University of Wales Trinity Saint David & Hong Kong Management Association
HKMB7003

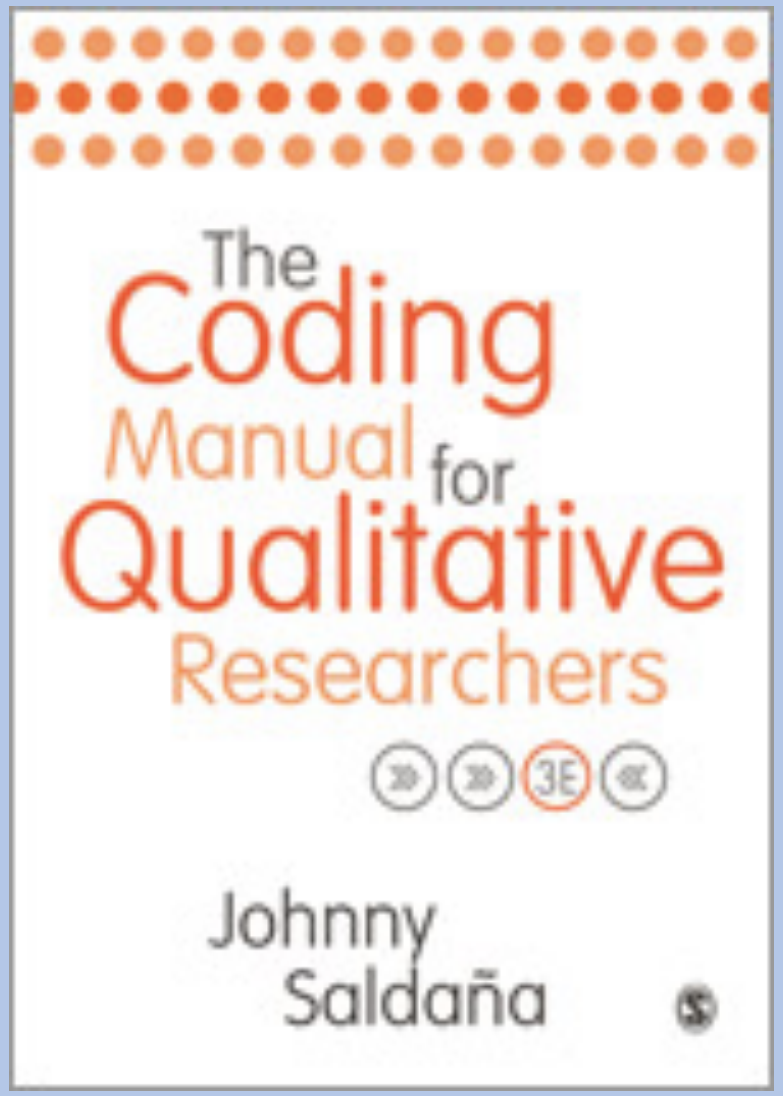
+ Bonus

Qualitative Research Methods

Dr. Tamara Savelyeva

Coding and Analysis

Coding in qualitative inquiry



Acknowledgement

These presentation uses materials created by
Prof. Emeritus
Johnny Saldaña

Arizona State University, USA

Saldaña, J. (2016). *The Coding Manual for Qualitative Researchers* (3rd ed). London: Sage.

Coding in qualitative inquiry

1. **Code** is most often a word/ short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language- based or visual data
2. **Coding** is not a precise science; it is primarily an interpretive act
3. **Coding** is just one way of analyzing qualitative data, not the way

