Lecture 8
Qualitative Data Analysis
DHX_MET1 Methodology 1

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-1. REMEMBERING THE RESEARCH QUESTION & RESEARCH PURPOSE/OBJECTIVES

Open, wide RQ in QUAL research.

- Descriptive questions
  - What are relevant factors in peoples' experience of…
  - What is the range of ways of understanding/experiencing/doing….

- Explanatory/Understanding questions
  - How people make sense of…
  - How do social/psychological phenomena come to be, what are their antecedents, consequences, necessary conditions…

In qualitative research the **RQ can change** (not necessarily).

- The richness of data and wide-open possibilities can result in a feeling the original RQ does not serve the research purpose

- Specification
- Conceptual/focus shifts

0. Data *production* (because the analysis is not a separated step after data production)

Interviews – the major source of data

There are two main reasons for qualitative interviewing to be un/semi-structured:

- To provide freedom and space for self-expression
- To be able to clarify, extend our understanding of what the person is saying (based on the theory that continually forms in our mind)

Other sources of data – observations, texts

We select what needs to be observed (units, behaviors) based on our developing theory

1. REFLECTIONS FROM INTERVIEWS (RESEARCHER IS AN INFORMANT, TOO)

- Preliminary understanding of the informants' experience
  - Initial concepts and their properties
  - Extending theoretical sensitivity
- Field notes on what parts of interviews were difficult, emotional (informant, researcher) and how the difficulties resolved

- Own data collection provides advantages; secondary data analysis still possible

1½ INTERVIEW TRANSCRIPTION

- Interviews MUST be transcribed

- Time consuming, expensive process.
  - https://ocean.sagepub.com/blog/whos-disrupting-transcription-in-academia
  - Speech recognition is promising but…
    - still pricey as a professional service, e.g. www.happyscribe.co €12 per hour
    - without special notation for paralinguistic features
  - Software assisting with the process, e.g. https://www.audiotranskription.de

- Notation – we want more than just words
  - pauses, intonation, stresses, interjections (uh-huh) , and more
  - the level of detail depends on the goals and topic

Simple transcript	Complex transcript
S1: ...or whether they'll get divorced after all.	S1: =<<dim> or WHEther they'll get divorced ↑`after all.>
S2: Hm. (...)	S2: ˇhm,
	(- -)
S1: This is still. (...) . It is a transition.	S1: <<pp> this is still - > ((breathes out for 2.1 sec)) <<p> t'is a ↑`tran-sition.>
S2: Our former neighbors, they are a good example for this. (...) Mar-ried for thirty years (...) the last kid was finally out of the house, took off to study, (...) left, you know, to Berlin.	S2: our former neighbors ↑`they are a good example for this
	(- - -)
	err (- - -)
	↑married for THIRty years °hh
	the last kid (.) `finally outta-the
	´HOUSE,
	took off to STUdy, (-)
	´LEFT, =´you know, °h
	to ber´LIN, °h

2. READING AND RE-READING

- Repeated reading provides further understanding
- Especially important when analyzing texts produced by someone else

- Proto-theory
  - At least by the time of re-reading we should have an idea of the general „shape", or structure of our theory →
    - What general elements form a theory – what will I look for?

3. CODING – THE CORE PROCESS

- Identification of **meaning units** in the text
  - Theoretical sensitivity, previous readings & research questions indicate what a meaning unit is
  - Meaning unit usually describes(mentions) one incidence of a relevant **phenomenon**
- Assigning labels to meaning units – **CODES**
  - Codes are descriptive labels – handles - for phenomena that allow us to quickly refer to them
  - The words for codes come from theory, by association, from informants (=in vivo codes)
- Codes are initially quite specific (i.e. not general) – represent a narrowly defined phenomena
  - With each next meaning unit I ask whether it is another instance of previously used code-phenomenon, or whether a new code is in order
- Coding table – meaning unit + code + explanations/notes

I (Interviewer): Where do you see yourself five years from now in your career?

P (Participant): [1] Well, I hope to be teaching at a university somewhere on the East Coast. [2] But times being what they are, I don't know if that's possible.

I: You mean the economy?

P: Yeah. I may have to stay at my current job, assuming that I don't get pink slipped. [3] But hey, at least I've got a job, that's something.

