THE
BEHAVIORAL
INSIGHTS
TEAM

Data Collection Primer

Pre-reading during weeks 7 and 8

Introduction

When running a process evaluation, you will often need to collect additional data to answer your research questions. Four of the most common types of data collection are: interviews, focus groups, observations, and surveys, defined in more detail below:

- **Interviews**: An interview is a guided discussion that you can use to learn about the participants' ideas, knowledge, perceptions, opinions, and/or experiences. There are several kinds of interviews, but semi-structured interviews are the most common. In this type of interview, interviewers rely on an interview guide that details the questions they are planning to ask and the approximate time they intend to spend on each. This tool helps structure the conversation as it ensures that the key topics of interest are being addressed and that interviews are consistent across participants. However, at any point, interviewers can choose to probe further or ask additional questions in order to uncover meaningful insights.
- **Focus groups:** Focus groups are facilitated discussions involving multiple participants. Focus groups help show the breadth of ideas, knowledge, perceptions,

opinions, and/or experiences among different participants. Focus groups are shaped by group interaction. Facilitators typically rely on a focus group guide that details the questions they are planning to ask, but their main role is to steer the discussion while allowing for interactions between participants, debates, and collaborative creative thinking.

- **Observations**: Researchers observing in specific settings can provide explanations for patterns and differences in behaviors that cannot be captured through an interview, focus group, or quantitative analysis. Observations are appropriate in a few situations: when a research topic involves people's interactions within an environment or physical context, when actions or behaviors are so normal or commonplace to participants that they struggle to convey them in words, and/or when social norms or pressures to conform with expected behaviors make interviews or focus groups infeasible. Researchers conducting observations rely on observation guides where they can record notes about what they see and hear
- **Surveys**: Though surveys can be used to collect qualitative data (e.g., in free response answers), they often gather quantitative data points (e.g., satisfaction on a likert scale, self reported behaviors). Surveys allow you to gather data from many participants and usually don't require a large time investment from facilitators. However, they usually provide less in depth information than an interview or focus group.

The rest of this document outlines guidance for conducting each of these types of data collection.

Interviews and Focus Groups

If you're conducting interviews or focus groups, you will need to prepare 3 things:

- *A plan for conducting the sessions*
- *A guide*
- *A plan for organizing the data you receive so it's ready for analysis*

A plan for conducting the sessions

Before conducting your interviews or focus groups, you'll need a plan that covers:

Whom you want to participate and how you'll reach them

- **Outline whom you'd like to hear from:** Ensure you're reaching the people who are best suited to answer your research questions. Develop clear criteria outlining who will be eligible for an interview (e.g., participants in a certain program) and who will be excluded (e.g., people who attended a town hall meeting previously).
    - Your **approach to selecting participants** is called your sampling strategy and it will impact what your sample ultimately looks like.
    - It's important to include multiple perspectives on the same topic. You'll also want to ensure the group of people you collect data from reflects your population of interest across relevant characteristics. To achieve this, you might opt for purposive/purposeful sampling where you select participants based on specific characteristics to ensure representation.
    - Alternatively, you might use convenience sampling where you select participants that are easy to access (e.g., residents you have a good relationship with already), without being too prescriptive about who they are.
    - You may also ask participants to refer new participants to you which is called snowball sampling.
    - Even if you use a convenience sample, you will still want to target multiple groups of people (e.g., students and teachers or hospital workers and patients) in order to get a full picture of the issue you are investigating. In those cases, you may have inclusion and exclusion criteria for each subgroup you'd like to reach.
- **Outline how you'll recruit them:** Recruiting participants involves putting your sampling strategy into practice. You may need to reach out to participants directly or through advertisements. In other cases, you may call on partners who have trusted relationships with potential participants and ask them to reach out to people on your behalf. Remember, the way you recruit participants affects who is represented in your

sample and it's important to be transparent about that (e.g., if the program staff recruits participants, you should recognize that your sample will likely underrepresent the views of those who are disconnected from program staff).

  - For interviews: A general **rule of thumb** is that fewer than 10 interviews are a fairly small sample whereas more than 30 is pretty large; however, it depends a lot on your research question and whom you want to hear from. You should break your target sample size down into targets for each subgroup (e.g., 10 interviews with at least 3 women and 5 people who have finished the program).

