The basics of collecting qualitative data in the field

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Outline

- Why Qualitative?
- Methods and Implementation
- Other considerations: Sampling and instrument design
- Analyzing and Presenting

Why Qualitative?

- Objectivism

View that knowledge exists as meaningful entities independent of consciousness and experience. Often use statistical analyses to obtain a single "truth"

Main point: Objectivist research questions tend to be closed-ended, focused on being objective and excluding any subjectivity, utilizing standardize procedures to quantify or disentangle "true" values from "erred" values

Why Qualitative?

- Constructivism

Knowledge is not discovered, but constructed

Different people may construct meaning in different ways, even for the same phenomenon.

No single, objective "truth"

Main point: Constructivist research questions tend to be open-ended, subject to multiple interpretations, and researcher and participant influence(s)

Why Qualitative?

- Qualitative methods are useful to better understand:

✓ Behaviors
✓ Attitudes/Opinions
✓ Perceptions
✓ Community Knowledge
✓ Emotions and Values

✓ Culturally Shared Meaning
✓ Social Structures and Relationships
✓ Processes and Systems
✓ Environmental Context

Details on "lived realities" including beliefs, behaviors, interactions, experiences and how we interpret specific phenomenon in their world in subjective ways

Why Qualitative?

- ✓ Can be used to better understand a wider set of features of the context
- ✓ Can be used to explore and discover and develop new hypothesis
- ✓ Can be used to develop more precise content for surveys
- ✓ Can be used to improve and test interventions
- ✓ Can be used to better identify channels and mechanisms
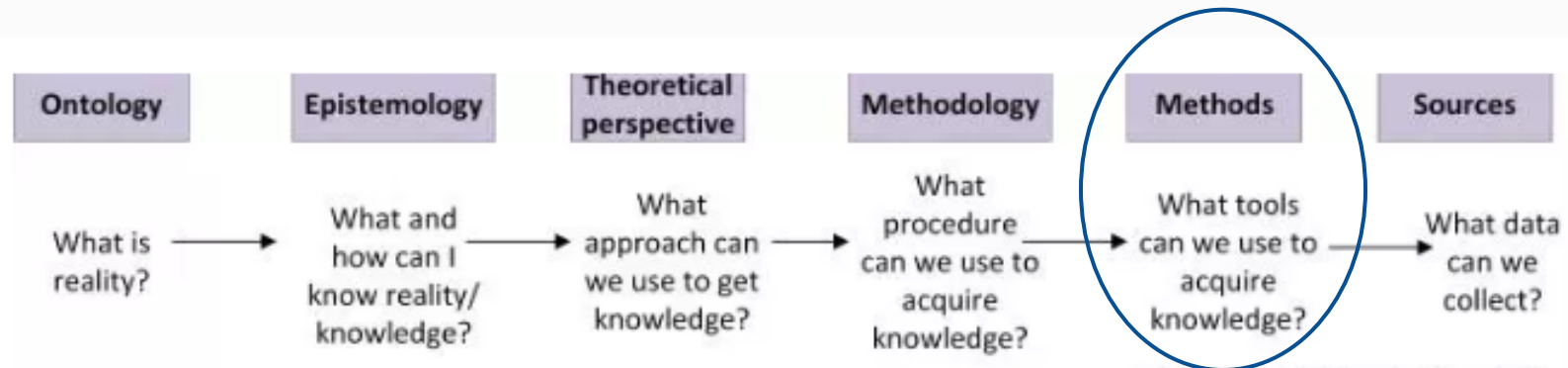- ✓ Can be used to explain survey results

"Summary"

	Quantitative	Qualitative
General framework	Seeks to confirm hypothesis Seeks to elicit and categorize responses to specific questions Uses highly structured methods	Seeks to explore Flexible and iterative style of eliciting responses to questions Semi-structured methods
Analytical objectives	Quantify variation Predict causal relationships Describe characteristics of population	Describe variation Describe and explain relationships Describe individual experiences Describe group norms
Study design	Stable Participants responses do not determine how study proceeds Study design is subject to assumptions and conditions	Some flexibility in study design and instruments Participants responses affect process Iterative design, data collection and research questions adjust

Enquiry traditions

Ontology – **What is reality? -**assumptions and beliefs about the nature of being and existence in the world: e.g. if you are working in education- How do humans learn? What are our purposes for learning?

Epistemology – **How do you know something?** the philosophy - including assumptions and beliefs – about how we know what we know. In the same example, How do we know how humans learn? How can we understand how an education system works?