J. Saldaña

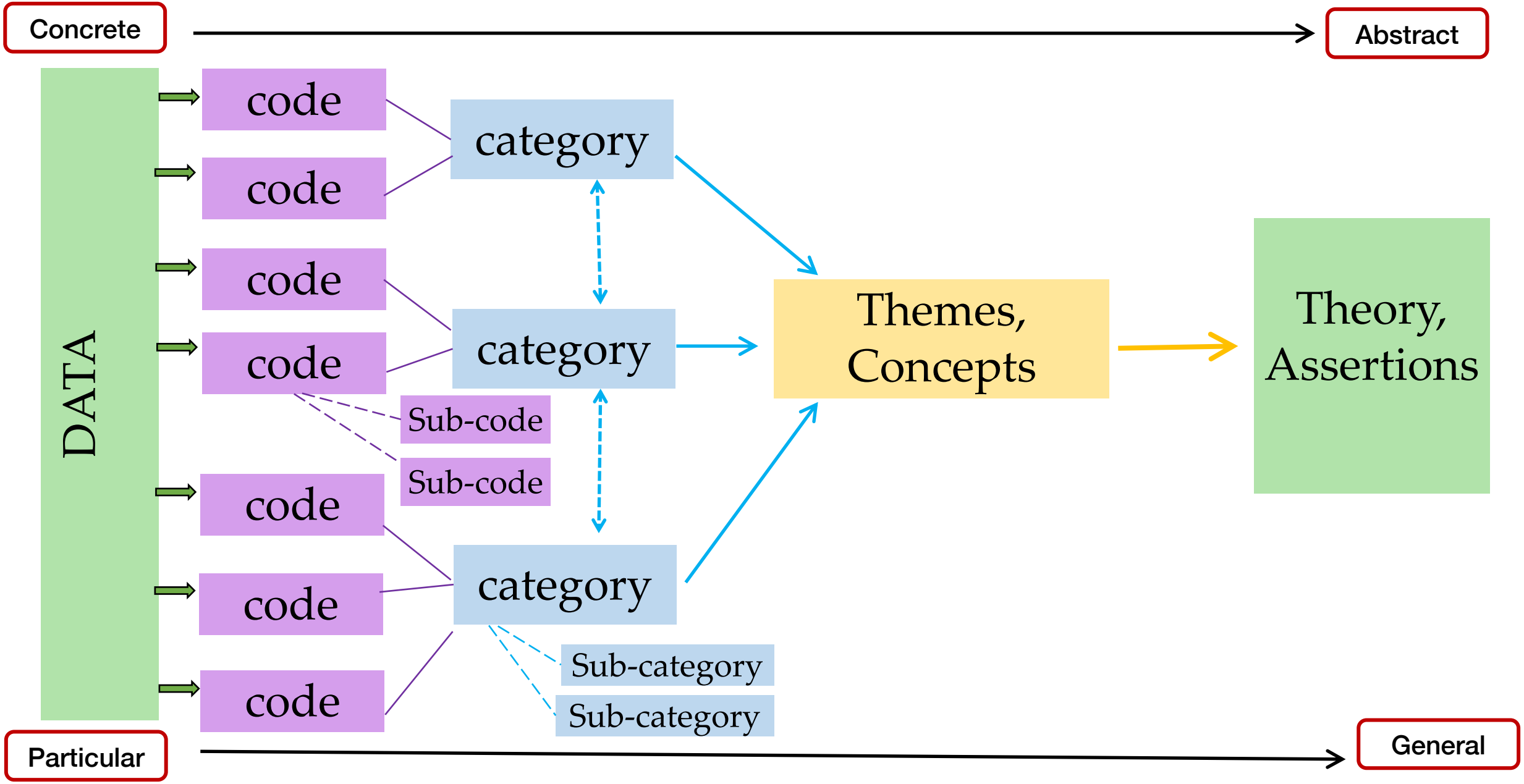
Aims of coding

- Reflect deeply on the meaning of each qualitative datum
- Find and construct patterns in the data
- Develop categories, concepts, themes, assertions, and other analytic findings, theme, theory, etc.

> Coding generates the bones of your analysis. . . . Integration will assemble those bones into a working skeleton
>
> Kathy Charmaz, 2006, p. 45.

Charmaz, K. (2006). *Constructing Grounded Theory—A Practical Guide through Qualitative Analysis*. London, UK: Sage.

From codes to theory



Coding in qualitative inquiry

Qualitative codes
are words and phrases that summarize and symbolize the data's meanings

qualitative codes: **language-based**, symbolic summaries of textual or visual data

quantitative codes: **numeric**, symbolic summaries of meaning (e.g., '88%' '8 out of 10' '28 years old')

Coding example

[1] I notice that homes in the village have chain link fences in front of them. There are dogs and signs on fences that say "Beware of the Dog."

