Introduction to Thematic Analysis

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Disclaimer

Disclaimer: The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

PRESENTATION OUTLINE

1. **Introduction to Thematic Analysis**

2. **Planning a Thematic Analysis**

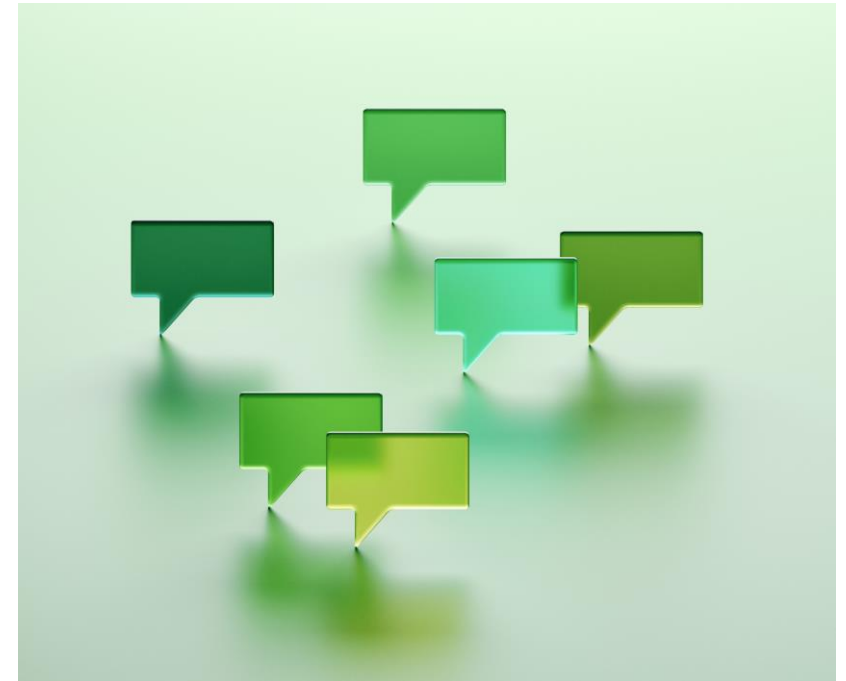3. **Methods for Thematic Analysis**

4. **Resources**

What is Thematic Analysis?

- **Thematic analysis** is a method for identifying, analyzing and reporting patterns (themes) within a data set.

- A **qualitative research method** than can be used to analyze interviews, transcripts, recordings, and narratives.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Key Components of a Thematic Analysis

Data
- Data can be gleaned from key informant interviews, 1:1 interviews, written narratives; reports, or open-ended questions.

→ **Example data sources from NTCP evaluation:**
- Recipient Annual Evaluation Reports

Research Question
- A clear and well-defined research question that seeks to identify patterns and trends in the data.

→ **Example question from NTCP evaluation:**
- How did recipients tailor strategies and interventions to reach intended population groups?

Codebook
- Outlines codes and categories used to organize data. Deductive, inductive; dual approach.

→ **Example of qualitative codes based on NTCP evaluation:**
- Deductive Codes: pre-established codes that categorize population groups based on evaluation questions.
- Inductive Codes: creating a code about a barrier multiple recipients noted in their reports when discussing tailoring strategies.

Analysis Plan
- Methods which the researcher/evaluator plans to use to analyze the data. There are several methods!

→ **Example methods from NTCP evaluation:**
- Conducting thematic analysis of recipient evaluation reports with deductive codes based on evaluation questions.

Why Use a Thematic Analysis?

✓ Thematic analysis, like other qualitative methods, can provide **insight into the perceptions, values, opinions, and community norms of a population**.

✓ In program evaluation, thematic analysis can be helpful when we want to **diagnose what went right or wrong in a process evaluation.**

✓ A method of **formative research** to explore which contextual factors are related to health behaviors.

✓ When used in conjunction with quantitative studies, **thematic analysis can confirm, challenge, or deepen the validity of conclusions** that either component might have demonstrated alone.

Methods for Thematic Analysis

1 Coding Reliability

- ✓ Using a structured codebook to **reach consensus** among multiple researchers.

- ✓ Develop **co-occurring codes** to understand how two or more concepts are related.

- ✓ May include use **Cohen's Kappa** to measure degree of agreement

2 Codebook Approach

- ✓ Analyzing data **using a framework of pre-existing identified themes** (i.e., deductive themes).

- ✓ **Framework Analysis**: guiding analysis based on conceptual farmwork (e.g., socio-ecological model)

- ✓ **Template Analysis**: guiding analysis based on template with pre-existing themes (e.g., SWOT analysis)

3 Reflective Approach

- ✓ Relies on the researcher's interpretation of the data based on theoretical assumptions and analytical skills of the researcher.

- ✓ An iterative approach with the creation of **inductive codes** (i.e., generating themes)

Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & quantity*, *56*(3), 1391-1412.

Methods for Thematic Analysis

Phase	Examples of Procedure for Each Step
1. Familiarization	Transcribing data: reading and re-reading; noting down initial codes
2. Generating Initial Codes	Coding interesting features in the data in a systematic fashion across the data set, collating data relevant for each code
3. Search for Themes	Collating codes into potential themes, gather all data relevant to each theme
4. Involved Reviewing Themes	Checking if the themes work in relation to the coded extracts and the entire dataset; generate a thematic map
5. Defining and Name Themes	Ongoing analysis to refine the specifics for each theme; generation of clear names for each theme
6. Producing the Report	Final opportunity for analysis selecting appropriate extracts; discission of analysis; relate back to the research question or literature; produce report.

Six Phases of Conducting Thematic Analysis (Braun & Clark, 2006)

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Pros and Cons of Thematic Analysis

Pros	Cons
• Offers a way to obtain detail, nuance, and depth to the data collected • Allows researchers to "hear the voice" of the subjects • Great for exploratory and formative research	• Time and skill intensive • Cannot provide representative or generalizable findings • Subjective over objective • Often requires small, purposively selected samples

Software for Thematic Analysis

References/Resources:

1. The CDC Field Epidemiology Manual: Collecting and Analyzing Data: [Collecting and Analyzing Qualitative Data | Epidemic Intelligence Service | CDC](#)
2. Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & quantity*, *56*(3), 1391-1412.
3. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.
4. <u>QDA Software Comparison Chart (NYU Libraries)</u> Comparison chart of QDA software from NYU Library's LibGuide
5. CDC Coffee Break: Using Nvivo to analyze qualitative data. [CDC Coffee Break: Using NVivo to analyze qualitative data](#)
6. Practical Strategies for Health Equity Researchers to Enhance Analytic Rigor and Generate Meaningful Insights From Qualitative Data. https://www.cdc.gov/pcd/issues/2022/22_0134.htm
7. Centers for Disease Control and Prevention. Excel Tool Tutorial #6: Thematic Analysis (Email *textanalysistool@cdc.gov to obtain a copy of the tool).* Note: this is meant for emergency response and outbreak investigations. https://www.youtube.com/watch?v=cWty6e18j0k&t=2s

Thank you!

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