

Using Qualitative Interviews in Evaluations: Improving Interview Data

Part 2 of 2

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September 2 2015

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These webinars were developed as part of the Center to Improve Project Performance (CIPP) operated by Westat for the U.S. Department of Education, Office of Special Education Programs (OSEP). For those of you who aren't familiar with CIPP, our purpose is to advance the rigor and objectivity of evaluations conducted by or for OSEP-funded projects. This involves providing technical assistance in evaluation to OSEP grantees and staff and preparing TA products on a variety of evaluation-related topics. We'd like to thank our reviewers Jennifer Berktold, Susan Chibnall, and Jessica Edwards, and the OSEP Project Officers who provided input.

Suggested Citation:

Heinemeier, S., & Lammert, J.D.. (2015). *Using qualitative interviews in evaluations: Introduction to interview planning (Part 2 of 2)*. Webinar presented as part of the Technical Assistance Coordination Center (TACC) Webinar Series, July 29, 2015. Rockville, MD: Westat.

Goals of the Two-Part Series

- Part 1
 - Help a study team decide whether to include interviews in an evaluation design
 - Outline the steps associated with using qualitative interviews as part of a rigorous evaluation
 - Highlight key logistical decisions associated with planning high quality interviews
- Part 2
 - Discuss what should be asked in the interview and how to collect high-quality interview data
 - Offer guidance on how to define and recognize high quality data
 - Discuss strategies to ensure high quality interview data are collected and utilized

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Welcome to part 2 in our two part webinar series on interviews. We want to start by briefly recapping the material presented in Part 1, which addressed decisions about including interviews in an evaluation and planning key logistical aspects of the interview process. Then we'll move on to our subject material for today.

Takeaways from Part 1 in this Series

- It's essential to know the evaluation needs, goals, and budget when planning to conduct interviews.
- The evaluation plan can help identify the specific variables that data collections must provide.
- Knowing what data are needed to answer the evaluation questions can help identify who should be interviewed.
- Consider the 5 “Ws” when planning interviews and use strategies to ensure high-quality data are collected and reported.

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Here are some of the key takeaway points from Part 1 of this two-part series. First, it's essential to know the evaluation needs, goals, and budget when planning to conduct interviews. Interviews should not be conducted in a vacuum from other evaluation plans and activities—this runs the risk that the interview will not generate the precise and accurate data that are needed. The evaluation plan should guide interview planning and the development of the interview protocol to ensure important variables or data are captured. Knowing what data are need to answer the evaluation questions may point to specific individuals that should be interviewed. Finally, plan through the logistical tasks of interviews well in advance, to ensure the interviews proceed smoothly. We refer to these logistical tasks as the “5 Ws”, which we will turn to next.

The 5 “Ws” of Planning High-Quality Qualitative Interviews

1. **Who** should you interview?
2. **Where** should you conduct the interviews?
3. **When** should you conduct the interviews?
4. **What** should you ask in the interview?
5. **hoW** can you collect high-quality interview data?

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In part 1, we discussed the 5 “Ws” of planning and conducting interviews. These include who, where, when, what, and how. We discussed the first three “Ws” on this list in part 1 – we’ll focus on the “What” and the “How” today.

Practical Example

- The project: Provide training in a new reading program to teachers (available in face-to-face, online synchronous, and online asynchronous modes).
- Goals of the evaluation:
 1. Determine the quality, relevance, and usefulness of trainings
 2. Determine the extent to which training opportunities (overall and by mode) have:
 - a. Improved teacher knowledge,
 - b. Improved teacher practice,
 - c. Contributed to improved student performance in reading.
 3. Determine how the trainings can be improved.

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In today's webinar we will continue using an example that was first presented in Part 1. The example is a project in which the evaluation may benefit from interviews as a data collection technique. In this example we have a project that provides training to teachers in three modes. The project's evaluation has three goals: (1) determine the quality, relevance, and usefulness of trainings, (2) determine the extent to which training opportunities have improved teacher knowledge, teacher practice, and student performance, and (3) determine how, if at all, trainings can be improved.

