CHAPTER 7

ASKING PEOPLE ABOUT THEMSELVES: SURVEY RESEARCH
LEARNING OBJECTIVES

- Compare the two ways to administer surveys: written questionnaire and oral interviews
- Define interviewer bias
- Describe a panel study
- Distinguish between probability and nonprobability sampling techniques
LEARNING OBJECTIVES

✓ Describe simple random sampling, stratified random sampling, and cluster sampling
✓ Describe haphazard sampling, purposive sampling, and quota sampling
✓ Describe the ways that samples are evaluated for potential bias, including sampling frame and response rate
WHY CONDUCT SURVEYS?

- Provides a methodology for asking people to tell about themselves
- To study relationships between / among variables
  - To study how attitudes and behaviors change over time
- Provides useful information for making public policy decisions
- Important complement to experimental research findings
CONSTRUCTING QUESTIONS TO ASK

- Defining the Research Objectives
  - Attitudes and beliefs
    - Likert scale?
  - Facts and demographics
    - Coding scheme!
  - Behaviors
    - Frequency?
    - Duration?
Question Wording

- Potential problems that stem from difficulty understanding the question:
  - Unfamiliar technical terminology!!
  - Vague or imprecise terms!!
  - Ungrammatical sentence structure!!
  - Phrasing that overloads working memory!!
  - Embedding the question with misleading information

“Did your mother, father, full-blooded sisters, full-blooded brothers, daughters, or sons ever have a heart attack or myocardial infarction?”
CONSTRUCTING QUESTIONS TO ASK

- Important considerations when writing questions:
  - Ensure simplicity
  - Avoid:
    - Double-barreled questions
      - Should… AND…? [Separate into two questions!]
    - Loaded questions
      - Do you support the *aggressive* military campaign in …?
    - Negative wording [e.g., double negatives]
    - Yea-saying and nay-saying
      - Reverse coded questions
# Table 7.1 Question wording: What is the problem?

<table>
<thead>
<tr>
<th>Read each of the following questions and identify the problems for each.</th>
<th>Negative wording</th>
<th>Simplicity</th>
<th>Double-barreled</th>
<th>Loaded</th>
</tr>
</thead>
</table>
| Professors should not be required to take daily attendance.  
1 = (Strongly Disagree) and 5 = (Strongly Agree)                                                                                 |                  |            |                 |        |
| I enjoy studying and spending time with friends on weekends.                                                                           |                  |            |                 |        |
| Do you support the legislation that would unfairly tax hard-working farmers?                                                          |                  |            |                 |        |
| I would describe myself as attractive and intelligent.                                                                                   |                  |            |                 |        |
| Do you believe the relationship between cell phone behavior and consumption of fast food is orthogonal?                              |                  |            |                 |        |
| Restaurants should not have to be inspected each month.                                                                                   |                  |            |                 |        |
| Are you in favor of the boss’s whim to cut lunchtime to 30 minutes?                                                                    |                  |            |                 |        |

Answers are provided at the end of the chapter.
RESPONSES TO QUESTIONS

✓ Closed- Versus Open-Ended Questions
✓ Number of Response Alternatives
✓ Rating Scales
  ✓ Graphic rating scale
  ✓ Semantic differential scale
  ✓ Nonverbal scales for children
    ✓ 😊 😊 😞
✓ Labeling Response Alternatives
FINALIZING THE QUESTIONNAIRE

✓ Formatting the Questionnaire
  ✓ Should appear attractive and professional
  ✓ Neatly typed and free from errors
  ✓ Use point scales consistently

✓ Refining Questions
  ✓ Proofread questions with others
ADMINISTERING SURVEYS

✓ Questionnaires
  ✓ Personal administration to groups or individuals
  ✓ Mail surveys
  ✓ Internet surveys
✓ Other technologies
  ✓ “Computerized experience-sampling”
Interviews

- Face-to-face interviews
- Telephone interviews
- Focus group interviews
- Problem: Interviewer bias
SURVEY DESIGNS TO STUDY CHANGES OVER TIME

- Questions Are the Same Each Time Surveyed
- Tracks Changes Over Time
- Panel Study
  - “Two wave”
  - “Three wave”
  - Longer?
Confidence Intervals

- Level of confidence that the true population value lies within an interval of the obtained sample
- Sampling error or margin of error

Sample Size

- A larger sample size reduces the size of the confidence interval
- Must consider the cost / benefit of increasing sample size
Variations on Random Sampling

- **Cluster sampling**
  - All of the clusters in a population are identified and a certain number of these clusters are selected randomly; everyone in the selected clusters would then be recruited to participate in the study.

- **Stratified sampling**
  - Strata, usually levels of a nominal variable, are identified, and then a random sample of the same size is taken from each stratum.
STRATIFIED RANDOM SAMPLING

STRATUM (age, gender, education) STRATUM
CLUSTER SAMPLING

Clusters (Classes, Groups)

Randomly Choose Clusters

Sample All Members of Each Randomly Chosen Cluster
Nonprobability Sampling—unknown probability of any member being chosen
- Haphazard sampling – convenience sampling
- Purposive sampling – sample meets predetermined criterion
- Quota sampling – sample reflects the numerical composition of various subgroups in the population
EVALUATING SAMPLES

- Representative of the population
  - Sampling Frame
    - Actual population from which the sample is drawn
  - Response Rate
    - Percentage of respondents who complete
    - Attrition and Mortality in longitudinal studies
- Reasons for Using Convenience Samples
  - Less costly in terms of time and money
- Concerns
  - May not be generalizable
Steps in Survey Research

1. Establish the goals of the project - What you want to learn
2. Determine your sample - Whom you will interview
3. Choose interviewing methodology - How you will interview
4. Create your questionnaire - What you will ask
5. Pre-test the questionnaire, if practical
6. Conduct interviews and enter data - Ask the questions
7. Analyze the data - Produce the reports
Helpful Links

- Survey Research Center (ISR): http://www.src.isr.umich.edu/
- Gallup Polls: http://www.gallup.com/home.aspx
- Roper Center: http://www.ropercenter.uconn.edu/
- Census Bureau: http://www.census.gov/
- Cozby website: http://methods.fullerton.edu/chapter7.html