Political Science 501, Baumgartner Short paper topics/discussion points Week 3: Measurement

Readings: Nachmias, Ch. 7, 11, 12, 18, skim ch. 9; Baumgartner and Walker; Prothro and Grigg; Morgenstern; Baumgartner, Jones, and Wilkerson N

Review the following in detail and be prepared to discuss. Refer both to Nachmias and to one of the substantive readings. For example, what problem discussed in Nachmias does each of the substantive illustrate most clearly?

Measurement issues

- Random v. systematic measurement error
- Systematic measurement error v. mis-specified theoretical model. Which is worse? What are the effects of each?
- Tests for validity: How do you know if your measure is valid?
- Tests for reliability: Same question.
- Practical problems in measurement and observation in field research settings. Not including sampling issues, what are the most important measurement problems?
- Unobtrusive measures v. obtrusive measures. Administrative records and other sources of accurate, unobtrusive, measures. Budgets and historical documents. News archives.
- Self-reports and interviews with participants v. unobtrusive archival records: When would you prefer one over the other?
- Shifting the base; instrumentation errors v. validity concerns. What if you want to "improve" your measure to make it more valid, but it's part of a time-series. Refer to Baumgartner and Walker.

Questionnaire construction:

- Response set; leading questions; double-barreled questions; threatening questions; respondent engagement and rapport; break-offs; refusals; etc. Refer to Prothro and Grigg.
- Open and closed ended questions. The temptation of vague and general questions. Pushing the hard decisions on to the coders. Not a good strategy in all cases.

Index construction

- What would be the proper way to weight something like the Consumer Price Index? How do we construct the "marketbasket" of goods? Refer to Morgenstern.
- Why construct an index when a single measure would do? Why use the CPI when you could use housing starts, the price of gas, or some other single measure of inflation?
- Methods of aggregation and weighting for index construction
- Why aggregate by simple addition? Why weight? How to determine proper weights?
- Which items fit into an index? How to determine this question? Discriminative Power scores. Reliability tests. Simple correlations. Guttman scales and how to know if you have one. Coefficient of reproducibility. Factor analysis. What to do with an index item that doesn't load on the same factor as the other items in the scale. Why would this occur?