

# Qualitative Research

with MAXQDA



Shahroud University of Medical Sciences

**Dr. Mozhgan Fardid**

**Faculty member of Shahroud University of Medical Sciences**

**Ph.D. in Health policy**

# Workshop Time Table

2

Title	Time
Qualitative Vs. Quantitative	12-12:15
Mix Method Research	12:15-13:45
Qualitative Study: when why	
Qualitative Research: Methods (Phenomenology, Grounded...)	
Sampling in Qualitative Researches	
Data Collection Methods (Interview, focus group...)	
Data Analysis: Tips and Software Introduction	13:45-14



“

*"Qualitative research aims to provide us with a rich understanding of people's lived experiences and perspectives, situated within the context of their particular circumstances and settings"*

*(Murphy et al. 1998).*



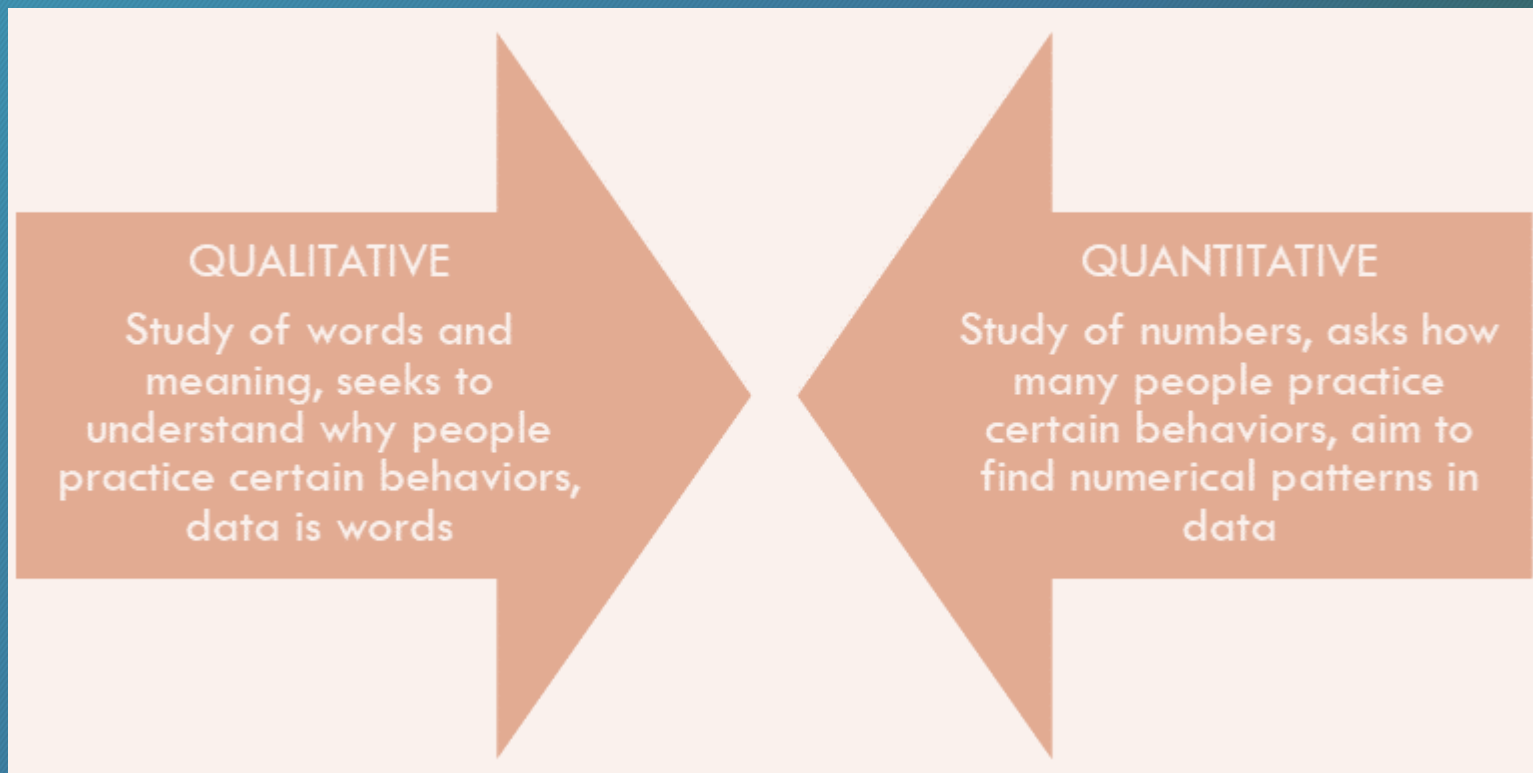
# Qualitative study design

4

- Research objectives and questions
- Study location (and justification)
- Sampling – identity, number, diversity of research participants
- Research methods e.g. in-depth interviews, focus groups, observations, participatory methods
- Strategies to getting access/ recruiting participants
- Detailed planning: research locations, profile of researchers, training of researchers, data recording techniques
- Ethics (e.g. anonymity, confidentiality, safety) and gaining informed consent
- Approach to data analysis (e.g. coding data)

# Qualitative vs. Quantitative

5



# QUALITATIVE

**INDUCTIVE** or theory-development driven

Helps **elucidate processes** (especially emerging over time)

Provides **detailed information** about setting or context & meanings of experiences

Emphasizes voices of participants (quotes)

# QUANTITATIVE

**DEDUCTIVE**

**Tests theories or hypotheses**

Provides **measurable evidence** & gathers descriptive information

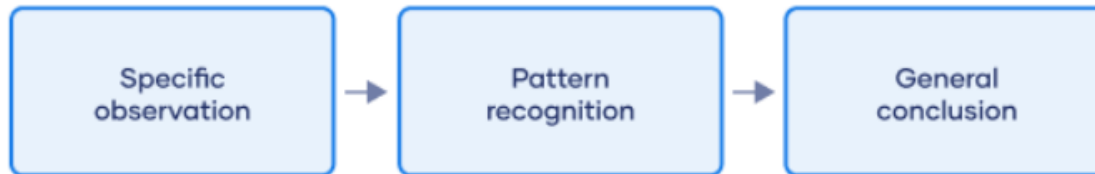
Examines relationships among variables

# QUALITATIVE

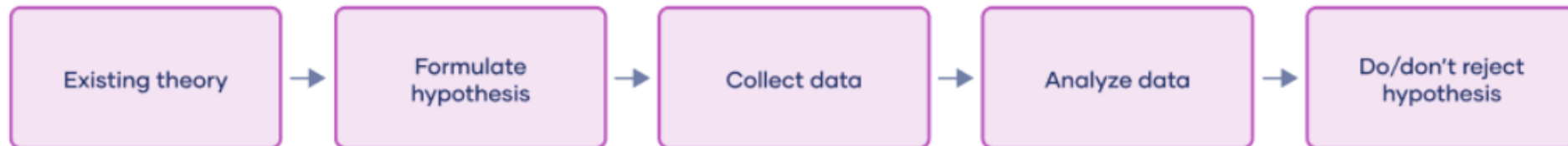
# QUANTITATIVE

7

## Inductive



## Deductive



meanings of experiences

information

Emphasizes voices of participants (quotes)

Examines relationships among variables

# QUALITATIVE

**INDUCTIVE** or theory-development driven

Helps **elucidate processes** (especially emerging over time)

Provides **detailed information** about setting or context & meanings of experiences

Emphasizes voices of participants (quotes)

# QUANTITATIVE

**DEDUCTIVE**

**Tests theories or hypotheses**

Provides **measurable evidence** & gathers descriptive information

Examines relationships among variables



## STRENGTHS

### QUAL

Facilitates collection of data when measures do not exist

Provides a depth of understanding of concepts

Allows identification of previously unknown processes

Explanations of “why” and “how” phenomena occur

Elucidate range of effects of phenomena

### QUANT

Yields efficient data collection procedures

Generalizability: creates possible replication

Facilitates comparison groups

Measures pervasiveness of “known” phenomena

Helps establish (probable) cause and effect

# Comparing Qualitative and Quantitative designs

10

	Qualitative	Quantitative
<b>Existing knowledge</b>	Subject matter is unfamiliar, limited understanding of phenomena / concepts	Subject matter clearly defined / familiar
<b>Type of understanding / evidence sought</b>	To understand people's experiences and perceptions of issues and situations (meaning)	To understand prevalence of phenomena in a population and test relationships between phenomena (e.g. causality)
<b>Importance of understanding context</b>	Relating particular behaviour/practices to the specific socio-cultural context	No need to relate findings to socio-cultural setting (setting is sufficiently understood)
<b>Application of research</b>	Often used to develop concepts and theories (inductive research)	Often used to test preconceived hypotheses (deductive research)
<b>Research approach</b>	Exploratory, flexible, open to discover and explore the unexpected	Systematic, structured, fixed, focused on repeatability of measurements

# Comparing Qualitative and Quantitative designs

11

	Qualitative	Quantitative
<b>Sampling</b>	Usually uses purposive sampling (individuals with specific characteristics)	Usually uses 'random sampling' to get representative so results can be extrapolated to whole population or sub-group
<b>Data collection methods</b>	Semi-structured / unstructured interviews, focus groups, observations, participatory research	Quantitative surveys, econometric modelling
<b>Data analysis</b>	Interpretative methods aimed at understanding – code data to identify trends, processes, factors	Statistical techniques that aim to achieve precision and statistical significance
<b>Nature of findings</b>	Window onto social processes and dynamics and suggest why people think and act as they do.	Findings can be generalised to whole population

# Mixed Qualitative-Quantitative study designs

12

Qualitative and quantitative approaches can be combined to minimize the limitations and maximize the strengths of each

- Qualitative research can identify topics which are appropriate for further study through quantitative methods
- Quantitative research can help to identify topics or social groups which warrant in-depth qualitative study e.g. to understand 'why' questions
- Qualitative research can help to interpret the results of quantitative studies e.g. what explain the variations in response between younger and older women



# Utility of Qualitative Data

13

- Identify important factors involved in processes.
- Develop new items for a quantitative instrument.
- Collect data regarding participant experiences.
- Collect data to inform development of procedures.
- Collect data to help explain results.
- Evaluate process of an intervention.



# Role of Qualitative Research

14

Qualitative research can be used to triangulate, explain and supplement quantitative research as well as to answer different research questions as standalone research.