  - For focus groups: A general rule of thumb is that you should conduct 3-5 focus groups and include 3-8 participants per focus group. However, it depends a lot on your research question and whom you want to hear from. You should break your total target sample size down into targets for each subgroup (e.g., 18 participants with at least 6 women and 6 people who have finished the program). It's a good idea to recruit 20-50% more participants than your target in case of no shows

- If you're conducting focus groups, **outline how you'll create the groups:** One of the reasons you might have chosen focus groups is so you could see how participants interact with each other. For this reason, it is important to lay out not only who will participate in your focus groups in total, but also how you will group those participants together based on the types of interactions you'd like to observe. For example, say you want to collect data from department staff members with a wide range of years of experience. There could be benefits to having mixed focus groups or having focus groups of staff with similar levels of experience.

- **Make it easy for participants to engage:** Finally, think about how you can make it as easy as possible on a practical level for people to participate. Providing compensation is a best practice—it can help address financial barriers to participating. Also, consider factors like the time and day sessions will be held and whether providing childcare or transportation would be helpful. Conducting interviews or focus groups virtually or over the phone may make them more accessible as well. It's critical to do this planning beforehand to ensure your sample represents the people you want it to. For example, if you don't provide childcare, you may inadvertently exclude single mothers from your sample.

How you'll conduct the interview or focus group

Thinking through and laying out the logistics for exactly how the interview or focus group will be conducted is also important. Consider logistics like:

- Who will be present for each session?
- Who will facilitate?
- How long will the sessions last?
- Will they be in person or virtual?

- Do you plan to take written notes, record the conversation, or both?
- What is the relationship between the participant(s) and facilitator(s)? What are the power dynamics at play? How would participants perceive the facilitator? For instance, consider if the data collector is of the same gender, race, and/or speaks the same language as the respondent. Being intentional and transparent about these relationships will help you identify potential ethical concerns (e.g., if a facilitator has significant power over interviewees such as their direct boss, this may make participants feel uncomfortable exercising their right to skip a question) and limitations to the kinds of information you might receive (e.g., a participant might not disclose the same information to a facilitator outside their community as they would to one in their community).

Answering these questions ahead of time can ensure that you don't run into any unexpected hiccups in the middle of a session.

How you'll uphold ethics and equity principles

Whether you need to collect consent from participants varies from city to city. But as a general rule of thumb, you should collect informed consent from anyone answering questions about their experiences (rather than questions about facts they might know in their professional capacity). In practice, that looks like getting formal consent from program participants before talking to them about their experiences, but probably not collecting consent from program staff if you're asking them questions about the types of services they provide.

If you need to collect consent, define how you will do so beforehand. Depending on who the participants are, you may need them to sign a consent form informing them of the details of the interviews or focus groups, how their data and personal information will be handled, and of their rights as potential participants. It's important to note that you can't guarantee confidentiality in a focus group since other participants could share what they hear. Remind participants of that ahead of time.

In some cases, you may be able to verbally cover these points and get a verbal confirmation before starting the interviews or focus group (e.g, if there is no more than minimal risk to participants, you won't be collecting sensitive or personal information, and you are conducting an interview over the phone). Follow any guidelines set out by your city.

Remember to always take specific risks into account that come from participants' identities, statuses, or roles (e.g., if participants are minors) or from the context and topic of your interview or focus group (e.g., if you are discussing a sensitive or upsetting topic).

Finally, one of the ways you can make your interviews or focus groups more equitable is by sharing what you learned and how it was used with participants. Sharing the data back to those who provided it is a great way to center their experiences and further involve them in the research.

A guide

Now it's time to write your questions! Begin by reflecting on your research questions and then brainstorm a few overarching topics you want to cover in the interview or focus group.

Under each topic, list questions and probes that you would like to learn more about. Once you've brainstormed this list, pause and reflect. For each question, ask yourself, "Does this help me answer my main research question?" Refine from there.

Once you have a strong list of questions, add indicators for how long each should take to discuss. Double-check that you can cover everything in the time you have with the participant(s).

It's important to be concise and selective. Focus on the most relevant questions so you can get through them in time. :

- In interviews: A good rule of thumb is to cover 10 or fewer questions per hour, though it depends on the content of your questions. Take the time to practice using the interview guide to make sure that it matches the amount of time you have for the conversation.

- In focus groups: Schedule at least 10 minutes per question (potentially much more) to allow for a useful discussion and contributions from all participants.

Consider including instructions for the facilitators to make it as easy as possible for them (e.g., "give the interviewee the materials to review"). You can also mark if questions are required or optional on the guide. This can help the facilitator ensure they're covering everything critical without feeling like they need to rush through every question. Ask a colleague to read over the guide and flag if any questions are confusing or ambiguous.