Methodology – **How do you go about finding it out?** The toolbox to be used to acquire knowledge (methods, are the tools inside the toolbox)

Example

Epistemology	Theoretical Perspective	Methodology	Methods
We want to understand reasons why households in lower-income Baltimore neighborhoods consume high-fat, high-sugar diets.	Studies suggest that diet is a contributing factor to urban prevalence of diabetes, CVD, and obesity. Existing food choice models do not seem applicable.	We will use **Grounded Theory Methodology** to answer: "What are the environmental, social, and economic factors contributing to highfat, high-sugar consumption"?	We will conduct n=50 interviews with community residents. We will perform community mapping of food options, and observe food purchasing in two local markets.
Based on constructivist view that multiple reasons may exists. All household reasons are valued.	*Based on chronic disease model and behavioral food choice theory.*	*Based on goal of generating more relevant theory of causes of diet consumption.*	*Based on goal of having increasing focus and understanding.*
Problem Statement	Existing Theory	Research Approach	What to do

Methods and Implementation

- Individual and Group interviews
- Observations
- Mixing Methods
- Written exercises, visual material, participatory
- Documentation/text , Case study

Interviews

Main goal
- Capturing the individual experience and view of events: the assumption is that participants perspectives are meaningful, knowledgeable, and able to be made explicit and articulated.
- Allows to present the meaningfulness of the experience from the respondent's perspective.

Interviews are particularly appropriate when:
- Complex subject matter
- Highly sensitive subject matter
- Detailed information is needed
- Busy, high-status respondents

Interviews

3 types of interviews:

- Structured interviews: neutral, controllable, pre-determined, consistent
- Semi-structured interviews: "middle ground"
- Open-ended or unstructured: flexible and require active listening, aimed at capturing not only experience but 'in their own words'

All interviews need: an *interview guide-* list of questions or issues that are to be explored and suggested probes for following up on key topics.

Dynamics of interviewing are similar to a *guided conversation*, allowing for clarification and probing.

Example: Structured -> Unstructured

Quant	Structured	Semi-Structured	Unstructured
1. Indicate 'yes' or 'no' if you experienced any of the following symptoms [Refer to list of symptoms.] 2. For each symptom, did you experience it within the last week, the last month, etc.? 3. Did you visit a facility for treatment? [Y/N] 4. What type of facility to did you visit [Refer to list.]	1. When did you start getting symptoms? 2. Who did you talk to first about your symptoms? 3. How did you make the decision to seek treatment? Where? 4. Describe how you accessed the clinic.	1. When did you start getting symptoms? Probe: Who did you talk to first about your symptoms? 2. How did you make the decision to seek treatment? Probe: Where? Describe how you accessed the clinic.	1. Tell me about the last time you felt unwell....

	Structured	Unstructured
Pros	Useful if looking for very specific information	Gain in-depth information which was not planned
Cons	Not suited for deep understanding of a process or context	Difficult to compare information between respondents

Group interviews and Focus groups

Main goal

- To learn about a relationship or shared experience that can promote answer to questions
- To capture shared thoughts or thoughts or reactions to questions
- To gather a group of people of similar characteristics to seek consensus/differences about a topic
- To foster a dialogue that allows for diverse perspectives from individuals and the collective to be revealed

All group interviews and focus groups need: an *interview guide-* list of questions or issues that are to be explored and suggested probes for following up on key topics.

	Group interviews (small)	Focus groups
Purpose	Ease to interview more than one person; it is culturally appropriate to be together in an interview. If the purpose is to analyze their conversation and how they relate to each other and to analyze multiple perspectives.	Moderated discussion around a common topic where members have a relationship or experience with the topic; used to gather views and opinions (similar and different) on the topic. Can be useful when gathering data on perceptions of a program or program implementation.
Role of interviewer	Interviewer directs questions to each person and seeks their responses.	Interviewer facilitates a discussion that aims to gather group opinions, including shared and divergent ones.
Participants	2-4 participants, usually friends or related members	6-10 participants from a homogenous group related to the topic under study

Moderator Role

The *don'ts to keep in mind*:

- Asking interviewee/s embarrassing/ awkward questions
- Asking leading questions
- Jumping too quickly from one subject to another
- Having more than one idea per question
- Teaching and preaching, for example giving participants advice or information
- Summarizing responses too early
- Presenting your own perspective
- Remaining at a superficial level
- Interruptions from outside
- Intimidating participants by using complex vocabulary/ patronizing by being too simplistic
- Asking questions that can be answered with yes/no
- Asking too abstract questions - 'think about last time you were pregnant. What did you like about services then?', rather than 'what do you think about ante-natal services?'
- Not giving concrete reference points (dates, event, project)
- Letting one or few respondents dominate the conversation

Moderator Role

- The quality of the information obtained is largely dependent on the interviewer's skills and personality, ability to build rapport
- The interviewing process is one that is always mediated by the interviewer and thus what people choose to talk about and tell a moderator is affected by this relationship

Observations

Main goal
- 'See through the eyes of the people' without imposing a pre-conceived frame of reference.
- Description of situations helps understand what happens in a particular context and situation: 'reality'
- To place things/issues/answers within a context

There are two crucial aspects of observational research:
- Capture interactions (between people and with their environment)
- Observational approaches allow to learn about things people may be unaware of or are unwilling/unable to discuss in an interview or focus group.