Practical Example (cont.)

- The design: Mixed-methods, quasi-experimental, pre-post design
- The data are shown in the table below...

Evaluation Focus	Quantitative	Qualitative
Quality, relevance & usefulness of training	Training evaluation forms	Interviews
Improved teacher knowledge	Pre-post measures of knowledge	Interviews
Improved teacher practice	Surveys	Observations Interviews
Improved student performance	Pre-post measures of performance	Interviews

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Here is more information about our example: it is a mixed-methods, quasi-experimental design, with pre and post data collections. This means that the evaluation will collect data from teachers who participated in one or more training opportunities as well as teachers who did not participate in training. A mix of quantitative and qualitative data will be collected, including quantitative training evaluations, pre- and post-measures of teacher knowledge, and pre-and post-measures of student performance. The evaluation also incorporates qualitative data in the form of interviews and observations.

WHAT should you ask in the interview?

- Interview questions should elicit the data necessary to answer evaluation/research questions or triangulate findings
 - Questions need to target specific variables of interest
 - Questions may support the formative and summative aspects of the evaluation
- Follow an interview protocol to
 - Ensure all participants answer the same core questions
 - Ensure all questions deliver important information for the evaluation

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We ended part 1 with a brief consideration of WHAT should be asked in the interview and HOW high-quality data can be collected. As mentioned, we will go into more depth on these topics in today's session.

Let's consider "what" first. The interview should provide specific and precise data in response to evaluation questions. That stated, interviews allow a study team to explore the boundaries of phenomena and experiences in order to get a better idea of what "specific and precise" may encompass.

No matter the number or nature of the questions, it is critical is to establish a formal protocol for the interview, to ensure all data are collected in a uniform way by all data collectors. An interview protocol is a detailed document that gives the interviewer instructions for how to conduct the interview and lists the questions and, maybe even the probes, that an interviewer should ask.

Creating and Testing Hypotheses

- Create hypotheses that align with evaluation questions
 - Hypothesis specify the variables and variable values that determine whether or not the null hypothesis can be rejected
 - Null hypothesis: status quo or what would exist if the project had no impact
 - Alternative hypothesis: what might exist if the project does have an impact
 - There may be more than one alternate hypothesis

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One tool for deciding WHAT to ask is to create hypotheses that can be tested through the collection, compilation, and triangulation of data...including data from interviews.

Triangulation: Process by which data from multiple data collections (different techniques, events, sources) are used to test or confirm findings or to fill knowledge gaps

Let's revisit our example...

- The project provides training in a new reading program to teachers
- Sample evaluation question: To what extent did the training contribute to improved teacher knowledge?
 - Possibility #1: The training did not contribute to improved teacher knowledge (*Null hypothesis*)
 - Possibility #2: The training contributed to improved teacher knowledge (*Alternate hypothesis*)
- How do we know which possibility is supported?
 - Pre-post knowledge assessments indicate average gains of a pre-determined magnitude
 - A pre-determined percentage of interview participants cite at least one way in which the training improved their knowledge
 - Both data sources verify that the training participated to improved knowledge

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Returning to our example, let's consider our training project and one of the evaluation questions: To what extent did the training contribute to improved teacher knowledge?

In this example, possibility 1 (which is the null hypothesis) is that the training DID NOT contribute to improved teacher knowledge.

Possibility 2 (alternative hypothesis) is that the training DID contribute to improved knowledge. In this example, we decided to triangulate pre-post knowledge assessments with interviews to determine which possibility can be supported.

Testing Hypotheses: Real-life challenge

- Data may deliver contradictory results
 - For example, 50% of teachers may say the training did increase knowledge, but 50% may say it did not.
 - Which hypothesis is correct?
- Possible solutions
 - Take a deeper dive; ask more questions
 - Report the findings as contradictory

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A challenge with testing hypotheses is that data do not always agree (do not triangulate on the same finding) or do not always clearly support one hypothesis over another. In this example, 50% of interview participants said the training did improve their knowledge while the remaining 50% of participants said it didn't improve their knowledge.

