

# Quantitative Research: Survey-Design

**Dr. Paul L. Hewett, Jr. & Dr. Beth L. Hewett,  
Defend & Publish, LLC**

# Survey Research Design

# Goals for Survey-Design Research

## Survey-Design Research:

- Provides a numeric description of trends, attitudes, or opinions of a population by studying a sample of that population.
- The researcher generalizes or makes claims about the population from the survey results.

# The Survey Method Plan: Survey Design

- The first part of the methods section for a proposal introduces the reason and rationale for using a survey.
  - Identify the purpose of survey research (be sure to reference the source from where you draw your purpose).
  - Indicate why a survey is the preferred type of data.
    - Advantages such as economy of design, fast data collection
    - The ability to gather data from small groups to large populations
  - Indicate whether the survey will be cross-sectional, with the data collected at one point in time or over a period of time (a longitudinal study).
  - Specify the form of collection and mechanism for collection:
    - Self-administered questionnaire, interview, record review
    - Telephone, return-mail, face-to-face, web-based, email

# The Survey Method Plan: Population and Sample

- **Specify the characteristics of the population and the sampling procedure**
  - State the size of the population and the means of identifying individuals in the population.
  - Identify whether you will use **single stage** (you have access to names in the population and can sample them directly) or **multistage** (you get names from groups or organizations and sample from within the group/organization).
  - Identify the selection process: any one of the random sampling techniques, convenience sampling.
  - Identify whether the sample will be stratified by characteristics such as gender, income level, education level, etc.).
  - Discuss the procedures for selecting the sample (e.g., using a random number generator).
  - Indicate the number of people in the sample and the procedure used to compute that number.

# The Survey Method Plan: The Instrument

- Describe the survey instrument.
  - Is it an existing intact survey developed by someone else, an existing survey that you modified, or a new purpose designed survey? (For intact or modified surveys indicate whether you have permission to use or modify the survey.)
  - If using an existing intact survey, describe the validity and reliability information from its past use.
  - If using a modified instrument, you must reestablish validity and reliability.
  - In an appendix, include sample questions.
  - Indicate the survey's major content areas (e.g., demographics, attitudinal items, behavioral items, factual items) and the type of scale (continuous or categorical).
  - Identify how the survey will be administered.

# The Survey Method Plan: Variables & Data Analysis

- While the variables are presented in the statement of the problem, tie them to specific questions on the survey in the methods section.
- Then list the steps involved in analyzing the data.
  - Discuss how response bias will be determined.
  - Discuss how you will provide a descriptive analysis of data for all variables—means, standard deviations, range of scores for each variable.
  - Identify the statistics and statistical program used for testing the data and the rationale for those choices.

# Reference

Creswell. J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Los Angeles, CA: Sage.

# Questions