Key approaches include:

- Formative research
- Operations research
- Longitudinal research
- Retrospective research



# Formative Research

15

Qualitative research is often used during programme design and testing to:

- Conduct a situation analysis
- To collect data to optimise implementation and contribute to programme effectiveness
- To study intervention testing and support intervention development and adaptation
- Support the design of quantitative research to measure programme impact



Qualitative research is often used during programme implementation to collect data from programme staff and beneficiaries in order to:

- Track implementation fidelity and challenges
- Identify unintended positive and negative consequences
- Provide insights into how different components of combined programs are working
- Provide insights to refine and adapt programmes to improve their effectiveness



# Longitudinal Research

17

Qualitative research is also used to collect data with the same group of beneficiaries at different points in time (e.g. baseline, midline, endline) during programme implementation (and often in complement to quantitative research) to:

- Generate detailed insights into processes of, motivations for and barriers to change – how and why change happens?
- Explore other contextual factors which may influence outcomes (beyond the programme)



# Retrospective Research

18

Qualitative research is often used following the end of a programme to:

- Understand participants experiences of an intervention
- Explore participants' understandings of the processes of change (e.g. generate stories of changes)
- Examine wider impacts beyond those measured in the quantitative research



# Qualitative Methods: WHEN

19

- Research methods MUST fit research problem or question
- New questions and initiatives
- Complex phenomena
- Hard-to-measure constructs
- Interactions in specific, everyday settings
- An example: *Why are certain external and internal factors significant or not significant predictors of students' success in school?*





# Let's go

Dr. Mozghan Fardid

# Start with a Research Topic

21



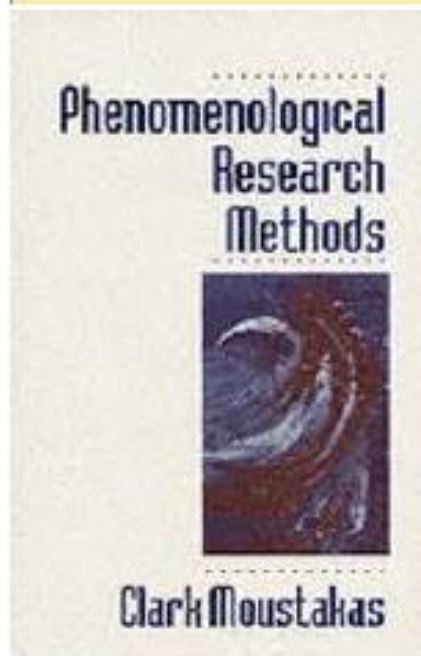
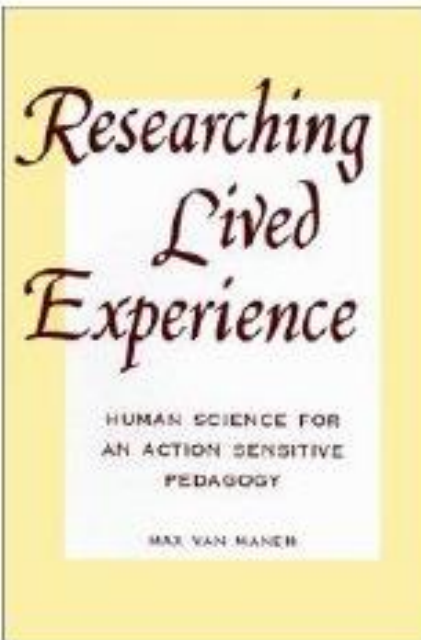
# Qualitative Research



## Methods

Dr. Mozghan Fardid

2  
2



# Phenomenology

- ✓ Goal: to gather an in-depth reflective description of experiences (phenomena)
- ✓ Describes the meaning for *several individuals* of their **lived experiences** of a concept or phenomenon
- ✓ Attempting to understand how people attend to the world





*What are the lived experiences of  
caregivers/patients?*



## Process (PH)

26

- Need to listen to caregivers' stories of ..., entering into conversations with no preconceived ideas
- Avoid asking predetermined questions
- Need to understand the “essence” of the experience **AND** describe the “essence” of the lived phenomenon



# Sampling (PH)

27

- Choose the “best” example of the phenomenon where you are most likely to see whatever it is you are interested in
- Observe or interview experts
- ***Purposeful Sampling*** – selection of individuals/site for study because they can purposefully inform an understanding of the phenomenon
- ***Snowball Sampling*** – using recommendations of participants already in study to obtain additional participants

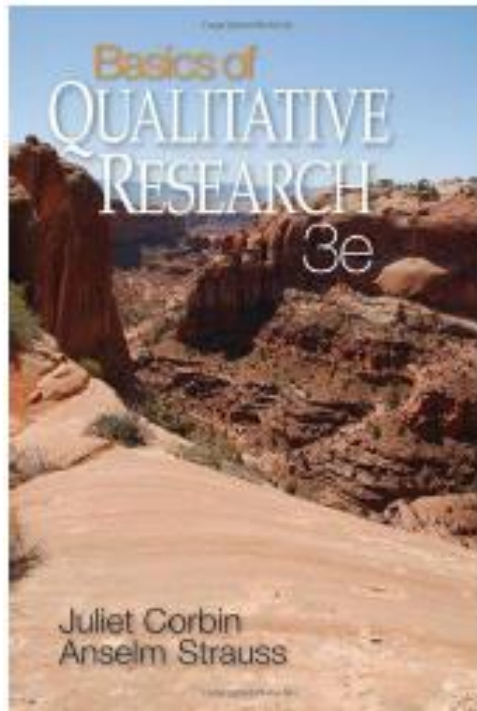


# Data Collection (PH)

28

- Primarily uses interviews with individuals
- ***Informal Conversations*** – Researcher records conversations specific to the phenomenon
- ***Semi-structured Interviews*** – Open-ended questions are developed in advance w/ probes
- ***Focus Groups*** – tape-recorded small group dialogue
- ***Observations, Documents, Art*** – less often used but may be considered





# Grounded Theory

- ✓ Goal: to move beyond description and generate a *theory* about a process, action or interaction– through detailed exploration and theoretical sensitivity
- ✓ Addresses questions of process and explaining questions
- ✓ Theory is grounded in data from large number of participants who have experienced the process being studied



What is the process that caregivers experience deciding to have their children tested for HIV?



# Process (GT)

32

- *Theoretical Sensitivity*: seeking theory by working with data records and records of ideas to identify concepts and linkages that might generate theoretical insight
- Emphasizes detailed knowledge and *constant comparison*
- Identify a concept & develop a theory by exploring relationships between these concepts in the stages or phases of the process and the *core category (variable)*
- *Core Category (Variable)* – runs through the data and accounts for most of the variance  
– goal is to account for the centrality of the core concept by telling the story of its emergence.
- *Constant reexamination of earlier data*





# Sampling (GT)

33

- Often starts in the field with interviews (narratives about an event told from beginning to end)
- *Theoretical Sampling* –
  - once you begin to understand whatever you are studying, selection of participants is directed by the emerging analysis
  - theory is modified by data obtained from the next participants
- *Negative Cases* – experiences contrary to cases that support emerging theory
- *Thin areas* – participants who have experienced special conditions identified as significant



# Data Collection (GT)

34

- ***Unstructured Interactive Interviews*** – few prepared questions, researcher listens to and learns from participant, use of unplanned questions or probes
- ***Informal Conversations*** – Researcher has more active role
- ***Semi-structured Interviews*** – Open-ended questions are developed in advance w/ probes
- ***Focus Groups*** – tape-recorded small group dialogue
- ***Observations*** – Field notes of



# Data Collection (GT)

35

- Collect enough background data (persons, processes, settings) to understand and portray full range of contexts of the study
- Gain detailed descriptions of a range of participants' views and actions
- Data MUST reveal what is beneath the surface
- Data MUST be sufficient to reveal change over time
- Gather enough data to develop analytic categories
- What comparisons can be made between data?
- How do comparisons generate and inform ideas?



## Exploratory Questions

*What are the barriers and facilitators for caregivers to receive HIV test results for their children?*

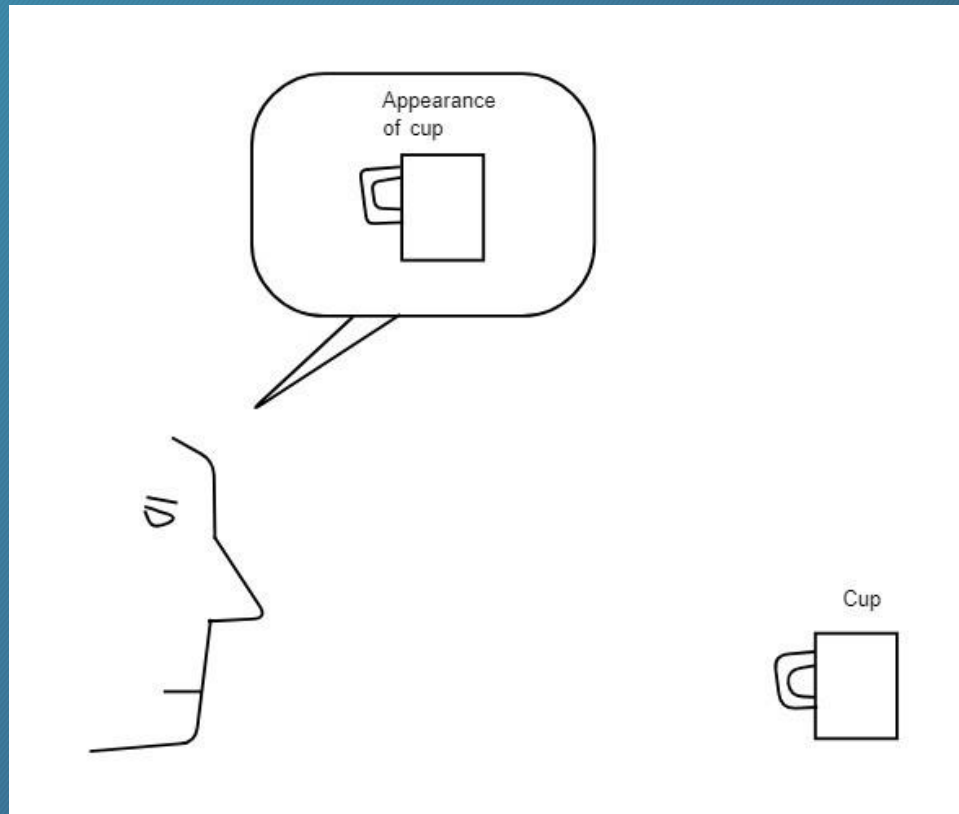
- Exploratory
- More limited qualitative question
- May be paired with a quantitative study–mixed methods