3 types: Participatory, non-participatory, visual data collection

Observations

Information for which observations are a good source:

The setting - The physical environment within which the project takes place.

The human, social environment - The ways in which all actors (staff, participants, others) interact and behave toward each other.

Project implementation activities - What goes on in the life of the project? What do various actors (staff, participants, others) actually do? How are resources allocated?

The native language of the program - Different groups have their own language or jargon to describe the problems they deal with in their work.

Nonverbal communication – From the way individuals express opinions to physically space themselves during discussions.

Notable non-occurrences - Determining what is not occurring although the expectation is that it should be occurring as planned by the project team, or noting the absence of some particular activity/factor that is noteworthy and would serve as added information.

Observations

Some **disadvantages**:

- Observations are expensive and time consuming
- Need well-qualified, highly trained observers (even if when using technology)
- Selective perception of observer may distort data
- Investigator has little control over the situation that presents itself
- The presence of observers may change behaviors- Observational techniques are privacy-threatening.

Mixing Methods

- Listing exercises
- Vignettes

Mixing Methods

Listing Exercises

Please write down as many factors, things, events, and relationships that you can think of that you think affect a person's height.

Now on a fresh sheet of paper, write down all the words you previously wrote but group similar words together. Do any of these groups of words represent a broader theme or category? If so, please write it down next to the group of similar words.

Mixing Methods

Vignettes

In a typical public sector organization, Elena, a line manager manages 5 employees and contract staff, including Andrei.	1. **Better than last year**
During the performance appraisal, Elena and Andrei sits down to create his work plan together unlike last year	2. **Same as last year**
Elena does not provide feedback on his past year's performance to Andrei	3. **Worse than last year**
Elena did not provide much feedback during the pastyear.	**- > Why?**
How is Andrei likely to perform?	

Other Considerations

Sampling

- Qualitative samples are generally *purposive*. This means participants are selected because they are likely to generate useful data for the project (the quality of the data is more important than sample size).

- The total number of participants or cases does not indicate whether the data are more representative or valid. Qualitative research does not aim for empirical generalizability but can produce *theoretical generalizability*.

- Sampling can be an iterative process in seeking more data to answer the research questions and to reach *theoretical saturation, data saturation*, or *estimate saturation.*

- Sampling is informed by a principle of *comparability*, if the research design and study questions are seeking explanations across groups or sites.

- Sample has to be credible, and covers the main groups you are interested in, one common strategy is a *maximum variation sample*.
  - Involves selecting key demographic variables that are likely to have an impact on participants' view of the topic
  - Generates a sampling 'grid'
  - Recruit groups that reflect various combinations of variables. For example: age (adolescents, adults, elderly); male/female; low income/high income; rural/urban; ethnicity.

Sampling

Type of sampling	Purpose
Criterion	Identify and select cases based on a set of pre-determined criteria; this could include selecting cases that are homogenous
Theory-driven	Selecting participants based on the theory of change, and to seek confirmatory and dis-confirmatory evidence; this may include a form of maximum variation to select participants with a wide variety of experiences to help inform the development of theory
Iterative, snowballing and emergent	Selecting participants based on emergent theory or findings, also to facilitate the identification of hard-to-find cases
Extreme, unique or outlier case	Selecting participants to explain unique or outlier cases in the phenomenon being studied, or to provide explanation for quantitative findings of means analysis
Stratified or cluster	Selecting participants for comparability among sites/cases or linked to a mixed-methods study, which may have a representative sample and participants are selected within that sample.
Intensity	To provide rich information form a few select cases that manifest the phenomenon intensely but not extreme cases
Deviant case	To learn from highly unusual manifestations of the phenomenon in question
Maximum variation	To document diverse variations to identify common patterns that cut across variations

Sampling

- Can follow strategy similar to quant at initial levels (random)
- Stratify by better or worse examples of phenomenon/outcome indicator
- Rule of thumb: at least 2 exercises per geographic area and demographic (or until saturation)

Instrument Design

✓ Protocols/guides are extremely necessary! Clarify questions and identify probes; ensure that interviews are consistent; prioritize research questions.

