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Applied Qualitative Research in a Nutshell with a Focus on Older Diverse Populations

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What is Qualitative Research?

- An interpretative approach to data collection and analysis that is concerned with the meanings people attach to their experiences of the social world and how people make sense of that world

  - a situated activity that locates the researcher in the world and thus, is suited to studying people in their day-to-day settings rather than in artificial or experimental settings

  - gathers words and/or visual, descriptive forms of data and explicates these using text-based, interpretative analytical methods

  - involves the application of logical, planned and thorough methods of collecting data and careful, thoughtful analysis

Qualitative Research Questions

- If quantitative research asks questions such as
  - *'How big is X or how many Xs are there?'*
- Qualitative research asks questions such as
  - *'What is X and how do people's perceptions of X vary in different circumstances, and why?'*

Contributions of Qualitative Healthcare Research

- Help researchers understand why promising clinical interventions do not always work in the real world, how clients experience care or how practitioners think
- Explore and explain the complex relations between the healthcare system and the outside world
  - *For example, the sociopolitical context in which healthcare is regulated, funded and provided and the ways in which clinicians and regulators interact with industry*

Characteristics of Qualitative Research

- **Natural setting.** Data are often collected in the field at the site where participants experience the research issue or problem
- **Researcher as the key instrument**. Data are collected through examining documents, observing behavior and interviewing participants
- **Multiple methods.** Multiple forms of data, such as interviews, observations and documents are collected rather than rely on a single data source
- **Complex reasoning through inductive and deductive logic.** Patterns, categories and themes are built from data "bottom up," by organizing the data inductively into increasingly more abstract units of information

Characteristics of Qualitative Research

- **Participants' meanings.** The focus is always on learning the meaning that the participants hold about the problem or issue, not the meaning that the researcher or literature brings to the research
- **Emergent design.** The initial research plan cannot be tightly prescribed because process may change or shift after the researcher enters the field and begin data collection
- **Reflexivity.** Researchers "position themselves," meaning that they convey their background (e.g., work experiences, cultural experiences, history), how it informs their interpretation of the information in a study, and what they have to gain from the study
- **Holistic account.** Involves the researcher developing a complex picture of the problem or issue under study not bound by cause-and-effect relationships

Major Qualitative Approaches to Inquiry

- Methodology refers to the rationale, rules and procedures for conducting and evaluating research
- **Phenomenology:** describes what individuals have in common as they experience a phenomenon; it reduces individuals' lived experiences with a phenomenon to a description of the universal essence *(e.g., grief is universally experienced)*
- **Grounded Theory:** directed to the development of theoretical explanations; theories are generated from the ground *(i.e., the data)*
- **Ethnography:** study of people and culture that relies on direct observation of groups and settings to understand how people see their social world
  - **Critical ethnography:** emphasizes explaining how power operates in society, particularly for marginalized or under-represented groups; seeks to inform or effect transformation and social change *(e.g., feminism, critical race theory, queer theory)*