# Selecting the Method for your Question

Type of Q	Method
Qs about meaning (ex. What is the meaning of...?) and about the core or essence of phenomena or experiences	Phenomenology
Process Qs about changing experiences over time (ex. What is the process of becoming...?) or understanding questions (What are the dimensions of the experience...? What is happening here? How is it different?)	Grounded Theory
Qs about how different social languages are used and mixed, how language (spoken & written) enacts social and cultural perspectives and identities	Discourse Analysis

# Phenomenology

38



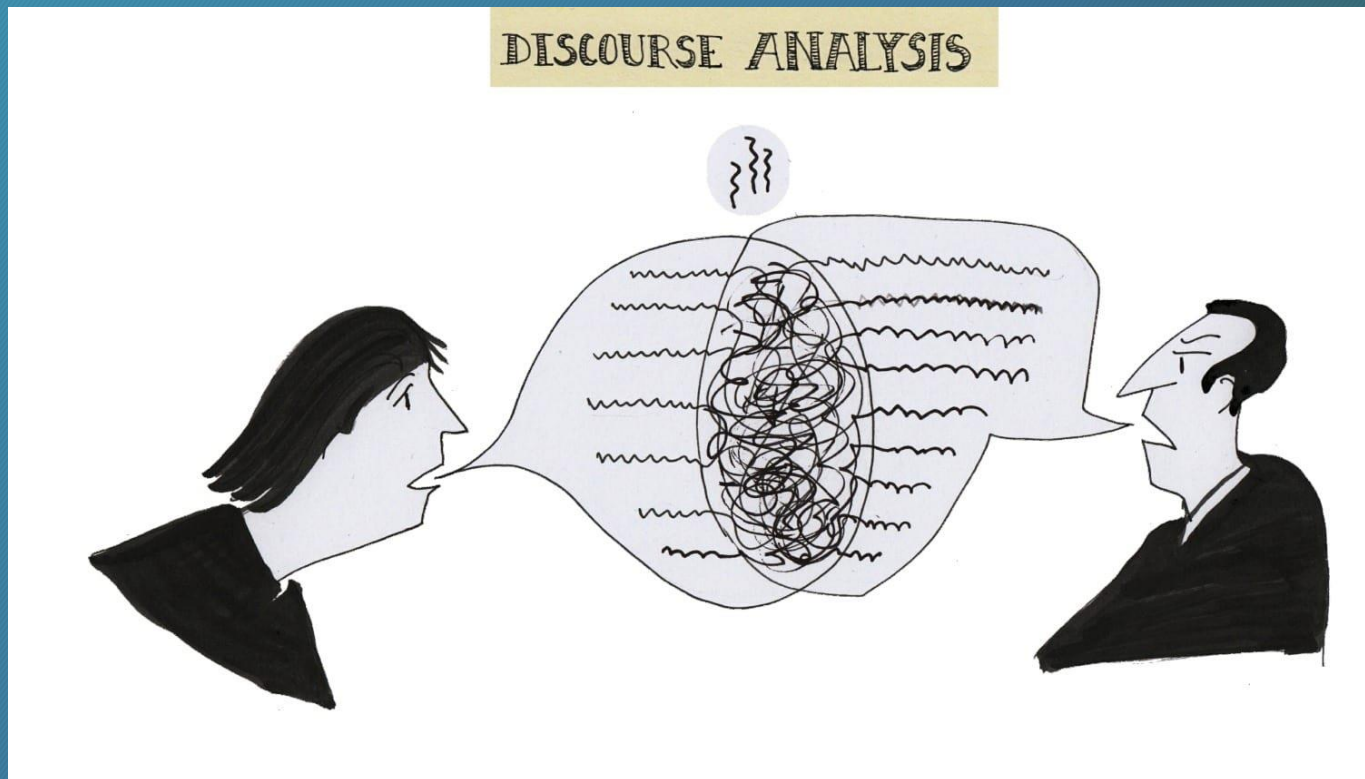
# Grounded Theory

39

**Grounded**  *theory*

# Discourse Analysis

40





## Population



## Sample



# Sampling

Dr. Mozhgan Fardid

4  
1

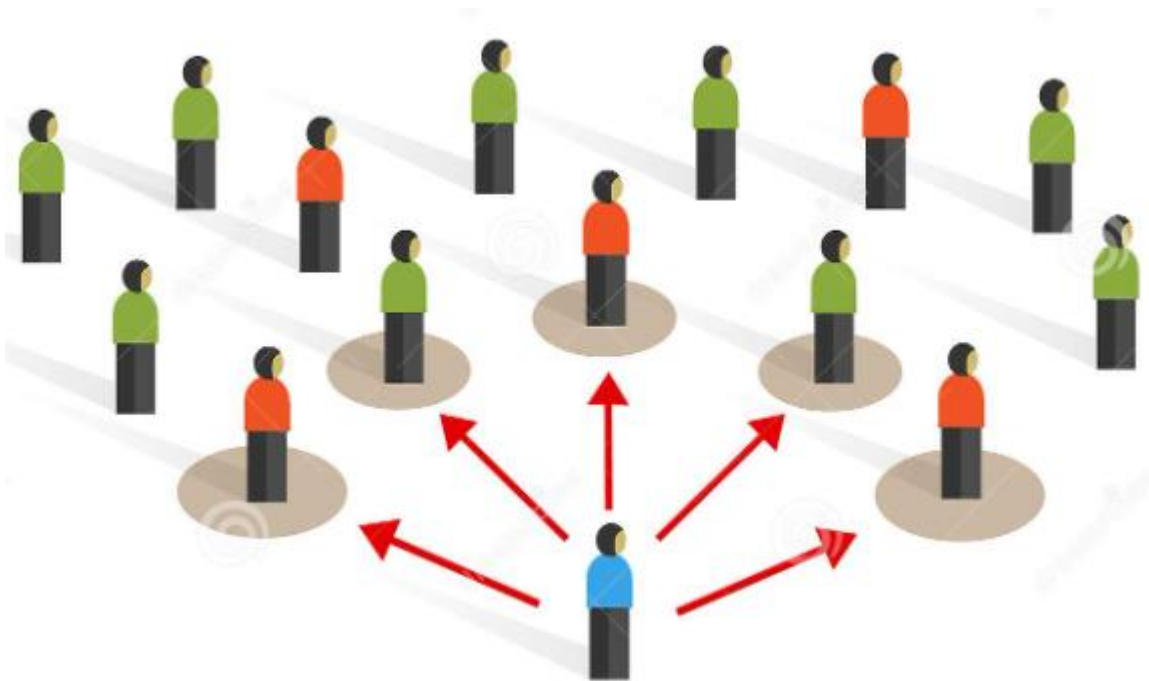
# Sampling: General Principles

42

- Stem logically from the research question– strategic and thoughtful
- Focus on depth rather than generalizability
- Feasible
- Ethical
- Most often need to think about selection of communities and of respondents



- Depends on the method and the question
- Depends on your sampling strategy
- Is *more* better?
- ✓ What is *saturation*?
- Theoretical saturation or informational redundancy
- The point at which no new information/themes are emerging



# Convenient Sampling

4  
4

Dr. Mozghan Fardid

# Convenience

45

## Select easily accessible subject

### Advantages

- Cheap, fast and easy

### Disadvantages

- May get information poor cases
- Least legitimate

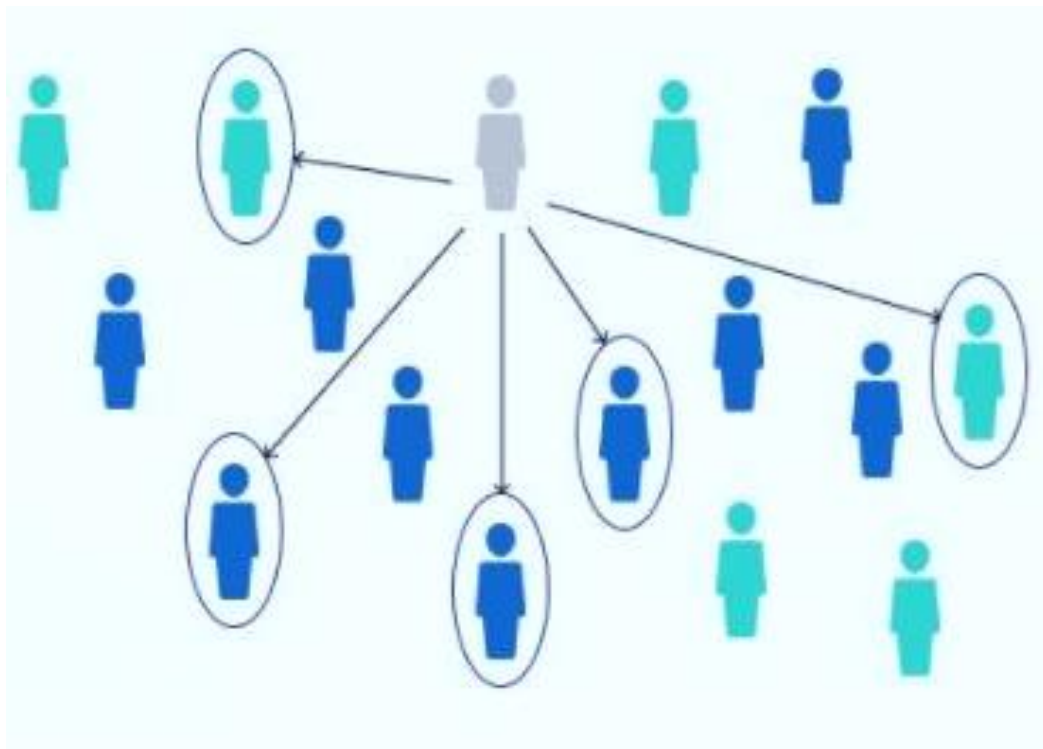
Element of convenience sampling in all qualitative research but needs to be done within a thoughtful and justifiable approach to sampling



# Purposive Sampling

Dr. Mozghan Fardid

4  
6



## Purposive: Emphasis on similarity

47

### Criterion-i

To identify and select all cases that meet some predetermined criterion of importance

EX: Selection of program leaders at study sites to facilitators and barriers to EBP implementation

### Criterion-e

To identify and select all cases that exceed or fall outside a specified criterion

EX: Selection of directors of that failed to move to the next stage of implementation...

