Qualitative Data Analysis: Proposal Stage
Qualitative Data Analysis

• Qualitative data analytic procedures are indicated in Chapter 3 of the applied dissertation proposal.
• After qualitative data are collected via interviews, focus groups, or open-ended questions on surveys, the researcher must make sense of the findings through a rigorous data analysis process.
• This workshop will cover qualitative data analysis.
• The session will provide insight into how to incorporate a description of this method in Chapter 3 of the proposal.
• The presentation of results in Chapter 4 will also be highlighted.
Qualitative and Quantitative Research Differences

- Qualitative research (Martella et al., 1999, Table 8.3)
  - phenomena are studied holistically, as a complex system
  - primary purpose to describe ongoing processes
  - no specific independent variable
  - data are represented/summarized verbally or in the narrative

- Quantitative research
  - phenomena are broken down or simplified for study
  - primary purpose to determine cause and effect
  - independent variable is controlled and manipulated
  - data are represented and summarized in numerical form

- Differences in research reports and applied dissertations
Chapter 1: Introduction

Statement of the Problem

Phenomenon of Interest
  – Background and Justification
  – Deficiencies in the Evidence
  – Audience

Definition of Terms

Purpose of the Study
Chapter 2: Literature Review

The literature review should contain the following:
– introduction to the section
– discussion of the theoretical perspective
– historical context of the study
– synthesis of the findings in a “state-of-knowledge” summary
– identification of gaps and limitations of the literature;
– clear discussion of how further research should extend, differ from, or replicate past studies
– articulation of the unique contribution of the study
Research Questions

*Central question* is the overarching question. *Subquestions* divide the central question into specific questions. *Issue subquestions* narrow the focus of the central question.
Chapter 3: Methodology

Aim of the Study
Qualitative Research Approach
Participants
Data Collection Tools
Procedures
Data Analysis
Ethical Considerations
Trustworthiness
Potential Research Bias
Limitations
Chapter 4: Findings

• Findings are discussed according to the qualitative approach. This section should include quotes from interviews with informants or from analyzed documents to illustrate findings.

• For instance, in grounded theory, the aim is the generation of theoretical constructs. In this section, then, you would have findings from the process of memo writing, theoretical sampling, sorting, saturation, the review of literature, and developing the theory.
Chapter 4: Findings (cont.)

- With an ethnographic approach, the findings may be reported in a smooth and flowing description narrative. The aim of the narrative is to portray a full context of the experiences and the culture of research participants as observed and analyzed.

- With phenomenology, the findings will be reported differently. Examples might include (a) a description of experiential themes, (b) a description of the essences of experience, and (c) a description of relationships among essences.
Chapter 5: Discussion

In writing this section, incorporate the following:

– preconceptions and ideas as discussed in your introduction
– existing literature and practice in the area of study
– the utilization of the method
– conclusions and recommendations
Overview

• What is qualitative data analysis?

• How do I conduct qualitative data analysis and present results?
Defining Qualitative Data

- Words
- Feelings
- Actions
- Rituals
- Experiences
- Perspectives
- Impressions
- Events
- Artifacts
- Symbols
Defining Qualitative Data Sources

• Interviews and Transcripts
• Observations and Field Notes
• Documents
• Pictures and Images
• Audio and Visual Recordings
Defining Qualitative Data Analysis

Qualitative data analysis is the rigorous process of selecting qualitatively distinct data, articulating the qualitative meaning ascribed to those units, and commenting on the qualitative similarities and differences noted between and among these distinct units of data.
Defining Qualitative Data Analysis (cont.)

The goal of qualitative data analysis can be to describe, explain, and/or interpreting qualitative patterns in terms of words, numbers, matrices, pictures, sounds, or other forms of representation.
Defining Qualitative Data Analysis (cont.)

• Metaphoric: saying something about something

• Coding: drawing a distinction and naming it

• Analysis: making sense of how these distinctions are qualitatively different and qualitatively similar
Defining Qualitative Data Analysis (cont.)

