

Coding in Qualitative Research

June 3, 2021

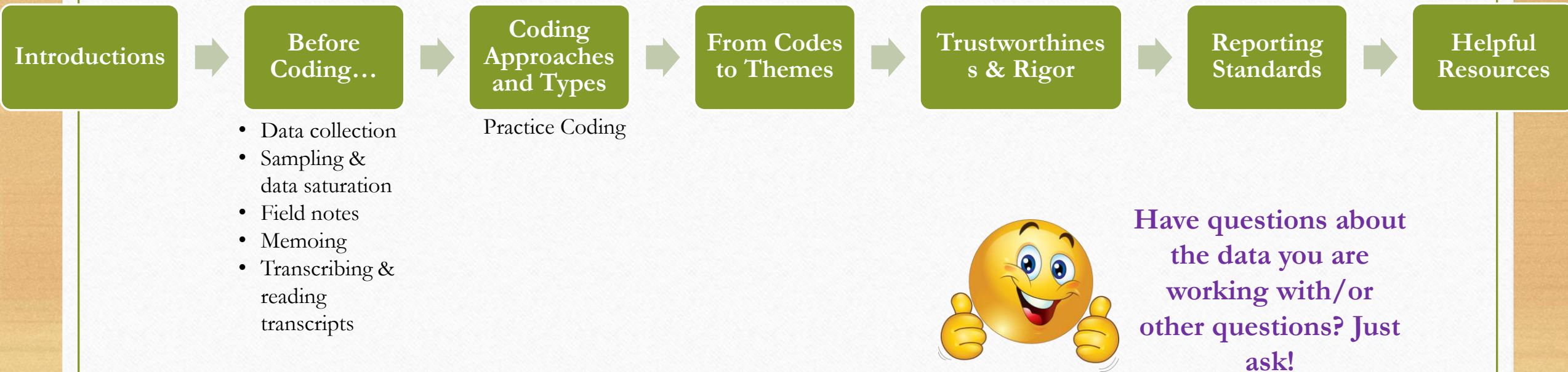
9am-11am

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TO DO, TODAY!



Who are YOU?

- Name
- School/Department
- Currently working on/developing a qual project?



Sampling & Data Saturation

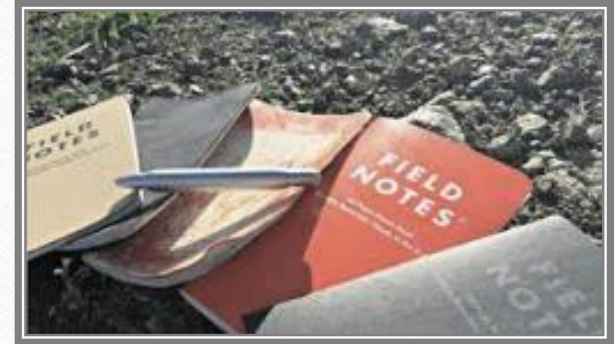
- Too small sample & data are not saturated → results would be superficial & cherry picking
- Lack of variation & depth → not adequately represent the phenomenon
- High impact journals usually look for 20+ interviews for publication

Data Collection

- There are many ways to collect data, some include:
 - Interviews
 - Focus Groups
 - Documents/records (e.g., online caregiver support group content, Facebook)
 - Observations
 - Nominal Group Technique

Fieldnotes

- Record behaviors, activities, events and other happenings in the setting
- Note your feelings, reactions, and reflections about the experience
- Note your interpretations about what is happening in the setting



Fieldnotes

Field note tips:

- Write as soon as you can
- Take notes in the setting
- Fill in details in your notes as needed
- Ensure your field notes are clear/understandable
- Use pseudonyms for names, locations, etc.



Fieldnotes: What to note?

- Date, time, weather, location
 - The setting (what it looks like, a map, etc.)
 - Participant characteristics (e.g., age, gender, and race)
 - Activities you are observation such as interactions between people in the setting
- *No judgement - be descriptive*



Fieldnotes: Example

During demographic data collection, the patient indicated he is married but separated for “years and years.” She (his wife) has her own family, and he has his. The circumstances are unclear, but the patient indicated they are amicable, and his wife will apparently keep in touch or check on him. In addition, he told me how he never went to school growing up.

He does have rheumatoid arthritis (presumably) that’s very bad in one of his hands/dominant hand, thus making it difficult for him to write. His daughter indicated that he has literacy issues but knows how to write his name.

Memoing

- Document your thoughts throughout the data collection and analysis process.
- When you get a thought/idea, jot it down! Abby's "small book" method.

January 17, 2011

PATTERN: INTRINSIC AND EXTRINSIC

One of the most striking contrasts between survey respondents who graduated in the 2000s and in the 1950s–1970s is what they seem to value about the experiences. More recent graduates wrote about those intangible, intrinsic outcomes such as “camaraderie,” “self-discovery,” and identity, while the older generations put more stock into awards, specific roles they played, and what they’ve accomplished over their life course. I wonder if just being recently graduated from high school means that the memories are fresher about those internal experiences, and so it’s going to be more in your head. As someone who’s from the older generation, I know that I myself put a lot of stock into my own legacy, those tangible things that are evidence of what I’ve accomplished.

Ironically, I would have thought the older generations would have been more reflective and internal about those memories, more nostalgic, while the younger “me” generation would have valued awards, letter jackets, etc. Maybe it has something to do with human development—when you’re in your late teens and early twenties, you’re still trying to figure out “Who am I?” So, you’re still looking within and exploring what’s really important to you.

(Miles, Huberman, and Saldana, 2020, p. 89)

Transcribing & Reading Transcripts

- Can be *time intensive*. A 90 min interview can take ~8 hours to transcribe
- Re-listen to the audio to fill in unclear passages or to correct errors
- Transcribe nonverbal utterances (e.g., sigh, sobs, laughter); nonverbal cues = information
- Deliver what the participants say, don't edit their language even if it is inappropriate. If you need to clarify use [] after the word(s)

Transcribing & Reading Transcripts

- Participants' full name, or others referred to should not be in the transcript.
Confidentiality!
- TIP: Have a lot of transcribing to do? Get a foot pedal and use transcription software
- Companies that complete transcription for you can be helpful but check their work!

Transcribing & Reading Transcripts

- Use a key so others reading your transcript understand your notations

Overall note. I tried my best to identify each voice as unique and this is reflected as R1, R2, R3, etc. In some cases it was difficult to disentangle whose voice belonged to who, however, most importantly, the content is transcribed.

