Why choose a survey to collect data?

A survey is a questionnaire (written or verbal) that is administered verbally or in writing to your focus population. Surveys are a good method to use to learn about:

- Knowledge—what people know or how well they understand something
- Beliefs—people's attitudes, opinions
- Behaviors—what people do
- Attributes/demographics—who people are

In comparison to many of the other qualitative methods (interviews, focus groups, and observations), surveys provide more standardized and consistent data that can be more easily combined and analyzed. Surveys can help you to gather both qualitative and quantitative information. Also, survey responses can be anonymous, which is very helpful if you are asking about sensitive or personal information.

Planning and developing surveys

Did you identify the group or sample you'll survey?

A survey is a good choice for collecting data from a large group of people. The people who you are asking to participate in your survey are called your sample. The number of people you include, or the sample size, depends on the level of detail you are interested in collecting, as well as by how much data you need to draw strong conclusions.

- For example, if your program affects the entire county, you would likely survey a large number of county residents but not the whole county. However, if it is a program that reaches a small number people (e.g., a class, conference, etc.), you could survey everyone.
- To be able to detect population-level change and to be able to generalize that information to a larger population requires a large sample size. Consult a sampling expert if you intend to detect statistically significant change in a population in order to define an appropriate sample size.

If you have to choose a subset of people to survey, there are many different ways to sample your population, including:

- Randomly drawing names from a hat (random sample)
- Choosing systematically from a list (for example, inviting every 5th person on your list) (systematic sample)

Survey tool overview

Planning
- Define the sample
- Decide how & when to administer
- Develop the questions
- Pilot test

Collecting data
- Distribute & collect
- Monitor & record responses
- Calculate response rate
- Key follow up steps

- Dividing the group into subgroups based on characteristics (e.g., gender, age, geography, participant, eligible but not participating) and randomly selecting representatives from each subgroup. This method is used when want to compare data across different subgroups. (Stratified sample)

- Recruiting people who are easy to reach (convenience sample). For example, you could approach individuals who are shopping at a farmers' market. Although this method can make it easy to recruit, the ideas expressed may not be representative of the people you're trying to get opinions from.

- Snowball sampling. You might also use a method where you start inviting a core group of people and ask them recommend other knowledgeable people for you to survey. If you are working with a hard-to-reach population or have only a limited list to start with, using this method can expand your sample relatively easily. But it also may be subject to the same biases as a convenience sample.

If you are administering a survey, but it is not your only method for collecting information, you may consider only including people in the survey sample who haven't already been contacted via your other methods (e.g., interviews.) This helps to avoid over burdening those who participate in your evaluation.

Did you decide how and when you will administer the survey?

How should we administer a survey?

To decide how to administer your survey you'll want to focus on the best way to reach your sample. Modes of administration to consider include:

- Paper questionnaire (mailed or handed out)
- Web-based questionnaire
- In-person, verbal survey (i.e., administered one-on-one by a second party, such as an outside evaluator or a member of the program staff)
- Telephone survey (i.e., conducted over the phone either by a second party or an automated system)

Ask yourself these questions to choose how to administer your survey:

(1) What kind of access you have to your sample (e.g., do you meet with them regularly? Is it a pre-existing group of people that you can meet with in-person? Is it a wider, more disparate group?)

(2) The resources available to your sample (e.g., do they have computers with internet access, phones?)

(3) The willingness of your sample to invest time responding to your survey.

In-person and telephone surveys can be time consuming and costly and may limit how many people can be included in your evaluation. Although much less costly, web-based surveys are limited to people with access to a computer and, like mailed surveys, often result in low response rates. Follow-up reminders or other measures are typically needed to get an adequate number of respondents. To increase response rates and thank people for participating, you may consider providing incentives to respondents, such as gift cards or raffles.

When should we administer a survey?

The timing of the survey depends on what you want to learn. You may only need to do a survey one time, however, depending on what you want to learn, it may be useful to do them at multiple points. It's also important to consider your stakeholders and the timing that is ideal for them. To decide when to administer your survey, consider the elements below.

Did you develop the questionnaire you will use for your survey?

A questionnaire is the data collection instrument generally used when conducting a survey. Survey refers to the method; questionnaire refers to the tool you use. Questionnaire design is complicated because you are using short questions that you hope everyone will interpret and answer in a similar way. Poorly designed questions can result in misleading data and, consequently, erroneous conclusions. Plan to involve others to get a variety of ideas and opinions, and plan to have multiple drafts before the questions and format are finalized. Before writing your questionnaire, be sure to research whether there is something you could adapt or modify.

Before the program starts	**During the program**	**After the program finishes**
• Identify what program features are needed • Get baseline data for later comparison • Assess community needs	• Assess progress • Learn about what is working and not working to improve the program	• Assess if the program achieved the outcomes • Understand who the program worked for

← Before and after the program →

Surveys can be given before and after or, pre and post, as well. For example, a training program could administer a survey at the beginning and end of the training top assess whether participants learned what was intended.