# Purposive: **Emphasis on similarity**

48

## **Typical case**

To illustrate or highlight what is typical, normal or average

EX: A child undergoing treatment for trauma

## **Extreme or deviant case**

To illuminate both the unusual and the typical

EX: Selecting clinicians from state agencies or mental health with best and worst performance records or implementation outcome



## Purposive: **Emphasis on similarity**

49

### **Homogeneity**

To describe a particular subgroup in depth, to reduce variation, simplify analysis and facilitate group interviewing

**EX:** Selecting Latino/a directors of mental health services agencies to discuss challenges of implementing evidence-based treatments for mental health problems with Latino/a clients.



## Purposive: **Emphasis on similarity**

50

### **Snowball**

To identify cases of interest from sampling people who know people that generally have similar characteristics who, in turn know people, also with similar characteristics

**EX:** Asking recruited program managers to identify clinicians, administrative support staff, and consumers for project recruitment.

## Purposive: **Emphasis on variation**

51

### **Intensity**

Same objective as extreme case sampling but with less emphasis on extremes

**EX:** Clinicians providing usual care and clinicians who dropped out of a study prior to consent to contrast with clinicians who provided the intervention under investigation

## Purposive: **Emphasis on variation**

52

### **Maximum variation**

Important shared patterns that cut across cases and derived their significance from having emerged out of heterogeneity.

**EX:** Sampling mental health services programs in urban and rural areas in different parts of the state (north, central, south) to capture maximum variation in location

# Purposive: **Emphasis on variation**

53

## **Critical case**

To permit logical generalization and maximum application of information because if it is true in this one case, it's likely to be true of all other cases

**EX:** Investigation of a group of agencies that decided to stop using an evidence-based practice to identify reasons for lack of EBP sustainment.

## Purposive: **Emphasis on variation**

54

### **Theory-based**

To find manifestations of a theoretical construct so as to elaborate and examine the construct and its variations

**EX:** Sampling therapists based on academic training to understand the impact of CBT training versus psychodynamic training in graduate school of acceptance of EBPs.

## Purposive: **Emphasis on variation**

55

### **Confirming and disconfirming case**

To confirm the importance and meaning of possible patterns and checking out the viability of emergent findings with new data and additional cases

**EX:** Once trends are identified, deliberately seeking examples that are counter to the trend

## Purposive: Nonspecific emphasis

56

### Convenience

To collect information from participants who are easily accessible to the researcher

EX: Recruiting providers attending a staff meeting for study participation.



- Write down your research aims and objectives
- Where you plan to collect data
- Who you will sample and why
- How you will sample them

## Sample size: informal rules

- Range from 20–50 interviews and 2–5 FGDs per category
- Some say that for interviews 15 is the smallest acceptable and that >50 is too many
- Generally sample size depends on the level of homogeneity of the sample, the complexity of the research and the quality of the interviews
- Too large a sample is as harmful as too small as it reduces the quality of the analysis.

## Should be based on the concept of saturation:

- Theoretical: no new data, or themes/codes and the ability to replicate
- Practical: diminishing returns' from further data-collection i.e. sufficient conceptual depth
- Very little written about sample size and no empirical reasons given when sizes are given

- □ Select the RIGHT people to answer your question; balance that with not leaving out the people who may confirm or disconfirm your theory
- □ Research sample should be one in which your issue of interest is *likely* to be seen
- □ Choose a setting/context in which you will *best* see the issue you want to study

# Data Collection Method



Dr. Fardid

Advantages  
&  
disadvantages

6  
1

# Main Methods Using in Qualitative Method

62

1. In-depth interviews
2. Focus groups
3. Observations



# Main Purpose of the Method

63

Method	Main use
IDIs	Understanding personal perspectives and experiences and linking concepts at an individual level
FGDs	Understanding social norms, dominant cultural values, group opinions Testing concepts and materials
Observation	Understanding behaviors in their physical, social and economic context



# Interview

Dr. Mozhgan Fardid

6  
4



# Conversation vs. In-depth interview

65

## Similarities

- 2 people discussing a topic of mutual interest in a relaxed and open way
- Flexible and free flowing

## Differences

- Interviewer directed to get as much relevant info as possible and to ensure all topics are covered
- Question, response, probe
- Respondent opens up to a stranger who divulges little about themselves
- Confidential and de-identified



Type of interview:

- Unstructured, Semi-structured, Structured
- Telephone, face-to-face



## Advantages:

- Most in-depth
- Collect information about why behaviors are practiced, how people think, and conceptualizations of behavior
- Gain knowledge of exact words/language people use
- Emic (insider) perspective

## Disadvantages

- Based on a few people
- Interviews very long, lots of data, time consuming to analyze
- Need people who aren't hesitant to speak and share ideas



Advantages	Disadvantages
<ul style="list-style-type: none"><li>• Can explore complex and detailed issues</li><li>• Good for high volume issues</li><li>• Opportunity for probing and clarifying questions</li><li>• One on one enhances rapport</li></ul>	<ul style="list-style-type: none"><li>• Time consuming and can result in large volumes of data</li><li>• Interviewer must have good listening and probing skills</li><li>• Respondent may want to please interviewer</li></ul>



# Focus Groups

6  
9

Dr. Mozhgan Fardid

# Focus Group Discussion

70

- Organized and focused discussion among 6–12 people
- Guided by a moderator in a permissive and non-threatening environment
- Group interaction help participants explore and clarify their views and encourage participation



# Focus Group Discussion

71

- Interactions help clarify similarities and differences in opinions/values
- Interactions are part of the research data: jokes, anecdotes, arguing tell us a lot
- Participants are not asked questions in turn, rather encouraged to: ask questions, exchange anecdotes, comment on views and experiences



# Focus Groups

72

- ✓ Optimal size: 6–10
- ✓ How many people do I recruit for each focus group?
- ✓ Rule of thumb: more than you need (2x)





# Focus Group

73

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• Gets information quickly and cheaply</li><li>• Good for 'low volume' issues</li><li>• Group interaction can stimulate response</li><li>• Peer pressure can challenge thinking</li><li>• Good at identifying content that do or do not resonate</li></ul>	<ul style="list-style-type: none"><li>• Cannot explore complex or detailed issues</li><li>• Respondents may be concerned about anonymity</li><li>• Responses influenced by peers</li><li>• Some participants may dominate, others may not speak</li><li>• May not be suitable for sensitive topics</li><li>• Skilled moderator required</li><li>• Can be logistically difficult</li><li>• Writing up from audio can be difficult</li></ul>



Interview	Focus Group
Complex subject matter and knowledgeable respondents,	Promote discussion between participants on a specific topic
When interviewing one person at a time will yield the best info (ex. sensitive topics)	When interaction among interviewees will yield the best info (ex. community norms)
When interviewees are unique or may be in conflict with each other	When interviewees are similar and cooperative with each other
When interviewees are being asked about information that they are unlikely to give in a group of people that they don't already know (ex. when peer pressure or social desirability are a threat)	When individuals might be reluctant to give info one-on-one (ex. good for idea generation, problem identification and definition, evaluating messages for an intervention)



# Analysis

7  
5

Dr. Mozghan Fardid

# Data handling and analysis

76

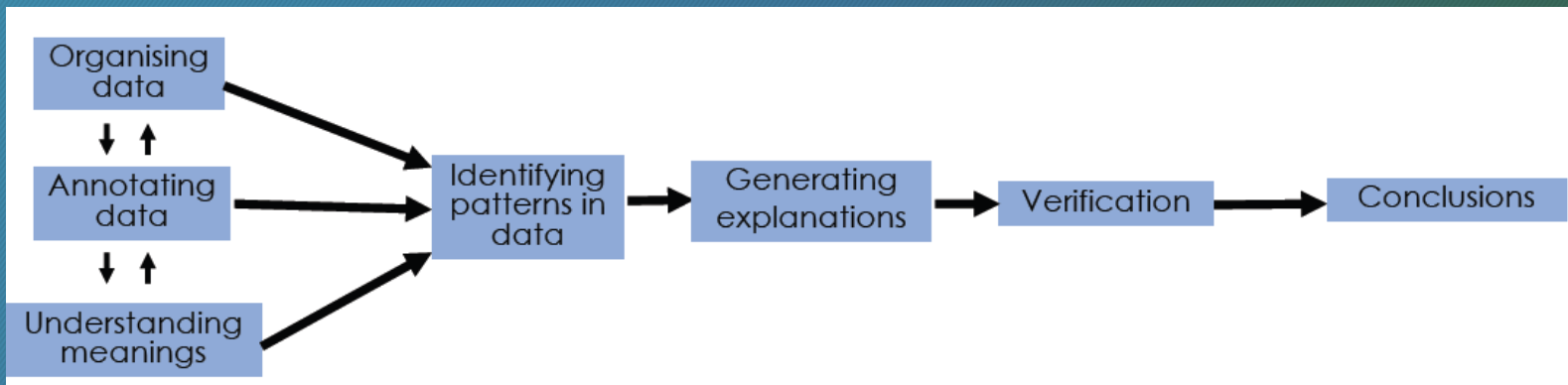
- Different stages of data handling and analysis
- During and immediately after data collection – field notes and analytic notes
- During initial analysis– initial coding, sub coding
- During further analysis and writing – summarizing and interpreting data
- WHO HAS ANY EXPERIENCE OF DOING ANY OF THE ABOVE?



# Qualitative Data analysis Process

77

- There is no single fixed procedure or approach for analysing qualitative data. However,
- most common approaches follow the following process:



## During data collection: Field diary/notes

78

- A series of notes recorded by researchers in the course of fieldwork, during or after their observations of a specific phenomenon under study
- Evidence that gives meaning and aids in the understanding of the phenomenon
- Write this up as soon as possible
- Include your impressions of places and persons, scenes observed, snippets of conversation overheard etc.



# Analytical Notes

79

- Make notes to records your developing understanding of the data in relation to theory and context
- Notes can be made from a transcript, from notes made in an interview or re-listening to a tape
- ✓Can help you:
  - realize when no new information is emerging
  - guide recruitment of informants



# Analytical Notes

80

- guide scope of next interviews
- help you test out emerging hypotheses in the field

## TIPS

- Sketch out the main information arising from the interviews
- Include questions raised, possible hypotheses, possible explanations etc.
- Record in a way that summarizes main findings of interviews so far
- Information from every new interview should be added in





# Coding: Analysis by themes

81

- Aim: To draw together the extracts from all the interviews which give information on a particular topic / theme (assigned a 'code;)
- Process of identifying common themes, sub-themes, summarizing, synthesizing, looking for patterns, commonalities and differences
- ✓ Keep two questions in mind:
  - The initial research question: What am I actually interested in?
  - A much more detailed question: What is the informant talking about?