Remember:
- Avoid close-ended questions (e.g., "Did you like the program?" could be answered with a yes or no. Instead, you could ask, "Please describe your overall experience in the program")
- Avoid leading questions (e.g., "The program helped you, right?")
- Use the guide as just that—a guide! Deviate from the guide as much or little as needed.

A plan for organizing the data you get back so it's ready for analysis

As you're developing a plan, you should also consider how you will analyze your data. At the end of your interviews or focus groups, you will usually have a folder of notes and/or transcripts from each session you conducted. Turning those documents into useful insights requires structured analysis.

There are many ways to organize your data so it’s ready for analysis. One common approach is to develop a simple framework in a spreadsheet ahead of time. This framework should have a row for each participant or group and columns for each of the key topics you wanted to focus on. Say you wanted to learn about “participant experience” in your study so you asked participants several questions about what they liked or didn’t like about the program. As you read through your transcripts, you can add notes about each participant’s experience to the “participant experience” column in your spreadsheet. Once you’ve read through a transcript, you’ll have already summarized the participants’ takeaways about each topic you wanted to cover. It’s a best practice to have more than one person on your team conduct this process independently.

When it’s time to conduct your analysis, you will be able to review your organized framework and debrief with your team to conduct your analysis. There are several ways to do this, but a common one is to identify key themes in order to generate a final list of findings.

If you are undertaking a large number of interviews or focus groups, or are focused on complicated themes, you may want to use software like NVivo to keep track of your data and make your analysis easier. However, this type of software is not typically necessary unless you are collecting a large amount of data.

Surveys

If you're conducting a Survey, you will need to know/prepare 3 things:

- Information about whom you're surveying and how you'll reach them
- The survey
- Information about how you'll ensure that your survey upholds ethical standard

Information about whom you're surveying and how you'll reach them

Outline whom you'd like to hear from: Develop clear criteria outlining whom you will survey and the number of surveys you will conduct. Ensure that the sample of people you are surveying is representative of your population of interest across relevant characteristics (e.g., demographics) and note any groups that will be left out of your data collection.

Choose a medium: Surveys are often digital (e.g., using platforms like Qualtrics, Google Forms, or SurveyMonkey) and delivered online (e.g., by email or to people who click on an ad). However, surveys can also be delivered in person, over the phone, or by mail. In-person surveying often achieves a high response rate and can be particularly effective if your target sample is otherwise hard to reach. Especially when the survey is embedded in another process (e.g., program intake) or the survey or is someone the participant knows and trusts (e.g., program staff). Using online survey methods can be helpful if you want to reach a very large group of people.

Outline how you'll reach participants: You'll need to send participants your survey or embed it in some process they're already interacting with. It's usually helpful to work with a partner who can give you a contact list for the people you'd like to survey or who can survey participants on your behalf. Often, the more trust participants have in that partner, the better response rate you will be able to achieve.

Make it easy and attractive for participants to engage: Achieving a high response rate means you have the most possible data back from all the work you've done assembling and fielding your survey. Response rates will vary depending on whom you're surveying, what medium you use, and the content of the questions. However, they also depend on how easy it is to fill out the survey. Short and simple surveys with unambiguous questions are easier to complete than long and confusing ones. Have a colleague test your survey before you roll it out to ensure it's easy to use. Additionally, consider providing some compensation for participants who complete your survey (e.g., a gift card or entry into a raffle), especially if it is long or is being sent out on an ad hoc basis, rather than embedded in another process.

The Survey

To write your survey, you should first identify your key objectives, and then brainstorm a long list of questions and topics that align with those objectives. Once you have your long list, pause and reflect. For each question, ask yourself, “Does this help me answer my main research question?” Refine from there.

When writing questions, avoid:

1. Question and answer mismatch where the response categories do not match the question.
2. Leading questions that ‘inject’ the answer you want and therefore bias respondents toward a particular answer (sometimes to match the researcher’s unconscious bias).
3. Ambiguously worded questions that could be interpreted differently by different respondents.
4. Double barrelled questions that ask 2 or more things at once.
5. Questions using jargon like acronyms, expressions, or words that may be difficult for others to understand.
6. Long and/or complex questions
7. Questions that contain assumptions (Where did you go on holiday last year?).
8. Questions that require mental math.
9. Sensitive questions that are poorly worded and could make the respondent feel uncomfortable.

When writing answers, be cautious and/or intentional when using :

1. Agree/disagree or ‘how satisfied were you’ options. These are often associated with a strong positive bias and can usually be replaced with different answer categories (e.g., always → never scale, ‘how effective’ questions)
2. Ranking options. This may elicit problems with primacy and recency effects. Consider replacing with ratings for each concept or randomizing choices for each respondent.
3. ‘Don’t know’ options that could be used as an easy way out. Only include ‘don’t know’ if your respondents may truly not know.
4. Select all that apply. Use yes/no for each option when possible.