[1] SECURITY

J. Saldaña

Categories and Categorisation

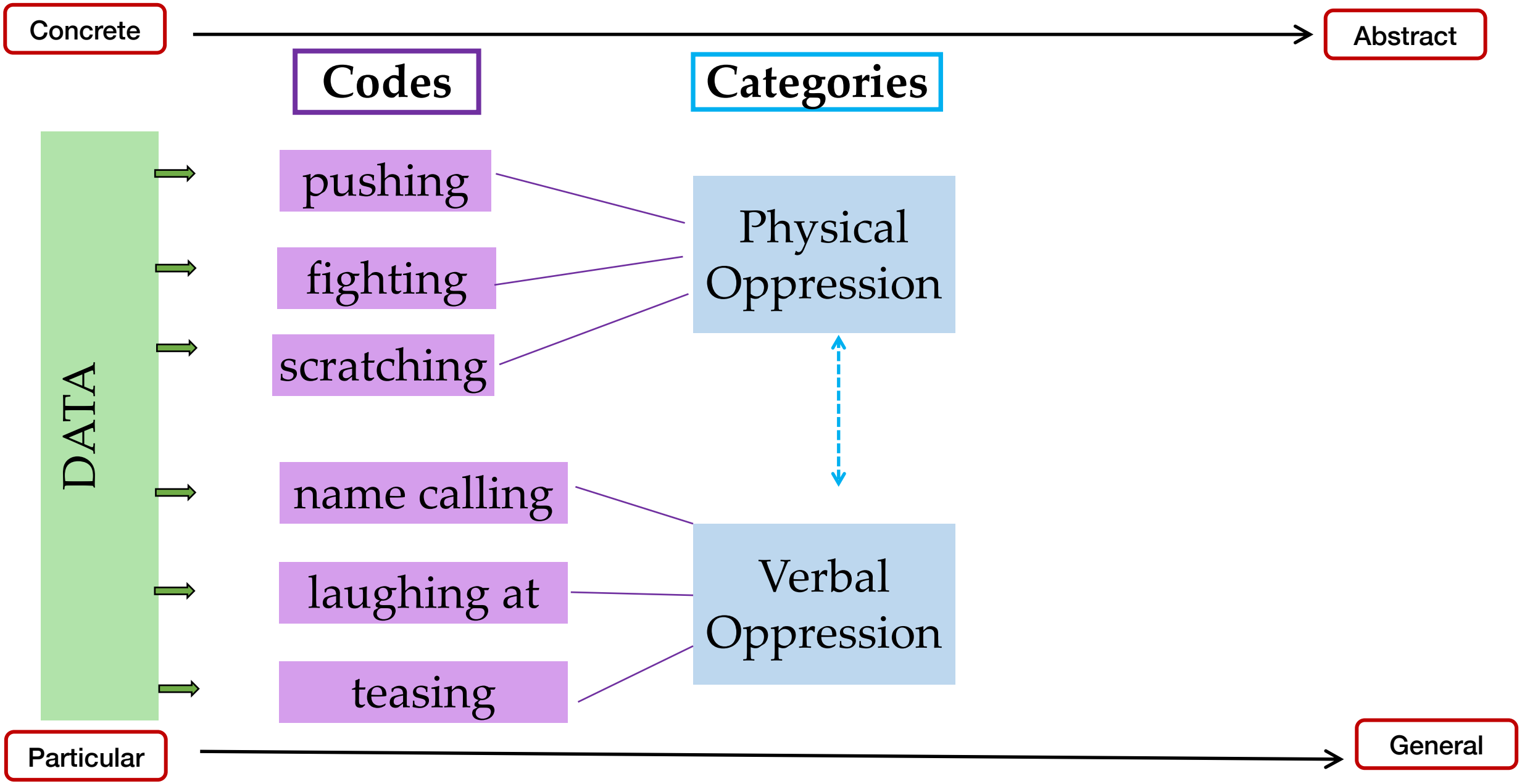
- Composed of codes that '*look alike*' and '*feel alike*'
- Embody and label the patterns from data analyses.

Label

word or short phrase that symbolically assigns a summative, salient, essence-capturing, evocative attribute of the data

Lincoln, Y., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

Example of Categories and codes



Categories and Themes

Category

a word or phrase describing segment of the data that is explicit

→

Theme

a phrase or sentence describing more subtle and tacit processes or meanings

Example

Category

'Happiness'

→

Theme

'Happiness means a strong sense of security'

Foundation Principles

Foundation Principles

- Because each qualitative study is unique, the analytic approach you use will be unique -- which may or may not utilize coding

- Your choice of coding method(s) and even a provisional list of codes might be determined beforehand (deductive) to harmonize with your study's conceptual framework, paradigm, or research goals. Emergent, data- driven (inductive) coding choices are also legitimate

- If needed, you can develop new or hybrid coding methods or adapt existing schemes, customized to suit the unique needs and disciplinary concerns of your study

J. Saldaña

Mechanics of Coding

Coding as a 'Lumper'

I'm not telling you this to depress you or scare you but it was a [1] reality for me.[2] I thought I was so ready for this population because I had taught other groups of kids. But this is such a unique situation, the inner city school. No, I should take that back: It's not as much of a unique situation anymore. There are more and more schools that are turning into inner city schools. . . . I really had to learn about the kids. I had to learn about the culture, I had to learn the language, I had to learn the gang signals, I had to learn what music was allowed, what t-shirts they could wear on certain days and not on other days. There was just a lot to learn that I had never even thought about.