What are we supposed to do with these results? Can we interpret this to mean the program is making a difference?

When this happens, it might be good to add data collection events to take "deeper dives" into the phenomenon, or the study team should report findings as contradictory.

What are some other solutions you have used in the past?

HOW can you collect and use high-quality interview data? — Seven strategies

1. Create an interview protocol to provide precise data that align with evaluation questions.
2. Make efforts to reduce response bias throughout the interview.
3. Train (and re-train) interviewers to elicit complete and information-rich answers.
4. Screen data for quality DURING the interview.
5. Capture responses accurately and completely.
6. Conduct rigorous qualitative analysis.
7. Create a report template for compiling the interview data.

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Let's now turn to "how" high-quality data can be collected. In part 1 of the series, we introduced seven strategies: the use of protocols, trainings, data screening, data capturing, thorough analyses, and report templates. Before we discuss these in more depth, let's first define what we mean by high-quality data.

What are high-quality data?

- **Precise:** To what extent do data reflect an exact measurement or the exact [narrative] information needed to respond to a question?
- **Accurate:** To what extent do data reflect the actual value of an observation or achievement? For example, is a measure of height or weight accurate or “off” by several inches or pounds? Does the participant provide a “true” (e.g., verifiable) account of a phenomena or experience?
- **Reliable:** To what extent can a data measurement be replicated with accuracy and precision? Does the participant have any reason to respond falsely?
- **Consistent:** To what extent do data or responses agree with each other?
- **Complete:** To what extent is complete information provided? For example, is the unit of measurement provided to help interpret the data? Is there enough context to understand a participant's response?

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It is important in every data collection to ensure high-quality data are collected—this applies to both quantitative and qualitative data. There are five basic aspects of quality, as shown in this slide: precision, accuracy, reliability, consistency, and completeness. Let’s take a few moments to review each of these aspects of quality—do any seem more or less important than others? Do any of these seem more or less challenging, when it comes to collecting interview data?

Strategy 1: Create an Interview Protocol to Provide Precise Data

- Construct interview questions that will allow the study team to
 - Test hypotheses
 - Elicit a precise response, but without leading the respondent
 - Prompt for additional information, as needed

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Now that we've defined "high-quality data", let's turn back to the strategies for ensuring collection of high-quality data through interviews.

Strategy 1 is to create and use an interview protocol that contains questions that will allow for testing hypotheses. It is helpful to think through and include question prompts when designing the interview protocol. Prompts may be necessary if the data an interviewee is providing isn't as precise, accurate, reliable, complete, or consistent as you would like (remember, these are the data quality characteristics). For example, let's suppose the interviewer asked a participant how they heard about a training and the participant responds "from a friend". The interviewer may prompt the participant to indicate whether the friend is another teacher in the school, an administrator, a member of the training team, and so on.

The challenge is assessing these characteristics of data quality "on the fly"—interviewers need to know a lot about the topic and be well trained in the protocol in order to effectively use prompts to elicit high quality data.

Some prompts are generated during the interview itself as new topics or questions arise out of the conversation with each respondent. It may be helpful to create instructions for interviewers on how to handle these new topics or questions (e.g., explore a new topic more fully or try to get the respondent back on topic) as it is possible for an interview to get "derailed," with the result that all data needed to

answer the evaluation questions might not be collected. At a minimum, when this occurs, the interviewer should be sure to note the nature of the prompt that is generating new topics or questions so that the study team can explore whether it is necessary to add a new question or prompt to the protocol.

Question Types

- Structured
- Semi-structured
- Unstructured
 - Direct
 - Indirect

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There are three basic types of questions: structured, semi-structured, and unstructured. Further, the interviewer can deliver unstructured questions in a direct or indirect manner. Let's spend some time discussing each.