I: Are you actively looking for another job now?

P: [4] I've picked up the Job Search newsletter and looked through it just to see what's out there, [5] but I think it's too early to leave here. I've gotta get some more years under my belt before I start applying—you know,

[1] HOPING

[2] DOUBTING

[3] BEING GRATEFUL

[4] JOB SEARCHING

[5] GAINING EXPERIENCE

from Saldaña (2011)

I (Interviewer): Where do you see yourself five years from now in your career?

P (Participant): Well, [1] I hope to be teaching at a university somewhere on the East Coast. But [2] times being what they are, I don't know if that's possible.

I: You mean the economy?

P: Yeah. I may have to stay at my current job, assuming that I don't get [3] pink slipped. But hey, [4] at least I've got a job, that's something.

I: Are you actively looking for another job now?

P: I've picked up the Job Search newsletter and looked through it just to see what's out there, but I think it's [5] too early to leave here. I've gotta get some [6] more years under my belt before I start applying— you know, more experience to make me look like [7] I know my stuff. But, I also [8] check some online job search sites each day, [9] check my e-mails to see if there's any response to letters I've sent out. Friends tell me to just [10] keep looking, something eventually turns up, so [11] I hope they're right.

[1] "I HOPE"

[2] "TIMES BEING WHAT THEY ARE"

[3] "PINK SLIPPED"
[4] "AT LEAST I'VE GOT A JOB"

[5] "TOO EARLY"
[6] "MORE YEARS UNDER MY BELT"

[7] "I KNOW MY STUFF"
[8] "CHECK"
[9] "CHECK"

[10] "KEEP LOOKING"
[11] "I HOPE"

in vivo codes

from Saldaña (2011)

I: Where do you see yourself five years from now in your career?

P: [1] Well, I hope to be teaching at a university somewhere on the East Coast. [2] But times being what they are, I don't know if that's possible.

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P: Yeah. I may have to stay at my current job, assuming that I don't get pink slipped. But hey, at least I've got a job, that's something.

I: Are you actively looking for another job now?

P: [3] I've picked up the Job Search newsletter and looked through it just to see what's out there, but [4] I think it's too early to leave here. I've gotta get some more years under my belt before I start applying—you know, more experience to make me look like I know my stuff. [5] But, I also check some online job search sites each day,

[1] A CAREER IS GEOGRAPHIC

[2] A CAREER IS DETERMINED BY ECONOMIC FORCES

[3] A CAREER IS INQUIRY

[4] A CAREER MEANS CULTIVATING EXPERTISE

[5] A CAREER IS DAILY MAINTENANCE

themes

from Saldaña (2011)

3¼. CODING - Software

- Paper&Pen&Highlighter
- Office software – Word+Excel
  - https://www.youtube.com/watch?v=o4qa7Zb8twM
- Specialised software
  - Atlas.ti, NVivo …
  - free: google free QDA software

What are the features of Qualitative Data Analysis Software

Annotations Coding tools	1
2	Data Visualization Linking ability
Media Analytics Tools for Mapping or networking	3
4	Mixed methods research
Multi-language	5
6	Qualitative Comparative analysis
Quantitative content analysis	7
8	Sentiment Analysis Tools for Query, Writing and annotation
Statistical Analysis	9
10	Text Analytics

3½. CODING – EMERGING DEFINITIONS AND HIERARCHIES

- The common features of meaning units with the same code indicate the definition behind the code – CONCEPT
  - With each coding we decide whether a meaning unit fits the partially implicit/explicit definition.
  - With each coding the definition may slightly change to accommodate meaning unit
  - This is how concepts gradually EMERGE (as opposed to having them defined from theory before coding)
- Close CODES/CONCEPTS may inspire to define a superordinate category/code/concept – a HIERARCHY emerges
- More general (higher) categories are sometimes called THEMES
- Sekaran & Bougie call this **categorization**

DEVELOPING THEMES AND CONCEPTS

1. Read and reread your data.

2. Keep track of hunches, interpretations, and ideas.

3. Look for themes that occur frequently.

4. Construct typologies.

5. Develop concepts and theoretical propositions.

6. Read the literature.

7. Develop charts, diagrams, and figures.

8. Write analytical memos.

from Taylor (2016)

