

AEA/CDC Summer Evaluation Institute

Offering 51: Introduction to Qualitative Data Analysis

Description: Qualitative methods, such as interviews, qualitative responses to surveys, and focus groups, can provide a wealth of information about specific points of view, cultural contexts, and the meaning behind health beliefs and behaviors. The key to accessing this information is learning how to analyze qualitative data. This session will provide step by step lessons in basic qualitative analysis. A group activity will allow participants to practice coding qualitative data, triangulating findings between multiple analysts, and developing conclusions based upon the findings.

Audience: Attendees working in any context with little or no experience undertaking qualitative data analysis.

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Offered (Two Rotations of the Same Content - Do not register for both):

- Monday, June 23, 2:30 – 4:00 PM
- Tuesday, June 24, 2:30 – 4:00 PM

Introduction to QUALITATIVE ANALYSIS

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Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter.

This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them.

~ Denzin & Lincoln, *Strategies of Qualitative Inquiry*



How is quantitative research different from qualitative research?

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Quantitative Research

- Focus is on numbers and defined categories
- Quantitative methods are usually used to find population-level, generalizable results
- Limitations include missing context or variables that fall outside defined structures

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Quantitative Research

- Example quantitative research questions:
 - What percentage of Americans are HIV positive?
 - Of Americans who are HIV positive, what percentage self-identified as heterosexual?
 - What are the HIV/AIDS rates of American men compared to American women?

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Qualitative Research

- Focus is on meaning and context
- Qualitative methods are usually used to determine individual or small group-level perspectives
- Limitations include a lack of generalizability


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Qualitative Research

- Example qualitative research questions:
 - Why do teens in rural West Virginia decide to get tested for HIV/AIDS?
 - How does testing positive for HIV/AIDS affect condom use behavior for low income African American women?
 - Why do men who have sex with men sometimes self-identify as heterosexual?

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Using quantitative and qualitative methods in concert enhances the breadth and depth of results.

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Common public health uses for qualitative methods

- Collect information from experts, stakeholders and/or the target audience to:
 - Gauge the audience fit for the design of a survey, strategic plan, logo/branding, curriculum, or media campaign
 - Consider the usability of a tool or training
 - Assess how an intervention is being implemented
 - Give context to the results from a survey
 - Gather success stories and lessons learned

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Interview

- Facilitator talks 1-on-1 with participant face to face, by telephone, by video-conference or online
- Useful for participants who:
 - Provide key, individual-level information
 - Are difficult to schedule
- Considerations:
 - Incentive for participants
 - Time for recruitment and scheduling

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Focus Group

- Facilitator moderates group of 5-10 participants face to face, by telephone, by video-conference or online
- Useful for participants who:
 - Can build off comments from others in a group
- Considerations:
 - Incentive for participants
 - Time for recruitment and scheduling
 - Location

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Site Visit

- Researcher or team of researchers visits a participant or group of participants on location
- Useful for situations where:
 - Environmental and/or cultural context plays a key role
- Considerations:
 - Gatekeepers
 - Travel
 - Types of data collection

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Online Bulletin Board

- Facilitator moderates group of 5-20 participants online
- Useful for situations where:
 - Topic is sensitive
 - Participants are internet literate
 - Participants are difficult to schedule and may be located in diverse time zones
- Considerations:
 - Incentive for participants
 - Time for recruitment and scheduling


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Self-Ethnography

- Facilitator directs participants in capturing a defined experience by audio recording, still camera or video; results are collected in person or online
- Useful for situations where:
 - Environmental, individual and/or cultural context plays a key role
 - Participants are comfortable with the given data collection technology
- Considerations:
 - Incentive for participants
 - Time for recruitment and scheduling

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Qualitative analysis is...

Interpretive

- Explaining meaning

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Qualitative analysis is...

Based on context

- Meaning is tied to a specific setting and population
- Meaning will change over time

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Qualitative analysis is...

Iterative

- Theories emerge as data is collected and should be tested, refined, and retested against new information until explanations are repetitive

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Qualitative analysis is not...

Quantifiable

- Counting words or counting codes is not a substitute for interpreting meaning

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Qualitative research & analysis is an interactive process shaped by both the subjects' and researcher's:

- ✓ Personal experience
- ✓ Age
- ✓ Gender
- ✓ Race/Ethnicity
- ✓ Social class
- ✓ Biases!

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Triangulation

- The use of multiple methods of data gathering
- Using different methods helps to build an in depth understanding of meaning

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Multiple qualitative analysts

- Allowing different analysts to formulate theories and/or code texts independently (and then come to agreement as a group) adds rigor to findings

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Tools for qualitative analysis

- The researcher/analyst is the main interpretive tool!
- Video camera
- Audio recorder
- Transcription
- Qualitative analysis software (e.g., Atlas.ti, MaxQDA, NUD*IST)

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Steps for Qualitative Data Analysis

1. Get to know the data
2. Focus the analysis
3. Categorize information
4. Identify patterns and connections within and between categories
5. Interpretation: What does this all mean?

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Step 1: Get to know the data

- Read, read, and re-read the data (text)
- Listen, listen, and re-listen to recordings (audio)
- Watch, watch, and re-watch videos
- Write down any impressions you have as you review the data
- Consider the quality of your data

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Step 2: Focus the analysis

- Review the purpose of the evaluation
- Identify a few research questions
- The focus of the analysis will depend on the purpose of the evaluation and how you plan on using the results

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Step 3: Categorize Information

- Labor intensive
- Emergent categories
- Identification of coherent categories
- Subcategories
- Abbreviated codes
- Iterative process
- Preset categories

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Step 4: Identify patterns and connections

- Within category description
- Between category description

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Step 5: Interpreting the data

- What does it all mean?
- List of key points and/or important findings
- Use quotes and descriptive examples
- Suggest areas for further study

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Pitfalls to Avoid

- Avoid generalizing
- Choose quotes carefully
- Address limitations and alternatives

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Quantitative Analysis Activity

1. Read through the article to get a general understanding
2. Write down your general impressions

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Quantitative Analysis Activity (cont.)

