Introduction to Qualitative Research Coding

presented by Josué Meléndez Rodríguez MA, MSW
Introductions

Josué Meléndez Rodríguez

UC Berkeley D-Lab
Qualitative Research Lead
Senior Data Science Fellow

VERBI Software GmbH
Professional MAXQDA Trainer

Michigan State University
MA in Higher, Adult, & Lifelong Education
MSW in Organizational & Community Practice

Loyola University Chicago
BSW in Generalist Practice
Agenda

Basic Information
Codes & Coding Schemes
Analysis
Qualitative Data Analysis (QDA) Software
Basic Information

Steps in Research Project
1. Determine Question(s)
2. Conduct Literature Review
3. Determine Methodology & Methods
4. Collect Data
5. Code & Analyze Data
6. Determine & Write Findings
7. Frame & Write Discussion

Methodologies
- Case Study
- Ethnography
- Phenomenology
- Grounded Theory
- Narrative
What are Codes? What is Coding?

Coding is a way to organize data around common ideas, concepts, or categories ACROSS sources.
Deductive & Inductive Codes

You create codes because you deem the identified topics/concepts/ideas as important and relevant to your study. This typically happens one of two ways:

- **Deductive Coding**
  - Codes emerge from your research question and/or the literature review.
- **Inductive Coding**
  - Codes emerge through engagement with your actual data sources and/or data set.
Defining Codes

Codes should be defined, just as variables in a quantitative study should be. The level of specificity will depend on various factors (e.g., complexity of your coding scheme, whether you have a team of coders, requirements of your field).

There are a few common things to consider including:

- Inclusions and Exclusions
- Weighing Scale
- Examples
Organization of Coding Scheme

Whether deductive or inductive, codes are organized into a coding scheme that you use to systematically identify relevant segments of data within your entire data set.

- Flat Coding
  - Codes are organized at the same conceptual level.

- Hierarchical Coding
  - Codes are organized into groups and subgroups based on whatever conceptualization the researcher deems appropriate/relevant.
Coding & Analysis

Coding

Research Questions

Unit of Analysis

Literature or Theory

Metadata

Data

Codes

Memos

Analysis
**Code Creation Process  – Sample**

4 steps in 3 timeframes

1. Prior to Data Collection
   1. Generation of Deductive Codes
2. During Data Collection
   1. Generation of Deductive Codes, cont.
   2. Generation of Inductive Codes
3. After Data Collection
   1. Generation of Inductive Codes, cont.
   2. Organization of Codes into Preliminary Coding Scheme
   3. Test Application of Preliminary Coding Scheme & Editing into “Final” Coding Scheme
Code Creation Process – Exercise

What beverages do first-year college students prefer to drink while studying?

1. Prior to Data Collection
   1. Generation of Deductive Codes
2. During Data Collection
   1. Generation of Deductive Codes, cont.
   2. Generation of Inductive Codes
3. After Data Collection
   1. Generation of Inductive Codes, cont.
   2. Organization of Codes into Preliminary Coding Scheme
   3. Test Application of Preliminary Coding Scheme & Editing into “Final” Coding Scheme
Best Practices

Treat Code-Creation & Coding as an Iterative Process

Keep a Codebook with Definitions for All Codes

Break Up the Coding Process
  - Actively Work with 20-30 Codes at a Time (total code count likely higher)
  - Divide Your Data Sources and Code Segments Separately

Memo as You Code
What is Analysis?

The process of identifying themes related to your research findings.

This is different than identifying ideas/concepts/topics that come up throughout your data set. It’s “bigger picture” stuff…

○ Overarching Themes
○ Subgroup Themes
○ Typology Themes
Analysis

Coding & Analysis

Unit of Analysis
Research Questions

Literature or Theory

Metadata
Data

Codes
Memos

Analysis Plan

Code/Query Output

Memos
QDA Software as a Tool for Organization & Engagement

What It Does
- Structure Data & Codes
- Code Manually & Automatically
- Explore Data & Coded Segments
- Memo Generally & Specifically
- Create Visualizations & Summaries
- Quantify Qualitative Data
- Export Almost Everything

What It Does Not
- Eliminate Bias
- Error-Free Autocoding
- Analytic Thinking
- Advanced Quantitative Analysis
  (MAXQDA can do some quant analysis)

Potential Benefits
- Frees Time to Focus on Analysis
- Can Deal with Large Data Sets
- Improves Auditability
- Improves Credibility
  (among some audiences)
- Allows for Easy Transition to New Projects

Potential Drawbacks
- Can Produce Erroneous Findings
- May Create Pressure to Engage Excessive Features &/or Use Large Data Sets
- Requires Learning the Software
Overview of Relevant Programs

QDA Software

- SPSS
- STATA
- Python
- R
- atlas.ti
- dedoose
- MAXQDA
- NVivo
References & Reading Recommendations

Paradigms of Research for the 21st Century: Perspectives & Examples from Practice edited by A. Lukenchuk

Qualitative Inquiry & Research Design: Choosing Among Five Approaches by J. Creswell

Qualitative Data Analysis: A Methods Sourcebook by M. B. Miles, A. M. Huberman, & Sánchez

Qualitative Research: Bridging the Conceptual, Theoretical, & Methodological by S. M. Ravitch & Mittenfelner Carl

Qualitative Research Design: An Interactive Approach by J. Maxwell

Stanford Encyclopedia of Philosophy at plato.stanford.edu

The Coding Manual for Qualitative Researchers by J. Sánchez

Thinking Qualitatively: Methods of Mind by J. Sánchez

Other recommendations may be available based on specific areas of interest.