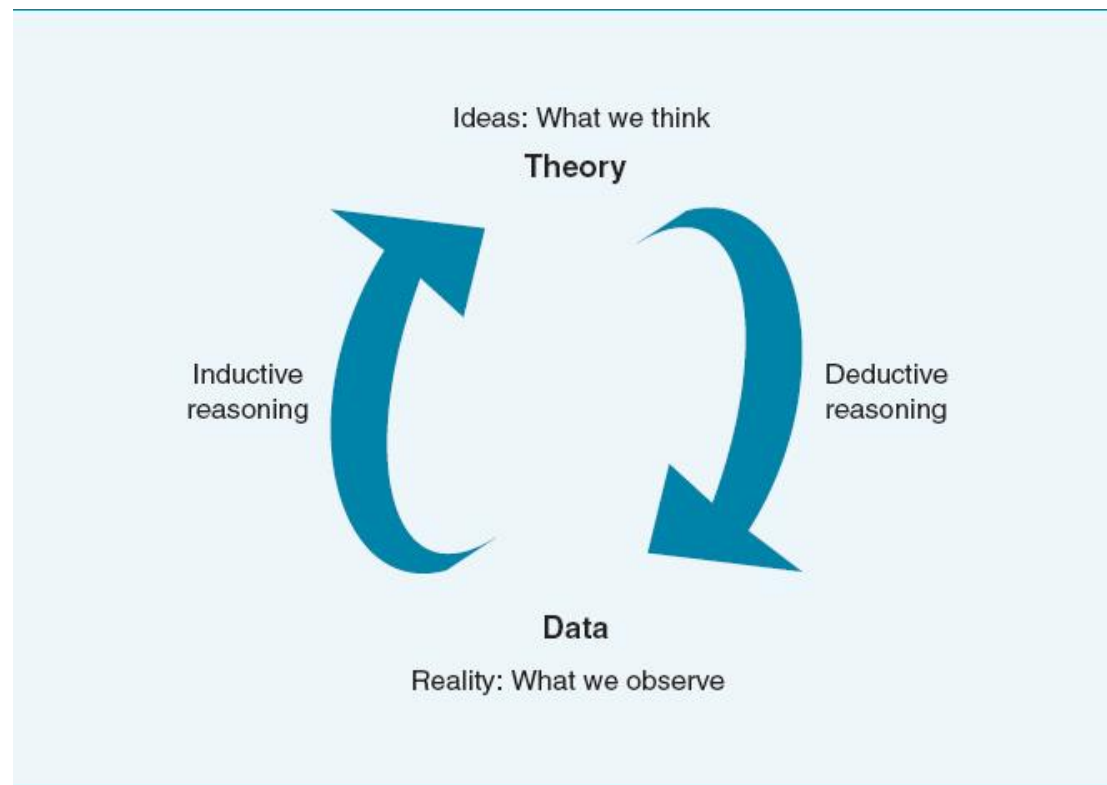
I: Abby
R: CG
_: Missing word
(?): Not sure correct word
Italics: transcriptionist comments
- : Abrupt stop in speaking

A: Abby
R: Respondents
L: Lauren
Al: Allen
_: Missing word
CAPS: emphasis on word(s) spoken
Italics: transcriptionist comments
- : Abrupt stop in speaking
(?): Uncertain if the word is correct

Transcribing & Reading Transcripts

Reading the transcripts

- When your transcripts are done you should read them multiple times to familiarize yourself with the data
- Take notes while reading: what is happening here? what is important?
- Reflective thinking: memo your thoughts, insights, reflections, etc.



<https://methods.sagepub.com/book/research-methods-in-education/i196.xml>

Overall Approaches to Coding

Concept driven (deductive)

Vs.

Data-driven (inductive)

Overall Approaches to Coding:

Concept Driven Coding

- Deductive coding
- Codes are developed before the coding process begins. You then look for those ideas in the text of your transcripts
 - Codes could be based on an interview guide
 - Codes developed based on theory or existing literature

(Linneberg & Korsgaard, 2019; Gibbs, 2007)



Overall Approaches to Coding: Data-Driven Coding

- Inductive Coding
- No pre-developed system of codes
- Let the words “speak for themselves,” and then construct coding structure based on your review
- Starting from “scratch”

You may use BOTH approaches or go back and forth between both in the analysis process!

(Linneberg & Korsgaard, 2019; Gibbs, 2007)

What are codes?

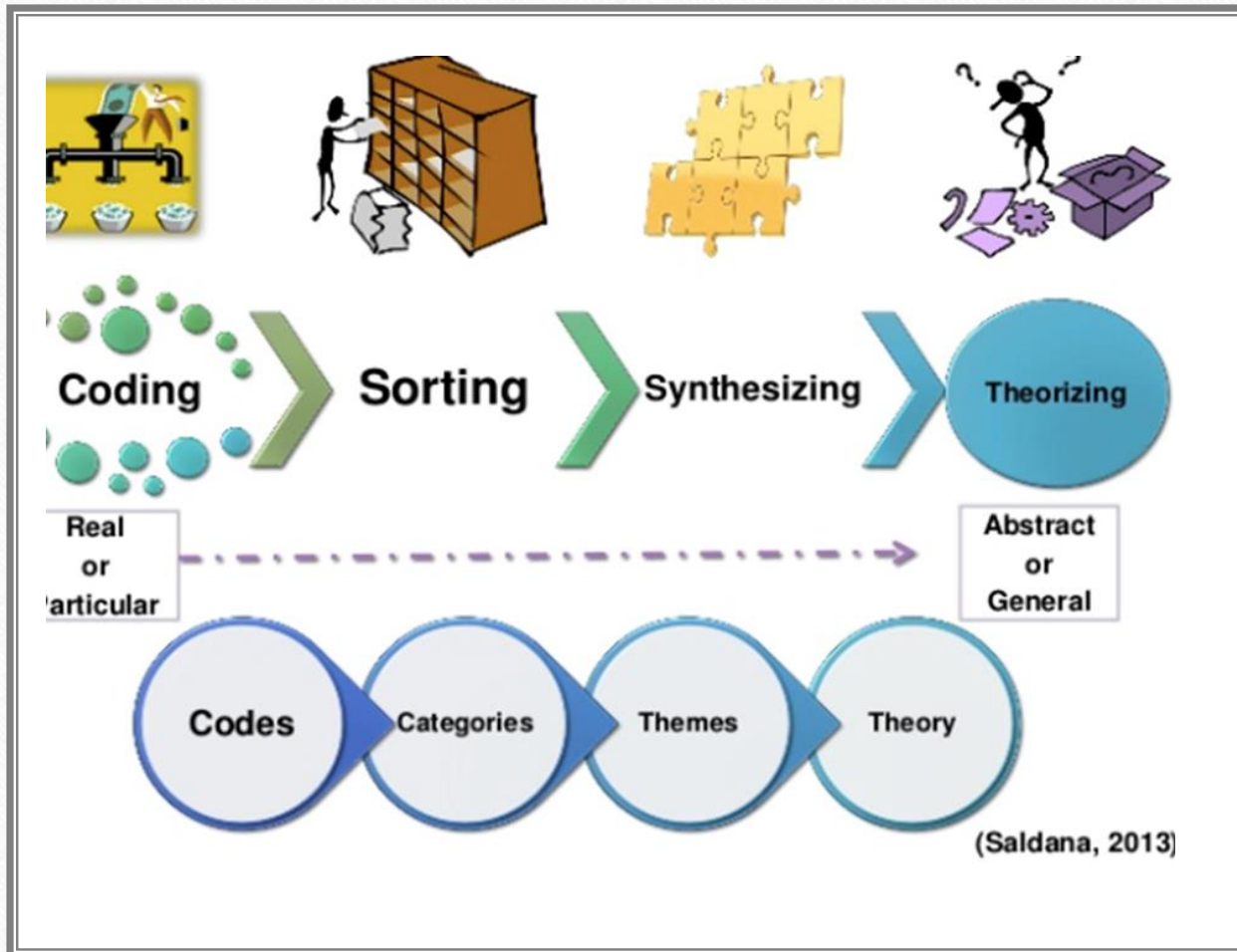
- Coding: The process of naming or labeling the data, categories, & properties
- Words, phrases, meaning units- repeated in the data
- When coding, be sure to highlight enough text so that you understand why you coded a section the way you did

¹I notice that the grand majority of homes have chain link fences in front of them. There are many dogs (mostly German shepherds) with signs on fences that say, 'Beware of the Dog.'