When writing answers, avoid

1. Vague quantifiers such as ‘a few’ or ‘many’. Use numbers or ranges when possible.
2. Too many open ended questions. This increases cognitive load and can reduce response rate.
3. Answer options that are not mutually exclusive or exhaustive. This is a common error when creating age group ranges.

You should also consider the structure of your survey. It’s often best to start with easy questions to ease the respondent into more difficult questions. Place any sensitive questions later in the survey.

Finally, remember that a longer survey usually leads to higher dropout rates. If your survey is too long, it can be difficult to decide what to cut. Here are some tips:

- Ensure you are only asking questions that directly support your objective.
- Identify which topics are most critical and thus deserve more “space” in the instrument (e.g., measuring household income with 1 or 36 questions)

- Look for redundant items that are probing the same topic or for the same or very similar information.

Be sure to include enough questions to answer your research question. Ask what you need to know, in the most thoughtful way, the first time.

Information about how you'll ensure that your survey upholds ethical standard

Most surveys have a brief screen, page, or verbal section at the beginning to collect consent from participants. Some surveys can use implicit consent statements (e.g., "by completing this survey you consent to…") while others should ask for explicit consent (e.g., asking a participant to check a box, sign, or otherwise give consent to continue). The information you need to provide participants may vary based on the context of your survey, but it's usually important to: 1) Tell participants the purpose of the survey, 2) Inform participants that the survey is voluntary, 3) Describe how their data will be used and whether or not it will be kept anonymous or confidential, and 4) Give an overview of the instructions to complete the survey.

If you're collecting personally identifying information, you may need to work with your IT department to ensure you have a secure way to store that data. You should also have clear processes laid out to uphold the anonymity or confidentiality that you promise participants. For example, if you tell participants their answers will be kept confidential, you will need to make sure that only the research team has access to their data and ensure you don't share back any identifying information in reports.

Remember to always take risks into account that come from your participants' identities or roles (e.g., if your participants are minors) or from the context and topic of your survey (e.g., if you are asking workers to comment on their employer or their company's work practices)

Observations

If you're conducting observations, you will need to know/outline:

- The details about the observations you will be conducting.

The details about the observations you will be conducting.

Outline the purpose of your observations: You should develop clear criteria for whom and what you will be observing (e.g., if you want to understand why people do not engage with an employment center, you may choose to observe anyone who enters the office on a certain day, then follow their interactions and activities while there).

Pick an observation site: Observations are very context dependent, so you need to make sure that the location and timing you choose allows you to observe the people you are most interested in (e.g., if there's an employment center in every neighborhood but you're only observing one, it's important to consider how that choice will impact whom you collect data on). Once you choose a site, you may need to get permission to conduct your observations there.

Determine how involved the observer will be in the process: In some instances, observers are completely detached from the situation and do not interact with the people they're watching at all. In others, they may talk to participants and even ask them questions about their experience and about the activity they may be performing. You might choose to be a:

- Complete participant: the researcher engages in the same activities and interactions as participants and conceals their observer role.
- Participant as observer: the researcher's status as observer is made clear but they are able to take part in activities.
- Observer as participant: the researcher observes as unobtrusively as possible but may sometimes engage in some activities.
- Complete observer: the researcher is detached from any engagement and is not usually known to those they are observing.

Plan out the logistics: Before conducting any observations, consider questions like: Will there be more than one observer? If so, will they all adopt the same role or will it vary? How will you record notes?

Ensure an ethical observation process: Whether you need to collect consent from people you're observing depends on the context of the observation and on the role you are taking as an observer/participant. In some cases, you may choose to be open about your role as an observer. As a general rule of thumb, you should always collect informed consent from anyone you've had a conversation with and plan to quote directly (even if anonymously).

Remember to always take risks into account that come from your participants' identities, statuses, or roles (e.g., if your participants are minors) or from the context and topic of your observation (e.g., if you are observing a hospital ward, you may learn participants' private health information).

Make an observation guide: An observation guide is a place where you can make notes to record what you observe. Observation guides are often structured with close-ended questions, check boxes, or specific spaces for free response text or additional observations. The goal of this structure is to make it easy for the observer to collect relevant data. Your notes should be relevant to the research questions, inclusive, and as detailed as possible including recording details on the setting. A good exercise is to map the social and physical scene that you are observing and count specific metrics (e.g., the number of residents in the waiting room, the number of calls that the office received during observation, etc.).