Types of Interview Questions: Structured

- Example: To what extent do you believe the training program provided the knowledge you need to successfully implement the reading program in your classroom? Please choose one of the following answers.
 - a. Great extent
 - b. Moderate extent
 - c. Little extent
 - d. Not at all

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Here is an example of a structured interview question. Notice the use of pre-determined answer choices, which generates very precise data.

A structured interview question may look very similar to a survey question—this is by design. In fact, when surveys that are completed orally are a form of interview.

Types of Interview Questions: Semi-Structured

- Example: To what extent do you believe the training program provided the knowledge you need to successfully implement the reading program in your classroom? Please choose one of the following answers.

- a. Great extent
- b. Moderate extent
- c. Little extent
- d. Not at all

Please explain your answer:

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Here is an example of a semi-structured question, which solicits precise data through forced choice of a response and asks the respondent to provide greater detail and explanation of his or her answer.

Pros & Cons of Different Types of Interview Questions

	Pros	Cons
Structured	Help ensure data are collected in standardized, comparable, ways across multiple respondents; limited, if any, use of prompts reduces the amount of time needed to answer the questions. Can be analyzed relatively quickly using quantitative techniques.	Interviewer cannot divert from the structure and language of the interview question to probe for additional information from respondent.
Semi-Structured	Help ensure complete or comprehensive data are collected across multiple respondents. Interviewer may have some ability to rephrase questions or to use prompts to probe for additional information.	Interviewer has limited ability to divert from the structure and language of the interview question to probe for additional information. The use of probes increases the length of the interview. Require quantitative and qualitative analysis techniques.

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As a quick reference, we've outlined common pros and cons for structured and semi-structured questions. There is no "perfect" approach or question. Rather, the researcher will find the best choice for the project, balancing the need for high quality with the need to reduce bias.

Types of Interview Questions: Unstructured

- Example: In what ways do you think the training program provided (or didn't provide) you with the knowledge you need to successfully implement the reading program in your classroom?

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Here is an example of an unstructured question. This type of question may result in a broad range of responses and those responses may lack precision. However, they allow the respondent to provide a fuller response than structured or semi-structured questions. (NOTE: If unstructured questions are used, keep in mind that much more time will be needed to conduct data analysis.)

Types of Unstructured Questions: Direct & Indirect

- Examples of direct questions: How, if at all, did the training improve your knowledge? What were some of the new ideas and strategies you learned?
- Examples of indirect questions: What information was covered during the training? How familiar were you with some or all of these concepts prior to the training?
- **What potential issues do you see with the direct and indirect questions listed above?**

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As shown here, unstructured questions can be designed to approach a topic or question DIRECTLY, in which the interviewer asks for the specific data that are of interest. In contrast, a question may be framed INDIRECTLY, in which the interviewer asks more general questions about the topic.

Direct questions tend to limit the types of responses a respondent is likely to give and may lead to a bit more bias in the interview. However, the precise data they generate can be useful for helping to answer evaluation questions and often require less extensive data analysis.

Indirect questions tend to reduce bias in the way a question is asked (e.g., they may be less leading), but they also may decrease the precision of responses and increase the amount of data analysis required. In addition, indirect questions may generate answers that are not the information that is being sought.

Pros & Cons of Different Types of Interview Questions

	Pros	Cons
Un-structured	Allow the interviewer to fully explore a participant's experience or phenomena.	Few if any guidelines for questions and prompts can result in little standardization across interviewers and limited ability to compare responses across respondents. Require extensive qualitative analysis.
• Direct	Allow the interviewer to ask for the specific or precise data that are needed. May reduce extent of qualitative analysis needed.	Allow the respondent to limit their responses (e.g., "yes/no"). May be leading the respondent to give a particular answer.
• Indirect	Allow the respondent to choose how he or she responds to the question, which may allow for collection of unexpected or atypical responses.	Responses may lack precision. May require follow-up probing to clarify response. May require more extensive qualitative analysis to infer the needed data.

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Here are common pros and cons for unstructured questions, along with direct and indirect styles of questioning.