(Saldana, 2013, p. 4)

¹ SECURITY

Coding Process



- Codes: divide text into a word or phrase/label
- Categories (subcategories): sort the codes into categories based on how different codes are related
- Themes: identify a central category & relate it to other categories
- Coding process: code → categories → themes

<http://web.colby.edu/global-elites/2018/11/13/a-first-time-coder-the-struggles-of-coding/>

Coding by Qualitative Design

- Several types of qualitative approaches/designs
- Ethnography, Phenomenology, Grounded Theory, Narrative Research, Case Study, Qualitative Descriptive
- We will go through an example “chunk” of data, and code it together as if it were a Grounded Theory study

Coding by hand or using software?

It's your call!

- Software is not required for qualitative data analysis
- Can code using highlighters, colored pencils, or color-coding in Word (highlight function, type in codes)
- Software helps with sorting by codes and by subgroups across interviews (e.g., NVIVO, Atlas.ti)
- Software also calculate inter-coder agreement

Types of Codes

- There are MANY types of codes– it can be overwhelming! We will discuss *some* types of codes
- Open/Initial Coding Process
 - In vivo
 - Descriptive
 - Subcoding

} First cycle coding methods
- Grounded Theory Coding Process
 - Open
 - Axial
 - Selective

} Second cycle coding methods

Open Coding Process

- Getting the “lay of the land” and remaining OPEN to the possibilities of your data, not restricted by the literature, a theory, etc.
- Line-by-line, paragraphs, segments
- All codes are tentative and provisional- may be reworded as analysis progresses (Saldana, 2013, p. 101).
- During open coding, can employ *in vivo*, *process*, or other types of first cycle codes.

Types of Codes: In Vivo

- Using respondents' exact words as a code – “verbatim coding”, “emic coding” (Saldana, 2013)
- Allows you to stay close to the data

I ¹hated school last year. Freshman year, it was awful, I hated it. And² this year's a lot better actually. I, um, don't now why. I guess, over the summer I kind of³ stopped caring about what other people thought and cared more about, just, I don't know.

(Miles, Huberman, & Saldaña, 2020, p. 65)

¹ “HATED SCHOOL”

² “THIS YEAR'S A LOT BETTER”

³ “STOPPED CARING”

Types of Codes: Descriptive

- Label data in word or short phrase – basic topic
- Can use with interview data but also field notes, observational notes, etc.

Upon entering the unit, I was in the living room area. It had two couches and a large standing TV. There was a pregnant woman sitting on one couch with a 2-year-old boy. I sat on the other couch perpendicular to them. I introduced myself and we didn't speak much. About 10 minutes later the caregiver walked in and we greeted each other...

During our interview she received a phone call from her boyfriend and ran out to bring him cash. Later, he came into the kitchen. He was a very tall lean man. Her father, the patient also popped into the kitchen, and I said hello and introduced myself and said I looked forward to speaking with him Thursday when I came back for his interview. He was wearing pajamas was also tall and was thin. The boyfriend came back in another time holding the little boy...

Overall, it seemed like the caregiver runs this house, the people popping in and out of the kitchen during our interview indicated that she is the woman with the answers. I also learned that the young pregnant woman is one of her son's girlfriends, so I assumed the other gentleman was her son.

Her sister's *name* who no longer helps care give for her dad also lives there. I was unsure who else lived in the home other than the caregiver, patient, and *name*. However, the people who I met amounted to 7 individuals. The unit was quite small, so I'm not sure how that many people could live there, but perhaps some were visiting and lived somewhere else.

Types of Codes: Subcoding

- Second tag assigned after primary code for detail
- Helpful when general code entries later need to be categorized, subcategorized, etc.

¹The school's multipurpose room functions as a cafeteria, auditorium, assembly space, meeting space, and study hall. Its portable tables with attached seating fold up easily for somewhat quick transformation and cleaning of the space. ²The adjoining media center houses books, a computer lab with 26 stations, study "nooks" for small groups, and various tables and chairs. A large screen and LCD projector suspended from the ceiling make the space look like a private movie theater.

¹SCHOOL-MULTIPURPOSE SPACE

²SCHOOL-MEDIA CENTER

(Miles, Huberman, & Saldaña, 2020, p. 72)

Examples of Open Coding Process

What types of codes and processes (e.g., line-by-line) are used in this example?

I: Oh ok, and then what happens if you're after- if you can't pay them?

R: They'll normally still see her, but and then just try to put us on a payment plan. So, they'll they'll work with us.

payment plan for health bills

I: That's good. I ask cause I didn't know so it's helpful for me to know.

R: Yeah.

I: Um, what has been most helpful to you through all of this?

R: Mmm, the doctor's the support, like *name* over in Leo Jenkins she's really a good help. Um, the nurse is pretty good. Yeah.

I: Is there anything um, that would be particularly helpful for you and for your mom that could really kinda help you with all of this, this is a lot.

R: Transportation wise. That's the biggest part too. Cause I be takin' all of my bill money sometimes to come up here.

I: So, what happens when you take it out of your bill- does that mean that you're then not paying bills?

R: And I try to go look for other sources or ask for help, to put toward my bills.

It takes time to get to treatment

cost of gas

Examples of Open Coding Process

What types of codes and processes (e.g., line-by-line) are used in this example?

TIFFANY: ⁶ Almost everybody in my grade. No, in school. And so there are ⁷ certain people that I've just been ⁸ friends with since forever. And then it's ⁹ not fair of me to stereotype either, like, say, "Oh well, like, the ¹⁰ really super popular pretty girls are all mean and ¹¹ they're all snobby and they all talk about each other," ¹² 'cause they don't. Some of them, some of them don't. And ¹³ those are the ones I'm friends, friends with. And then there are the, there are the ¹⁴ geeky people. ¹⁵ Some of them though, the geeks at our school, aren't like harmless geeks. They're like ¹⁶ strange-psycho-killer-geek-people-who-draw-swastikas-on-their-backpacks ¹⁷ kind of geeks.

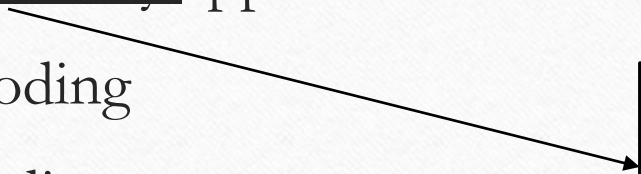
⁶ QUALIFYING: "ALMOST"
⁷ FRIENDS WITH "CERTAIN PEOPLE"
⁸ FRIENDS WITH "SINCE FOREVER"
⁹ "NOT FAIR TO STEREOTYPE"
¹⁰ LABELING: "REALLY SUPER POPULAR PRETTY GIRLS"
¹¹ IDENTIFYING STEREOTYPES
¹² DISPELLING STEREOTYPES
¹³ CHOOSING FRIENDS: "SUPER POPULAR PRETTY GIRLS"
¹⁴ LABELING: "GEEKY PEOPLE"
¹⁵ QUALIFYING: "SOME OF THEM"
¹⁶ LABELING: "STRANGE-PSYCHO-KILLER-GEEK"
¹⁷ QUALIFYING: "KIND OF"

(Saldaña, 2013, p. 102)

Grounded Theory Analysis/Example

Practicing qualitative data analysis and 3 phrases of coding associated with Grounded Theory approach:

1. Open coding
2. Axial coding
3. Selective coding



Study of people's experience with a process and use the data collected to create a theory regarding how the process functions.

Ex: How people adapt to life with disability .

