Workshop:
Applied Survey Data Analysis

University of Kentucky
March 30, 2013
Content

• **Introduction**
  Mark Peffley, Professor, Department of Political Science and Director and QIPSR
  Arnold Stromberg, Chair, Department of Statistics and Co-Director, Applied Statistics Lab (ASL)

• **Module 1: Introduction to Sampling Methods**
  Abby Córdova, Assistant Professor, Department of Political Science
  Dominique Zéphyr, Data Analyst, Applied Statistics Lab (ASL)

• **Module 2: Variance estimation**
  Arnold Stromberg, Chair, Department of Statistics and Co-Director, Applied Statistics Lab (ASL)

• **Module 3: Analysis of Survey Data using Stata**
  Dominique Zéphyr, Data Analyst, Applied Statistics Lab (ASL)
Today’s Schedule

9:15 AM  Coffee and Welcome (Gatton Lobby)

9:30 AM  Introduction (B&E, 313)
• Mark Peffley, Professor, Department of Political Science and Director and QIPSR
• Arnold Stromberg, Chair, Department of Statistics and Co-Director, Applied Statistics Lab (ASL)

Introduction to Sampling Techniques: Simple Random Samples versus Complex Samples

10:00 AM  • Abby Córdova, Assistant Professor, Department of Political Science
• Dominique Zéphyr, Data Analyst, Applied Statistics Lab (ASL)

10:45 AM  Coffee Break

11:00 AM  Variance Estimation Techniques
• Arnold Stromberg, Chair, Department of Statistics and Co-Director, Applied Statistics Lab (ASL)

12:00 PM  Lunch Break

1:00-2:30 PM  Analysis of Complex Survey Data using Stata (Computer Lab, B&E, 105)
• Dominique Zéphyr, Data Analyst, Applied Statistics Lab (ASL)
Software Workshops:
  R, Stata, SAS, SPSS, MatLab, and ArcGIS.

2- or 3-day Statistical Workshops in May:
  “Spatial Regression Analysis” Paul Voss (May 2011)
  “Multilevel Modeling (MLM) Using Stata” Brandon Bartels (May 2011)
  “Missing Data and Applied Solutions” Fred Boehmke (May 2012)

Grant Workshops:
  "An Insider's Guide to Social Science Grants” Janice Almasi, Tom Janoski, Jim Ziliak Matthew Webster, Lawrence Gottlob, Anna Secor, Margot McCullers (February 2011)
  "Writing Successful NSF Dissertation Improvement Grants” Tom Janoski, Michael Samers, Emily Beaulieu (October 2011)
  “Grant-Writing Basics” Proposal Development Office (February 2012)

Statistical Workshops on Automated Text Analysis:
  "Automated Content Analysis for Social Scientists" Daniel Hopkins (March 2011)
  "Using TABARI, Text & Event Data Analysis " Phil Schrod (November 2011)
  "How Censorship Allows Government Criticism but Silences Collective Expression” Gary King (April 2012)
  "Computer-Assisted Clustering and Conceptualization from Unstructured Text" Gary King (April 2012)

Annual Interdisciplinary Conferences
  “Immigration Policy in an Anti-Immigrant Era” (March 2011)
  "Rising Economic Inequality in the 21st Century” (March 2012)
  “The Polarized Electorate” (December 2012)

Other Statistical Workshops
  "New Directions in the Study of Political Geography" Demonstration of GIS software” James Gimpel (December 2010)
  "Voter Migration and the Geographic Sorting of the American Electorate" James Gimpel (December 2010)
  "How the News Shapes Perceptions of the Economy” Yanna Krupnikov (October 2011)
  "Seven Deadly Sins of Contemporary Quantitative Political Analysis” Phil Schrod (November 2011)
  “Matching Methods for Causal Inference” Gary King (April 2012)
• 3 day workshop on **Applied Multilevel Models for Longitudinal and Clustered Data**, by Lesa Hoffman, May 14-16.

• Applied examples will be based on Stata, but software syntax for all examples provided in SAS, SPSS, too.
Applied Statistics Laboratory

How Does the Consultation Process Work?

STEP 1: SUBMIT A REQUEST.

Dean's Channel with Prof. Bathke and Prof. Stromberg, Statistics
Another name for this workshop: “Survey Analysis: The Missing Manual”

- And most of us **think** we know what we’re doing when analyzing survey data, but as we’ll find out today that is probably not true.
- Personal goals:
  - I will know what I don’t know about survey analysis.
  - I will be able to use Stata’s “Survey Data Reference Manual” for something other than a door stop.
Transformation of Survey Research in the Last 15 Years

• Decline in landline phones & the rise of Internet surveys
• When will you find “Applied Survey Data Analysis” most relevant?
  – SLOP surveys? No.
Other Surveys?

• Other surveys
  – Survey Monkey, Qualtrics surveys to email addresses?
  – Mechanical Turk surveys: $.50/survey through Amazon?
  – Internet panel opt-in surveys: CCES (QIPS)?
  – Knowledge Networks: maybe

• Gold standard surveys:
  – General Social Survey (Sociology)
  – American National Election Studies (Political Science)
  – World Values Surveys