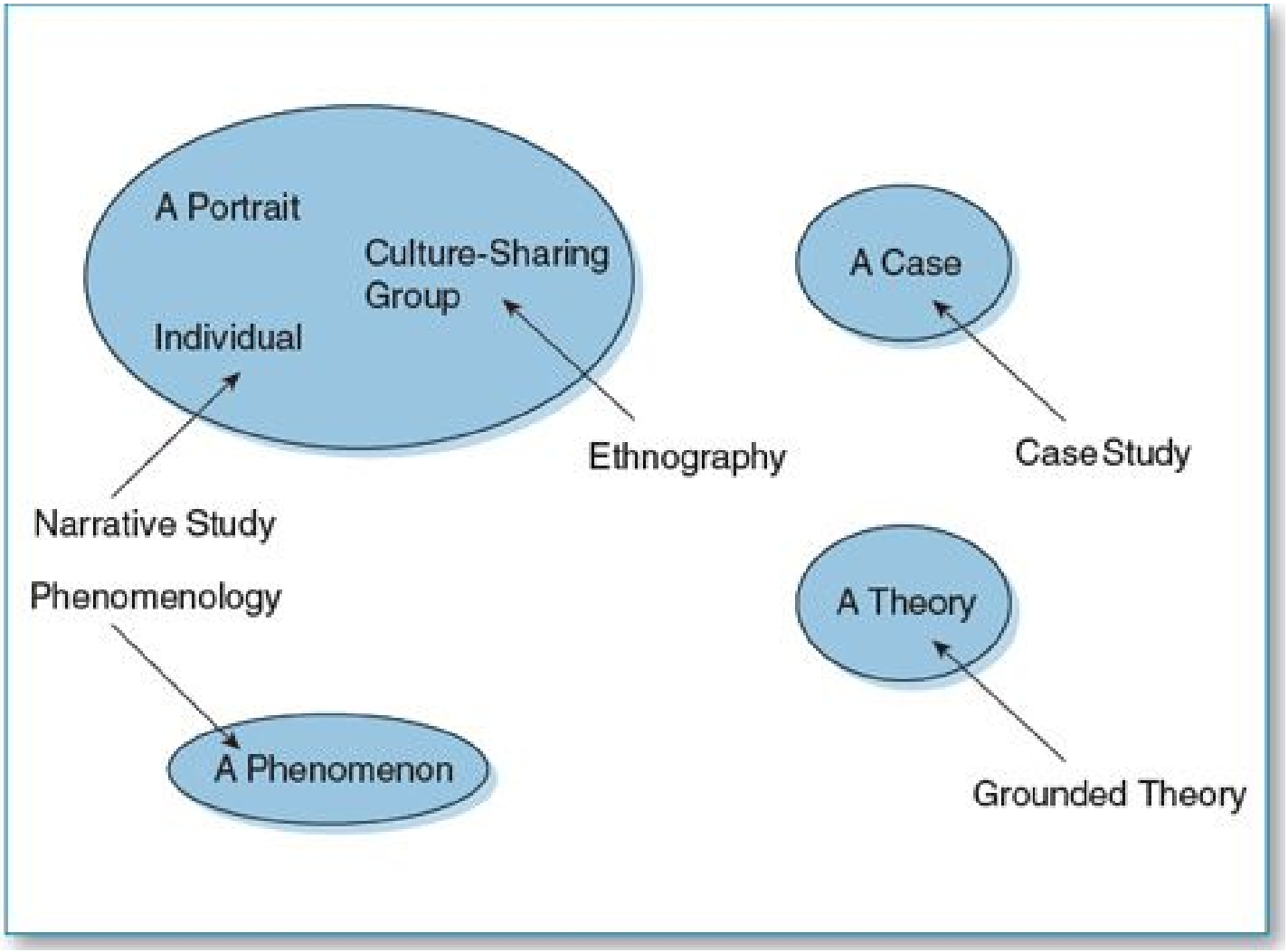
Major Qualitative Approaches to Inquiry

- **Narrative:** collection of experiences as expressed in lived and told stories (spoken or written text) of one or two individuals giving an account of an event/action or series of events/actions, chronologically connected
  - *For example, life history, oral history, biography of older immigrants or refugees*
- **Case Study:** exploration of a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection
  - *For example, case analysis of a medical or psychological problem of unknown or little known origin in the aging, Latinx population*

Comparison of Major Qualitative Methodology

Characteris-tic	Narrative Research	Phenome-nology	Grounded Theory	Ethnography	Case Study
Focus/Type of Problem Best Suited for Design	Exploring the life and individual experiences through storytelling	Understanding the essence of a lived experience or lived phenomenon	Developing a theory grounded in data from participants' views	Describing and interpreting shared patterns of culture of a group	Developing an in-depth description and analysis of a case or multiple cases
Discipline	Humanities: anthropology, literature, history, psychology, sociology	Philosophy, psychology, education	Sociology	Anthropology, sociology	Psychology, law, political science, medicine
Unit of Analysis	One or more individuals	Several individuals who have shared the experience	Process, action or interaction of many individuals	Group that shares the same culture	Event, program or activity of one or more individuals

Foci of the Major Qualitative Approaches to Inquiry



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Main Methods of Data Collection Used in Qualitative Research