[1] A LOT TO LEARN

J. Saldaña

Coding as a 'Splitter'

[1] I'm not telling you this to depress you or scare you but it was a reality for me. [2] I thought I was so ready for this population because I had taught other groups of kids. But this is such a [3] unique situation, the inner city school. No, I should take that back: It's not as much of a unique situation anymore. There are more and more schools that are turning into [4] inner city schools. . . . [5] I really had to learn about the kids. I had to learn about the [6] culture, I had to learn the language, I had to learn the gang signals, I had to learn what music was allowed, what t-shirts they could wear on certain days and not on other days. There was just [7] a lot to learn that I had never even thought about.

1 REALITY

2 I THOUGHT I WAS SO READY

3 UNIQUE SITUATION

4 INNER CITY SCHOOLS

5 I REALLY HAD TO LEARN

6 THE CULTURE

7 A LOT TO LEARN

J. Saldaña

Analytic Memos

‘Memmoing’ = Reflective writing about:

- How you personally relate to the participants and/or the phenomenon
- Your code choices and their operational definitions
- The participants’ routines, rituals, rules, roles, and relationships
- Emergent patterns, categories, themes, concepts, and assertions
- The possible networks (links, connections, overlaps, flows) among the codes, patterns, categories, themes, concepts, and assertions
- An emergent or related existent theory
- Any problems with the study
- Any personal or ethical dilemmas with the study
- Future directions for the study
- The analytic memos generated so far (‘meta-memos’= memos about memoing ;)
- Tentative answers to your study’s research questions
- The final report for the study

J. Saldana

First Cycle Coding

Re-coding and Re-categorisation

- More than one coding cycle ('coding-recoding')
- Second cycle codes may replace, relabel or remove some of the first cycle codes
- Recoding makes codes and categories more refined, conceptual, and abstract

> [Analysis is like] decorating a room; you try it, step back, move a few things, step back again, try a serious reorganization, and so on
>
> Andrew Abbott, 2004, p. 101.

Abbott, A. (2004). *Methods of Discovery: Heuristics for the Social Sciences*. New York: Norton.

Coding Flexibility

Data are not coded – they are re-coded.
Be willing to change your method(s) if your initial choice(s) is not working

- Coding methods choices may happen not just *before* but even *during* and *after* an initial review of the data, based on emergent or new conceptual frameworks and methodological needs of the study
- Explore variations of coding based on hunch-driven queries, triggered by nothing more than researcher curiosity to explore "what if. . . ?"

J. Saldaña

First cycle coding methods

- **Grammatical methods** → Attribute, Magnitude, Simultaneous Coding, Subcoding
- **Elemental methods** → Structural, Descriptive, InVivo, Process, Initial, Concept Coding
- **Affective methods** → Emotion, Values, Versus, Evaluation Coding
- **Literary & Language methods** → Dramaturgical, Motif, Narrative, Verbal Exchange Coding
- **Exploratory methods** → Holistic, Provisional, Hypothesis Coding
- **Procedural methods** → Protocol, Outline of Cultural Materials, Domain and Taxonomic, Causation Coding

Themeing the data

Descriptive Coding

Assigns labels to data to summarize in a word or short phrase -- most often as a noun -- the basic topic of a passage of qualitative data

Appropriate for virtually all qualitative studies, specifically for beginning qualitative researchers, ethnographies, and studies with a wide variety of data forms.

Describes social environments rather than social action

Examples: BUSINESSES, HOUSES, GRAFFITI

In Vivo Coding

Uses words or short phrases from the participant's own language in the data record as codes.

