Harold Pakulat's Survey Design Bibliography

5/21/03

At our last meeting Rob was kind enough to ask about literature references on a couple of issues we were discussing. Included below are a number of resources I found useful for addressing two key topics of interest to us (well ... ok, at least of interest to me) – non-response bias and Likert scales. I placed an emphasis on literature that directly presented experimental results and/or referenced credible sources. Where sources are available on the web, a link is included. Some of the references are hard copy and I've indicated the ones I have available, in case someone wants to peruse them. I've also included brief comments about each of the sources. Within the two topic areas, I attempted to order the references from general to more specific with the understanding that most may wish get a feel for the topic, but not necessarily go over all the references. I apologize for not using standard bibliographic convention, but I believe each source is appropriately cited in spirit.

Harold

NONRESPONSE BIAS

Maximizing Response Rate and Controlling Nonresponse Error in Survey Research, Keith G. Diem, Ph.D
Available at http://www.rce.rutgers.edu/pubs/pdfs/fs997.pdf
Basically a friendly two page "executive summary" of non-response error. If you really only want to review a single item on this topic, this might be it.

Handling Nonresponse In Social Science Research, James R. Lindner, Tim H. Murphy, Gary E. Briers
Available at http://pubs.aged.tamu.edu/jae/pdf/Vol42/42-04-43.pdf
Provides a very straightforward explanation of non-response error detection techniques including a regression technique using "days to respond" I hadn't encountered elsewhere.

Classifying Response Behaviors in Web-based Surveys, Michael Bosnjak, Tracy L. Tuten
Available at http://www.ascusc.org/jcmc/vol6/issue3/boznjak.html
The Background section of this paper provides some interesting correlations of survey design and non-response.

Early versus Later Respondents in Intranet-based, Organizational Surveys, Ingwer Borg, Tracy L. Tuten
Available at http://www.jbam.org/Articles/article4_8.htm
On the surface a study that looks similar to what we're doing, but they use a intensive follow up method that holds managers responsible for the response rates in their area.

Sampling: Design and Analysis, Lohr, Sharon L. 1999. Duxbury Press.
Available from Amazon or my office. A textbook dealing with moderate to advanced sampling issues. Chapter 8 deals specifically with non-response. This text has many illustrative examples, but the math gets non-trivial.

Survey Nonresponse, Robert M. Groves, Don A. Dillman, John L. Eltinge, Roderick J. A. Little, 2001, Wiley
Available from Amazon or my office. A collection of 28 papers, most of which were presented at the International Conference in Survey Non-response, 1999. (Yes, there's a whole conference on this stuff!) More than a rational person really wants to know about survey non-response. Many of the papers assume a substantial background in statistics and survey methodology. Some of the papers dealing with weighting methods are mathematically intimidating; statistics on crack!

CONSTRUCTION OF LIKERT SCALES

Opinion Survey Rating Scales, Barry Stennet
Available at
http://www.assessmentplus.com/articles/opinion_survey_rating_scales.pdf
A brief review of the literature to determine the optimum number of points for a Likert scale. Probably serves as the executive summary for this section. Sets the tone in the summary with "it is recommended that at least 5 rating scale points be used and that 7 point scales are to be preferred."

The Psychology of Survey Response, Roger Tourangeau, Lance J. Rips, Kenneth Rasinski, 2000, Cambridge
Available from Amazon or my office.
A comprehensive overview and theory of how people answer survey questions; includes over 700 literature references. A top contender in the "must have" category of survey literature. Chapter 8 discusses different rating scale attributes and their effect on responses. On the issues related to the appropriate number of rating scale categories, the authors observation that "seven scale points seem to represent the best compromise" (page 249).

Survey Measurement and Process Quality, New York: Wiley-Interscience, L. Lyberg, P. Biemer, M. Collins, L. Decker, E. DeLeeuw, C. Dippo, N. Schwarz, and D. Trewin (Eds.)
Not in stock anywhere online, but MIT Dewey has a copy - currently checked out by me.
A collection of survey related papers including **Designing Rating Scales for Effective Measurement in Surveys**, Krosnick, J.A., & Fabrigar, L.R. (1997). Among other issues, the Krosnick paper addresses several aspects of Likert scale construction including the number of scale points. Krosnick's review of the literature is one of the primary sources cited by Tourangeau above in support of seven scale categories.

A Method For Constructing Likert Scales, Jamal Munshi
Available at http://munshi.sonoma.edu/working/likert.html
A very interesting approach to investigate Likert scale construction. The researchers gave subjects a blank straight line and asked them to put a tick mark anywhere on the line to indicate strength of agreement with a statement. The results from over 200 subjects showed clusters of responses around seven areas.

Quantitative Research in Public Administration, an online course by Dr. David Garson at North Carolina State University.
The Data Levels and Measurement section available at
http://www2.chass.ncsu.edu/garson/pa765/datalevl.htm#levels
discusses using Likert scales as interval data - something we do - the author indicates (you know what's coming) "Likert scales (ex., strongly agree, agree, etc.) are very commonly used with interval procedures, provided the scale item has at least 5 and preferably 7 categories."