- Interviews
- Focus groups
- Observations
- Documentary analysis of texts, documents, artifacts or audiorecordings or videotapes of speech or behavior
- Digital analysis of online conversations or forum threads

Interviews

- Interviewing is a form of social and human interaction in which the interviewer guides, prompts, listens to and encourages the accounts of participants so that they feel safe to tell their stories or share their views

- Three major types of interviews:

  - **Structured:** closed questions that require, for example, a 'yes' or 'no' answer, like *'Did you think the clinician answered all your questions in enough detail?'*

  - **Semi-structured:** an interview guide composed of questions that are sufficiently flexible to encourage participants to talk openly and probe issues that participants raise

  - **In-depth:** a few, very open-ended questions to understand the experiences, thoughts and perceptions of participants

Interviews

- Participants can be interviewed individually, in a couple or in a small group
- Interviews can take place face-to-face, by telephone, using online video chat platforms (e.g. Zoom) or by text messaging or email
- Participants can be interviewed more than once to capture changes over time (longitudinal interviews)
- Other materials may be brought into the interview setting by the interviewer or interviewee; for example, photographs, objects, vignettes or short stories as prompts to encourage participants to open up or think more deeply about the topic of the research
- Careful listening involves thinking about what is *not* said as well as what *is* said

How Many Interviews are Adequate?

- Aim of qualitative interviews is to capture rich accounts or a **thick description** of an experience *(e.g., of older women living with breast cancer)* in the context of their family, work and social lives

- The appropriate sample size for a study will depend on the research questions being asked and the methods being used

- Qualitative study samples do not aim to be statistically representative, but rather to generate data to answer a particular research question *(e.g., what is the range of experiences of older Asian men who have sex with men and are living with HIV/AIDS?)*

- The question 'how many interviews are enough?' cannot be answered by a statistical calculation, but rather through **iterative or theoretical sampling** and a judgment about when **data saturation** has been reached through **purposive sampling**

Focus Group Interviews

- A type of group interview used to explore an issue about which little is known by generating insights from a group of participants with certain characteristics who collectively have relevant knowledge *(e.g., beliefs and attitudes about advanced directives among a group of older, low-income African Americans)*
- Brings 6–12 people together for a discussion on a specific set of topics. Sessions usually last 60–90 minutes and may be audiorecorded and/or videotaped
- Aim is to promote interaction between group members rather than have each participant answer every question. The researcher, therefore, plays the role of facilitator or moderator rather than interviewer.
- **Ethical considerations** typically relate to: the identity of participants is known to the other focus group participants

Observations

- Involves a systematic, detailed collection of data by watching what people do to see if what people say they do is what they actually do
- Instead of asking questions about behavior, the researcher systematically watches people's behavior, talk and their social interactions and everyday activities in the social world *(e.g., studying how healthcare organizations work and how staff practice toward a more culturally humility and inclusive environment)*
- As an observer, the researcher is an inescapable part of the social world being studied, which in and of itself, invites subjectivity from a detached observer to active participant; and thus, reflexivity and keeping field notes are important methodological considerations
  - **Field notes:** researcher, acting as the research instrument, documents the world she or he observes; requires not only good observational skills, but also good memory and/or clear, detailed and systematic recording