May include folk or indigenous terms of a particular culture, subculture, or microculture to suggest the existence of the group's cultural categories

Appropriate for virtually all qualitative studies, specifically for beginning qualitative researchers and studies that prioritize and honour the participant's voice

Codes are placed in quotation marks

Examples: "LOVED WORK", "ENJOY CARING," "DON'T KNOW"

Process Coding

Uses gerunds ("-ing" words) exclusively to connote observable and conceptual action in the data

Processes also imply actions intertwined with the dynamics of time, such as things that emerge, change, occur in particular sequences, or become strategically implemented

Appropriate for virtually all qualitative studies, specifically for *grounded theory research* that extracts participant action/interaction and consequences

Part of and employed in other grounded theory methods (Initial, Focused, Axial, and Theoretical Coding)

Examples: TELLING TRUTH, ACCEPTING HELP, HOLDING TOGETHER

Emotion Coding

Labels the emotions recalled and/or experienced by the participant, or inferred by the researcher about the participant

Processes also imply actions intertwined with the dynamics of time, such as things that emerge, change, occur in particular sequences, or become strategically implemented

Appropriate for virtually all qualitative studies, specifically for those that explore *intrapersonal and interpersonal* participant experiences and actions

Provides insight into the participants' perspectives, worldviews, and life conditions

Examples: EXITED TO LEARN, HAPPY FACE, DISCOVERY

Values Coding

Reflects participants' values, attitudes, and beliefs, representing their perspectives or worldview

Value--importance we attribute to oneself, another person, thing, or idea.
Attitude--the way we think and feel about oneself, others, things, or ideas.
Belief --includes values and attitudes, personal knowledge, experiences, opinions, prejudices, morals, and other interpretive perceptions of the world

Appropriate for virtually all qualitative studies, specifically for those that explore cultural values, identity, intrapersonal and interpersonal participant experiences and actions in *case studies*, *appreciative inquiry*, *oral history*, and *critical ethnography*

Examples: SUCCESS, BRIGHT FUTURE, PRACTICE MAKES PERFECT

Versus Coding

Identifies in dichotomous or binary terms the individuals, groups, social systems, organizations, phenomena, processes, concepts, etc. in direct conflict with each other

Represents a duality as a "X VS. Y" code

Appropriate for policy studies, discourse analysis, critical ethnography, action and practitioner research, and qualitative data sets that suggest strong conflicts, injustice, power imbalances, or competing goals within, among, and between participants

Examples: IMPOSSIBLE VS. REALISTIC; STATE VS DISTRICS; YOUR WAY VS OUR WAY; LEADER VS EMPLOYEE

Dramaturgical Coding

Applies the terms and conventions of character, play script, and production analysis to qualitative data

Include such items as participant objectives (OBJ), conflicts (CON), tactics (TAC), attitudes (ATT), emotions (EMO), and subtexts (SUB)

Appropriate for exploring intrapersonal and interpersonal participant experiences and actions in case studies, *power* relationships, and the processes of *human motives and agency*

Examples: OBJ: CONFRONT; TAC: ADMONISH; ATT: IRONIC.

Causation Coding

Extracts attributions or causal beliefs from participant data about not just how but why particular outcomes came about

Searches for combinations of antecedent and mediating variables that lead toward certain pathways

Attempts to map a three-part process as a CODE 1 > CODE 2 > CODE 3 sequence

Appropriate for discerning motives, belief systems, worldviews, processes, recent histories, interrelationships, and the complexity of influences and affects on human actions and phenomena; as preparatory work before *diagramming* or *modeling* a process through visual means such as decision modeling and causation networks. May serve *grounded theorists* in searches for causes, conditions, contexts, and consequences.

Examples: SUCCESS + HARD WORK REWARDS + GOOD COACH > CONFIDENCE

Theming the Data

Theme → An extended phrase or sentence that identifies what a unit of data is about and/or what it means

Functions as a way to categorize a set of data into "an implicit topic that organizes a group of repeating ideas" (Auerbach & Silverstein)

Analytic goal to derive the number of themes to explore; develop an overarching theme from the data corpus, or an integrative theme that weaves various themes together into a coherent narrative