The theory is generated “grounded” in data that is collected and analyzed

Example: Transcript Excerpt

R: Right. Well in 2008 I was diagnosed with- it's funny because I've been diagnosed with cancer 3 times and all 3 times I was misdiagnosed. First time I was living in New Jersey, and I felt a lump in my breast, and I went to have a mammogram and they said, "no it's not cancer." But it was still sore, and the lump was still there, so I went back a second time 6 months later and they said, "No it's not cancer, it's dried up milk ducts." So, I moved down here, and I went to um, the breast imaging in city name they did a mammogram they said, "No it's just dried up milk ducts, it's not cancer" so I said, "but it's sore and it's getting bigger." So, they said, "Ok, we'll send you to name of cancer center for a biopsy." They sent me to cancer center did the biopsy right there, told me they had breast cancer stage 4.

R: So, then I had radiation, chemotherapy, and surgery bilateral mastectomy both breasts removed ok. So later on, that same year while I was still under radiation for the breast cancer, I discovered that I had endometrial cancer. Again, I had soreness there, I felt the lump, I went to the doctor, said 'oh no, it's scars from a previous surgery, it's not cancer." But it was sore, I kept goin' - I went back a second time, they said "no, it's not cancer, it's scar tissue from old surgery." So, one morning I woke up, my daughter never takes off work, but this morning for some reason, the lord, she took off work that morning, and when I got up, I didn't know she was home, I got up I pulled the sheet back I'm covered in blood.

Data Analysis: Open Coding

Text	Open Coding	Axial Coding
<p>R: Right. Well in 2008 I was diagnosed with- it's funny because I've been diagnosed with cancer 3 times and all 3 times I was misdiagnosed. First time I was living in New Jersey, and I felt a lump in my breast, and I went to have a mammogram and they said, "no it's not cancer." But it was still sore, and the lump was still there, so I went back a second time 6 months later and they said, "No it's not cancer, it's dried up milk ducts." So, I moved down here, and I went to um, the breast imaging in city name they did a mammogram they said, "No it's just dried up milk ducts, it's not cancer" so I said, "but it's sore and it's getting bigger." So, they said, "Ok, we'll send you to name of cancer center for a biopsy." They sent me to cancer center did the biopsy right there, told me they had breast cancer stage 4.</p> <p>R: So, then I had radiation, chemotherapy, and surgery bilateral mastectomy both breasts removed ok. So later, that same year while I was still under radiation for the breast cancer, I discovered that I had endometrial cancer. Again, I had soreness there, I felt the lump, I went to the doctor, said 'oh no, it's scars from a previous surgery, it's not cancer." But it was sore, I kept goin' - I went back a second time, they said "no, it's not cancer, it's scar tissue from old surgery." So, one morning I woke up, my daughter never takes off work, but this morning for some reason, the lord, she took off work that morning, and when I got up, I didn't know she was home, I got up I pulled the sheet back I'm covered in blood.</p>		

Types of Codes: Axial

Open Coding → After Axial Coding



- Draw connections between codes
- Organize codes you made during open coding
- Find relationships among codes, then group them into categories

<https://delvetool.com/blog/axialcoding>

Data Analysis: Axial Coding

Text	Open Coding	Axial Coding
<p>R: Right. Well in 2008 I was diagnosed with- it's funny because I've been diagnosed with cancer 3 times and all 3 times I was misdiagnosed. First time I was living in New Jersey, and I felt a lump in my breast, and I went to have a mammogram and they said, "no it's not cancer." But it was still sore, and the lump was still there, so I went back a second time 6 months later and they said, "No it's not cancer, it's dried up milk ducts." So, I moved down here, and I went to um, the breast imaging in city name they did a mammogram they said, "No it's just dried up milk ducts, it's not cancer" so I said, "but it's sore and it's getting bigger." So, they said, "Ok, we'll send you to name of cancer center for a biopsy." They sent me to cancer center did the biopsy right there, told me they had breast cancer stage 4.</p> <p>R: So, then I had radiation, chemotherapy, and surgery bilateral mastectomy both breasts removed ok. So later, that same year while I was still under radiation for the breast cancer, I discovered that I had endometrial cancer. Again, I had soreness there, I felt the lump, I went to the doctor, said 'oh no, it's scars from a previous surgery, it's not cancer." But it was sore, I kept goin' - I went back a second time, they said "no, it's not cancer, it's scar tissue from old surgery." So, one morning I woke up, my daughter never takes off work, but this morning for some reason, the lord, she took off work that morning, and when I got up, I didn't know she was home, I got up I pulled the sheet back I'm covered in blood.</p>		

Data Analysis: Selective Coding (1)

- Integration of all categories
- Grouped around a core category
- Decide a “story line” or form a theory that describes the interrelationships of the categories

*Remember: Keep your research question(s) in mind as you begin to develop your story based on categorization

(Creswell, 2007)

Data Analysis: Selective Coding

Text	Axial Coding	Selective Coding
<p>R: Right. Well in 2008 I was diagnosed with- it's funny because I've been diagnosed with cancer 3 times and all 3 times I was misdiagnosed. First time I was living in New Jersey, and I felt a lump in my breast, and I went to have a mammogram and they said, "no it's not cancer." But it was still sore, and the lump was still there, so I went back a second time 6 months later and they said, "No it's not cancer, it's dried up milk ducts." So, I moved down here, and I went to um, the breast imaging in city name they did a mammogram they said, "No it's just dried up milk ducts, it's not cancer" so I said, "but it's sore and it's getting bigger." So, they said, "Ok, we'll send you to name of cancer center for a biopsy." They sent me to cancer center did the biopsy right there, told me they had breast cancer stage 4.</p> <p>R: So, then I had radiation, chemotherapy, and surgery bilateral mastectomy both breasts removed ok. So later on, that same year while I was still under radiation for the breast cancer, I discovered that I had endometrial cancer. Again, I had soreness there, I felt the lump, I went to the doctor, said 'oh no, it's scars from a previous surgery, it's not cancer." But it was sore, I kept goin' - I went back a second time, they said "no, it's not cancer, it's scar tissue from old surgery." So, one morning I woke up, my daughter never takes off work, but this morning for some reason, the lord, she took off work that morning, and when I got up, I didn't know she was home, I got up I pulled the sheet back I'm covered in blood.</p>		

Data Analysis: Themes

- Themes are outcomes of the coding and categorization process.
- ...“think of a category as a word or phrase describing some segment of your data that is explicit, whereas a theme is a phrase or sentence describing more subtle and tacit processes” (Rossman and Rallis, 2003, p. 282, as cited in Saldana, 2013)
- “Themes ‘cluster’ or form patterns” (Munhall, 2007, p. 317)

Data Analysis: Themes

TABLE 17-2 Examples of Themes, Subthemes, Categories, and Classes of Responses

Theme	Subtheme	Category	Class
Definitions	Oneself and one's own life	Self as caregiver	Active agent
			Thwarted agent
			Victim
			Ambiguous
			Ambiguous
	Recipient and relationship	Evaluation of recipient	Life better
			Life the same
			Life worse
			Ambiguous
			Ambiguous
		Current relationship	Normal and ordinary
			Absolved
			Unworthy
			Ambiguous
			Ambiguous
	Caregiving	Own view	Reciprocal
			Role reversal
			Antagonistic
			Custodial
			Ambiguous
Management activities	Managing care	Priorities	Pleasure
			Normal responsibility
			Challenge
			Identity
			Burden
	Day-to-day care		Ambiguous
			Policing
			Assessing
			Negotiating
			Mixed or ambiguous
		Positive strategies	Learning the ropes
			Established routines
			Anticipated crises
			Perpetual crisis
			Ambiguous
	Managing own affect		Avoidance
			Distraction
			Reframing
			Processing
			Prayer

(Munhall, 2007, p. 429)

Table 9.5 A Sample Process for Developing Themes

- Read all of your coded data.
- Begin to group and combine (and possibly delete) codes.
 - As you do this, analyze your codes and develop themes.
 - Consider overlaps, disjunctures, patterns, and what they tell you about the data.
 - These themes may have the same names as your codes, or they may be different.
- Document these themes, what they mean, and what codes went into them in memos.
 - Look to your research questions for the relationship of codes to themes.
 - Look to theory as a framework to analyze data in thematic ways.
- Re-revisit and recode your data with your themes.
 - Determine what is missing.
 - Generate subthemes.
- Tell the story of your themes in writing.
 - Include data that support your themes.
 - Explain how your themes fit into the broader understanding of your data.
 - Explain the relationship of the themes to your research questions.
 - Consider the various ways that theory can inform the themes.
- Throughout these processes, write memos to make sense of your emerging understandings and discuss these with thought partners and advisers as needed.