• Transformation from data to information to knowledge to wisdom

• Transformation from separation to connection (e.g., coding to create discrete nodes and then connecting the nodes to create categories)
No Findings (Not Research)

• Presenting data as if they were the findings
• Reproducing interview data, case histories, or collected stories in a reduced form with minimal or no interpretation of those data
• Containing no analysis and no interpretation

(Sandelowski & Barroso, 2003, pp. 909-910)
Topical Survey
(Not Qualitative Research)

• Emphasizing nominal or categorical data, or lists and inventories of topics covered by research participants in interviews and focus groups

• Emphasizing inventories, frequencies, and percentages of participants stating a topic, or enumerations of the topics themselves

• Investigators often introducing topics in their interview questions and/or derived from a manifest content analysis

(Sandelowski & Barroso, 2003, pp. 910-912)
Generic vs. Designer

- Conceptual/Thematic Description is a type of descriptive qualitative research wherein researchers use generic qualitative methods (e.g., open coding, axial coding, constant comparison) to produce conceptual categories and themes.

- Interpretive Explanation is a type of explanatory qualitative research wherein researchers follow designer or “name brand” methodologies to produce the most transformed results and findings (e.g., thick descriptions, grounded theories, essences of lived experience).
Thematic Survey  
(Exploratory Qualitative Research)

• Conveying an underlying or more latent pattern or repetition discerned in the data
• Containing the lowest level of abstraction
• Offering more penetrating or nuanced descriptions of experience, using either in vivo or everyday language, or themes or concepts from existing empirical or theoretical literature to label and/or organize their data

(Sandelowski & Barroso, 2003, pp. 912-913)
Conceptual/Thematic Description
(Descriptive Qualitative Research)

• Presenting one or more concepts or themes either developed in situ from the data or imported from existing theories or literature outside the study

• Moving towards interpretively integrating portions of data

• Extending the theoretical or other intellectual tradition from which they were imported and/or illuminating an experience

(Sandelowski & Barroso, 2003, pp. 913-914)
Interpretive Explanation
(Explanatory Qualitative Research)

• Transforming data to produce grounded theories, ethnographies, or otherwise fully integrated explanations of some phenomenon, event, or case

• Clarifying or elucidating conceptual or thematic linkages that re-present the target phenomenon in a new way

• Attending to relevant variations in both sample and data (Sandelowski & Barroso, 2003, p. 914)
Defining Qualitative Data Analysis

• Iterative Process (e.g., the process can be changed based upon the outcomes)

• Circularity (e.g., constant comparison leading the researcher from the analysis to the field and back again)

• Documentation (e.g., the study and the study of the study)
The “Nuts and Bolts”

• Codes, Categories, and Themes

• Analysis

• Memos

• Evidence

• Style
Codes, Categories, and Themes

- Articulating the relationship between meaning and data (Codes), Codes (Categories) and Categories (Themes)

- Internal Integrity (i.e., Is there a high degree of homogeneity across the individual codes or across the coded units within the categories?)

- External Integrity (i.e., Is there a high degree of heterogeneity or differentiation between the array of homogeneous codes, categories, or themes?) (Chenail, 2008)
Codes, Categories, and Themes (cont.)

• Exhaustive System of Codes, Categories, and Themes (i.e., No significant meaningful feature of the phenomenon under study falls outside of the array)

• Dual Planes of Focus: Horizontality (i.e., category-to-category relationships) and Verticality (i.e., category-to-phenomena relationships) (Chenail, 2008)
Codes, Categories, and Themes (cont.)

• Origination (i.e., Where does the responsibility reside for the creation of the codes/categories?)

• Verification (i.e., How are the codes/categories justified?) (Constas, 1992)
Codes, Categories, and Themes (cont.)

• Nomination (i.e., What are the sources of names for codes and categories?)