Analytic Memos
Topics for Reflection during coding

- how you personally relate to the participants and/or the phenomenon

- relevance to your study's research questions

- your code choices and their operational definitions

- the emergent patterns, categories, themes, and concepts

- the possible networks (links, connections, overlaps, flows) among the codes, patterns, categories, themes, and concepts

- an emergent or related existent theory

- any problems with the study

- any personal or ethical dilemmas with the study

- future directions for the study (Saldaña, 2009 , p. 40)

(Sub)category	(Sub)category definition	No. of behaviors	Example(s)
Procedural failures			
Unreliability	*Service firm does not perform the service dependably.*	156	
Delivery promises	Service provider does not provide services at the time it promises to do so.	104	Wait for appointment with dentist, physician, or hairdresser, or on a plane, train, or taxi.
Service provision	Service provider does not provide the service that was agreed upon.	40	Client receives different car than agreed upon with car rental company or different apartment than agreed upon with travel agent. Bicycle repairers, car mechanics, or building contractors carry out different work than agreed upon or work that was not agreed upon with their clients.
Pricing	Price agreements are broken.	12	"After a party we called a cab. We were with a party of five. A van would take us home for a fixed, low price. However, upon arrival, the driver asked the regular clock price."

3¾. CODING – DESCRIPTION OF DATA

- The above coding procedure is considered DESCRIPTIVE
  - despite a lot of subjectivity and considerable theory used
- The informants' experiences with respect to the RQ may be efficiently summarized by describing the emerged concepts (their definitions)

- **Open coding** (within **Grounded Theory**)
- **Thematic Analysis**, **Content Analysis**

- Often the analysis ends here
  - Categories/Concepts/Themes reported in tables
  - …narratives
  - …graphical schemes

Content analysis may represent different techniques!

Quantitative CA = categories heavily dependent on theory, focus on frequencies (=should be reflected by sampling strategy)
Qualitative CA = emergent categories, focus on their qualities, counting does not carry much weight, often missing

4. THEORY BUILDING

- Theory of the phenomenon of interest
- Depends on the researcher's theoretical background and existing theory of the phenomenon
  - Grounded Theory (Glaser, Strauss, Charmaz)
  - Narrative Analysis (Bruner, Polkinghorne)
  - Discourse Analysis (Potter, Edwards, Wetherell)

4¼. THEORY BUILDING IN GT

- Decide about the **Central Category** (phenomenon, concept)
    - The phenomenon of which the theory would be
    - Sometimes trivial decision sometimes not
- What composes GT theory?
    - Properties, dimensions of the central (and other) category
    - Antecendents of the central category, possible causes
    - Consequences of central category
    - Context, intervening conditions

- **Analytic Induction** a.k.a. the Constant-Comparison method

    +

- **Theoretical Sampling** - the deductive component.

3.   ıon.