# Coding Process

82

- Read and re-read all transcripts, one by one, marking up the parts which relate to each code (theme)
- Some extracts fit in with more than one code – put them in both
- Some parts of interviews don't fit in codes – don't worry just leave them (unless you think the data is pertinent and then create a new code)
- CAUTION – every time you move a bit of text into a code keep with it the interview no./pseudonym and page no.
- You can use software like MAXQDA to support coding and then analysis





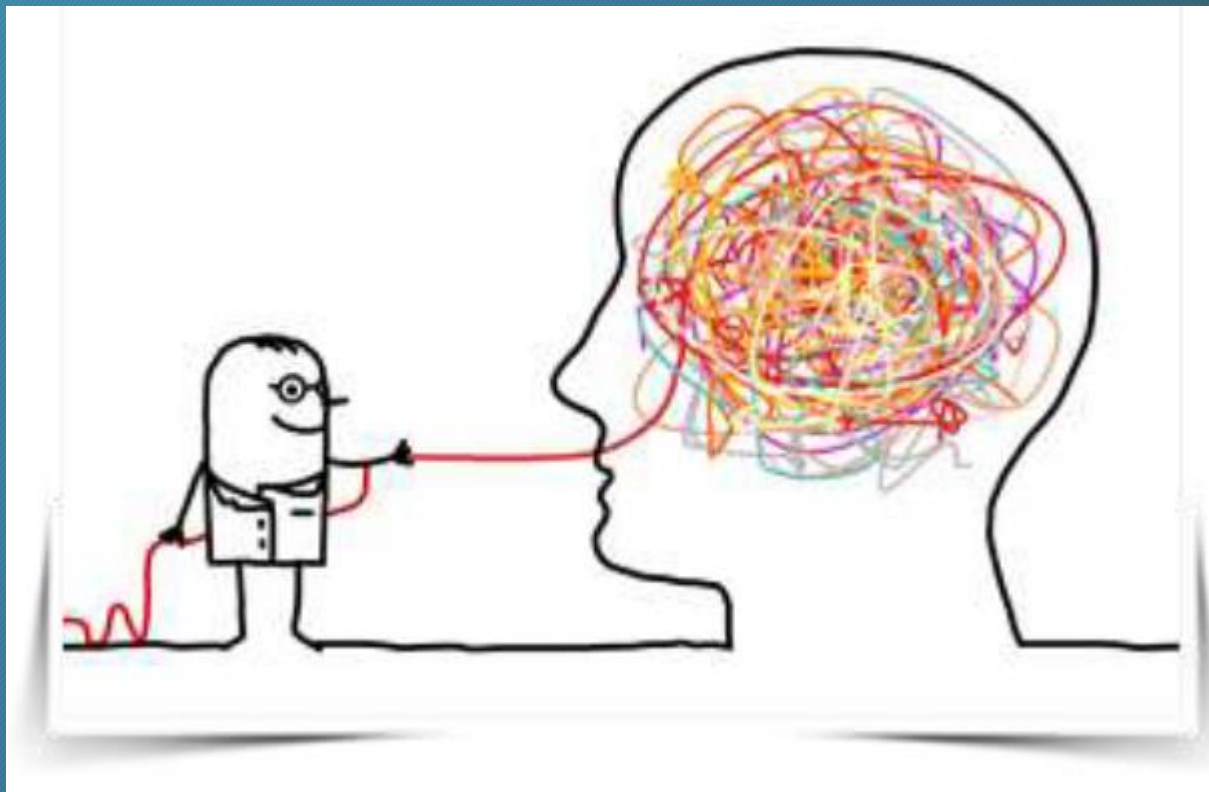
# Almost there

Dr. Mozghan Fardid

8  
3

# Getting good data from respondents: interviews

84



# What does Qualitative Data look like?

85



## Text

- Transcriptions of interviews & focus groups
- Notes & memos



## Audio

- Audio recording



## Visual

- Video
- Photograph

# Keys to planning a qualitative project

86

- Engage a qualitative expert from the BEGINNING
- Educate yourself before you start (read, take a course, talk to experts)
- BUDGET for your expert consultants, interviewers, transcription/translation, and coders
- Be clear about WHY you need to use qualitative or mixed methods



# Ensuring a rigorous study design

87

Engage in *AT LEAST TWO* strategies to ensure rigor

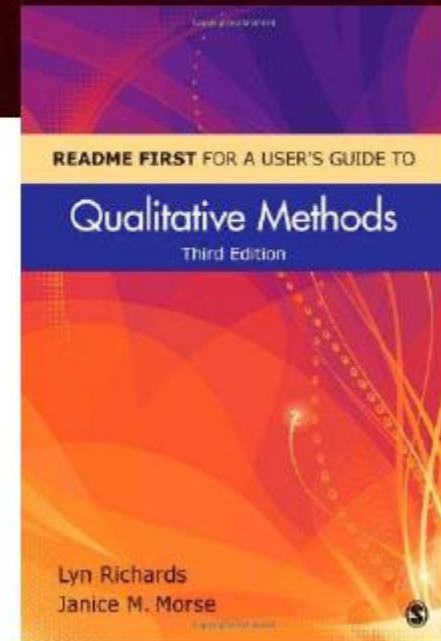
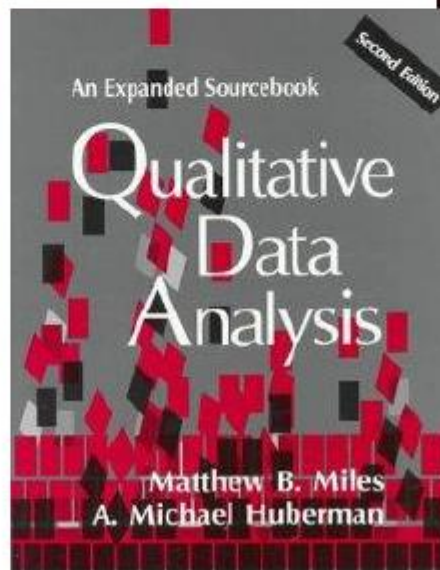
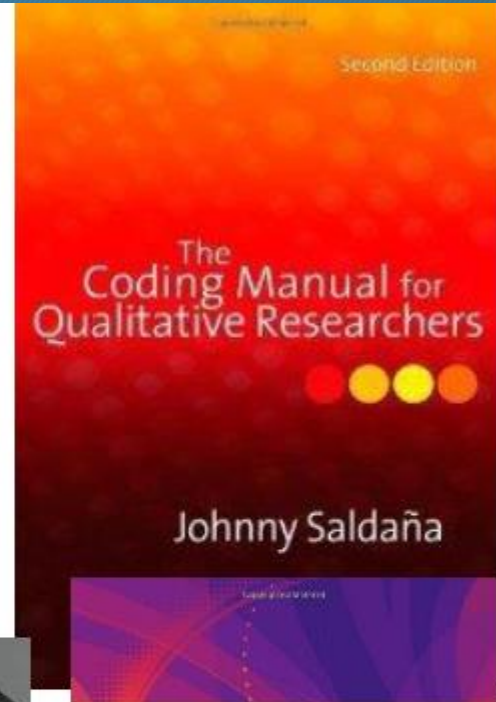
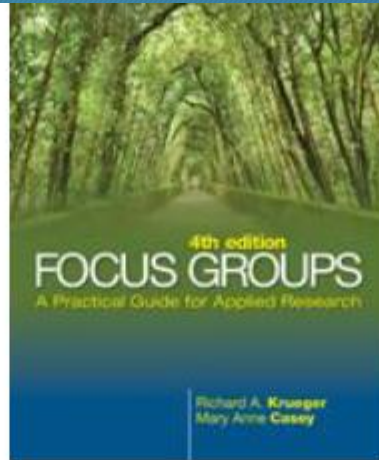
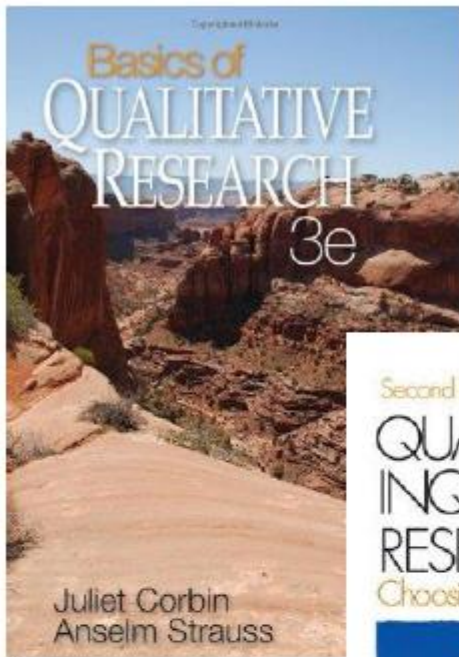
Prolonged  
Engagement


Triangulation

Member  
checking

Peer Review/  
Debriefing

External  
Audit



 **Qualitative Methods In Health Research**

Opportunities and Considerations in Application and Review

Office of Behavioral and Social Sciences Research  
 National Institutes of Health








# MAXQDA

Dr. Mozhgan Fardid

8  
9

# Compare

90

	 MAXQDA Standard	 MAXQDA Plus	 MAXQDA Analytics Pro
∨ Data Types (Import & Analysis)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
∨ Data Management & Usability	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
∨ Transcription	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
∨ Qualitative Data Analysis	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
∨ Mixed Methods Analysis	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
∨ Visualization	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
∨ Teamwork	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
∨ Report & Publish	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
∨ User Community, Languages and Support	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
∨ Quantitative Text Analysis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
∨ Statistical Data Analysis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Dr. Fardid



