Survey Tips

Designing Data Collection Instruments

Collaborative Programs Research & Evaluation

This document provides best practices in survey construction and administration. Overall, people will be more likely to respond to surveys that are meaningful (address important issues, respondents stand to benefit from results), anonymous, confidential, minimally intrusive, attractive, and easy to navigate. References to additional resources that might be useful are listed on the last page.

Survey Items

When writing survey items ***avoid*** questions that are:

- Double-barreled: avoid asking more than one question in one item; be wary when you use the words "and", "or".
- Confusing: are respondents competent enough to answer the question, do they know what terms or acronyms mean? Use simple, direct, familiar language.
- Irrelevant: is the item relevant to some or all respondents; is it relevant to your program?
- If-then: the item may not pertain to all respondents (hence is irrelevant)
- Long: use short items without being vague
- Negative: many respondents will agree with an item when they actually would have disagreed if the item was not written in the negative. In addition, certain words (e.g., censor, abandon, prohibit) can influence respondent opinions to be less in favor.

Survey Scale

The goal and challenge is to choose the appropriate response type options. There are many types of response options:

- Dichotomous: Only two response options (e.g., Yes/No, True/False). These items have minimal variability. You could use a longer scale and then combine items based on agreement later.
- Polytomous: multiple choice options (more than two)
  Likert scale: the more response options the better (the wider the range)
    - Many, Some, Few, Very Few, None
    - Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
    - Neutral category: this includes "neutral", "don't know", "neither agree nor disagree" categories. However, use of these may prevent respondents from making a choice of agreement or disagreement.
- Open-ended: No response options are available. This is not a forced-choice question; therefore, the respondent is free to write any answer.

Follow these guidelines for choosing good response options:

- The response options should fit the question.

- Response options should be on the same continuum.
- Don't make it easy to select the most desirable response (e.g. begin the response options with Strongly Disagree rather than Strongly Agree).
- Make the most positive or negative responses viable (e.g. if possible, avoid universals such as all, always, none or never. Use "almost always", "rarely or never").
- There should be a logical order to the response options (e.g. alphabetical) or similar options should clustered (e.g. Senior colleges, Junior colleges).

<u>Survey Format</u>

The following tips will help reduce rater (respondent) errors when answering questions.

Instructions

- Provide clear instructions
- State the purpose of the survey and identify the originating organization
- Assure anonymity and confidentiality if it can be provided

Anonymity: You can ensure anonymity if you do not collect information that allows you to connect the response to the respondent

Confidentiality: You can ensure confidentiality if you take measures to not try to identify an individual's response, such as keeping the number of people at a minimum who have access to these data, creating a master identification roster, and protecting data.

If you are collecting individually identifiable information, make it clear to respondents that their information will be kept confidential, but not anonymous. These words are not synonymous, and should not be used interchangeably

- Describe how the results will be used
- Explain whether and how feedback will be provided
- Provide contact information
- Provide instructions whenever the response categories change.
- Frame or prime respondents with reference to time, place, or person.

Question Order

- The order of questions in a survey can affect the outcome; that is, one question can influence the answer to the next question (priming).
- Begin with the most important or interesting questions (keep demographics at end of survey unless it is critical to obtain up front)
- Group questions by content, framing
- Sequence the material logically. Include subheadings or lead-in statements (e.g. "The next section will ask you about…") to help organize the material for respondents.

Length

- Keep questions short: if it doesn't fit on one line it may be too long
- Try to limit surveys to 3-5 per person per year
- Try to minimize survey length (20-40 multiple choice, 1-3 open-ended questions for 30 minute completion time)
- Avoid fatigue & lack of interest

Layout

- Font should not be smaller than 10pt
- Make sure questions are spaced appropriately
- The questionnaire should be as free of clutter as possible
- Format survey items so that eye-scanning across the page is reduced (create response flow)

Pilot Survey

- Pretest survey items with colleagues or sample population
- Revise items and format based on feedback
- Test multiple versions
- Calculate time to complete survey

Other Survey or Questionnaire Methods

Web-Based Surveys

Although the above tips are appropriate for both paper-and-pencil and web-based surveys, the following are recommendations for web-based methods:

- Ensure the screen contains all pertinent information (the whole question and all response options)
- Pretest your format on different computers: monitors differ
- If you include video or audio content, provide equivalent alternatives (text equivalent for non-text info for the hearing impaired, auditory presentations for the visually impaired)
- If you use color to convey info, provide a black and white alternative
- For tables, include clear row and column headers
- Have many options to consider: exiting and re-entering the survey, opting out of the survey, mandatory response fields, allowing more than one answer, branching
- Be aware of limitations imposed by equipment, browser or transmission capability that do not support the technology.
- Make arrangements for respondents who do not have easy access to the internet (phone, paper and pencil alternatives).