6.   s or

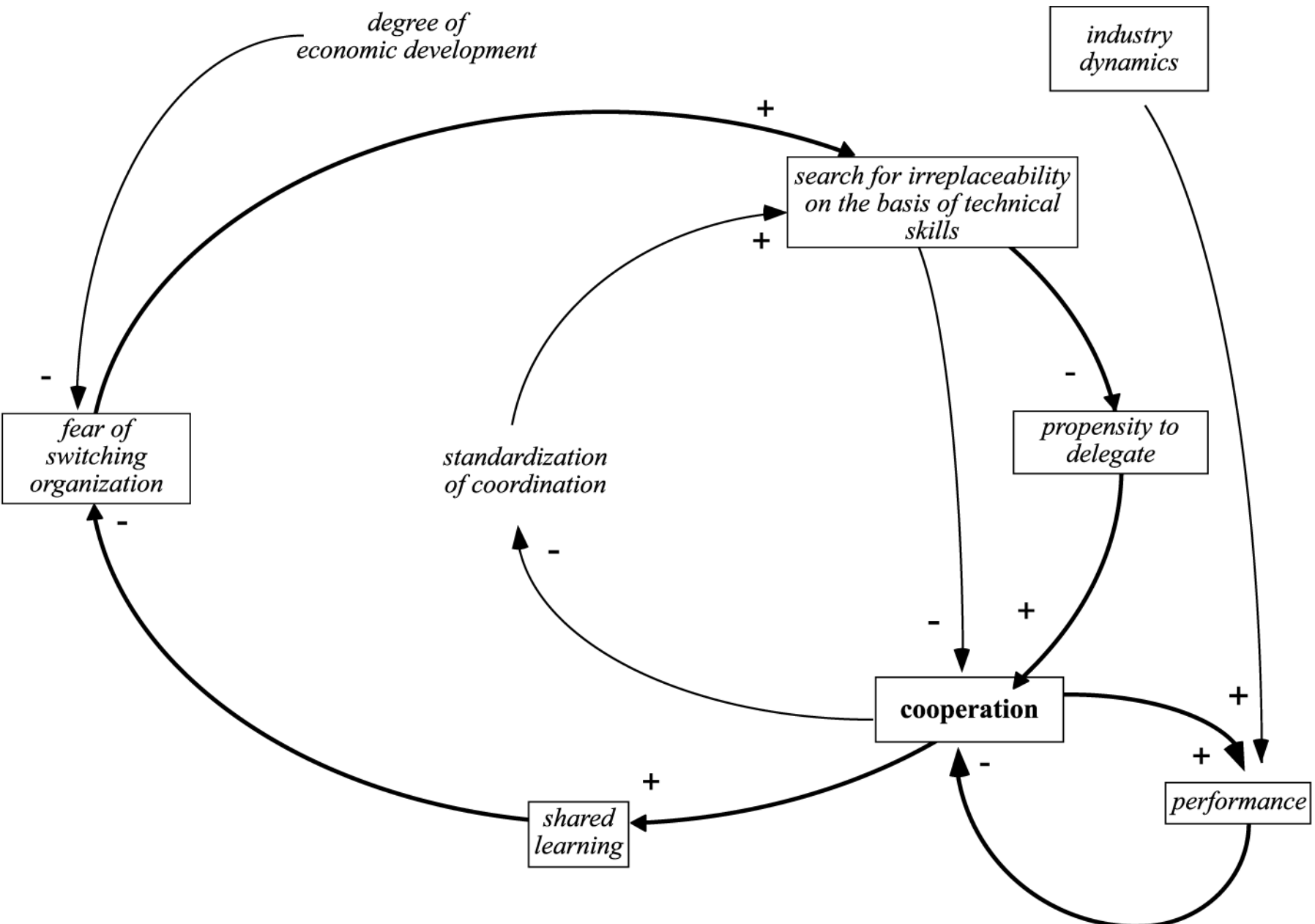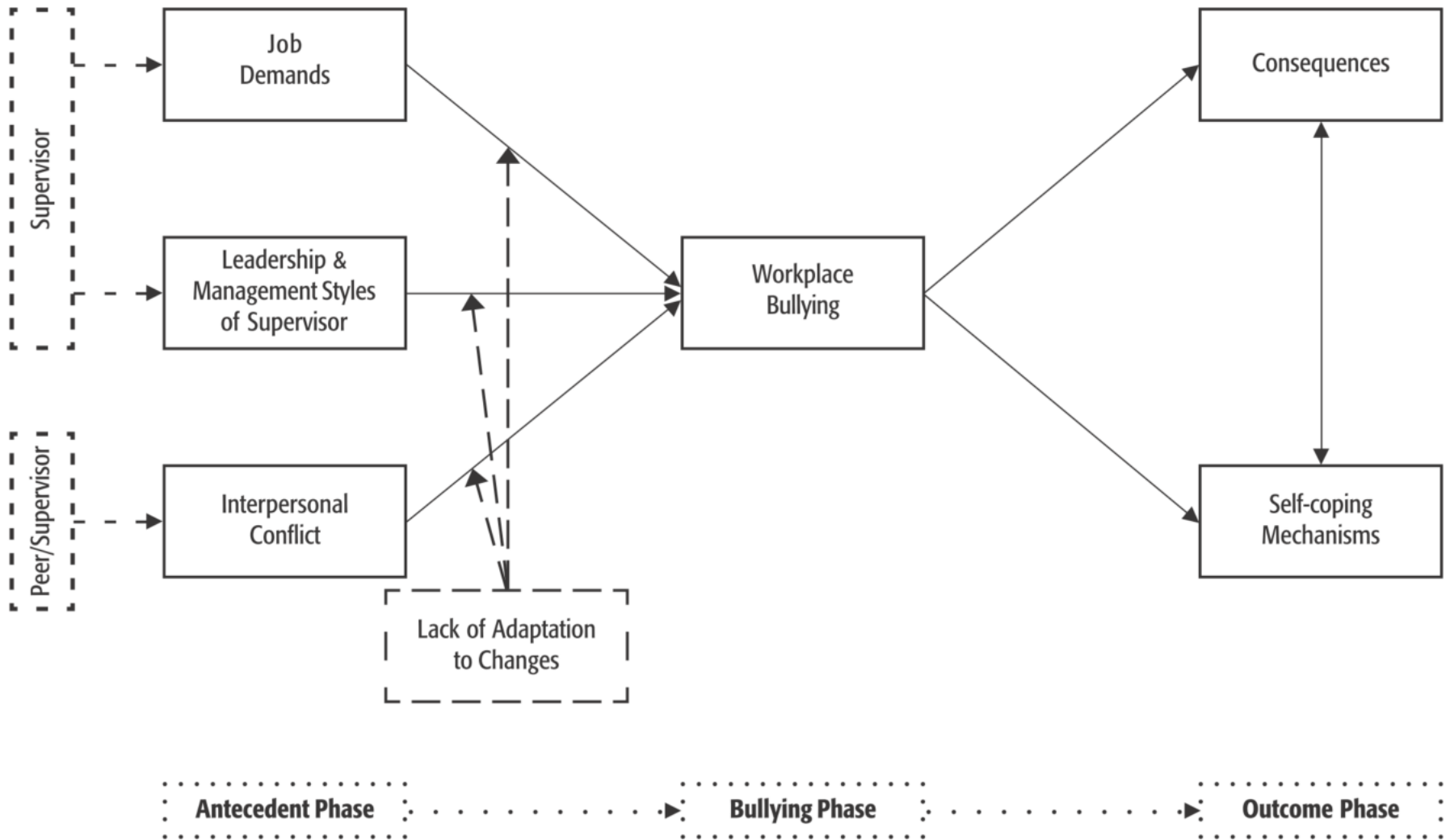7.   ad