Types of questioning protocols:
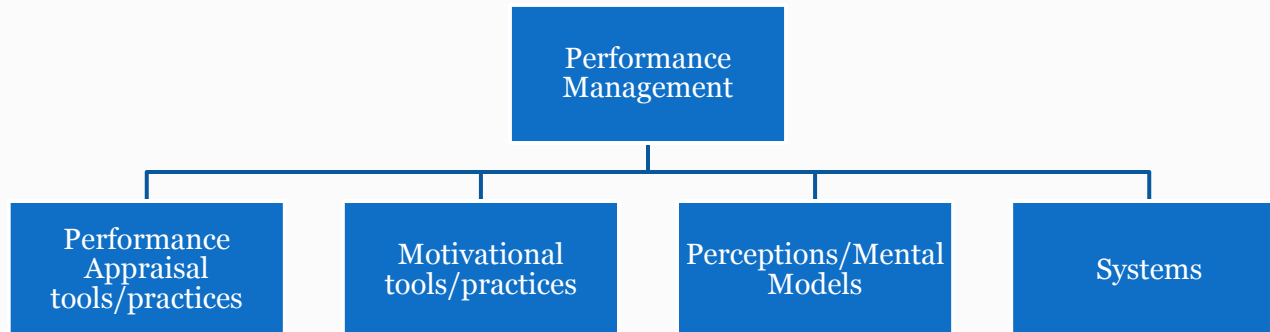
- *Funnel protocols* employ broad questions (think long road/grand tour) before asking more pointed questions. Appropriate for sensitive topics.
- *Inverted funnels* begin with closed questions, often background questions, and gradually build to more open-ended questions. Sets the interviewee in a zone of comfort with interviews and accessing/elaborating views.
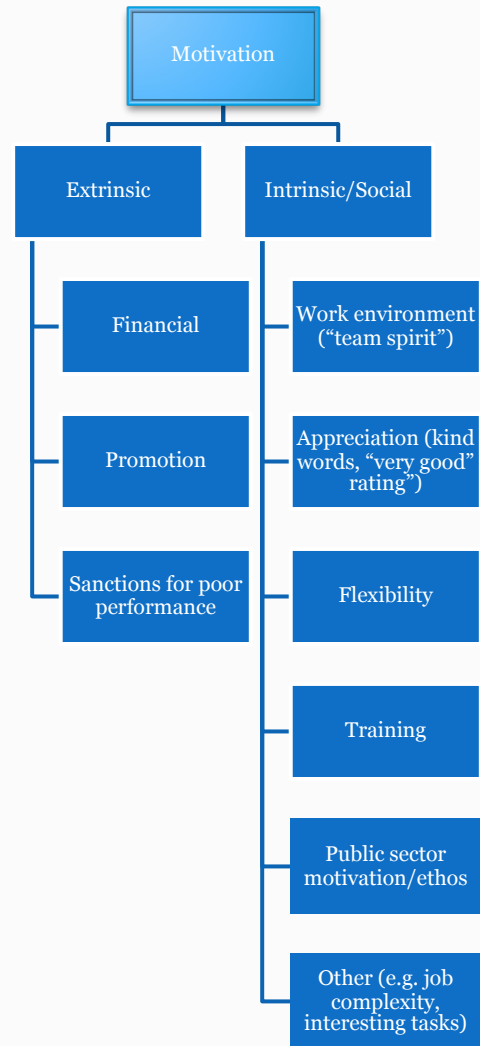
Qualitative Data Analysis

Qualitative data analysis

- Qualitative analysis is a *loop-like pattern* -multiple rounds of revisiting the data. An *iterative* set of processes. Start with an initial set of themes – revise upon reading of data.

- Questions analysis should aim to answer:
  - What patterns and common themes emerge in responses dealing with specific items? How do these patterns (or lack thereof) help to illuminate the broader study question(s)?
  - Are there any deviations from these patterns? If yes, are there any factors that might explain these atypical responses?
  - What interesting stories emerge from the responses? How can these stories help to illuminate the broader study question(s)?
  - Do any of these patterns or findings suggest that additional data may need to be collected? Do any of the study questions need to be revised?
  - Do the patterns that emerge corroborate the findings of any corresponding qual/quant analyses that have been conducted? If not, what might explain these discrepancies?