Serves phenomenology, the study of lived experiences

After
First Cycle Coding

Code Landscaping

Similar to World Clouds (www.wordle.net) and Tags

Code Landscaping

as a Narrative's Outline

Lifelong Living and Loving

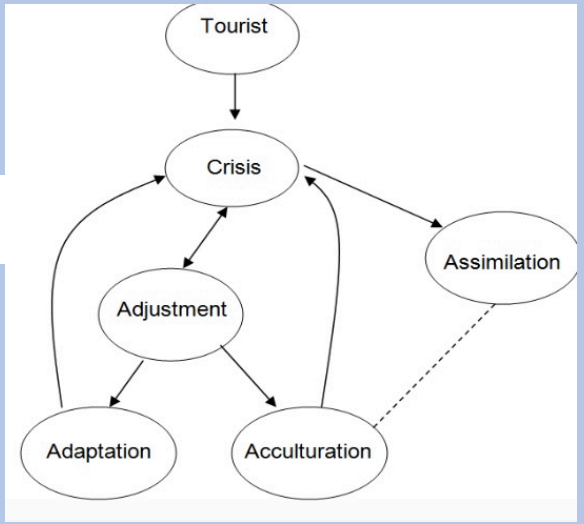
> Even though I'm not currently doing theatre, I still feel an element of the theatrical in my bones. It comes out in my personality from time to time. Working in theatre in high school actually helped me become alive as a human being as well as a student. (Male, Adjunct Professor of Art, High School Class of 1978)

This category is composed of the affective, intra-, and interpersonal domains of learning. Like earlier survey findings, some respondents noted the lifelong friendships that were initiated during their high school years. But also prominent here is the formation of one's personal identity. Theatre and speech were opportunities to discover one's talents and strengths, and thus to find one's focus or purpose:

as a Chart

Participant	Observation Summary	Primary Codes
Geniene	Gentle spirit with her class, maintains an atmosphere conducive to arts learning. Participates with children in activities. University minor in dance. Welcomes arts experiences, supportive of artists-in-residence.	EMBRACES ART ARTIST'S SENSIBILITY PARTICIPATES WELCOMING
Andrea	Perceives some value to the classroom activities, but wants more arts integration with "traditional" curriculum (math, language arts, etc.). Concerned about children's ability to focus on arts activities. Has a collegial quality about her and the artists-in-residence.	CURRICULUM-BASED "TRADITIONAL" COOPERATIVE
Martha	Concerned about arts experiences taking up class time. Intervenes a lot when artists-in-residence have management issues with children. Visitors inherit Martha's classroom dynamics and culture. Lots of cliques among the children.	MISMANAGED CLASS FRACTURED COMMUNITY CONTROLLING

as a Model



Second Cycle Coding

Second Cycle Coding

Goal– to develop a sense of categorical, thematic, conceptual, and/or theoretical organization from your first cycle codes

Requires analytic skills— classifying, prioritizing, integrating, synthesizing, abstracting, conceptualizing, and theory building

Types of 2nd Cycle Coding

- Pattern Coding
- Focused Coding
- Axial Coding
- Theoretical Coding
- Elaborative Coding
- Longitudinal Coding

Second Cycle Coding

Pattern Coding	Groups codes into sets, constructs, or themes
Axial Coding	Clusters codes to integrate their categories
Elaborative Coding	Categorizes according to the codes' properties and dimensions
Focused Coding	Condenses into a few words (a core/central category) what the research is all about (for grounded theory)
Theoretical Coding	Codes with the constructs of a previous study to build on it
Longitudinal Coding	Codes data to assess changes through time

After
Second Cycle Coding

Analytic Outcomes

After you've applied **first cycle methods** (several times),
and
second cycle methods (several times),
you have one or several:

- major categories
- major themes
- concepts
- theory
- through-line
- assertions and key assertion
- primary narrative

etc.

J. Saldana

From coding to theorizing

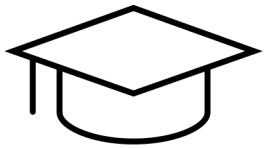
Characteristics of a social science theory

- predicts and controls action through an if-then logic
- accounts for variation in data and/or outcomes
- explains how and/or why something happens by stating its cause(s)
- provides insights and guidance for improving social life

Theory

- Is practical, elegant statement that proposes a way of living or working productively
- Many theories are provisional; thus, language should support the tentative nature of our proposals (e.g., “may occur,” “tend to”)
- Is not so much a story as much as it is a proverb, a condensed lesson of wisdom we formulate from our experiences that we pass along to other generations

J. Saldana



Qualitative research is a mindset,
and here we are making it grow

Tamara Savelyeva

Cite this Power Point presentation:

Savelyeva, T 2022, *'Coding and Analysis'* [Power Point Presentation], Qualitative Research Methods HKBM7003, University of Wales Trinity Saint David-Hong Kong Management Association

Tamara Savelyeva
© 2022