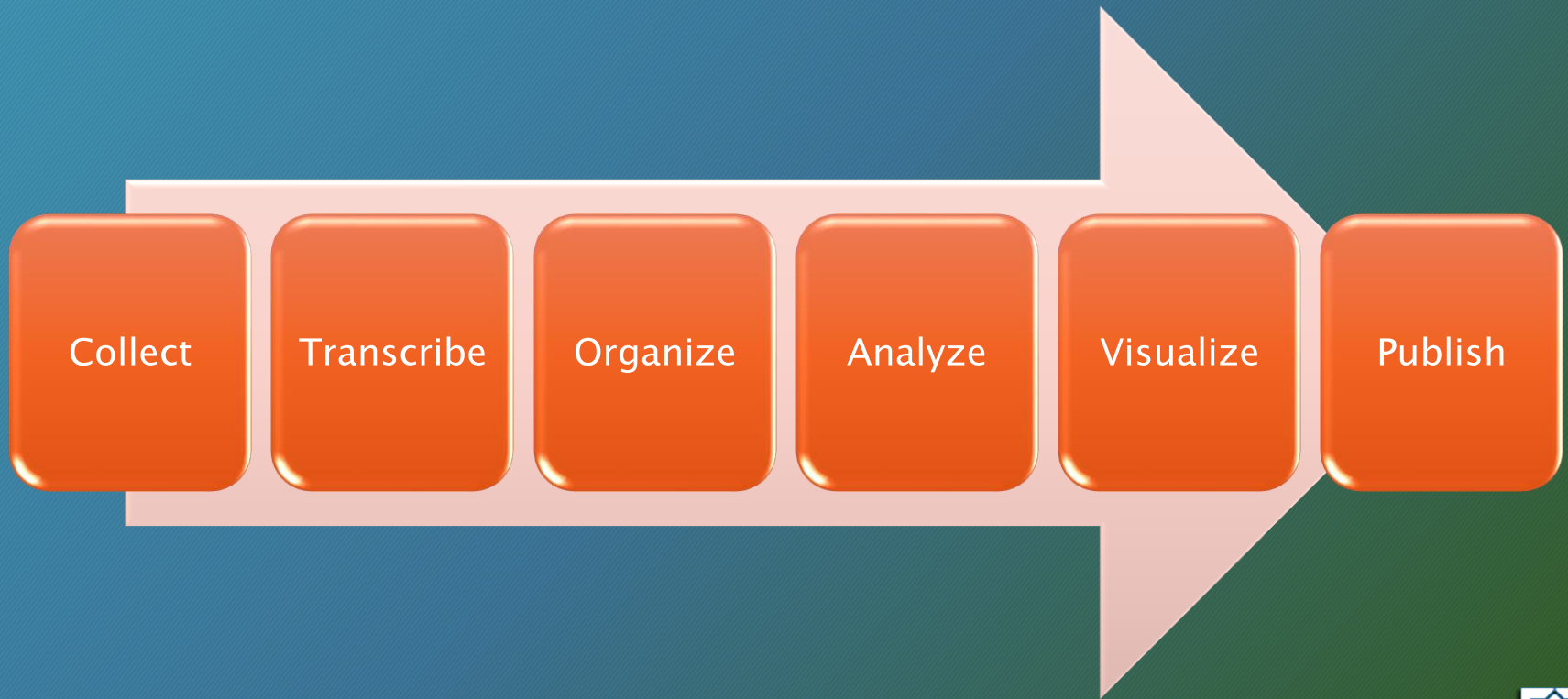
# MAXQDA

91

MAXQDA is a world-leading software package for qualitative and mixed methods research. Analyze all kinds of data – from texts to images and audio/video files, websites, tweets, focus group discussions, survey responses, and much more.

Developed by and for researchers, MAXQDA is at once powerful and easy-to-use, innovative and user-friendly, as well as the only leading QDA software that is 100% identical on Windows and Mac.





# The Interface: Sleek & easy to use

93

The screenshot displays a software interface for document analysis, organized into several main sections:

- Top Menu:** Includes options like 'New Project', 'Open Project', 'Document System', 'Code System', 'Document Browser', 'Reviewed Segments', 'Logbook', 'Teamwork', 'Merge Projects', 'Save Project As', 'Save Anonymized Project As', 'Project from Activated Documents', 'External Files', and 'Archive Data'.
- Document System:** A tree view on the left showing a hierarchy of documents. The selected document is 'Notes: Session #5-8 (Methods)' with 33 pages.
- Your Data:** A central panel showing a list of documents and their associated data points, such as 'Focus group discussion' (1), 'Videos' (2), and 'Images' (1).
- Your Codes:** A panel on the bottom left showing a list of codes and their associated data points, such as 'Interview Guide Topics' (0), 'Health' (3), 'Recreation' (4), and 'Home Life' (5).
- Document Browser:** The main central area displaying the text of the selected document. It includes a search bar, a list of sections (e.g., 'Recreation', 'Relationships', 'SECTION 2 - WORD TO STORY PROMPTS...', 'FAILURE:'), and a 'Memo 2' section.
- 7 coded segments (from 1 document, 1 document group):** A panel on the right showing a list of coded segments extracted from the document, such as 'Notes: Session #5-8 (Methods)' and 'Relationships'.
- Retrieval:** A panel on the bottom right showing a list of retrieved segments, such as 'Notes: Session #5-8 (Methods), Pos. 12' and 'Interview Guide Topics > Relationships'.



# All your data, one place

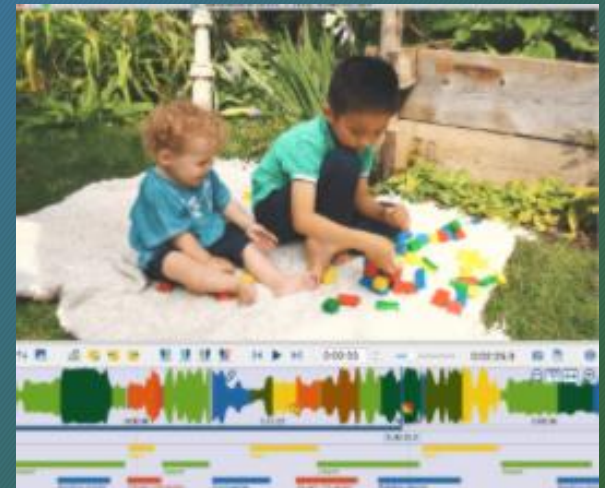
- simple text document
- Excel table of survey results
- PDF file, image, website
- audio or video recording
- SPSS data file
- bibliographic record
- or focus group discussion
- even YouTube comments
- you can analyze it all!



# Transcription & media analysis

95

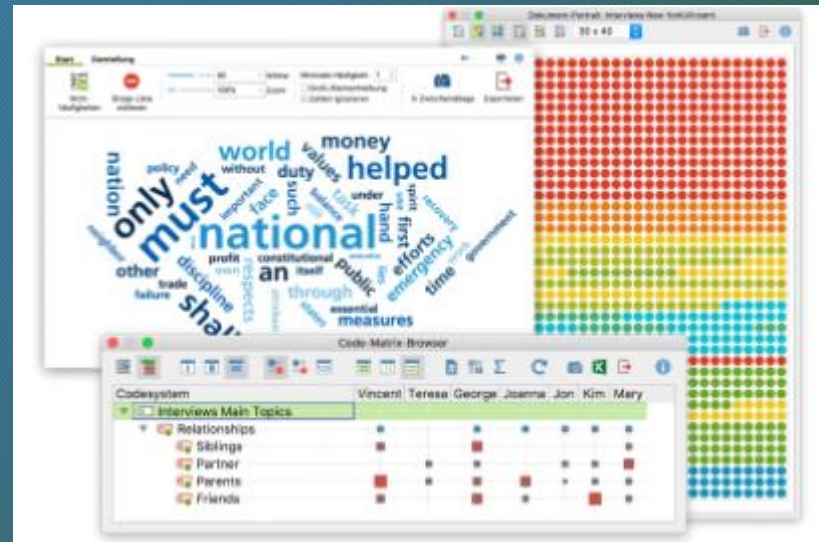
- Built-in tools for professional transcriptions of audio and video recordings.
- Of course, you can also import transcripts you've created in a separate program and link your transcripts to the original media file.
- Or code and analyze your media file as it is – even without transcribing it before.



# Visualize your data & results in MAXQDA

96

Visualize the progression of an interview, compare documents, or use MAXMaps to visualize connections in your data. The outputs are always linked to the underlying material – so you'll never lose sight of the bigger picture.





# Annotate, Paraphrase, Summarize

97

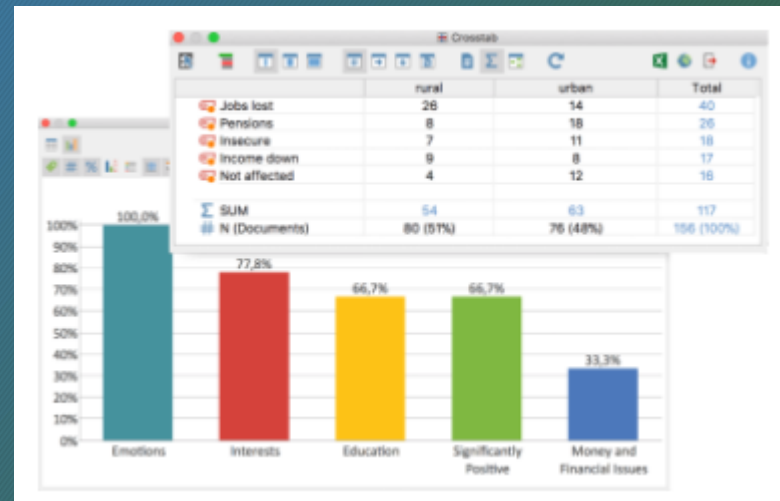
Write notes while you work and attach them anywhere – to documents, to codes, or to the data itself. Summarize the most important data points or paraphrase them to develop a coding system. With the Memo Manager, Summary Grids and Summary Tables you'll never lose track of your progress!



# THE mixed methods leader

98

MAXQDA's features have been developed in close collaboration with world-leading experts in mixed methods research. Integrate quantitative methods and/or data into your project, link qualitative to quantitative data with Typology Tables, Similarity Analyses, Joint Displays, and more! Quantify the results of your qualitative analyses, or calculate statistical frequencies, all in one program



# Search & retrieve

99

MAXQDA's advanced search functions offer you everything you should expect from professional data analysis software – from a simple one-click activation system to advanced retrieval options for finding overlaps, groups of words, code colors, and more.

