Survey Research

What is survey research?

A quantitative research method which makes use of a series of questions, written or oral, to sample a desired "universe" -- a population or group of people. The important part of this method is developing questions which answer your research question without threatening the people you are surveying. Surveys can be mailed, telephoned, or asked in person but very different types of techniques are used for these different survey formats.

Survey Advantages:

1. Planned correctly, a survey makes it easy for the person to participate.
2. People participating can remain anonymous.
3. The same questions can be asked in several ways and to double-check the response for accuracy.
4. You can place questions in a sequence that will aid getting answers even for threatening subject matter.
5. Survey answers that can be quantified can be put on the computer for analysis.
6. You can pre-mail a product and then survey.
7. Surveys can be used in a variety of forms: personal, written and telephone.

Survey Disadvantages:

1. People surveyed may not answer all questions.
2. People who respond may not be part of the universe you intended to sample.
3. If you use open-ended questions, it is unlikely you can statistically analyze them and tabulating by hand is lengthy and tiresome.
4. If open-ended questions are not specific enough, the answers will be too broad.
5. You can't test knowledge with mailed surveys.
6. It is easy for people to give habitual responses.
7. People don't necessarily return the survey.
8. Costs to mail a survey and provide return mail, and for gimmicks can make it expensive.
9. People won't write a lot.
10. People can and do lie.

Determine the best survey method

a. Use **personal interviewing** for complex situations which require extensive explanation. This is the best possible method for results. It also is the most expensive, and is rarely used.
b. Use a **telephone survey** for well-defined basic opinions.
    1. Hold length to 5 to 10 minutes.
    2. Use professional phone callers if possible
    3. It is possible to get nearly 100% response.

c. **Mail surveys are** the most effective for well-defined concepts and specific limited answers. They rarely produce high response.
   1. Mail to right people.
   2. Use covering letter.
   3. A postcard announcement before the survey helps response.
   4. Follow-up mailings can improve the response.

How should you ask the questions?

a. **Open-ended** questions allow respondents to answer in their own words, but present problems of interpretation and analysis.
b. **Multiple-choice** questions present the respondent with several options. Be sure to include an "other" category.
c. **Yes and no** questions serve as good qualifying questions, to make sure the respondent has the characteristics of the group you want to test.
d. **Ranking answers,** putting items in a rank order, is useful.
e. **Opinion measurement** questions of the "agree" or "disagree" approach can be used.
f. **Verbal/numbered scale** questions are the best for determining the intensity of feeling about a subject. Example: Strongly agree, somewhat agree, neutral, somewhat disagree, strongly disagree. Another example, Circle a number on a five- or seven-point scale, where one end is "strongly agree" or "strongly approve" and the other end is "strongly disagree" or "strongly disapprove." Other terms can be used with the scale, of course.

Method for Conducting Surveys

1. Write the research question.
2. Review the literature and develop a hypothesis (What you think you might find to be true)
3. Select the audience or universe
4. Decide on the format -- phone, mail, personal
5. Plan the arrangement of types of material -- non-threatening questions, threatening questions, demographic data (age and income are threatening)
6. Develop the questions.

7. When writing **non-threatening** questions, remember:
   a. Closed response questions give you more data faster -- answers such as *Yes, No*; or 1, 2, 3.
   b. Open-ended questions give you a range of data and may bring up ideas you had overlooked.
   c. Keep your questions specific.
   d. Use words everyone can understand.
   e. People are more likely to remember things about themselves.

8. When writing **threatening** questions, remember:
   a. Create an environment that lets people comfortably answer questions.
   b. Open-ended questions work better.
   c. Ask long questions.

d. Stay away from technical terms.
e. Phrase your question in terms of "most people you know." People are usually more willing to talk about others.
f. Go back to past behavior before you ask present behavior questions.
g. Cluster questions about deviant behavior with other deviant behavior.
h. Put threatening questions toward the end of the interview.
i. Remember, answers to threatening questions may be lies.

9. When writing **knowledge** questions, remember:
   a. Make sure questions aren't too easy or too difficult.
   b. Sugarcoat questions, e.g., Do you happen to know?
   c. Simplify questions and answers.
   d. Leave questions with numerical answers open-ended.
   e. If you use yes/no questions, use related questions later to double check.
   f. Do not use mail to test for knowledge.

10. When writing **attitude and opinion** questions, remember:
    a. Be very specific.
    b. Keep the affective (feeling), cognitive (knowledge), and action aspects in separate questions.
    c. Gauge the strength of responses by providing a scale for answering.
    d. Start with general questions; move to specific questions.
    e. Group together questions with the same underlying value.
    f. Start with the least popular proposal.
    g. Use neutral terms, for example, the President, not President Clinton.
    h. Ask close-ended attitude questions.

11. Write questions so the answer will be easier to record.

12. Put the questions in order.
    a. Put like questions together.
    b. Start with non-threatening, go to threatening.
    c. Ask demographic questions last; they are seen as threatening.
    d. Start with general questions; go to specific.
    e. Go forward or backward in time, but don't jump around.
    f. Reverse scales to eliminate habitual responses.
    g. Diagram questions in a flow chart to see the logic.
    h. Survey shouldn't be too long. Some topics require a longer survey.

13. Format the survey.

14. When formatting written surveys:
    a. Use booklet (paper folded in half) to prevent loss of front or back page.
    b. Put identifying characteristics on first page -- who, what, why, etc.

15. Pretest the survey with people who know about the study and make any needed alterations.

16. Precode the answers and recheck the format.

17. Do a pilot test by surveying, on a small scale, the group you want to check.

18. Do the full scale survey.

How many to survey?
There are complex formulas for this purpose. The mathematics have all been done for you and are standard information. See the charts provided as part of the handouts for this session: Sample size and accuracy, and Table for Determining Random Sample Size.

Types of samples:

- **Census.** A 100% sample. Identify all the people in your universe and give each one an opportunity to respond. Especially useful with small well-defined populations. If your universe is under 300, consider a census.
- **Probability samples.** Random sample is a good example. A scientific sample drawn in such a way that the probability of being chosen is equal, or is known.
- **Nonprobability samples.** More informal selection of persons to be interviewed.
  - > *Convenience or accidental*. Drop by the company cafeteria and ask questions of whomever you find there.
  - > *Quota.* In a school, find 10 elementary teachers, 10 middle school teachers and 10 high school teachers. Any 10 of each kind.
  - > *Dimensional.* Go find so many male or female employees, so many in clerical or technical jobs, so many married or unmarried, or so many married female technical workers. Any employee is OK if they match the dimensions.
  - > *Snowball.* You may know only a few users of a certain type of computer, but they probably know others. You contact the first few and ask them for names of others. Proceed in successive waves of questioning to find the universe you desire.
  - > *Purposive.* A sample that suits your purpose. For a quick check among music-lovers, you do intercept surveys in the lobby before a symphony concert. For opinion among golfers, you hang out at the 19th hole and buttonhole people. For business executives, you choose the largest companies in town and start through the staff officers in their annual reports.
  - > Nonprobability sampling is easier and faster than formal methods. It can give you quick clues to opinion or behavior. It cannot be projected to the universe -- considered to represent the total population which interests you.

Source: Henry Milam Ph.D. APR