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                              ┌──────────────┐
                              │  Motivation  │
                              └──────┬───────┘
                        ┌────────────┴────────────┐
                  ┌───────────┐            ┌───────────────┐
                  │ Extrinsic │            │ Intrinsic/Social│
                  └─────┬─────┘            └───────┬────────┘
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Motivation

Extrinsic
- Financial
- Promotion
- Sanctions for poor performance

Intrinsic/Social
- Work environment ("team spirit")
- Appreciation (kind words, "very good" rating")
- Flexibility
- Training
- Public sector motivation/ethos
- Other (e.g. job complexity, interesting tasks)
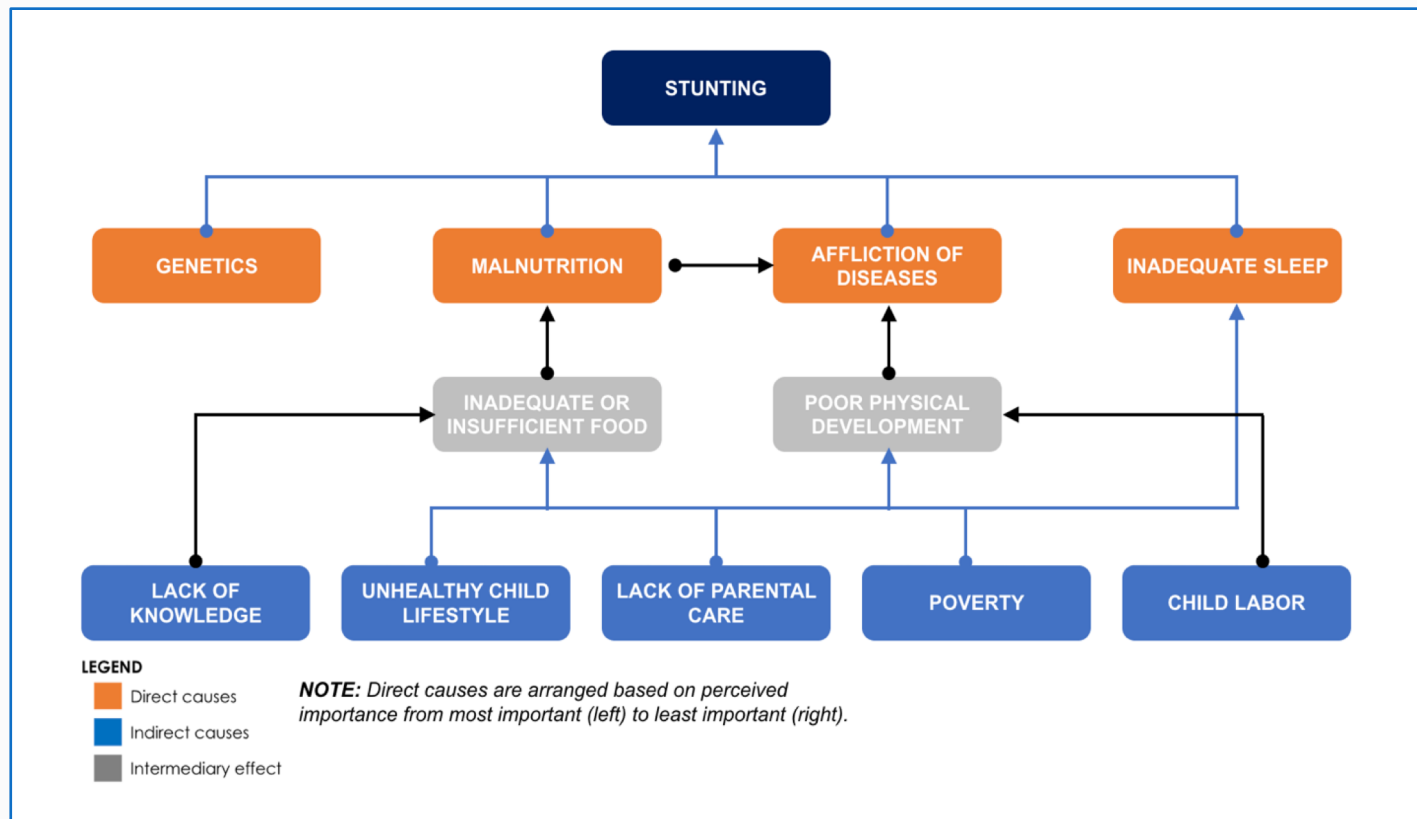
Qualitative data analysis

Practical Considerations:

- Time consuming when done properly
- Nvivo and Atlas.ti are common software
- Subjective, need to discuss and interpret codes and coding repeatedly
- Need at least 2 coders, compare interrater agreement
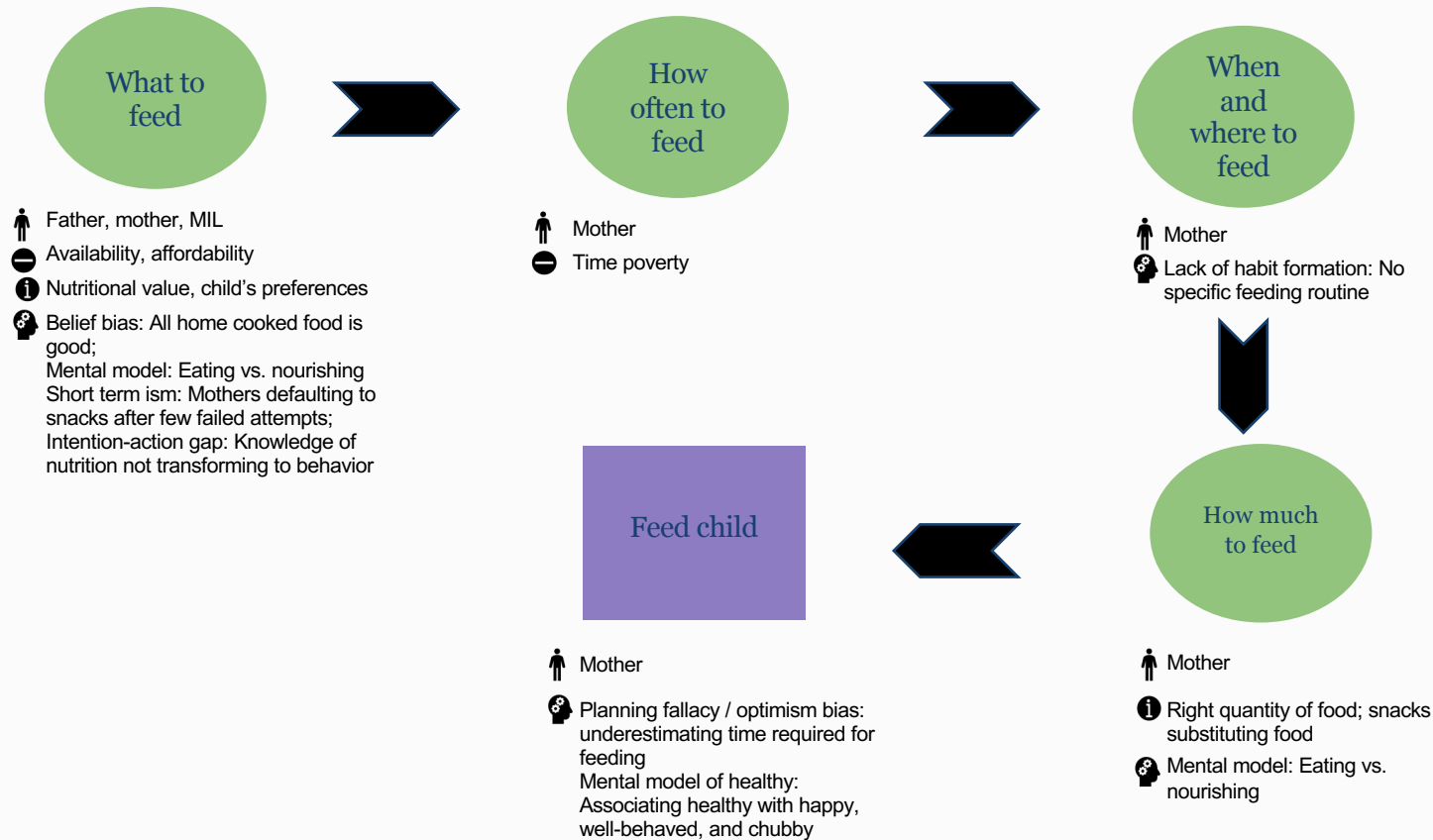- Better to "overcode"

Presenting data : Quotes

- They are not the text "speaking for itself" and not, they are not the "human side" Quotes are used for:
  - ▫ Evidence
  - ▫ Explanation
  - ▫ Illustration
  - ▫ Deepening understanding
  - ▫ Giving participants a voice
  - ▫ Enhancing readability

Conceptual Frameworks

Process Map: Child Feeding

What to feed → **How often to feed** → **When and where to feed**

What to feed
- 🧍 Father, mother, MIL
- ⊖ Availability, affordability
- ℹ️ Nutritional value, child's preferences
- 🧠 Belief bias: All home cooked food is good;
  Mental model: Eating vs. nourishing
  Short term ism: Mothers defaulting to snacks after few failed attempts;
  Intention-action gap: Knowledge of nutrition not transforming to behavior

How often to feed
- 🧍 Mother
- ⊖ Time poverty

When and where to feed
- 🧍 Mother
- 🧠 Lack of habit formation: No specific feeding routine

↓

How much to feed
- 🧍 Mother
- ℹ️ Right quantity of food; snacks substituting food
- 🧠 Mental model: Eating vs. nourishing

Feed child ← **How much to feed**

Feed child
- 🧍 Mother
- 🧠 Planning fallacy / optimism bias: underestimating time required for feeding
  Mental model of healthy: Associating healthy with happy, well-behaved, and chubby

Quality Control

- **Reproducible:** someone else could use the same research plan and guide to generate similar information
- **Systematic:** not just picking interviewees or data that support our pre-existing ideas about the answers
- **Credible:** the questions asked, and the ways in which they are asked should generate valid (or 'truthful') accounts of phenomena.
- **Transparent:** methods and protocols are documented so that others can see exactly how the data were collected and analyzed.

