Preview Questions

1. What are the four cornerstones of quality surveys?
2. What has changed about surveying in the last 20 years?
3. What is the advantage of mixed-mode data collection?
4. How is the tailored design method different from other surveying methods?
5. What surveying challenges does the tailored design method address?

Reading Summary

Introduction

* There are numerous reasons for conducting a survey.
  + Understanding how attitudes about a topic vary with other characteristics is often the objective of the survey sponsor.
* There are also numerous uses for survey results.
  + Making capital investment decisions.
  + Setting policy.
* Surveys can be large or small.
  + Q: what is considered a large survey?
* Most surveys are based on samples of a target population.
  + Carefully selected sample surveys enable researchers to make inferences about a population that are only slightly less precise than a census of the entire population and much less costly.
* Non-survey methods used to collect data
  + Unstructured interviews
  + Focus groups
  + Participant observation
  + Content analysis
  + Simulations
  + Small group experiments
  + Records analysis
* A census is the opposite of a sample survey.
  + 100 percent of the target population is surveyed.

Four Cornerstones of Quality Surveys

* Minimizing the four main types of errors
  + Coverage error 🡪 sample frame does NOT accurately represent the population on the characteristic of interest.
  + Sampling error 🡪 difference between the estimate from sample survey and estimate from census survey
  + Nonresponse error 🡪 difference between the estimate generate when only some sampled units respond and estimate when all sampled units respond
  + Measurement error 🡪 difference between the estimate produced from the survey and the true value caused by inaccurate respondent answers
    - Types
      * Response bias 🡪 systematic shift in estimates
      * Response variance 🡪 variability in estimates of the same attribute taken over time
    - Causes
      * Poor question design
      * Survey mode effects
      * Interviewer behavior
      * Respondent behavior
      * Data collection mistakes
* Total Survey Error (TSE) framework attempts to minimize data inaccuracy within unavoidable constraints.
  + Often focuses on discrete actions.
  + Attempts to simultaneously control all four types of errors.

What Is Different About Surveying in the 2010s

* Many more ways of contacting survey respondents and more ways for respondents to complete surveys.
* Less need for an intermediary (i.e., interviewer) between surveyor and respondent.
* Traditional methods are still used for a variety of reasons.
* We can now connect with roughly 98% of U.S. households but there are more buffers that filter out unsolicited messages such as surveys.
* Traditional sample frames no longer provide the desired coverage of some populations.
* Different characteristics for different populations that prefer one communication medium over others.
* Web-based surveys have not lived up to their potential.
* Mail surveys are considered less desirable because they tend to have lower response rates and don’t enable intensive branching.
  + Up to 97% of U.S. households are accessible via mail surveys.
  + Mail has the lowest response rate and highest cost per response
* Single mode surveys are generally not as effective as they once were.

Why Emphasize Mixed-Mode Data Collection?

* More likely to minimize the four major sources of error and survey costs.
* Possibilities:
  + Offering respondents more than one way to complete a survey.
  + Contacting respondents in multiple ways even when only one collection method is used.
  + Creating synergy between contacts via different modes.
    - Postal request followed by an email with an electronic link to a web survey.
* Four types of mixed-mode surveys:
  + Type 1: Use one survey mode to encourage response by another mode.
  + Type 2: Use multiple survey modes to collect responses from the same respondent.
  + Type 3: Use multiple survey modes to collect responses from different population segments.
  + Type 4: Use multiple survey modes to collect responses from the same respondent at different times.
* Effect of four types of mixed-mode surveys
  + Types 1, 3 & 4 focus on minimizing coverage and nonresponse error.
  + Type 2 focuses on minimizing measurement error.
* Single-mode data collection still has value.
  + Mixed-mode data collection may be impractical or ineffective.

What is Tailored Design and Why Is It Needed?

* Researchers must tailor their survey designs to their situations.
* No simple set of procedures for designing surveys.
* Key considerations when designing surveys.
  + Topic knowledge
  + Survey sponsor objectives
  + Target population
  + Available resources
* Fundamental considerations
  + Reducing total survey error may undermine the quality of the information collected.
  + Survey procedure elements must operate synergistically to encourage all sample members to respond to the survey.
  + Build positive social exchange to encourage responses.