Macrì, D., Tagliaventi, M. and Bertolotti, F. (2002). A grounded theory for resistance to change in a small organization, Journal of Organizational Change Management, 15 (3), 292-310.

5. THINKING CRITICALLY ABOUT THE FINDINGS – VALIDITY&RELIABILITY

- Validity & reliability are seldom used as terms
- Instead: Authenticity, Dependability, Consistency, Applicability…

- Data should be persuasively described (represented) by presented categories, concepts, themes … theory
- The reader wants to see how the concepts/theory emerged from data and what is derived form theory
- The reader wants to see efforts to
  - become aware of the role/influence of the researcher
  - identify weaknesses in the support of concepts/theories

- All is reported in a study → length of QUAL studies

TECHNIQUES FOR INCREASING VALIDITY

- Transparency in all parts of analysis
- Overt discounting, critical evaluation, explicit falsification attempts
- Thick description, verbatim quotes
- Triangulation – methods, sources, analytics
- Member checking
- …

TECHNIQUES FOR INCREASING VALIDITY

DISCOUNTING

- Solicited or unsolicited statements?
- What was your role in the setting?
  - Who was there?
  - Direct or indirect data?
  - Who said and did what?
- Did you conduct member checks?
- What was your perspective going into the study?
  - How has it changed?

REPORTING

- CONCEPTS/THEMES/CATEGORIES
  - Their definitions, examples of data from which they emerged
- STRUCTURE - Hierarchy or theory
  - Narratively described, explained
  - Depicted
- VALIDITY SUPPORTING INFORMATION
  - Explicit steps taken
  - Limitations

SUMMARY

- QUAL analysis revolves around identification of meaningful elements of data(text) and inductive generalizations of these elements

- Substantial general knowledge of the researcher is necessary

- The process is FLEXIBLE → must be well described to be trusted

- The process is REPETITIVE, ITERATIVE → meaning

REFERENCES

- Taylor, Bogdan, DeVault, Introduction to qualitative research methods: a guidebook and resource, 4th ed. Wiley, 2016.

- Saldaña, J. Fundamentals of qualitative research: Understanding qualitative research. OUP, 2011.