Regardless of what type of question is being used, it is very important that interviewers are thoroughly trained in the evaluation's goals and interview protocol so that the interviewer knows what information or data the evaluation is trying to gather. That way the interviewer can have some flexibility in the way s/he asks questions and still obtain high-quality data. The interviewer should pay close attention to the characteristics of data quality during the interview and use prompts to address or correct any potential problems that arise. Again, being able to do this successfully requires the interviewer to fully understand the INTENT of the question, so the interviewer can probe if needed to ensure information provided by the respondent is what is needed.

Strategy 2: Minimize Bias Throughout the Interview

- Identify and control for possible bias
 - Consider who is included in the response pool
 - Ensure questions are not leading or asked in a leading way
 - Positive—e.g., training was helpful and contributed to improved knowledge
 - Neutral—e.g., training wasn't particularly helpful but didn't cause confusion or contradict information obtained from other sources
 - Negative—e.g., training led to confusion or provided contradictory information
 - Ensure the interviewer is attending to the full response

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Strategy 2 addresses bias, which can occur through the construction of questions, the choice of respondents, the interviewer style, and so on. It is almost impossible to remove all bias. Because bias is such a serious issue and concern for researchers, we've compiled some strategies for identifying and minimizing it.

First, consider how the respondent pool is constructed and whether that process might marginalize or leave out certain viewpoints.

Second, it's important to recognize that bias may emerge in how questions are designed and presented—it is important to train interviewers and conduct practice interviews to minimize the opportunity for bias and allow for a full range of responses. In particular, avoid a "leading" question, or a question that is worded in such a way that it suggests a desired response.

Finally, it is important for the interviewer not to allow his or her biases (or background knowledge) to influence how questions and prompts are asked or how data are captured. In particular, be sure to capture the full response, and not just the highlights or "important" pieces.

Allowing for Positive, Negative, or Neutral Responses

▪ Sample questions

- In what ways, if any, did the training:
 - Improve or impact your professional knowledge?
 - Contradict or challenge pre-existing knowledge or practices?
 - Lead to confusion?
- Was there anything particularly helpful or not helpful about the training?
- What aspects of the training will you use? Not use? Were you confused by?
- What, if anything, will help or hinder your use of skills learned in the training?

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Here are some examples of phrasing interview questions to control for bias. Notice, for example, that the interview questions allow for both positive and negative responses (as opposed to only soliciting positive responses).

Note that we are NOT asking if the training IMPROVED professional knowledge, but rather if the training improved knowledge, contradicted or challenged other knowledge or practices, or led to confusion.

Strategy 3: Train (& Retrain) Interviewers

- Train interviewers on the protocol
 - Same set of questions, including prompts and probes
- Conduct practice interviews to
 - ensure interview questions are implemented according to protocol or within acceptable margins
 - give opportunities to develop fluency with the questions
 - identify possible areas where interviewer style or approach may hinder participant responses or introduce bias
- If conducting interviews over a long period, consider re-training interviewers to the protocol to ensure on-going high-quality data collection

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Strategy 3: Train and Retrain. The interviewer(s) should be thoroughly familiar with the goals of the interview and with the interview protocol. This entails training and practice, which may need to occur and re-occur over the duration of a long-term project. Training also needs to encompass the “soft skills” of interviewing, such as building rapport with participants or knowing when to prompt for more information.

Training Interviewers: Real Life Challenge

- Interviewers often adopt their own style or do not ask questions verbatim or use probes
- Possible solutions
 - Give interviewers plenty of opportunities to practice conducting interviews using the protocol and retrain as needed.
 - Using a very structured approach may help ensure all interviewers ask all questions in the same way.
 - BUT, a structured approach limits the ability of interviewers to “connect” with participants, probe for additional information that might be available, and explore new topics.

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A challenge that occurs frequently and is hard to control for is the fact that interviewers have different styles when conducting interviews. This can be a particular challenge if the study team wants to ensure that all questions are asked in similar ways with all respondents.

Again, practice and training are critical strategies—interviewers should understand potential sources of bias in the interview process and know the importance of controlling for bias. The use of a more structured interview question also will limit the opportunity for personal style to introduce variation into the process.