Observations

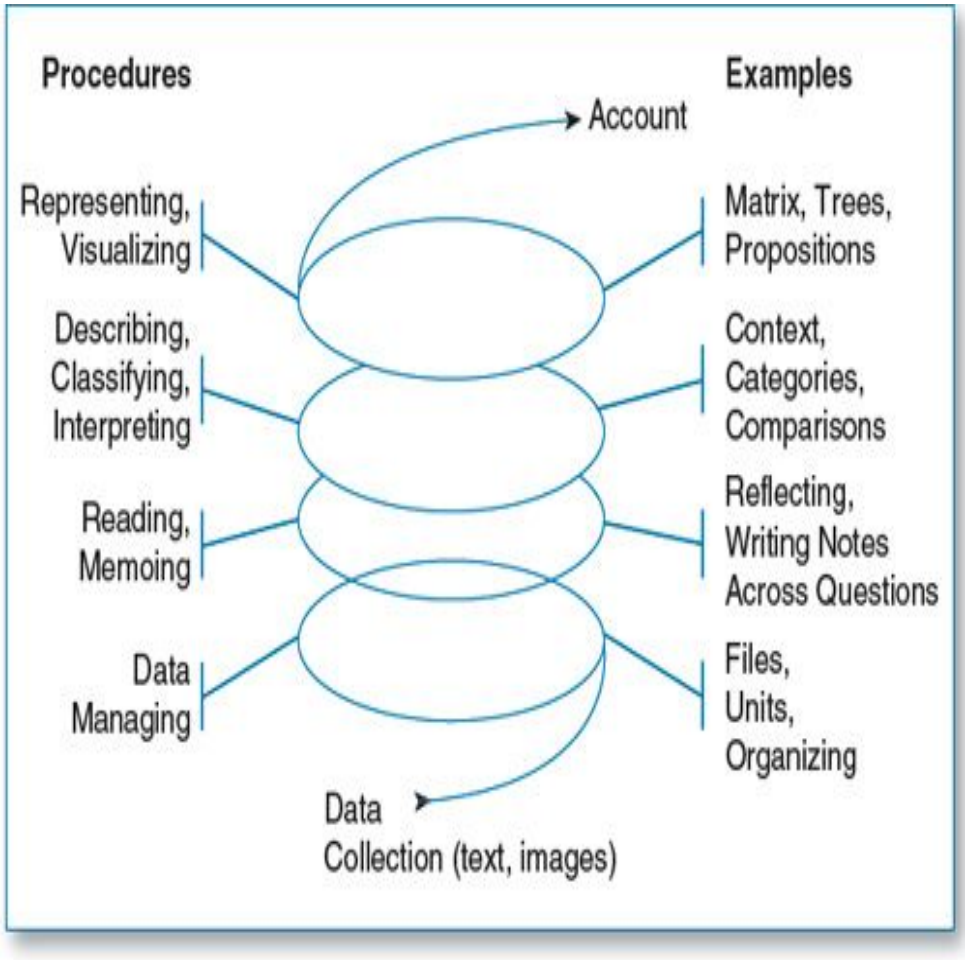
- **Ethical Considerations:**
  - May be difficult to inform all participants that observation is taking place *(e.g., in clinic waiting rooms)* and thus, obtaining written consent from those being observed may be problematic, for example, when doing so might interrupt the delivery of care
    - Does this type of access to the setting lead to opportunistic research?
  - Observation usually occurs over a sustained period of time, presenting the issue of ensuring that consent is continually obtained or refreshed over time

Data Analysis and Representation in Qualitative Research

- In general, analysis of qualitative data involves
  - **Preparing and organizing** the data for analysis (i.e., text data as in transcripts or image data as in photographs)
  - **Conducting a preliminary read-through** of the data
  - **Coding and condensing the codes and reducing the data into themes**, representing the data, and forming an interpretation of the themes
  - **Representing the data** in figures, tables or a discussion

Data Analysis and Representation in Qualitative Research

- Data analysis is not off-the-shelf; rather, it is custom-built, revised, and choreographed.
- The processes of data collection, data analysis and report writing are not distinct steps in the process; they are interrelated and often occur simultaneously



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Comparison of Data Analysis & Representation by Major Qualitative Methodology

Characteris-tic	Narrative Research	Phenome-nology	Grounded Theory	Ethnography	Case Study
Data Organization	• Create and organize files for data				
Reading & Memoing	• Read through text, make margin notes, and form initial codes				
Coding Data	• Describe story or objective set of experiences and place it in a chronology	• Describe personal experiences through epoch • Describe essence of phenomenon	• Describe open coding categories	• Describe social setting, actors, events • Draw picture of setting	• Describe case and its context
Condensing Codes & Reducing Data to Themes	• Identify stories • Locate epiphanies • Identify contextual materials	• Develop significant statements • Group statements into meaningful units	• Select one open coding category for central phenome-non in process	• Analyze data for themes and patterned regularities	• Use categorical aggregation to establish themes or patterns