Additional slides

Qualitative Data Collection: Enquiry Traditions

Enquiry traditions (paradigms)

Understand, interpret, construct meaning (**Interpretive/ constructionist**)

Reveal hidden perspectives and causes, alternative and silenced voices (**Critical**)

Deconstruct assumptions (**Deconstructive/ post-colonial**)

phenomenology/ hermeneutics and grounded theory

ethnography; qualitative longitudinal research (QLR)

case studies

historical analysis and policy analysis

community and participatory approaches

critical ethnography, critical realist evaluation

life histories, narratives

post-structural analysis - narratives

historiography

discourse analysis

- **Phenomenology and hermeneutics**: As methodological approaches they are primarily concerned with how humans live in, experience and interpret specific phenomenon in their world (van Manen, 1990). Phenomenology is particularly useful when studying groups of individuals' experiences in and interpretations (e.g. 'what does it mean to be poor in urban Pakistan), as we aim to understand how people regard a situation, thing, program, activity in their own life. It focuses on individuals own thinking, feelings and actions as they see and experience them in a specific situation.

- **Grounded theory:** Aims to generate emerging theories from in-depth qualitative data by interpreting key themes across multiple data points or participants (Corbin & Strauss, 1990). This type of study is particularly useful when existing theories are not appropriate to the question or context under study, and they can help generate more relevant theories that can then be further tested on larger samples of participants or in other contexts.

- **Ethnography:** It engages with cultural contexts and communities over a long period of time for an in-depth approach. It aims to understand participants in their social and cultural context to be able to provide social and cultural explanations of a phenomena (Anderson-Levitt, 2012). It tends to involve the researcher as a participant/observer in the context over a period of time, and it requires more than one source of data. While ethnography has been most used to study groups of people, it has also been applied to the study of policy as it gets enacted. **Critical ethnography** aims to reveal assumptions of the system or program of focus, that challenge the 'expressed' goals (Levinson, Foley, & Holland, 1996).

- **Qualitative longitudinal research:** Is concerned with understanding how time affects individuals', groups, or a phenomenon, and it analyzes the dynamics of change and continuity in relation to time, or across generations (Saldana, 2003). It includes a number of approaches and methods, including ethnographies that extend over years, repeat interviews or observations, and life histories.

- **Life histories, oral histories and narratives:** Focus on individual experiences and how each individual constructs important events in their lives (See Clandinin and Connelly, 2000). Normally used to focus on groups of people who are not often represented in mainstream studies, or whose experiences tend to not be represented by aggregated data. Oral histories are a useful methodology to document people's lives and experiences that tend not to be present in current research; they can also be used in a form of community-engaged research by having the participants' construct and share their oral histories in an effort to change commonly accepted knowledge about something (largely in relation to a temporal framework).

- **Case studies:** As the name says, it focuses on a case, which is defined by specific boundaries related to the phenomena or setting. Case studies can be single or multiple (comparative). The value of a case study the use of a variety of methods to more fully describe and explain the phenomenon as enacted in the case.

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- **Historical and policy analysis**: This approach takes many different forms across the three paradigms — interpretive, critical and deconstructive. An interpretive approach examines how policies problems come to be, how policy options are formed and how policies are in turn implemented. This approach tends to examine political processes, policies as texts, and policies as practices. Another approach takes a critical sociological approach, situating policy problems, texts and practices within a social context of considering what are "policy problems" as defined by different groups (See Gale, 2007; Ball, 1993). This approach tends to utilize ethnographic and life history methods to understand the policy discourses and practices related to the policy problem under study. Critical policy historiography, like critical ethnography, is an important methodology for examining public issues and how they came to be addressed through policy, in the past and the present. A critical approach further examines the complexities in the account of policy, and reveals who is advantaged and disadvantaged by these arrangements. These analyses tend to draw on documentary data.

- **Participatory and community-engaged** research encompasses a set of approaches that situate the participants as co-inquirers in the process, in contrast to be being sources of data. There is a broad continuum of what constitutes participation in these approaches from the use of engaging and creative methods so that participants decide on how and what they will reveal about a phenomenon to actively deciding on the research questions and how they will be studied. A key criterion of the validity of such an approach is the extent to which it is responsive to and incorporates the active participation of those who are affected by and involved in the issue under study.