• Timing (i.e., sharing when decisions were made -- before the data collection began, after the data are collected, or throughout the data collection process) (Constas, 1992)
Figure 1. *Relational System of Separating and Connecting Qualitative Differences Vertically and Horizontally*

<table>
<thead>
<tr>
<th>Theme</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th></th>
<th></th>
<th>Category</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th></th>
<th></th>
<th>Code</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>↑ Connectio n</td>
<td></td>
<td></td>
<td>↑ Connectio n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>↓</td>
<td></td>
<td></td>
<td>↓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Unit of Analysis |   |   | Unit of Analysis |   |   |
|                  |   |   |                  |   |   |

Chenail (2012), p. 4
Analysis

• Making sense of the codes, categories, and themes in context (i.e., research question and literature)

• Shifting from information to knowledge

• Asking yourself the question, “What Have I learned?”
Memos

• Memos are notes in which we make the meaning of our codes, categories, themes, and analysis transparent.

• Memos are the start of the analysis and the results.

• Memos create our audit trails.
Evidence

• Data as star

• Juxtaposition

• Exemplars for every assertion, pronouncement, or declaration (Chenail, 1995)
Style

• Avoid errors of deficiency and exuberance by staying close to the data.
• Develop a rhythm.
  – list section heading
  – present the distinction or finding
  – introduce the first data exemplar of this distinction
  – display the first data exemplar of this distinction
  – comment on the first data exemplar as evidence
  – make transition to second data exemplar and repeat the pattern until the closing of this section

(Chenail, 1995)
Relationships

- Relationship between data collection and data analysis
- Relationship between data analysis and writing up results
Quality Control

• Instrumentation
• Piloting
• Transparency
• Audit Trails
• Constant Comparison
• Member Checking
• Peer or Expert Debriefing
• Multiple Coders
• Exemplars
Things to Remember

• Maintain Coherence and Build Confidence

• Stay Focused on the Research Question

• The Role and Place of the Literature

• Technology
Ethnography

With an ethnographic approach, the findings may be reported in a smooth and flowing description narrative. The aim of the narrative, to the extent possible, is to portray the full context that was discovered by exploring pieces of reality or experience. Review of other sources, such as literature and films, is a plus.
Phenomenology

With phenomenology, the findings will be reported differently. Examples might include (a) a description of experiential themes, (b) a description of the essences of experience, (c) a description of relationships among essences, and (d) a review of other sources (e.g., literature)
Grounded Theory

In **grounded theory**, the aim is the generation of theoretical constructs. In this section, then, you would have findings from the process of memo writing, theoretical sampling, sorting, saturation, the review of literature, and development of the theory.
Transcendental Phenomenology

• Edmund Husserl

• Phenomenology: utilizes only data available in consciousness

• Transcendental: “adheres to what can be discovered through reflection on subjective acts and their objective correlates” (Moustakas, 1994, p. 45)
Transcendental Phenomenology (cont.)

Conceptual Framework

– Intentionality: “incorporates real and ideal content, in and through which we dwell in thought, perception, memory, judgment, and feeling in order to comprehend its essences” (Moustakas, 1994, p. 55)
  • Noema (not the real object but the phenomenon; the sensory experience) and noesis (meaning)
– Intuition: beginning place in deriving knowledge about human experience
– Intersubjective validity
– Perception is primary source of knowledge
Transcendental Phenomenology (cont.)

Methodology

– Epoche: everyday understandings, knowledge and judgments are set aside

– Transcendental-Phenomenological Reduction: each experience is seen in a new and open way; textural description of the phenomenon as it would appear in consciousness (perceptions, thoughts, feelings)—essences of the phenomenon

– Imaginative Variation
  • Derive structural themes from textural descriptions; then create synthesis of meanings and essences
Phenomenological Reduction

- Bracketing out the topic or question
- Horizontalization: each statement has equal value
- Delimited horizons (meanings): those that stand out as invariant qualities of the experience
- Individual textural description
- Composite textural description
Imaginative Variation

- Vary possible meanings
- Vary perspectives of the phenomenon
- List structural qualities of the experience
- Employ universal structures as themes: time, space, relationship to self, others
- Individual structural descriptions
- Composite structural descriptions

Synthesis of composite textural and composite structural descriptions (synthesis of meanings and essences)
References


[Qualitative data analysis slides courtesy of Ron Chenail]


Resources

• Online QDA:  
  http://onlineqda.hud.ac.uk/index.php

• The Qualitative Report and The Weekly Qualitative Report:  
  http://www.nova.edu/ssss/QR/