

Framework for Data Collection and Analysis

Week 4 Application of TSE Framework to Existing Surveys

NCVS (National Crime Victimization Survey)

- The purpose for this survey is a concern that the police records underestimate crime prevalence. Value of perceived victimization as concept
- Measurement of both HH and person victimization through self-report
- Permit rates of victimization across subpopulations
- Target population:
 - U.S. household members
 - 12 years old and over
- Multistage area probability sample
 - 160,000 persons/year in 90,000 HH
- Rotating panel survey
 - Seven interviews every six months of sample of addresses
- Interview-administered
 - First wave in-person
 - Waves 2-7 preferably by phone using computer-assisted telephone interviewing (CATI)
- Design Issues
 - Underreporting of minor and repetitive victimizations
 - Underreporting of crimes in earlier months of 6-month reference period
 - Reduced incident reports in later waves
 - Nonresponse at person-level within larger households

NSDUH (National Survey of Drug Use and Health)

Purposes

- Use of illicit drugs by population
- Relationship among different drug usages
- Measures changes over time
- Provides estimates at individual state level
- Target Population
 - U.S. household members
 - 12 years old and over
- Multistage area probability sample within each state: ~70,000 persons
- Repeated cross-section survey
- Interview administered
 - Computer assisted personal interviewing (CAPI)
 - Audio computer-assisted self-interviewing (ACASI) for most sensitive items
- Design Issues
 - Underreporting of most sensitive, socially undesirable behaviors
 - Effects of self-administration on quality of reports
 - Lower reports by experienced interviewers

Surveys of Consumers (SCA)

- Attitudes about financial matters predict later behaviors
- Measurement of attitudes toward personal and national economic attributes
- Measurement of savings, borrowing, purchase intentions
- Measurement of net change over time
- Target population
 - Adult household members
 - Contiguous U.S.
- List assisted random digit dialed sample of telephone households: ~500 adults / month
 - Two-wave rotating panel survey

Interviewer-administered with CATI

NAEP (National Assessment of Educational Programs)

- Performance of U.S. schools on basic mathematics and reading knowledge and skills
- Uniform measurement across states in order to facilitate comparisons
- Measurement of net change over time
- Target population
 - 4th, 8th, 12th graders in U.S. schools
- Multi-stage area probability sampling: ~100,000 students in 2,000 schools
- Repeated cross-sectional survey
- Computer-based assessment in class setting
- Design Issues
 - Assessment effects on teaching targets
 - Measurement of students of limited English performance and special education children
 - Political oversight of NAEP results

BRFSS (Behavioral Risk Factors Surveillance Survey)

- State-level health status and risk related behaviors
- Provision of estimates to state public health officials
- Measurement of net change over time
- Measurement of health issues of specific interest to individual states
- Target Population
 - U.S. adults in HH population
- Random digit dialed samples of state telephone HH populations
- Repeated cross-section surveys (annually)
- Telephone interviewers using CATI
- Design Issues
 - Difficulties of understanding across states given multiple data collection organizations
 - Balance of innovation in measurement and change over time
 - Increasing nonresponse rate

CES (Current Employment Statistics)

- Change in number of jobs in U.S. across months
- Change in numbers of hours worked by U.S. workers
- Change in earnings of U.S. workers
- Target Population
 - Organizations with one or more employees
- Stratified element sample
 - Employers on state unemployment insurance lists (143,000 businesses and government agencies, representing approximately 588,000 individual worksites)
- Rotating Panel Survey
 - No fixed panel length
- Electronic Data Interchange(EDI), Web entry, CATI, fax, touchtone data entry(TDE), paper form, interactive voice recognition(IVR)
 - ➔ outcome: CES – unemployment rates by state seasonally adjusted, 2015
- Design Issues
 - Comparison to quarterly benchmarks from unemployment insurance census data
 - Including new “births” of employers
 - Nonresponse among newly recruited employers
 - Reporting errors for “supervisory” employers

Cross-Cultural Surveys

Survey of Health, Ageing and Retirement in Europe (SHARE)

- Encompassing cross-national variation in public policy, culture and history across a variety of European countries since 2004
- Providing full picture of ageing process
- Funded by European Commission, U.S. National Institute on Aging, and national sources
- Data collected includes health variables, biomarkers, psychological variables, economic variables, and social support variables
- Harmonized with sister studies
 - U.S. Health and Retirement Study (HRS)
 - English Longitudinal Study of Ageing (ELSA)
- Target population
 - People aged 50 and older
 - 20 European countries (Wave 5)
- Different forms of probability sampling
 - Sample frames chosen in accordance with best available frame resources in country
 - Most countries use registers of individuals that permit stratification by age
 - Approximately 110,000 individuals
- Panel Study
 - Wave 1: 2004/2005, Wave 2: 2006/2007, Wave3: 2008/2009, Wave4: 2011, Wave 5: 2013
- Interviewer-administered
 - Computer-assisted personal interviewing (CAPI)
 - Including physical tests and collection of biomarkers
- outcome → Cross national correlation between education and physical health (SHARE 2004-2006)
- Design Issues
 - Weighting results based on different sampling procedures in countries
 - Direct linkage of survey data with administrative records of the German Pension Fund
 - Reducing the effect of declining response rates through respondent incentives and interviewer training

European Social Survey (ESS)

- Maps attitudes, beliefs, and behavior patterns of various populations in Europe since 2001
- Before, existing cross-national attitude surveys regarded as not methodologically rigorous enough to generate reliable knowledge about changes over time in Europe
- Initiated by European Science Foundation
- Questionnaires consist of core module (repeated each round) and rotating modules on specific themes
- Target Population
 - Persons aged 15 and over
 - Residents within private households in 36 nations, regardless of nationality, citizenship or language
- Different forms of probability sampling
 - Sampling guidelines implemented in each country
 - Minimum effective achieved sample size per country of 1,500 or 800 in countries with ESS populations of less than 2 million
- Repeated cross-section survey
 - Biannually
 - Wave 8 in 2016
- Interviewer-administered
 - Computer-assisted personal interviewing (CAPI)
 - In some countries paper and pencil interviewing (PAPI)
- Outcome → Satisfaction with work life balance by country group
- Design Issues
 - Translation of questionnaire into different languages
 - Effect of mixed mode on coverage, non-response, and measurement error
 - Improving question quality – Survey Quality Predictor (SQP)

Lessons Learned from Surveys

- All are key indicators in society
- Their designs are customized to their needs
 - Different target populations
 - Sampling frames fit populations
 - Different modes of data collection
- Surveys are ongoing

Questions to ask of all Surveys

- What is the target population (whom is it studying?)
- What is the sampling frame (how do they identify the people or units to be included in the survey?)
- What is the sample design (how do they select the respondents?)
- What is the method of data collection?
- Is it an ongoing or a one-time survey?

[Reading] A Cross-Country and Cross-Time Comparison of the Human Values Measurements with the Second Round of the European Social Survey by Eldad Davidov

The designers of the European Social Survey chose Schwartz (1992) human values theory as the basis for developing the human values measurement instrument included in the core of the survey.