

Survey Procedures

The following outline describes those considerations important in the creation, administration, and analysis of a survey. For more complete thoughts and procedures, see Salant and Dillman.ⁱ

Creating your survey instrument

1. Identify the audience from whom you wish to gather information. Be as specific as necessary, sufficient that you can describe in detail how you will know that you have reached that target population.
2. Make a list of the specific information that you wish to learn. Restrict your list by including only information that you know you will use. Refrain from asking questions in areas that you cannot impact or asking questions because it “would be good information to know.”
3. In most cases, the number of people who respond to your survey will be inversely proportional to the length and complexity of the instrument. For a high rate of response, keep your list short and clear.
4. Construct questions in similar formats so the sentence structure is the same for a series of questions. For example, begin a series of questions with the same phrase such as: “which of the following products and services have you used?” or, “how often do you think about the following issues?”
5. Organize your instrument around those groups of similar questions. This allows the respondent to get in a rhythm when answering, and provides better data because the respondent is not constantly changing gears.
6. Build your response categories so that they appear in the same order throughout the survey. For example, array your response categories so that highest to lowest are always presented from left to right across the page.
7. Open-ended questions (the respondent writes out an answer in a blank space) are easy to ask and difficult to analyze. It is much easier to collect and analyze data when respondents choose a specific answer (closed-ended; includes yes/no questions, multiple choice, Lichert scales, etc.). For example, if you want to know how much time people spend reading each day, try to give them categories to select (less than 30 minutes, 30-60 minutes, etc.).
8. If open ended questions are important for your assessment, data can be sorted and compiled into response categories and subcategories generated using open, axial, and selective coding techniques commonly used to analyze qualitative data.ⁱⁱ
9. Write clear and concise instructions for each set of similar questions, and for individual questions as needed. When the respondent is given a list of items to choose from, be sure to indicate when you are seeking one or multiple answers. Note that it will always be easier to interpret data when only one answer per question is permitted.
10. Different questions reasonably can be expected to produce highly correlated responses. For example, a person who has strong concerns about juvenile delinquency seems more likely to be interested in after school programs. For the sake of brevity, you should be conservative about asking highly correlated questions, unless you have specific needs to drill down into a topic. When it is desirable to ask closely related questions, group and format questions to optimize efficiency for both the respondent and the analyst.
11. Highly correlated (paired) questions can be used to validate the quality of a person’s responses. However, it is not recommended to lengthen the survey unnecessarily, and paired questions should be re-worded to avoid offending your respondents.
12. Do not use open-ended questions to answer an “information need” (from your list in “b” above). Open-ended questions should be reserved for suggestive data and explanatory information, as statistical analysis is compromised.
13. Be sure to include a limited number of questions to help you understand your audience. Common questions may include age categories, sex, and educational attainment. Be aware, however, that comparing responses between demographic groups may require a more complex sampling design (see previous discussion). For example, if you want to analyze how men respond differently from women, you may need to increase the number of completed surveys required.
14. Answers to demographic questions can also be highly correlated (e.g., education and income level) and asking about both characteristics may lengthen your survey without adding value.

Tips on writing questions

1. Be clear and to the point. Questions should be fewer than 20 words.

2. Check your grammar, punctuation, and spelling carefully.
3. Use bold typeface or underline to highlight important words.
4. Good questions provide facts to the reader and are easy to read and to answer.
5. Ask about only one variable per question. Compound questions are difficult to interpret; separate compound questions into multiple individual questions. For example, the question “Do you believe 4-H teaches important life skills and provides social opportunities?” is asking two questions and forces the respondent to choose which question to answer.
6. People want to answer questions correctly. Avoid asking questions like “which is better?” or “is it true that?” Rather, word questions in such a way as there is no wrong answer such as “which method of learning do you prefer?” or “which of these programs have you attended?”
7. Avoid asking questions in the negative, such as “shouldn’t the government...” or “haven’t you thought...?” Using negative forms produces confusion.
8. Avoid using jargon, acronyms, or terms of art. Do not abbreviate words or leave out important clarifications in order to shorten questions. Be sure to define words that may be interpreted more than one way.
9. Questions that ask the respondent to agree or disagree with a statement may be interpreted to reflect bias. Rather than asking “do you agree that juvenile crime is a major problem?” it is better to ask the respondent to rate the seriousness of juvenile crime on a scale, perhaps ranging choices from a minor problem to critical.
10. In some cases, it is important to gather objective data, and your questions need to be carefully constructed to avoid subjective answers. For example, if you want to learn what impact high gasoline prices will have, you have different options. You might ask “how important is fuel economy to you?” Alternatively, you could ask two objective questions “how many miles do you drive each week?” and “how many miles per gallon does your car achieve. Answers to the first question have limited value (how many people think it is important), whereas the objective questions:
 - Are easier to answer (and answers are more precise);
 - Allow the analyst to consider multiple approaches to address the need (teachable solutions ranging from carpooling to bundling errands to alternative work schedules);
 - Provide baseline data to establish goals and measure impacts;
 - Protect the respondent from making judgments.