Strategy 4: Screen Interview Data For Quality DURING the Interview

- As the interview is taking place, interviewers should ask themselves:
 - Have interview participants responded to the question that was asked?
 - Are the responses precise, reflecting the experience or phenomena in question?
 - Have participants responded to the question in full?
 - Are participant responses consistent throughout the interview?
 - Do individual responses appear to contradict other responses?
 - Are responses logical with regard to time and location?
 - Are responses plausible?

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Our fourth strategy is to screen responses during the interview, to ensure collection of data that are precise, accurate, reliable, consistent, and complete. For example, the interviewee may indicate in one question that she teaches 50 students. In another question, however, she may reference her classroom of 20 students. In this instance, it may be unclear how many students actually are affected by the teacher's training.

During the interview, the interviewer should ask him/herself the following questions:

- Has the participant responded to the question that was asked?
- Has the participant responded in full?
- Are participant responses consistent with each other?

If the answer to any of the above questions is “no”, the interviewer should ask for clarification or prompt for additional information.

What are some strategies you have used when conducting interviews?

Screening Interview Data For Quality

- It may be helpful to pre-establish data quality criteria in the interview protocol
 - For each question, identify the elements that make up a high quality response
 - Provide prompts that will help interviewers elicit high quality responses

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In addition to following the strategies we outlined on the last slide, it can be helpful for the study team to provide interviewers with examples of higher- quality and lower- quality responses. This way, interviewers can quickly know if they need to use prompts to elicit higher quality data.

Screening Interview Data For Quality: **Real life challenge**

- Screening data for quality during the interview may interrupt the flow of the interview
- Participants may become frustrated if the interviewer frequently interrupts or prompts for additional information
- Possible solution:
 - Wait to ask clarifying questions or probe for additional information until after the respondent has finished discussing a particular point

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A challenge that can arise when interviewers try to screen data for quality relates to the need to maintain rapport with respondents. If an interviewer frequently interrupts to ask clarifying questions or probe for more information, respondents may get irritated or frustrated. Another challenge is associated with the time it takes to ensure the interviewer is gathering high-quality data. Interviews are typically time-limited and the interviewer may need to make a “real time” decision about moving the interview forward, even though some of the data may not be as high-quality as would be desired.

Strategy 5: Capture Interview Data Accurately & Completely

- Data capture methods
 - Handwritten notes
 - Typewritten notes
 - Audio/visual recording
- Combine methods to ensure participants' responses are fully captured
- Ensure data confidentiality is maintained regardless of the data capture method
- Obtain respondent permission for the desired data capture method

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Strategy 5 targets data capture techniques. The goals of data capturing are to:

- Ensure data can be retrieved for coding and analysis
- Ensure data can be maintained for the duration of the study

Common techniques include “real time” handwritten notes, typewritten notes, and audio/visual recording. We recommend combining strategies to increase confidence in data capture.

Strategy 5: Capture Interview Data Accurately & Completely: **Real life challenge**

- It may be difficult to capture all important aspects of a participant's response
 - In some cases, this may include body language or tone of voice
- Possible solution:
 - Consider using an assistant during the interview to ensure responses are captured accurately and completely

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Data capture can be one of the more challenging aspects of interviewing, especially if the participant or researcher decides against audio/video taping. When possible, it is helpful to have back-up in the form of an assistant, to ensure the highest level of data capture.

What are some other strategies you've used to ensure that data are captured accurately and completely?