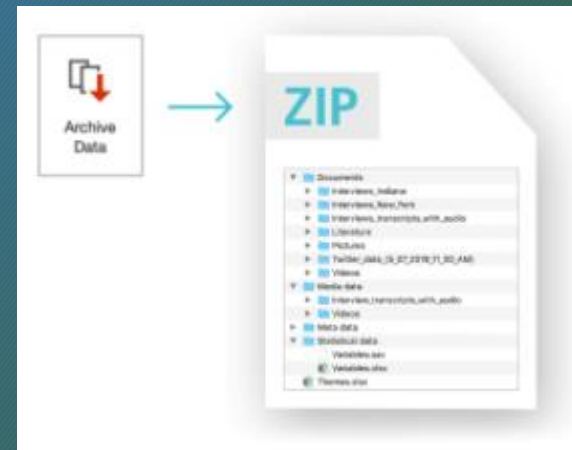
Or link your data to demographic variables to create groups



# Export, Publish & Archive

100

- Export every type of data and all kinds of results – search queries, tables, visualizations, you name it! You can choose between different file formats – Word, Excel, HTML, image files, and more. Create printable reports in your own corporate design or export all of your data at once into a customizable folder structure.



# Cross-platform, multilingual

101

MAXQDA is 100% identical on Windows and Mac, and ideal for working in teams. You can easily transfer complete projects or single elements and test your intercoder-agreement. Perfect for international teams: The interface is available in 15 languages – and it's Unicode-based so you can label your codes and data elements in any language you like



# Interview analysis in six steps

102

## ***Step 1: Prepare, organize, and explore your data***

the beginning of the analysis, such as the intensive reading of the interviews and the writing of initial memos and case summaries.

## ***Step 2: Develop categories for your analysis***

how the path from the interview guide to the analysis categories proceeds and which criteria categories should fulfil.

## ***Step 3: Code your interviews (“basic coding”)***

the focus is on coding. It is the first coding cycle, which we call *basic coding*.

# Interview analysis in six steps

103

## ***Step 4: Develop your category system further and the second coding cycle (“fine coding”)***

The coded text passages are systematically processed, categories are differentiated, and the data is coded accordingly in a second coding cycle.

## ***Step 5: Analysis options after coding***

How to proceed after coding? Which analysis options are available and how the results look like?

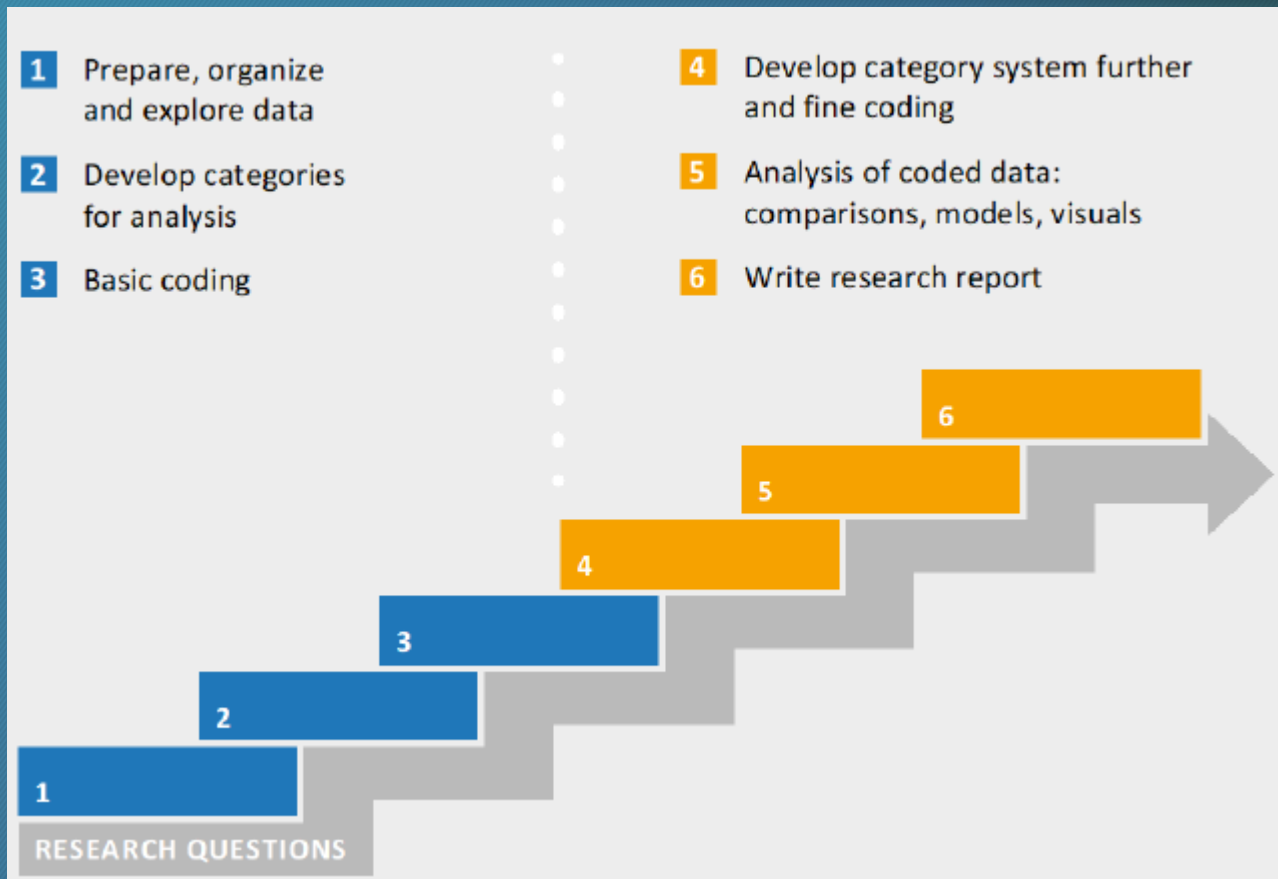
## ***Step 6: Write the research report and document the analysis process***

The final sixth step is dedicated to writing: How do I write the research report or the empirical parts of my dissertation or master thesis? How can transparency be created such that the readers of my research can understand it as well as possible?



# Focused analysis of interviews in six steps

104

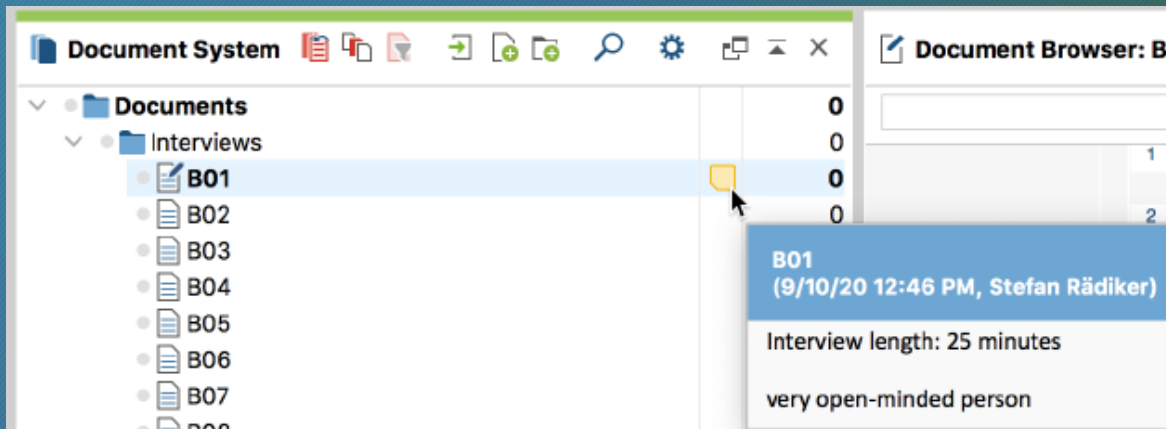




# Import your interviews and organize them in document groups

105

1. By clicking on the *New Document Group* icon in the header of the “Document System” window, you create a new document group.
2. Via *Import > Transcripts* you can then import transcripts directly into the currently selected document group. If the transcripts contain timestamps,



# Store sociodemographic and background data in document variables

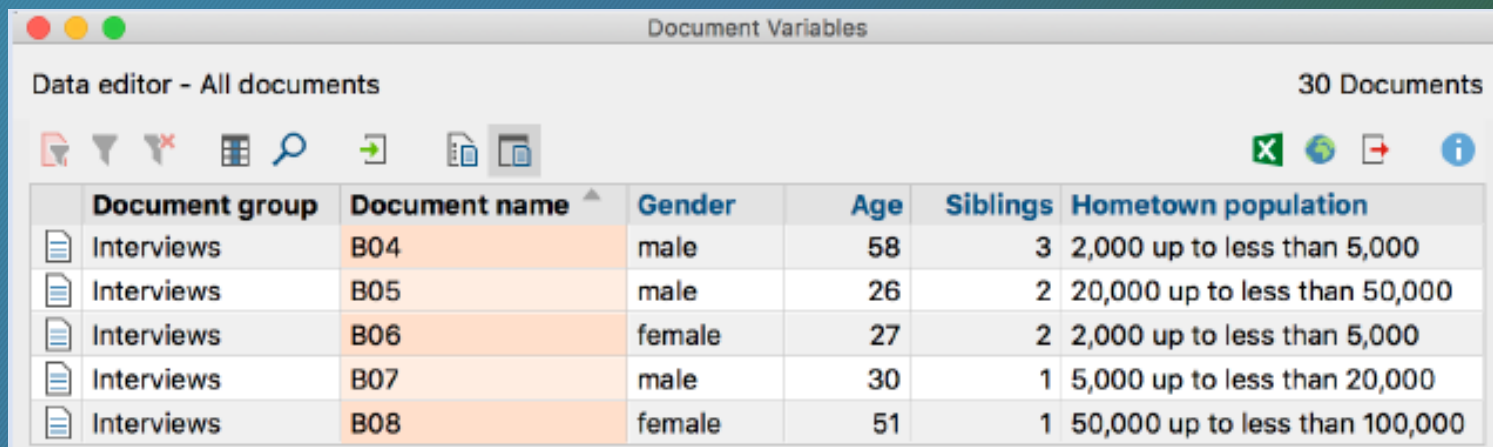
106

- 1. Open *Variables > List of Document Variables* and create the required variables.
- The variable types “Text”, “Integer”, and “Decimal” are used most frequently.
- 2. Switch to the window *Variables > Data Editor for Document Variables* and enter
- the respective values for each interview.

# Sociodemographic and background data

107

Using *Variables > Import Document Variables*, background information can also be inserted into the project directly from an Excel or SPSS file, e.g. if you want to add questionnaire data for each person interviewed in a mixed methods study.

