relationships among items
- Multivariate relationships
Index scoring

• Default is equal weight
• Bases for unequal
  – More important item
• Skewed distribution
Handling missing data

• Leave out cases
• Assign average
• Infer a value
  – Checked a few yeses but not any noes in a list
Index validation

- Item analysis
- External validation
- Bad index versus bad validators
Note that student evaluations are an example of an index.
Scales

- Contrasted with indexes
- Index is additive
- Scale considers intensity structure of items
Likert scaling

- Questionnaire format and also basis for scaling
- Standard format
  - Strongly agree
  - Agree
  - Disagree
  - Strongly disagree
  - Undecided
Match terms to content of items

- Strongly Approve/Disapprove
- Definitely True/Untrue[False]
- Definitely Like/Dislike
- Very Important/Unimportant
- Don't use with absolutes
  - SA/A/D/SD: "My mom is the best cook in the world"
  - Probably have to strongly disagree
  - Even if you like your mom’s cooking
Thurstone Scale

- "Equal-appearing intervals"
- Create hundreds of possible items
- Have judges rate them 1-11
- Look for high agreement at each level
Bogardus Social Distance Scale

- Would you be willing to have a serial killer:
  - Live in your country
  - Live in your city
  - Live in your neighborhood
  - Live next door to you
  - Marry your child
Typologies

• Contrasted with indexes
  – Index is unidimensional
  – Typology is multidimensional

• Ok as an Independent Variable

• Problematic as a Dependent Variable
Example of Typology

Like jazz?

Yes

No

Like classical?

Yes

No
7.1: Random sample
- Be sure to use the table of random numbers
- Don’t just grab the ones you like
7.2: Stratified Systematic Sample

- Be sure to stratify the population by gender before sampling
- You should end up with right proportions of men and women
Next Time

- The Logic of Sampling
- Read Chapter 7