(Ravitch & Carl, 2021, p. 284)

Data Analysis: Themes

Text	Axial Coding	Themes
<p>R: Right. Well in 2008 I was diagnosed with- it's funny because I've been diagnosed with cancer 3 times and all 3 times I was misdiagnosed. First time I was living in New Jersey, and I felt a lump in my breast, and I went to have a mammogram and they said, "no it's not cancer." But it was still sore, and the lump was still there, so I went back a second time 6 months later and they said, "No it's not cancer, it's dried up milk ducts." So, I moved down here, and I went to um, the breast imaging in city name they did a mammogram they said, "No it's just dried up milk ducts, it's not cancer" so I said, "but it's sore and it's getting bigger." So, they said, "Ok, we'll send you to name of cancer center for a biopsy." They sent me to cancer center did the biopsy right there, told me they had breast cancer stage 4.</p> <p>R: So, then I had radiation, chemotherapy, and surgery bilateral mastectomy both breasts removed ok. So later, that same year while I was still under radiation for the breast cancer, I discovered that I had endometrial cancer. Again, I had soreness there, I felt the lump, I went to the doctor, said 'oh no, it's scars from a previous surgery, it's not cancer." But it was sore, I kept goin' - I went back a second time, they said "no, it's not cancer, it's scar tissue from old surgery." So, one morning I woke up, my daughter never takes off work, but this morning for some reason, the lord, she took off work that morning, and when I got up, I didn't know she was home, I got up I pulled the sheet back I'm covered in blood.</p>		

Data Analysis: Selective Coding Leading to Themes

Theme 1: Cancer diagnosis & treatment

- Misdiagnosis
- Diagnosis (breast, endometrial, & bone cancer)
- Treatment (e.g., radiation, chemo, surgery)

Theme 2: Social support across the cancer experience

- Family support (e.g., daughter & grandson)
- Friends' support (e.g., friends' ride for treatments/appts)
- Church support (e.g., prayer chain)

Developing a Codebook

- Dictionary or guidebook of all codes in project
- Provides
 - guidelines for consistent coding across coders
 - name of the code
 - definition/description of the code
 - example of text excerpt that represents the code

Codebook Example

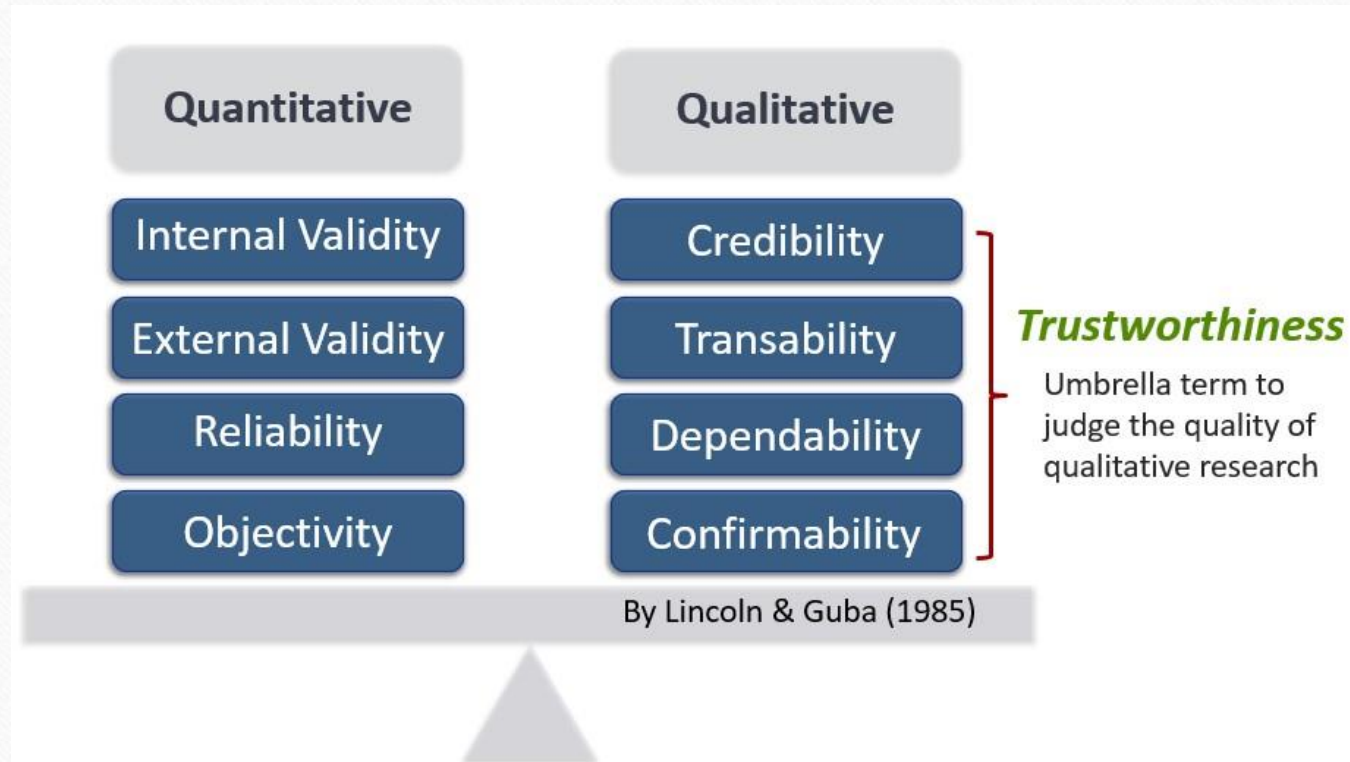
Code	Description	Example
Satisfaction	Satisfaction with amount or type of exercise. Also applies to enjoyment of exercise. Can be used positively (am satisfied) or negatively (am not satisfied).	"I wish I could exercise more." / "A lot of my exercise was fun, so I enjoyed it. It didn't feel like exercise."
Reasons for exercise	Reasons participants choose to exercise, or would like to exercise more. Use for reasons that influence long term or short term exercise goals. Do not use for motivational factors that might influence a person to workout on any given day.	"It makes me feel a lot better, emotionally as well as physically. And then...the health benefits are up there"
Motivation to exercise	Drive to engage in exercise. Applies to factors that cause a participant to follow through on their intention to exercise. Can be used positively (am motivated) or negatively (am not motivated).	"...after a long day of work I just don't feel like going"
Barriers	Factors that keep a participant from exercising. Applies to people, e.g. family members who discourage exercise, or situations, e.g. lack of time to exercise.	"Well, since I'm kinda in the process of moving I cancelled my gym membership. So with that I haven't really been exercising."
Facilitators	Factors that enable exercise. Applies to people, e.g. family members who encourage exercise, or situations, e.g. access to a gym.	"I have a little bit more time on my schedule to be able to go to the gym and pay for my gym membership " / "when I was living with a roommate, we...had a fairly consistent workout routine"