Pros and Cons of Different Data Capture Techniques

	Pros	Cons
Handwritten Notes	Relatively non-intrusive and inexpensive.	Time needed to write responses by hand. Interviewer may not capture all relevant data. Difficult to write and monitor data for completeness and accuracy and keep focus on interview. Difficult to analyze handwritten notes. Data may need transcription (adds to cost). Having an assistant to write notes will increase cost.
Typewritten Notes	May help ensure accurate and complete responses are captured without a need for transcription. Data can be entered into a database relatively easily for analysis.	If face-to-face, typing notes may be intrusive or off-putting to the interviewee. Difficult to type and monitor data for completeness and accuracy and keep focus on interview. Having an assistant to type notes will increase cost. Requires having a computer available during the interview (may increase cost).
Audio/ Visual Files	Allows the interviewer to focus on the interviewee. Complete responses can be captured and reviewed repeatedly. Audio/video data can be compelling in reports.	Require participants to agree to be recorded. Requires having an audio or video recording device available during the interview (may increase cost). Device may stop working during the interview (e.g., battery dying, running out of recording space). May require transcription (will increase cost).

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Not all forms of data capture are equal; there are pros and cons to each method. If possible, having an assistant and utilizing more than one method will help ensure quality. It may be helpful for the interviewer to inform participants about which technique will be used, and ask respondents' permission if recording the interview. Additionally, the interviewer should tell the respondents how privacy and confidentiality of the data will be maintained.

Strategy 6: Conduct Rigorous Data Analysis

- Three phases of analysis:
 - Data Reduction
 - Summarizing, coding, finding themes, clustering data
 - Can establish a framework for reduction before and/or after data are collected
 - Data Display
 - Use of graphs, charts, and other visuals to collapse data into concise ideas and sequences
 - Arrangement of data to inform or generate conclusions
 - Conclusion Drawing & Verification
 - Hypothesis testing
 - Triangulation of findings
 - Identifying contradictions and the unexpected

Source: Miles & Huberman, 1994

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Strategy 6 relates to the use of rigorous data analysis techniques. Qualitative data analysis is its own specialty and can be very time-intensive. In brief, most methods include three phases: reduction, display, and conclusion-drawing. Here we present the phases outlined by Miles and Huberman (1994). In this webinar we aren't going to go into detail on how to conduct rigorous qualitative data analysis, as it's a topic that goes well beyond what we can cover in this series.

We encourage webinar participants with an interest in qualitative methods to more fully investigate the range of techniques and software now available for analyses and learn ways to ensure the reliability and rigor of analyses (such as use of multiple coders). We have listed some resources at the end of this webinar that participants may find helpful.

When thinking about how to analyze the data collected through the interviews, it may be helpful to outline what information will be reported for the evaluation. Creating report templates (the final strategy we discuss today) may highlight what is needed from the analysis. In essence, the study team can start planning for analysis with the end in mind.

Conducting Rigorous Data Analysis: Real Life Challenge

- Analysis technique or choices may be a source of bias
 - Choice of codes
 - Choice or identification of themes
- Participant responses may contain multiple, contradictory, themes
- Possible solutions:
 - Specifically try to identify and control for bias
 - Draw conclusions that are supported by the data
 - Plan to use an iterative cycle of analysis to identify consensus or disagreement on findings
 - Use analysis teams (rather than one individual)
 - Use triangulation (verification of findings using more than one data source)

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A couple of challenges may arise during data analysis. As with any analysis technique, the choice of analysis approach may introduce bias, such as the choice of codes or the choice or identification of themes that “emerge” from the data. Another challenge may arise when participant responses aren’t consistent with each other. These challenges can be particularly problematic when data are very sensitive to a change of codes or themes, since those changes can affect study findings.

To address these issues, it is good to identify and report issues with bias, whenever possible, as limitations to the analysis. Conclusions should be supported by the data and analysts should plan to use iterative cycles of analysis. Choice of codes may be delayed until after themes have emerged. Coding software also can assist in identification of themes and coding options. Analysis teams can help to reduce bias and address problems of data consistency (e.g., by requiring that the team reach consensus when responses aren’t consistent). Finally, using multiple sources of data to triangulate data from interviews can help to improve data quality and foster generation of sound conclusions from the data.

Selected Data Analysis Software Packages

- Qualitative data analysis software can facilitate analysis, especially when there are have large amounts of interview data.