Tips for developing questionnaires:

- Make questions short and clear, ideally no more than 20 words.

- Ask about one thing at a time. For example, the question, "Have you increased your awareness of the importance of physical activity and nutrition?" involves two concepts and would be difficult to respond to clearly.

- Do not use jargon, and define or write out all acronyms.

- Keep in mind the people who will be completing the questionnaire. Questions should be tailored to the group's characteristics (e.g., age, culture, language) and written at an appropriate reading level. This is true whether the survey will be conducted in written form, online, in-person, or by telephone.

- Be neutral in the wording of the questions to avoid introducing bias. Slanted questions will produce slanted results. For example, instead of, "Do you agree that the park has benefited the neighborhood?" ask, "In your opinion, how has the park affected the neighborhood?"

- Give exact instructions to the respondent on how to record answers, like, "check all that apply" in a list of possible answers.

- Decide how many questions to include. A general rule is to limit questions to only those you need to know in order to answer your evaluation questions. Purge questions that would merely be nice to know. The more quickly and easily a questionnaire can be completed, the more likely it is that people will respond and finish the entire thing.

- Consider how much time the survey will take to complete (see pilot testing section below); think about the context in which it will be administered (who, how, where, when), and balance your need for data with the burden you can reasonably place on participants.

- Limiting the number of open-ended questions will shorten the amount of time it takes.

- Pay attention to the sequencing/flow of questions:

- Questions should flow logically from one to the next.

- Start with general questions and progress to more specific ones.

- Questions should go from least sensitive to most sensitive.

- Generally, demographic questions are asked at the end of a survey, though there may be reasons to start with demographics (e.g., if the survey is long and you want to make sure to these questions are answered, or if you will use demographics to direct respondents to different sets of questions).

- Make a written or web survey visually appealing using clear formatting and blank space, so that it doesn't look overwhelming or confusing.

- Proofread your survey—poor grammar and typos look unprofessional and can result in bad data.

Types of survey questions

Type of question	Example	Considerations
Questions with a set of responses to choose from		
Closed-ended responses provide a set of possible responses from which to choose. Includes: • Ordered responses (see below) • Unordered responses (see below)	How often to do you use our community garden? a. Never b. A few times a year c. Once a month d. A few times a month e. Once a week f. More than once a week	• Provides uniform answers • Responses can be easily compiled for quantitative analysis • Easily administered to large groups • Easy for respondents to complete • Imposes fixed ideas/values on respondents by forcing them to choose from limited options • Less likely to uncover surprising information • Little room for nuance/deeper understanding
Ordered responses provide a set of possible responses organized in a sequence. Includes: • Yes/no questions • True/false questions • Rating scales (see below)	How many people currently live in your household? ❏ 1 ❏ 2 ❏ 3–4 ❏ 5–6 ❏ More than 6	• Can be used to answer, "how much," "how many," or "how often" • Each response option in the sequence should be distinct from the others without overlap.
Unordered responses provide a set of possible responses, but the options don't follow a particular sequence.	Which of the following is the most valuable component of the park? (Select only one.) ❏ Community garden ❏ Playground ❏ Walking trails	• Each response should contain only one item • Instruct respondents clearly, e.g., "select only one" or "choose all that apply" • Can add an "other" response and ask respondents to "please specify" to make sure you capture any additional thoughts. This is called a partially closed-ended response
Questions with a rating scale		
Rating scales provide a set of responses along a continuum. Includes scales, which: • May or may not be numeric • May or may not have a mid-point or neutral option	How satisfied were you overall with the class? ❏ Very satisfied ❏ Somewhat satisfied ❏ Neither satisfied nor dissatisfied ❏ Somewhat dissatisfied ❏ Very dissatisfied	• Can ask the extent to which respondents agree with a statement (e.g., "strongly agree, agree, disagree, strongly disagree") • Can ask respondents to rate the quality of something (e.g., "excellent, good, fair, poor") • If deciding whether to include a neutral option, consider the nature of the question and what you want to learn from the results • When using a rating scale, make sure the stem of the question matches the format of the responses. For example, if the question asks about the level of interest, the options might be "very interested, interested, somewhat interested, not interested"
Questions where people write in their answers		
Open-ended responses stimulate free thought by asking people to write their answer in their own words, rather than choosing from a set of response options.	How do you think the community garden can be improved?	• Provides relatively rich information. • Allows participants to report thoughts, opinions and feelings • People may be reluctant to write opinions • Only ask for brief responses in self-administered questionnaires • If more in-depth responses are needed or if there are many open-ended questions, a self-administered questionnaire may not be the best method • May make analysis more complex

Did you pilot test your survey?

It is always a good idea to test your questionnaire before you send it out, leaving time to make a few tweaks before you send it to your sample. You do not need to pilot test your questionnaire with a large number of people, but your testers should be representative of your sample or at least familiar with the perspective of the respondents so that you are getting an accurate sense of how someone will actually respond to your questions.