Inter-coder Agreement/Intercoder Reliability

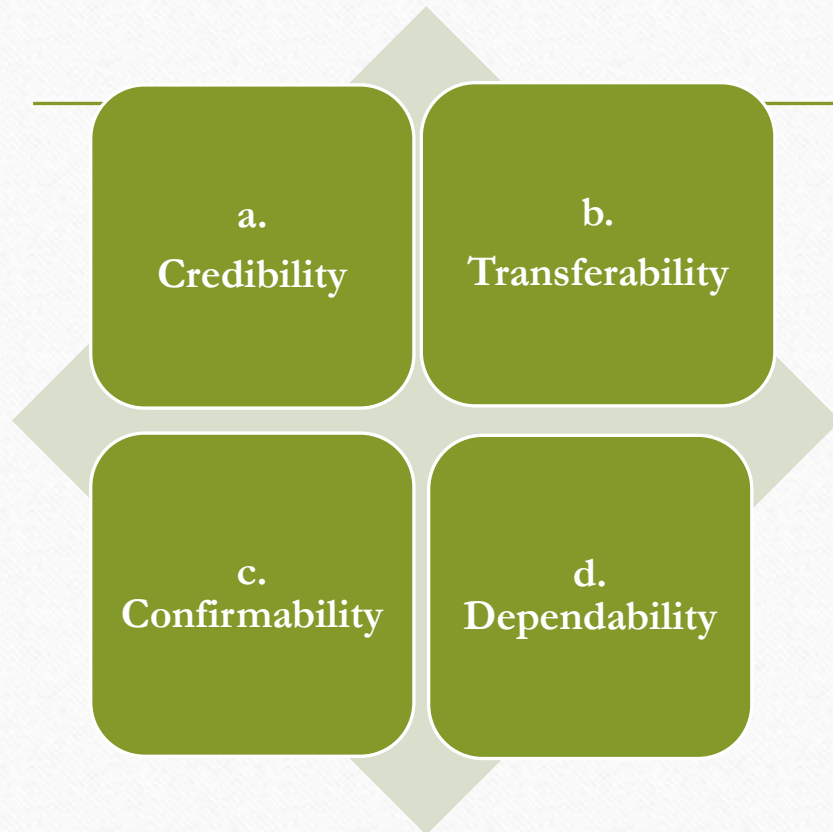
- Measure of reliability of coding, determining of two people coding the data independently code it in the same way.
 - Improves consistency and quality of analysis
 - Software will calculate inter-coder agreement
 - Come to consensus on codes/revise definitions
- Benefits and/or inappropriateness of using ICR (O'Connor & Joffe, 2020)
 - Establishing ICR (McPhail et al., 2016)

Strategies for trustworthiness to increase rigor

Trustworthiness

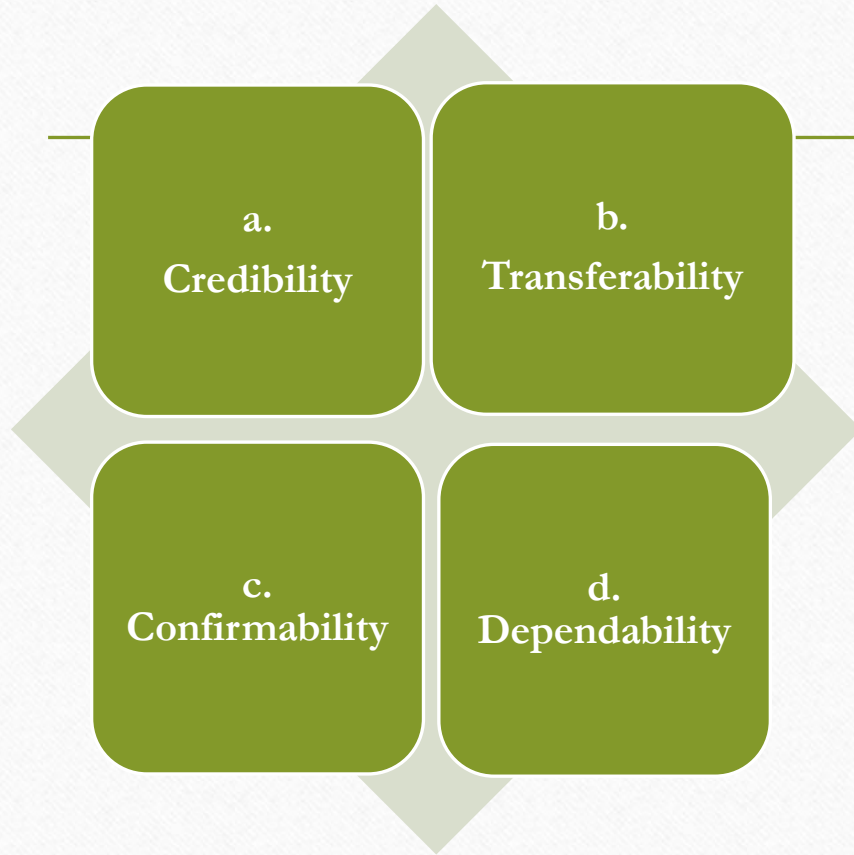


Trustworthiness



- a. Confidence in the 'truth' of the findings, akin to *internal validity* in quantitative research. Question to consider:
 - 1) Are the findings we present based on the data analysis reasonable?
 - 2) Do the findings reflect participants' views/experience?
- b. Showing that the findings have applicability in other contexts, equivalent to *external validity* in quantitative research. Question to consider: Do my findings apply to other people, time periods, etc.?