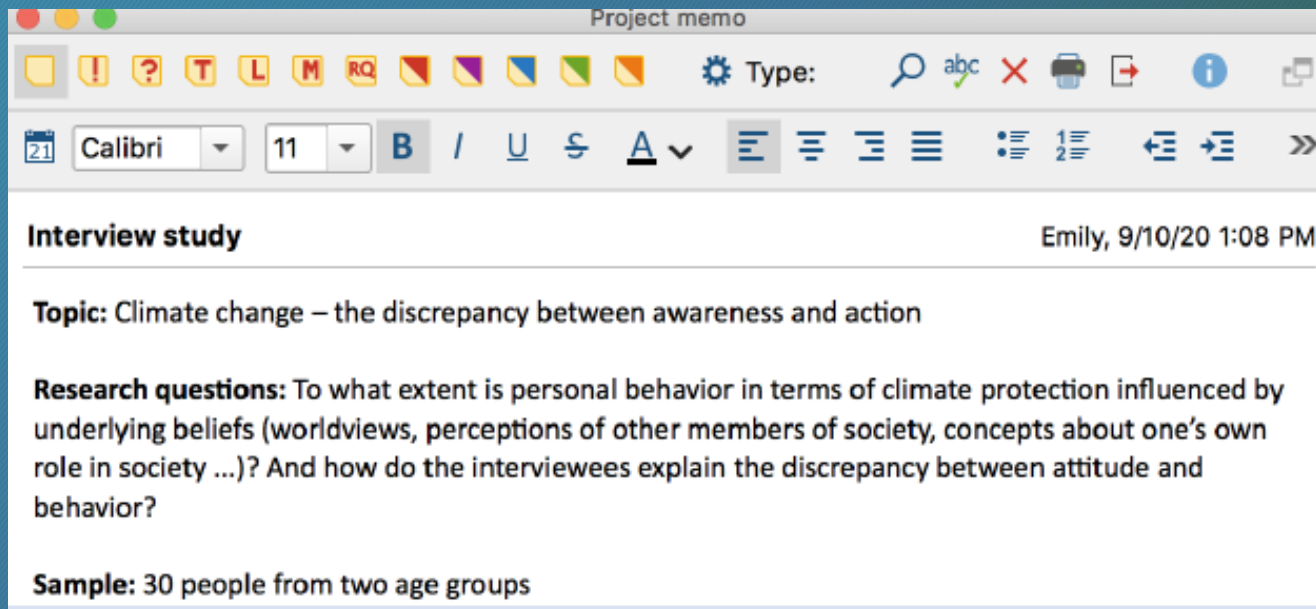


	Document group	Document name	Gender	Age	Siblings	Hometown population
	Interviews	B04	male	58	3	2,000 up to less than 5,000
	Interviews	B05	male	26	2	20,000 up to less than 50,000
	Interviews	B06	female	27	2	2,000 up to less than 5,000
	Interviews	B07	male	30	1	5,000 up to less than 20,000
	Interviews	B08	female	51	1	50,000 up to less than 100,000

# Record your research question(s) in MAXQDA

108

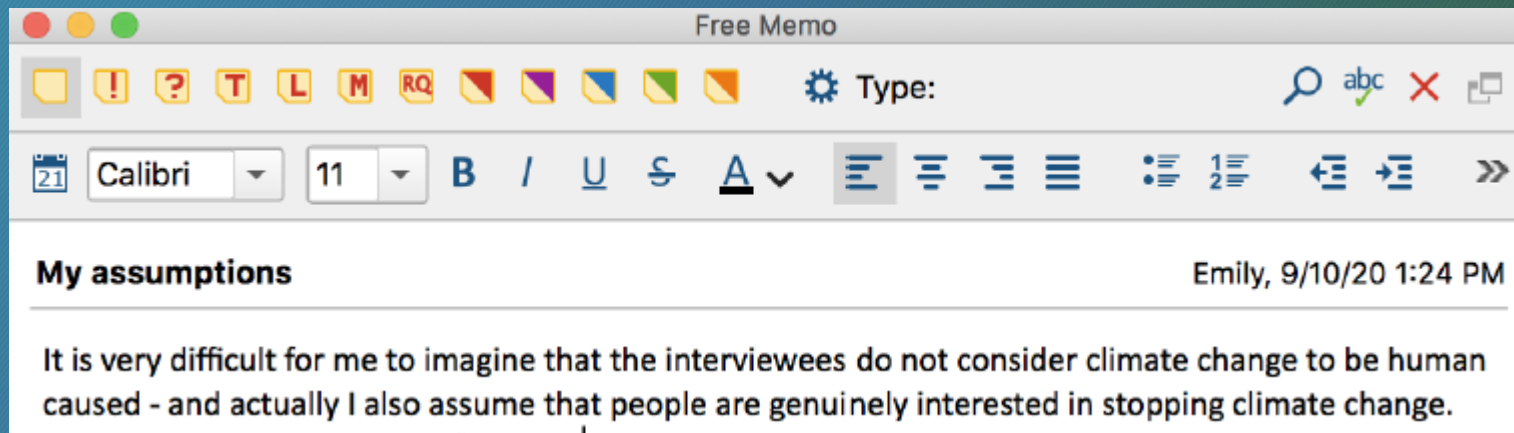
Switch to the *Memos* tab and select the *Project Memo* function. MAXQDA displays a memo window in which you can enter your research question(s) and other project-related information such as notes on research design



# Record your assumptions and preconceptions in MAXQDA

109

- Switch to the Memos tab and select New Free Memo. In the memo window, first assign a suitable title for the memo and then note the results of the reflection and your presumptions about connections, etc.



# Search for words in your interviews

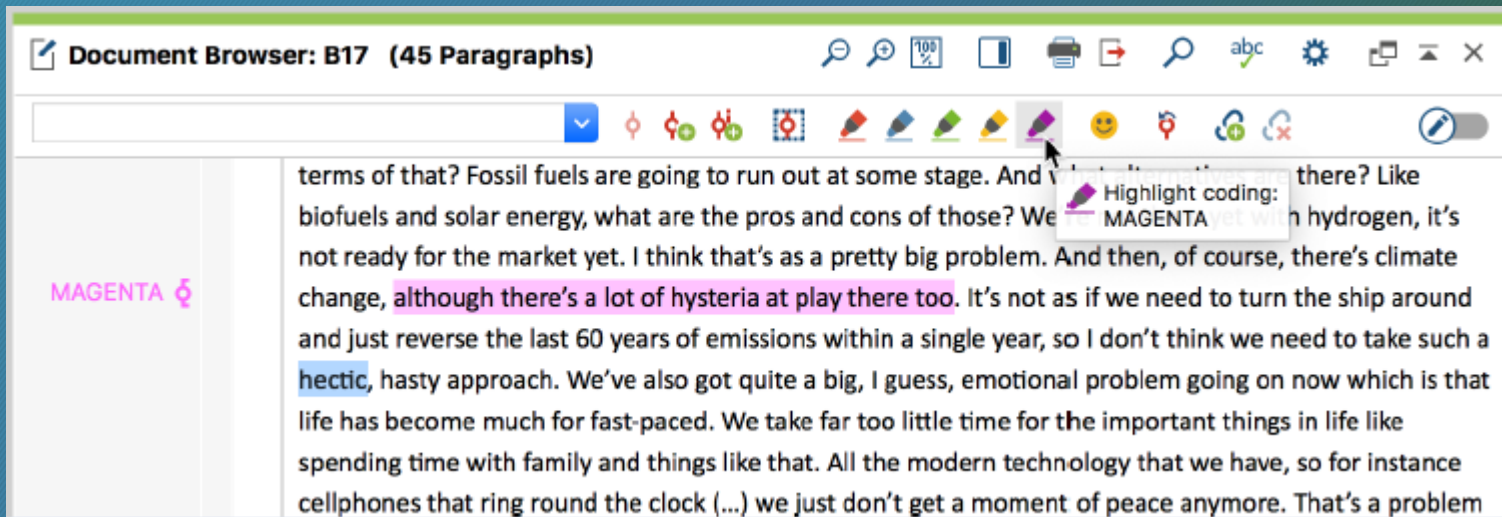
110

1. Start the function Analysis > Lexical Search and enter a search term in the list. You can also enter several search terms and search for their co-occurrence in a document, paragraph, or sentence.
2. The results table lists all the locations where the data was found. A click on a hit opens the interview and highlights the term found.



# Mark important and/or special text passages

1. Open the interview transcript in the “Document Browser” window.
2. Select the text passage to be highlighted with the mouse and click on one of the symbols with a colored marker above the text.
3. MAXQDA then highlights the selected text with the chosen color.



# Checklist

112

- Transcribe interviews according to well-established rules
- Review and correct transcripts generated
- Create suitable document groups in the MAXQDA project
- Import interviews into the document groups
- Enter sociodemographic
- Recall your research question(s) and record them in the project memo
- Record your own assumptions in a “free” memo
- Select interviews for data exploration
- Explore data using lexical search and word cloud
- Color code important terms and paraphrase text passages
- Record initial findings and analysis ideas in memos





It is important to be aware of these challenges and have strategies to address them:

113

1. Gaining access
2. Selecting informants
3. Social desirability bias
4. Low quality data/suboptimal data
5. Respecting research ethics



# References

114

- Rädiker S, Kuckartz U. Focused Analysis of Qualitative Interviews with MAXQDA. 2020
- Palinkas LA, Horwitz SM, Green CA, Wisdom JP, Duan N, Hoagwood K. Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Adm Policy Ment Health*. 2015
- Carter N, Bryant-Lukosius D, DiCenso A, Blythe J, Neville AJ. The use of triangulation in qualitative research. *Oncology nursing forum*. 2014;41(5):545–7
- Andrasik M, Murray, K. QUALITATIVE METHODS: CONDUCTING INTERVIEWS AND FOCUS GROUPS. University of Washington
- Andrasik M, Murray, K. Qualitative Research Methods. Sociobehavioral Prevention Research Core & International Core. 2013
- Andrasik M, Frey S, Endeshaw, M. **Qualitative Methods: Coding & Data Analysis**. CFAR SPRC
- <https://www.maxqda.com/>





# Thanks!

## Any Questions?

You can find me at

[fardid@shmu.ac.ir](mailto:fardid@shmu.ac.ir)  
[mfardid@gmail.com](mailto:mfardid@gmail.com)



Shahroud University of Medical Sciences