Ask pilot testers to respond to your questions and then provide you with feedback about their experience (e.g., clarity, appropriateness of length, etc.). Pilot testing provides valuable information about:

- How long it takes to complete the questionnaire
- Whether the instructions and the questions are clear
- Whether questions are well suited to the group being surveyed (e.g., appropriate terminology and reading level)
- How easy it will be to implement

After pilot testing make any necessary adjustments to your questionnaire. Do not use the data you collected in the pilot testing unless the respondents are part of your sample and you have not significantly changed the questionnaire.

Collecting survey data

Did you distribute and collect the survey?

Surveys can be distributed and collected in several ways. The people responsible depend on *how* the survey is being administered.

	Who should introduce and distribute the survey?	How are responses submitted?
Web-based (email or web link)	Introduced by a known person to invite participation and explain the purpose of the survey. In this initial email, this person may send a link to the survey or let people know to expect to receive a follow-up email from the entity that is administering the survey. **Note:** If the survey includes identifiable or sensitive information, it may be important for it to come from a neutral third party so that people feel like they can be candid.	Web-based surveys are gaining popularity because they are relatively easy to complete and submit. Sample is limited to those who have access to a computer and the internet.
Paper (mailed)	Introduced by a known person to invite participation and explain the purpose of the survey. For example, if you are doing a community survey, you may have a city or county leader send a cover letter with the survey to introduce it and ask for participation.	With the survey you should provide a postage-paid return envelope and/or identify drop boxes in convenient locations. Note: If the survey includes identifiable or sensitive information, it may be important for the survey to be returned to entity neutral third party so that people feel like they can be candid.
Paper (in-person)	Introduced and distributed at end of event by the person who has been working with respondents. If multiple people are introducing the survey, ensure the same introduction and directions are provided.	Participants are usually asked to turn in the questionnaire before they leave. Response rates can be improved by allowing participants time to complete the questionnaire during the event.
Verbally (in-person or phone)	Introduced by a known person to invite participation and explain the purpose of the survey. Ideally a neutral person or people—unknown to the respondents—will conduct the survey. Training is very important to make sure the survey is administered the same way every time.	Responses are recorded by the person administering the questionnaire verbally.

Did you monitor your responses and send reminders if needed?

You and your team are hoping to reach the entire sample you have contacted to answer the questionnaire. If needed, you may send one or more follow-up reminders or resend the questionnaire with the reminders to increase your response rate. Most commercial, web-based surveys have an email reminder feature built-in. If you expect a poor response, you might need to increase the sample size or offer an incentive, such as a gift card or entry into a drawing, for completing the questionnaire.

Did you develop a way to track and record your responses?

Establish a plan for how you will track and record survey responses as they come in. For example, will you use a spreadsheet or statistical software to track responses? Web-based survey programs will usually compile and code the results for you. Either way, you will need to develop a database (simple or complex) to record responses. You may need to assign and train people to do data entry. You will also need to make decisions about how you will deal with missing or incomplete data. For example, if respondent only answers 5 of your 20 questions will you count all/none/ part of their survey? (See the tool How to analyze and interpret data to support survey analysis for all of the data you collect.)

Did you calculate your response rate?

A response rate is the percentage of people who complete and return a survey. For example, in a web-based questionnaire, 100 people were sent a questionnaire and 72 people responded, this makes a 72% response rate (72/100). The response rate is calculated by dividing the number of people who responded to the questionnaires by the total number people who received it. It is common to calculate the response rate during a survey to know when/if reminders are needed, and at end of the survey to identify whom you reached. Knowing how many survey respondents you reached, and who wasn't included (as they did not respond), can be helpful as you interpret your results.

Did you do these follow up steps after your survey was complete?

- **Thank participants.** At a minimum, it is important to thank the people who responded to your survey for their participation and to inform them of any next steps. If other people helped to administer the survey you may also want to thank them for their help.

- **Plan for data analysis.** To analyze the data you need to (1) organize the data that you recorded; (2) conduct the appropriate level of analysis; (3) interpret your findings (i.e., what do the data tell you?); and (4) identify limitations of your data collection efforts. For details on how to do these steps with quantitative data, see the tool **How to Analyze and Interpret Data**.

- **Report back to participants and program planners.** When people participate in an evaluation, they often like to see the result. You should consider appropriate ways to report back to participants, and determine how the information will be used to help with decision making and program improvement. For details, see the tool **How to Use and Share Results.**

Sources:

- Dillman, D.A., Smyth J., & Christian, L.M. (2009). Internet, Mail and Mixed-Mode Surveys: The Tailored Design Method (3rd ed.). Hoboken, NJ: John Wiley Co.

- University of Wisconsin–Extension: Program Development and Evaluation http://fyi.uwex.edu/programdevelopment/

- W.K. Kellogg Foundation: Evaluation Handbook. https://www.wkkf.org/resource-directory/resource/2010/w-k-kellogg-foundation-evaluation-handbook

For more information about planning and conducting surveys, please see the toolkit **Resources** page.

Cottage
Population Health