Trustworthiness



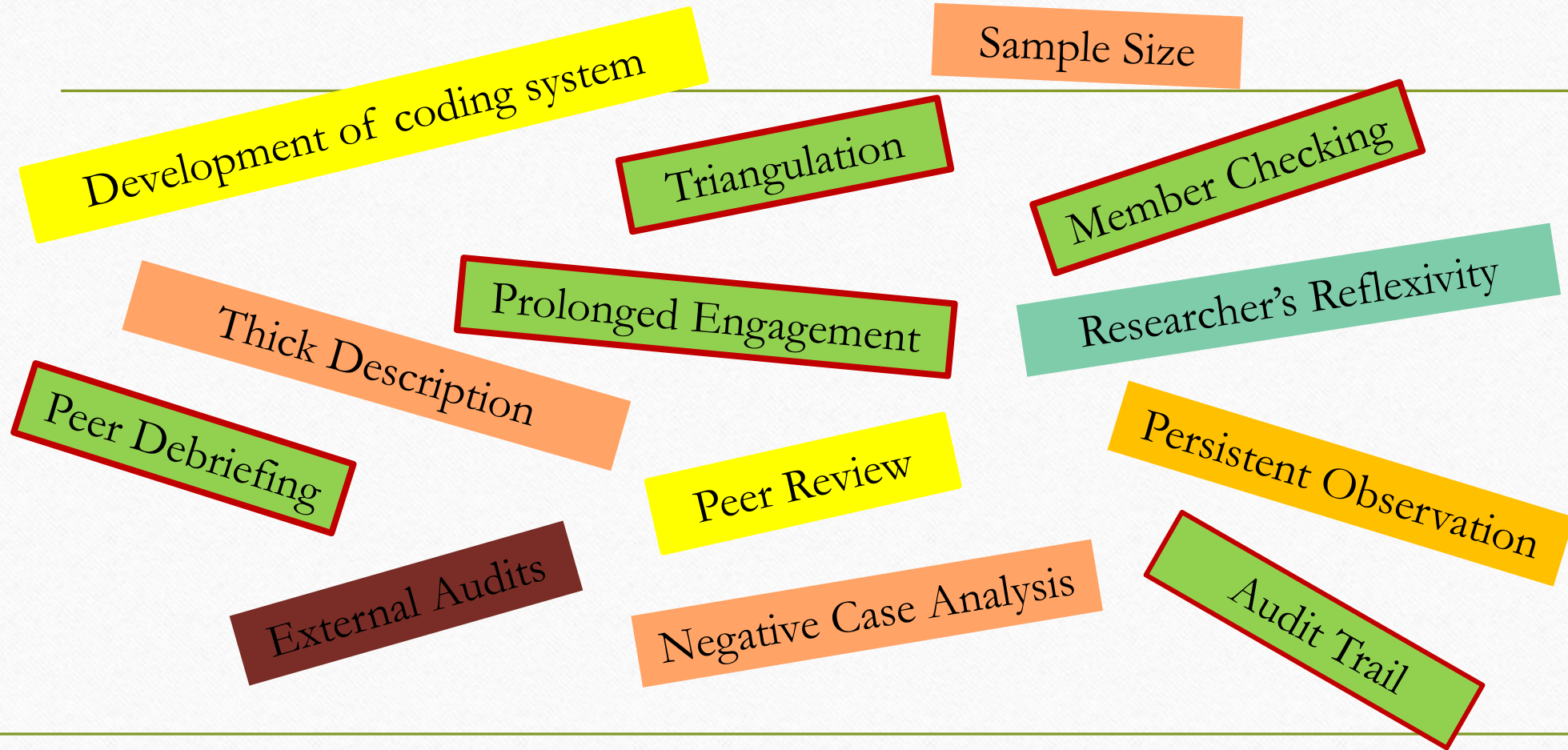
c. Neutrality of the researcher. Researcher's reality vs. participants' realities – keep the focus on your participants' realities. Study findings should not be based on your preferences and viewpoints, but rather should be grounded in data. Equivalent of *objectivity* in quantitative research.

d. Showing that the findings are *consistent*- study procedures are documented and distinguishable. Consistency in the interview and analysis processes. Equivalent of *reliability* in quantitative research. Questions to consider: 1) Am I consistent in the way I am analyzing my data? 2) Am I consistent in the way I am doing interviews/observations?

Threats to Trustworthiness

Threat	
Reactivity	<ul style="list-style-type: none">• The potentially distorting effects of the researchers' presence on participants' beliefs and behaviors• Similar with social desirability bias (response bias): the tendency of survey respondents to answer questions in a manner that will be viewed favorably by others
Researcher's Biases	<ul style="list-style-type: none">• Choose informants who fit within their world view• Asking leading questions to solicit the answers you want• Ignoring data that does not support your conclusions
Respondent's Biases	<ul style="list-style-type: none">• Withholding information and/or lying• Offer answers that they think the researchers want to hear• Have ineffective recall

Strategies for Enhancing Trustworthiness



Strategies for Enhancing Trustworthiness

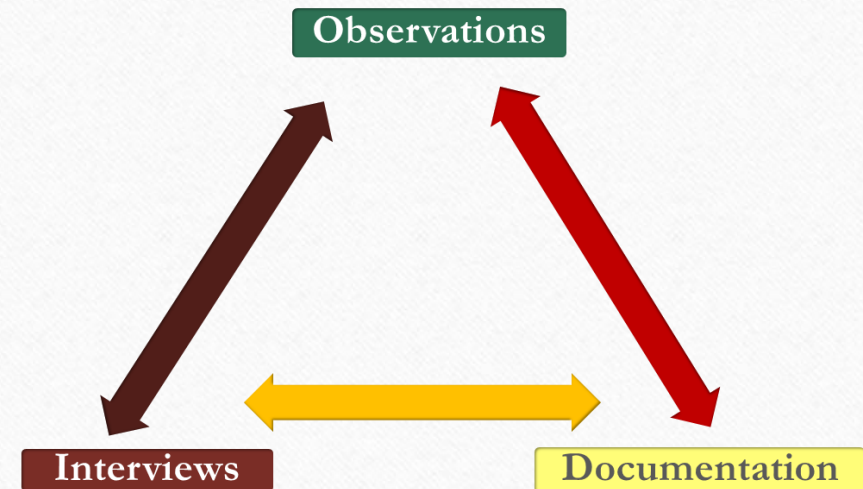
PROLONGED ENGAGEMENT

- Addresses credibility
- Build a rapport/trust relationship with study participants
- Participants are comfortable disclosing information
- Helps to ameliorate reactivity and respondent bias

Strategies for Enhancing Trustworthiness

TRIANGULATION

- Addresses credibility & confirmability
- Speaking to the analysis from multiple perspectives
- *Observer triangulation*: multiple observers in a single study to achieve intersubjective agreement
- *Data triangulation*: use more than one data source (e.g., interviews, observational data, & documents)



(Padgett 2017, <http://www.qualres.org/HomeLinc-3684.html>)

Strategies for Enhancing Trustworthiness

PEER DEBRIEFING

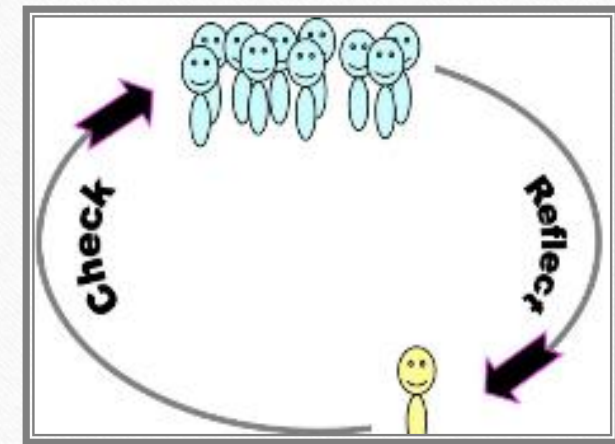
- Addresses credibility
- Review of the data and research process by someone who is familiar with the research, or the phenomenon being studied
- Present study findings & listen to alternative points of views
- A type of group reflexivity → fresh perspectives and guards against bias
- Provides support & challenges the researchers' assumptions

(Padgett 2017, <http://www.qualres.org/HomeLinc-3684.html>)

Strategies for Enhancing Trustworthiness

MEMBER CHECKING

- Addresses credibility
- Share study findings with participants to ensure that they agree with the conclusions
- If participants do not agree, obtain additional information and incorporate their comments into the final product



(Padgett 2017, <http://www.qualres.org/HomeLinc-3684.html>)

Strategies for Enhancing Trustworthiness

AUDIT TRAIL

- Addresses confirmability
- A transparent description of the research steps taken from the start of a research project to the development and reporting of findings
- Raw data (interview transcripts, field notes), data collection and analysis process notes

The COREQ

(Tong, Sainsbury, & Craig, 2007, p. 352)

Table 1 Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

No	Item	Guide questions/description
Domain 1: Research team and reflexivity		
Personal Characteristics		
1.	Interviewer/facilitator	Which author/s conducted the interview or focus group?
2.	Credentials	What were the researcher's credentials? <i>E.g. PhD, MD</i>
3.	Occupation	What was their occupation at the time of the study?
4.	Gender	Was the researcher male or female?
5.	Experience and training	What experience or training did the researcher have?