Refining your instrument

1. Always review your own draft carefully. Have someone read each question out loud to “hear” what it is that you are asking. After you are satisfied with the questions, you are ready to pilot test your instrument with representative respondents. This may be a hand-picked set of testers or a random test.
2. For your pilot test, it may be advisable to include more blank spaces marked “other” for respondents to help you complete a list of choices. You can ask your test group to be sure to record “other” categories that occur to them. Then, when you revise your instrument, you can include new response choices that were suggested by multiple testers as “others”.
3. If you have designed a written survey, include extra-wide margins for your test-run and ask respondents to make notes about clarity or questions they have about the survey. Even if you plan to administer the survey on the internet, it is useful to conduct a pilot test on paper so that your testers have an opportunity to record their comments. At the end of the questionnaire, ask your test respondents how much time they think it will take your sample population to complete the survey.
4. When you review the completed test surveys, you should review each question and record the range of responses and comments returned to you by your testers. Make a record of the responses that you receive, just as you plan to do for the actual survey.
5. For each question and range of responses, verify that you are receiving useful data, and verify that your test group did not have any problems or difficulty answering each question.
6. Bringing your testers together (as a focus group) to discuss the kind and quality of results to expect from the survey is a valuable exercise to help you fine tune your instrument.

Institutional Approval

Prior to conducting any human research, your application must be approved by the Human Assurances Committee (HAC) managed through the University Research Office. In order to receive approval, the

investigator must submit a Human Subjects Review Form to the HAC, and allow six weeks for approval. The guidelines for human subjects research and the review forms can be found at <http://www.uro.uidaho.edu/hac>.

Conducting your survey

1. For surveys by mail or email, sending a notice in advance is known to improve response rates. Before the survey is sent, send a brief announcement to your audience or sample letting them know who you are and what you are doing, and when to expect the survey.
2. Write a brief cover letter to transmit the survey to respondents. Be sure to explain:
 - Who is the target audience that you wish to survey, and how was the recipient chosen to represent that population?
 - Why people should cooperate and why the survey is being done?
 - Who is conducting the survey?
 - What is the scope of the questions in the survey (what time period should the respondent consider; are you seeking individual opinions or the opinion of a family/group)?
 - What will you do with the information you learn from the survey?
 - Will their responses will be anonymous, confidential, or public?
 - Thank them for their help and cooperation.
3. Ensure a high rate of return by following the Dillman survey Protocols ¹ or similar methodology.
 - Send a post card informing the respondents that a survey will soon be sent to them (1-2 weeks before mailing the actual survey instrument).
 - If you are using a mailing list with unknown accuracy, instead of a postcard you may choose to send a first class letter informing your sample of the survey. Undeliverable letters will be returned allowing you to cull bad addresses out of your data base prior to distributing the survey.
 - Mail the survey instrument with explanatory cover letter and a self-addressed, stamped return envelope. If the instrument is short, you may choose to send both English and Spanish versions of the survey and supporting materials. Alternatively, you may choose to include a page or postcard written in Spanish, instructing the recipient how to request a Spanish-language version of the instrument.
 - Include a due date for responses (at least 3-weeks following receipt);
 - One week before the due date, send a follow-up post card reminding them of the importance of their responses to your survey, and asking them to complete the instrument. Include contact information if they need to request a second copy of the survey.
 - If you have kept track of returned surveys, you may choose to mail a second copy of the instrument to slow responders, either instead of, or following the follow-up postcard.
 - If the preceding step does not yield the rate of response necessary, continue with a phone call to non-respondents. This call should give them an opportunity to agree that they will return the completed survey. Alternatively, you might choose to ask respondents if they would be willing to take the survey over the phone, in order to reach your target return rate.
 - Accurate mailing addresses are critical for high response rates and for sample validity.
 - Anything that makes the survey more professional-looking, personalized, or more attractive has a small positive effect on the response rate.
 - Ideas to increase response rates include high quality printing, colored paper, using an impressive letterhead, endorsements by neighbors or known leaders, and incentive payments, prize drawings, or gifts.

Analyzing your Data

The effort needed to analyze your data is inversely proportional to the effort invested to plan and conduct your survey to ensure a high rate of return. Your effort invested up front will all be rewarded by a straightforward analysis of the data.

1. When you survey the entire population rather than a sample, your results are not estimates, but are actual results. Consequently, statistics are not needed to estimate confidence levels surrounding your

results. Instead, your analyses are actual measures of the proportion of the population with a certain response.

2. Methods to analyze data from a sample of the population are influenced by the sampling design and by the level of confidence you have in your findings. For closed-ended questions, statistical analyses will help you rank responses in the order of frequency, and to determine whether there is a probable difference between two or more responses.
3. If your sample design includes stratification, it may be necessary to weight answers based on how precisely your sample represents your target population.
4. Most of the statistics needed to describe a survey are quite simple. However, if you are uncomfortable with statistical analysis, be sure to consult an expert early in the process.
5. For open-ended questions, your analysis will rely on recognition of major trends observed in the responses, on recognition of key words or phrases, and on various other means of grouping responses into categories.
6. You may also have individual responses to open-ended questions that can lead to important observations. However, those individual responses are only suggestive, and should not be taken to represent the target audience.
7. For mailed surveys, while you are waiting for your surveys to be returned, you have time to create your data entry system. This can be done with Excel or other spreadsheet software, or with SPSS, SAS, or other statistical software. For phone surveys, this must be done in advance of conducting the survey. For internet surveys (using proprietary software like Survey Monkey™ or Zoomerang™), you will receive a report with some general statistics such as the frequency of responses in each response category to each question, and mean response and standard deviation related to each question.
8. The format of your data entry system will be dictated by the types of questions asked and by the range of responses available. Be sure to think through your desired analyses, perhaps with assistance from an expert, before you begin to enter data.

ⁱ For a thorough explanation and numerous scholarly references, please review: Salant, Priscilla and Don A. Dillman. 1994. *How to Conduct Your Own Survey*. John Wiley and Sons, Inc. San Francisco.

ⁱⁱ Strauss, A. & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Sage Publications. London.