Free	Proprietary
Aquad	Atlas.ti
Coding Analysis Toolkit	Dedoose
Compendium	Ethnograph
Digital Replay System	HyperRESEARCH
QDA Miner Lite	MAXQDA
RQDA	Nvivo
Weft QDA	QDA Miner
	Qualrus
	Transana

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Here are some options for coding software. Note that we do not endorse any specific software package. These packages have information available online.

Strategy 7: Create a Report Template for Compiling the Interview Data

- Pre-establish a report template that identifies:
 - The structure of the report
 - Where interview data will be utilized (if multiple types of data are used in the report)
 - Interview features to be reported
 - Examples: number of interview participants, number of interviewers, number of interview questions, findings per question
 - Consider including a copy of the interview protocol in an appendix

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Our final strategy will work for quantitative and qualitative analyses and involves the creation of a report template that identifies the specific elements the study team will report. This will help ensure the data collection protocols and record-keeping are comprehensive and designed to provide the necessary data.

Using Qualitative Data in Evaluation Reports

- Use responses as quotes or vignettes within the report
 - Ensure participants are aware their words and experiences may be used (without attribution)
 - Take care not to modify meaning of quotes by taking them out of context
- Benefits of using quotes and vignettes
 - Highlight diversity of experiences and phenomena
 - Highlight the unexpected, the contradictory, and the surprising

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Qualitative data, such as interview data, provide richness and depth to evaluation reports, often highlighting a range of experiences, perceptions, and reactions to project services. Interview data can be used to illuminate quantitative findings, provided the team has permission to use data as quotes within the report.

Using Data in Evaluations: Real Life Challenge

- Data collection and analysis usually takes longer than anticipated, creating a shortage of time for report writing, review, editing, etc.
 - Possible solutions
 - Build plenty of time into the evaluation timeline and budget to collect, analyze and write up qualitative data
- Participant confidentiality may be violated when reporting a specific quote or story
 - Identifiers may not be apparent to the evaluator, but might be recognizable to other project members
 - Possible solutions
 - Consider having interview participants review specific quotes or vignettes

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As we have noted several times through the presentation, the entire interview process can be very time-intensive. It is easy to underestimate the amount of time necessary to schedule and complete all interviews in a series. It also is easy to underestimate the time needed for a thorough and rigorous analysis. Be sure to build plenty of time into the schedule.

In addition, it is important to confirm specific quotes or stories are non-identifiable before including them in a report. Just because the study team cannot identify a quote or vignette does not mean that something in the response's syntax or presentation is not identifiable to someone who might read the report.

Final Thoughts

- Interviews are a valuable component of a mixed-methods approach
 - Rich descriptive data
 - Explore the HOW and WHY
- Interview data are subject to the same quality constraints as other data—precision, accuracy, reliability, consistency, and completeness
- Consider the 5 “Ws” when planning interviews and use the 7 strategies to ensure high-quality data are collected and reported.

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As we finish up today, here are some final “take home” thoughts. First, interviews can be a very valuable source of data in an evaluation and worth the investment. That stated, interview data are subject to the same quality constraints as all data. Consider using the strategies presented in parts 1 and 2 of this series to ensure high-quality interview data are collected. As a reminder, Part 1 of the series contains more detailed information on the 5 Ws. Today’s session, Part 2, goes into depth on the 7 strategies.

For More Information...

- Bradburn, N. M., Sudman, S., & Wansink, B. (2004). *Asking questions: The definitive guide to questionnaire design (Rev. ed.)*. San Francisco, CA: Jossey-Bass.
- Maxwell, J. A. (2005). *Qualitative research design: An interactive approach (2nd ed.)*. Applied Social Research Methods Series, vol. 41. Thousand Oaks, CA: Sage.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook (2nd ed.)*. Thousand Oaks: Sage.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods (4th ed.)*. Thousand Oaks, CA: Sage.

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The remaining slide presents some additional resources that may be of interest.

Questions?

Contact us:

- Sarah Heinemeier or Jill Lammert
- CIPP@westat.com

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Our contact information is provided for follow-up questions and we will take some time for questions now. Thanks again for joining us today!