Domain 2: study design

Theoretical framework

- | | |
|--|---|
| 9. Methodological orientation and Theory | What methodological orientation was stated to underpin the study? <i>e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis</i> |
|--|---|

Participant selection

- | | |
|------------------------|---|
| 10. Sampling | How were participants selected? <i>e.g. purposive, convenience, consecutive, snowball</i> |
| 11. Method of approach | How were participants approached? <i>e.g. face-to-face, telephone, mail, email</i> |
| 12. Sample size | How many participants were in the study? |
| 13. Non-participation | How many people refused to participate or dropped out? Reasons? |

Setting

- | | |
|----------------------------------|--|
| 14. Setting of data collection | Where was the data collected? <i>e.g. home, clinic, workplace</i> |
| 15. Presence of non-participants | Was anyone else present besides the participants and researchers? |
| 16. Description of sample | What are the important characteristics of the sample? <i>e.g. demographic data, date</i> |

Domain 3: analysis and findings

Data analysis

- | | |
|------------------------------------|---|
| 24. Number of data coders | How many data coders coded the data? |
| 25. Description of the coding tree | Did authors provide a description of the coding tree? |
| 26. Derivation of themes | Were themes identified in advance or derived from the data? |
| 27. Software | What software, if applicable, was used to manage the data? |
| 28. Participant checking | Did participants provide feedback on the findings? |

Reporting

2018 APA Journal Article Reporting Standards for Qualitative Research

(Levitt et al., 2018, pp. 34-40)

Table 1
Journal Article Reporting Standards for Qualitative Research (JARS-Qual): Information Recommended for Inclusion in Manuscripts That Report Primary Qualitative Research

Paper section or element	Description of information to be reported	Recommendations for authors to consider & notes for reviewers
Title page		
Title	<ul style="list-style-type: none"> Identify key issues/topic under consideration. 	
Author note	<ul style="list-style-type: none"> Acknowledge funding sources or contributors. Acknowledge conflicts of interest, if any. 	
Abstract	<ul style="list-style-type: none"> State the problem/question/objectives under investigation. Indicate the study design, including types of participants or data sources, and analytic strategy, main results/findings, main implications/significance. Identify five keywords. 	<ul style="list-style-type: none"> Authors: Consider including at least one keyword that describes the method and one that describes the types of participants or phenomenon under investigation. Authors: Consider describing your approach to inquiry when it will facilitate the review process and intelligibility of your paper. If your work is not grounded in a specific approach to inquiry or your approach would be too complicated to explain in the allotted word count, however, it would not be advisable to provide explication on this point in the abstract.
Introduction		
Description of research problem or question	<ul style="list-style-type: none"> Frame the problem or question and its context. Review, critique, and synthesize the applicable literature to identify key issues/debates/theoretical frameworks in the relevant literature to clarify barriers, knowledge gaps, or practical needs. 	<ul style="list-style-type: none"> Reviewers: The introduction may include case examples, personal narratives, vignettes, or other illustrative material.
Study objectives/aims/research goals	<ul style="list-style-type: none"> State the purpose(s)/goal(s)/aim(s) of the study. State the target audience, if specific. Provide the rationale for fit of design used to investigate this purpose/goal (e.g., theory building, explanatory, developing understanding, social action, description, highlighting social practices). Describe the approach to inquiry, if it illuminates the <i>objectives</i> and research rationale (e.g., descriptive, interpretive, feminist, psychoanalytic, postpositivist, constructivist, critical, postmodern or constructivist, or pragmatic approaches). 	<ul style="list-style-type: none"> Authors: If relevant to objectives, explain the relation of the current analysis to prior articles/publications. Reviewers: Qualitative studies often legitimately need to be divided into multiple manuscripts because of journal article page limitations, but each manuscript should have a separate focus. Reviewers: Qualitative studies tend not to identify hypotheses, but research questions and goals.
Method		
Research design overview	<ul style="list-style-type: none"> Summarize the research design (data-collection strategies, data-analytic strategies, and, if illuminating, approaches to inquiry (e.g., descriptive, interpretive, feminist, psychoanalytic, postpositivist, critical, postmodern or constructivist, pragmatic approaches). Provide the rationale for the design selected. 	<ul style="list-style-type: none"> Reviewers: Method sections can be written in a chronological or narrative format. Reviewers: Although they provide a method description that other investigators should be able to follow, it is not required that other investigators arrive at the same conclusions.

Table 1 (continued)

Paper section or element	Description of information to be reported	Recommendations for authors to consider & notes for reviewers
Study participants or data sources		
Researcher description	<ul style="list-style-type: none"> Describe the researchers' backgrounds in approaching the study, emphasizing their prior understandings of the phenomena under study (e.g., interviewers, analysts, or research team). Describe how prior understandings of the phenomena under study were managed and/or influenced the research (e.g., enhancing, limiting, or structuring data collection and analysis). 	<ul style="list-style-type: none"> Authors: Prior understandings relevant to the analysis could include, but are not limited to, descriptions of researchers' demographic/cultural characteristics, credentials, experience with phenomena, training, values, decisions in selecting archives or material to analyze. Reviewers: Researchers differ in the extensiveness of reflexive self-description in reports. It may not be possible for authors to estimate the depth of description desired by reviewers without guidance.
Participants or other data sources	<ul style="list-style-type: none"> Provide the numbers of participants/documents/events analyzed. Describe the demographics/cultural information, perspectives of participants or characteristics of data sources that might influence the data collected. Describe existing data sources, if relevant (e.g., newspapers, Internet, archive). Provide data repository information for openly shared data, if applicable. Describe archival searches or process of locating data for analyses, if applicable. 	
Researcher-participant relationship	<ul style="list-style-type: none"> Describe the relationships and interactions between researchers and participants relevant to the research process and any impact on the research process (e.g., was there a relationship prior to research, are there any ethical considerations relevant to prior relationships). 	
Participant recruitment		
Recruitment process	<ul style="list-style-type: none"> Describe the recruitment process (e.g., face-to-face, telephone, mail, e-mail, recruitment protocols). Describe any incentives or compensation, and provide assurance of relevant ethical processes of data collection and consent process as relevant (may include institutional review board approval, particular adaptations for vulnerable populations, safety monitoring). Describe the process via which the number of participants was determined in relation to the study design. Provide any changes in numbers through attrition and final number of participants/sources (if relevant, refusal rates or reasons for dropout). Describe the rationale for decision to halt data collection (e.g., saturation). Convey the study purpose as portrayed to participants, if different from the purpose stated. 	<ul style="list-style-type: none"> Reviewers: There is no agreed-upon minimum number of participants for a qualitative study. Rather, the author should provide a rationale for the number of participants chosen. Authors/Reviewers: The order of the recruitment process and the selection process and their contents may be determined in relation to the authors' methodological approach. Some authors will determine a selection process and then develop a recruitment method based upon those criteria. Other authors will develop a recruitment process and then select participants responsively in relation to evolving findings.
Participant selection	<ul style="list-style-type: none"> Describe the participants/data sources selection process (e.g., purposive sampling methods such as maximum variation, diversity 	<ul style="list-style-type: none"> Authors: A statement can clarify how the number of participants fits with practices in

Takeaways

- Basic understanding of some types of commonly used codes, and the coding process
- Whatever approaches, coding types, ways you develop themes, etc. note your process by completing memos!
- An understanding of how despite being a different method, qualitative research employs means for trustworthiness and rigor, akin to quantitative research.
- To uncover individuals' experiences, the qualitative process from study formulation, to data collection, analysis, and presentation is *iterative*.

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Questions?