Comparison of Data Analysis & Representation by Major Qualitative Methodology

Characteris-tic	Narrative Research	Phenome-nology	Grounded Theory	Ethnography	Case Study
Interpreting the Data	• Interpret the larger meaning of the story	• Develop a **textural** (what happened) and **structural** (how phenomenon was experienced) description • Develop the "essence"	• Engage in selective coding & interrelate the categories to develop a story or propositions	• Interpret and make sense of the findings (i.e., how the culture works)	• Use direct interpretation • Develop naturalistic generaliza-tions of what was learned
Representing & Visualizing the Data	• Present narration about processes, theories, unique and common features of the life	• Present narration of the "essence" of the experience in tables, figures or discussion	• Present a visual model or theory with propositions	• Present narrative augmented by tables, figures and sketches	• Present in-depth picture of the case or cases using narratives, tables and figures

Software Programs to Assist with Data Management & Storage in Qualitative Research

- ATLAS.ti (https://www.atlasti.com)
- QSR NVivo (https://www.qsrinternational.com/)
- MAXQDA (https://www.maxqda.com/)
- HyperRESEARCH (https://www.researchware.com/)
  - Each program has advantages and disadvantages
  - All of the programs can organize text, graphic, audio and visual data files, along with coding and memoing
  - *ATLAS*.ti and *QSR Nvivo* purports to support robust qualitative and mixed methods research for virtually any data source and any research method with *ATLAS.ti* claiming to be #1
  - *MAXQDA* is supposed to be better for developing theories and testing theoretical conclusions

Rigor and Validity in Qualitative Research

- Qualitative research seeks depth over breadth, attempts to learn subtle nuances of life experiences, and is contextual and subjective as opposed to the emphasis placed on aggregation, generalization and objectivity in quantitative research.
- Validity is broadly defined as the state or quality of being sound, just and well-founded; *"how we claim to know what we know"*
- There are two categories of validity in qualitative research.

Primary Validity Criteria
- Credibility
- Authenticity
- Criticality
- Integrity

Secondary Validity Criteria
- Explicitness
- Vividness
- Creativity
- Thoroughness
- Congruence
- Sensitivity

Primary Validity Criteria in Qualitative Research

- **Credibility:** conscious effort to establish confidence in an accurate interpretation of the meaning of the data
  - *Do the results of the research reflect the experience of participants or the context in a believable way?*
- **Authenticity:** portrayal of research that reflects the meanings and experiences that are lived and perceived by participants
  - *Does a representation of the emic perspective exhibit awareness to the subtle differences in the voices of all participants?*
- **Criticality:** critical inquiry and analysis that alternative explanations might exist—to guard against distortion or conjecture
  - *Does the research process demonstrate evidence of critical appraisal?*
- **Integrity:** process to assure that the interpretation is valid and grounded within the data
  - *Does the research reflect recursive and repetitive checks of validity and a humble presentation of findings?*

Secondary Validity Criteria in Qualitative Research

- **Explicitness:** ability to follow the interpretive effort of the investigator (auditability)
  - *Have methodological decisions, interpretations and investigator biases been addressed?*
- **Vividness:** presentation of rich descriptions of the data
  - *Have thick and faithful descriptions been portrayed with artfulness and clarity without overwhelming the reader with excessive detail?*
- **Creativity:** novel methodological design to answer specific research questions
  - *Have imaginative ways of organizing, presenting and analyzing data been incorporated?*

Secondary Validity Criteria in Qualitative Research

- **Thoroughness:** sampling and data adequacy; comprehensive, consistent analysis
  - *Do the findings convincingly address the research questions posed through completeness and saturation)*
- **Congruence:** logical coherence among the research questions, method, findings, data collection, analysis and literature
  - *Are the process and the findings congruent? Do all the themes fit together? Do findings fit into a context outside the study situation?*
- **Sensitivity:** research implemented in a manner that is ethical and sensitive
  - *Has the investigation been implemented in ways that are sensitive to the nature of human, cultural and social contexts?*

References

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