1. Use the highlighter to mark instances in the article that refer to “money or finances”
2. How many instances did you find?
3. What does this mean?

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Quantitative Analysis Activity (cont.)

- Now highlight instances where finances are linked to State Government and Federal Government
- What do you notice?

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Quantitative Analysis Activity (cont.)

- What are some examples that illustrate a conflict over responsibility between the state and federal government jurisdiction?
- Find a quote that supports your assessment.

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Reference:

- Taylor-Powell, Ellen, and Renner, Marcus. Program Development and Evaluation: Analyzing Qualitative Data. Madison, Wisconsin; University of Wisconsin Extension, 2003.

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CASE STUDIES IN QUALITATIVE METHODS

Literature Review

Project: CDC's Worksite Wellness

Purpose: A review of relevant literature was conducted to find the most up-to-date best practices in worksite wellness.

Focus of Analysis: The sources of recommendations, strength of evidence, and cost-effectiveness were taken into consideration in compiling a report of best practices.

Policy & Procedure Manual Review

Project: CDC/DHQP Evaluation of Institutional Phlebotomy Practices for Prevention of Percutaneous Injuries from Needles and Other Sharp Devices (PINS)

Purpose: A review of policy and procedure manuals was used to evaluate factors influencing the risk of phlebotomy percutaneous injuries in hospitals and to identify potential best practices for prevention.

Focus of Analysis: Data collected in the review were compared to information gathered from interviews, focus groups and observations to determine the extent to which best practices were being implemented.

Site Visits

Project: CDC's Choose Respect

Purpose: Site visits were conducted at partners' kickoff events to publicize the initiative in order to gauge the scope of the event, integration of Choose Respect messages, and reactions among the target audience.

Focus of Analysis: Data collected at site visits, along with process evaluation tools and exit interviews, were used to create success stories for Choose Respect partners.

Procedural Observations

Project: CDC/DHQP Evaluation of Institutional Phlebotomy Practices for Prevention of Percutaneous Injuries from Needles and Other Sharp Devices (PINS)

Purpose: Phlebotomy procedures were observed in a variety of different locations within the hospital to evaluate factors influencing the risk of phlebotomy percutaneous injuries in hospitals and to identify potential best practices for prevention.

Focus of Analysis: The goal was to assess the extent to which written policies and procedures were implemented on a day to day basis in order to determine any training/retraining needs to achieve best practices.

Semi-structured Interviews

Project: HRSA's Supporting Networks of HIV Care by Enhancing Primary Medical Care

Purpose: Stakeholder interviews were conducted bi-annually in order to assess ongoing collaboration among the partners in their progress toward meeting goals and objectives.

Focus of Analysis: Findings on achievements and barriers were reported to the prime grantee in order to inform their decision making on next steps to strengthen collaborative work.

Focus Groups

Project: CDC's National Youth Violence Prevention Resource Center (NYVPRC)

Purpose: Focus groups were conducted with youth involved in violence prevention organizations in order to determine what topics and resources should be addressed on the NYVPRC website.

Focus of Analysis: Teens' opinions on relevant youth violence prevention issues, activities and resources were used to update and improve the website.

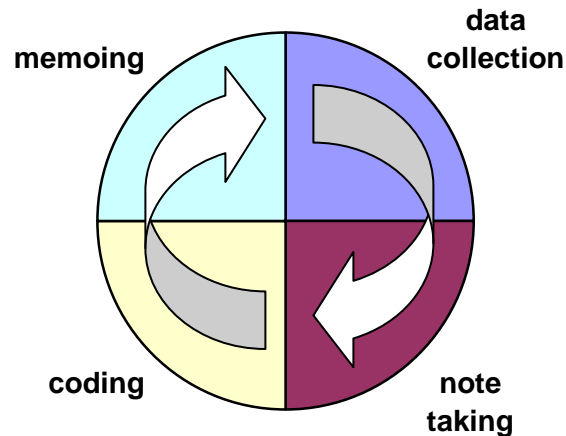
Qualitative Responses to Surveys

Project: CDC's Heads Up: Concussion in High School Sports Toolkit for Athletic Coaches

Purpose: In order to evaluate coaches' use of the tool kit, open-ended questions were included on the survey to ascertain what coaches had learned from using the tool kit and how the tool kit had changed the ways in which they prevented or managed concussions.

Focus of Analysis: Coaches' qualitative responses on the surveys included self-reported changes in knowledge, attitudes and behaviors that were explored in more depth with focus groups.

BASIC STEPS IN QUALITATIVE ANALYSIS



sorting

writing

Definitions

data collection: gathering information through qualitative methods such as interviews, focus groups, open-ended responses to surveys, texts, etc.

note taking: taking down notes of main ideas either during data collection, immediately after data collection, or during a review of an audio or video recording of the data collection

coding: highlighting ideas, categories or themes that help to answer predetermined research questions and/or the more general query of, *What is going on here?*

themes: concepts that explain how ideas or categories are connected

illustrative quotes: verbatim text that exemplifies a particular code or theme

saturation: a point of diminishing returns in the collection and interpretation of data that signals completion

memoing: noting hypotheses that arise about potential themes or relationships between categories

sorting: compiling and arranging themes, codes and illustrative quotes into the outline of a narrative that explains *What is going on here?*