Web-Based Survey Strengths

- Cost-Saving
- Ease of editing/analysis
- More candid responses
- Potentially quicker response time with wider magnitude of coverage

Web-Based Survey Weaknesses

- Sample demographic limitations
- Lower levels of confidentiality
- Layout and presentation issues
- Potential technical problems with hardware/software

Survey Planning & Management

Make good decisions about sample, administration, data collection, and reporting.

- Decide who will participate in the survey.
- Determine the time frame for the survey administration and reporting. Keep in mind other surveys taking place at the same time.
- Establish a communications plan for the survey and responsibility for each portion.
- Determine a method to deliver the survey: web, paper & pencil, in school, mailing. Ensure there is approval for your administration mode (DOE).Who/how will you train survey administrators
- Develop a strategy to use to follow up with non-responders.
- How will you handle incoming data (who will be analyzing the data, with what software, how will the date be maintained, who has access)?
- What are your plans for reporting the data (who is the audience for the survey results, in what form will the results be delivered: formal report, meeting, focus groups)?
- How do you intend to follow up? What actions will be taken as a result of the survey and how will you communicate those actions to the survey respondents?

Improving Response Rates

- Publicize the survey: announce the survey with an e-mail, communicate throughout the chain of command (e.g. meetings), place announcements on electronic bulletins, mailings, distribute posters
- Provide a cover letter
- Offer to share the results with the respondents
- Emphasize the importance of the topic
- Make sure they have time to work on it without interfering with other responsibilities
- Keep it short and simple
- Emphasize importance of survey responses to administrators and respondents
- Explain how the data will be used and the value it will provide to others
- Multiple survey administration: follow up with same administration approach
- Employ various administration approaches (e.g. mail, in-person, web, email)
- Decide if incentives are appropriate, necessary, and feasible
- Follow-up emails and letters
- Record keeping: keep track of returned surveys

Database Management

- Design questions that can be analyzed and connected to the program database
- Use key identifiers, data file format
- Surveys may be an opportunity to collect missing respondent data
- Decide how to handle missing data (e.g. eliminate entire cases, analyze by items)

Data Analysis

- Respect the limits of your data—keep it simple: most survey data relies on nominal (e.g., Male/Female) or ordinal (e.g., rating) scales, complicated statistical techniques are inappropriate. Frequencies are both sufficient and appropriate (decide how you will handle rounding error)

- Don’t average things that shouldn’t be averaged (e.g. “Don’t Know” and “Not Applicable” are different from “Satisfied” or “Dissatisfied”).
- Conduct subgroup analyses carefully (aggregate data to protect confidentiality, no less than 10 in a subgroup)

Reporting Data

- Tailor language to your specific audience; avoid using statistical jargon if presenting data to program managers.
- Be mindful of the interests of all potential audiences. Keep presentation of results focused on the aspects most relevant to members of your audience.
- Select salient quotes to illustrate survey findings
- Present results only to the agreed upon audience. Keep them secure.
- Report results quickly as possible
- Lead with positive results
- Present meaningful group differences

Ethical Decision Making

- (a) *Respect for persons* – For the most part, providing complete informed consent and recognizing individuals’ rights to privacy demonstrates respect for persons.
    - Voluntary participation: Participants may be encouraged, but not coerced. Incentives may be offered and reminders issued, providing they are not offensive or invasive.
- (b)*Beneficence – Researchers have first a responsibility to do no or* little harm and second to design the research that will maximize benefits relative to the risks of the research.
- (c) *Justice – Individuals and groups that benefit from research should also* bear the burdens of the research. For example, clinical trials should not be conducted only with low-income persons who receive health care at publicly subsidized clinics.
- *(d) Reporting of research:* the need to report findings completely, widely and objectively, with full information on methodologies employed, both to allow research work to be assessed by colleagues and to increase public confidence in its reliability

Not adhering to or violating these standards may result in:

- Loss of trust and confidence from the target research group
- Lower response rates
- Biased or less than candid results
- Professional sanctions
- Legal implications

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www.aapor.org/

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