- **Critical discourse analysis** is the analysis of documents and texts (e.g., interviews) and the kinds of discourses —or the ideas and language used to shape public meaning and practices.   Discourses are created and shared across organizations, documents, and authors; and the uses of discourses shape social practices (See Gee, 2014; Fairclough, 2013). Critical discourse analysis is particularly useful in examining taken-for-granted or everyday ideas as they take on new and different meanings across groups, time and spaces. Such analyses can be very useful to understand what commonly used ideas mean in practice in different settings, highlighting a disjuncture between policies as they are intended to be implemented and their desirable effects, and how they are implemented with what kind of effects.

Text and documents (and artefacts)

Why?:
- They provide rich, naturally occurring, accessible data which have real effects in the world.
- They represent reality beyond what people say about it
- Records provide insights into a setting and/or group of people that cannot be observed or noted in another way.
- They are particularly useful in describing institutional characteristics, and in identifying institutional strengths and weaknesses. They provide a record or history not subject to recall bias.
- Useful for making comparisons (between project participants and project applicants, project proposals and implementation)
- Collecting data from documents is relatively invisible to, and requires minimal cooperation from, persons within the setting being studied.

What?
- **Public records** Reports, office records, newspaper archives, meeting minutes, transcripts and records, historical accounts, institutional mission statements, annual reports, budgets, test reports, internal memoranda, policy manuals, institutional histories, handbooks, official correspondence, demographic material, mass media reports and presentations, and descriptions of program development and evaluation.
- **Personal documents** First-person accounts of events and experiences. Diaries, photographs, schedules, letters, stories, exams, essays.
- **Artefacts**: tools or materials used in relation to what we are studying, works created by participants, household or work/livelihood objects (these include visual methods to capture the built environment)

Text and documents (and artefacts)

Useful for:

- Historical research (to see something that otherwise we cannot observe first-hand)
- As another source of data to complement data sought through interviews and/or to triangulate—to cross-verify data from two or more sources— and complement interview or observation findings.

Very important when using these methods:

- Identify and list all the relevant documents used and how/why they were selected (think sampling)
- Identify documents/artefacts adequate to the problem and research target (e.g. text or documents will be produced by the literate/those with access)
- When relating to visual images of artefacts, the focus should be the 'work' that they do and to understand how they do that work –not how the researcher, based on his/her experience assumes they work.
- Keep in mind that visual elements in the environment are not autonomous entities but derive meaning from the place where they are

Analyzing data: Approaches

- *Content and thematic analysis:* Usually regarded as a quantitative approach to qualitative data, which involves coding the frequency of words, phrases or concepts. (vs. a qualitative approach to content analysis aims to identify the sub-categories or meanings associated with categories of words/concepts)

- *Constant comparative analysis*: Most associated with grounded theory, here a constant comparison of concepts in the data is done to generate an emerging theory. It normally includes 3 steps: (1) Identify concepts in the data; (2) These concepts are extensively compared and contrasted with other concepts; (3) Similarities are grouped together with the most abstract grouping forming a category; (4) Concepts and categories are continuously tested against new data until theoretical saturation has been reached

- *Process tracing and contribution analysis*: Aim to show causality in qualitative and mixed-methods studies. These analyses can be used to answer questions related to the conditions and mechanisms that affect implementation and outcomes. They require a theory of change used to explain the processes and desired outcomes. The aim is to look for evidence that increases our confidence in the existence or non-existence of the mechanisms by observing the evidence that shows the causes of the outcome and evidence of alternative assumptions that the mechanism did not cause the outcome.

- *Critical discourse analysis:* Aims to deconstruct language and how it is used to perpetuate or create existing social and political structures of power. Focuses on everyday language in use and do an analysis of linguistic feature of discourse, and how these discourses are then taken up and used by others, as well as how these discourses are linked with larger social and political practices that reproduce power inequalities

Main wrong conceptions of qualitative data

- *Qualitative is not objective...* there is no objective social reality, and that all knowledge is "constructed", hence quant is also subjective (some survey respondents may not understand the meaning of questions to which they respond; their recall of even recent events is often faulty, etc.).

- *Qualitative is not accurate...* because it does not adhere to the scientific method (positivist).

- *Qualitative is not standardized...* it is the method, not the answers. Also for qual. the study of deviant cases provides important insights for the interpretation of findings.

- *Qualitative cannot be replicated...*qualitative approach emphasizes the importance of understanding context, replication is in the methods, not in the outcomes (ehem, replication crisis).

- *Qualitative depends of non-statistical techniques...* it uses research techniques, just not the same ones

- Qualitative=anecdotal....