Qualitative Research

A primer…

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Overview

In this session, we will investigate qualitative research methods. At the end, I am hopeful that you will be able to:

• Define qualitative research.
• Identify the characteristics of qualitative research in terms of
  • research questions/purpose of study,
  • data collection approaches,
  • data analysis methods, and
  • reliability and validity.
How would you define qualitative research?

“One undertakes qualitative research in a natural setting where the researcher is an instrument of data collection who gathers words or pictures, analyzes them inductively, focuses on the meaning of participants, and describes a process that is expressive and persuasive in language.” (Creswell, 1998)
## Quantitative vs. qualitative methods

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<th>Steps in the Process of Research</th>
<th>Quantitative</th>
<th>Qualitative</th>
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<td><strong>Identifying a research problem</strong></td>
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<td><strong>Reviewing the literature</strong></td>
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<td>- Justification for the research problem</td>
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<td>- Measurable and observable</td>
<td>- Participants’ experiences</td>
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<td></td>
<td>- Numeric data</td>
<td>- Text or image data</td>
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<td>- Large number of individuals</td>
<td>- Small number of individuals or sites</td>
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<td><strong>Analyzing and interpreting the data</strong></td>
<td>- Statistical analysis</td>
<td>- Text analysis</td>
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<td>- Description of trends, comparison of groups, or relationships among variables</td>
<td>- Description, analysis, and thematic development</td>
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<td>- A comparison of results with predictions and past studies</td>
<td>- The larger meaning</td>
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<td><strong>Determining the quality of data</strong></td>
<td>- Reliability</td>
<td>- Verification, rather than internal validity</td>
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<td>- Validity</td>
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<td>- Standard and fixed</td>
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<td>- Objective and unbiased</td>
<td>- Reflexive and biased</td>
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Stages of qualitative research

I. Identifying a research problem/stating the problem
II. Reviewing the literature
III. Specifying a purpose and research questions
IV. Collecting the data
V. Analyzing the data
VI. Determining the quality of data
VII. Reporting the research
I. Identifying a research problem

- State the problem or issue to be examined in this study.
- How does the research problem fit into existing literature? How have others addressed this problem?
- Use theory in the introduction to put the current study within a place of importance, to guide researchers as to what is important, not to develop hypotheses from which to direct the study.
- What are the deficiencies in other studies? What was lacking in other studies that lead you to select your topic and research questions?
II. Reviewing the literature

- Qualitative literature plays a minor role.
- Qualitative literature justifies the research problem.
Ill. Specifying a purpose and research questions

- Qualitative purpose statement and research questions
  - Broad and general
  - Seek participants’ experiences.

- Research purpose
  The purpose of this ____________ (biographical, phenomenological, grounded theory, case study, ethnographic) study is to
  ____________ (understand, describe, develop, discover) the
  ____________ (central focus for the study) for ____________ (the unit of
  analysis: person, process, groups, site). At this stage in the
  research, the ____________ (central focus being studied) will be
generally defined as ________________ (provide a general definition of
the concept).
Research questions

- Questions should be open-ended, nondirectional and start with terms such as “how” or “what”.
- Start with the broadest possible question, what Creswell (1998) calls the grand tour question (central question) and then follow with subquestions that narrow your focus.
- Expect the research questions to evolve and to change during the study, as data are collected.
- For example, the research question in a grounded theory study is a statement that identifies the phenomenon to be studied. Grounded theory questions tend to be oriented toward action and process.
  - “How do students react to violence on campus?”
IV. Collecting the data

Qualitative research …
• Involves studying a small number of individuals or sites.
• Is conducted in a natural setting.
• Is focused on participant perspectives.
• Has the researcher as the primary instrument for data collection.
• Uses multiple methods of data collection in the form of words or pictures.
• Involves extended firsthand engagement.
• Focuses on the centrality of meaning for participants.
• Deals with dynamic systems.
• Deals with wholeness and complexity and assumes that change is constant.
• Is subjective.
• Uses an emergent design.
Data collection methods

- Observations/field research
- Interviews
- Documents
- Audiovisual materials
V. Analyzing qualitative data

- Consists of describing information and developing themes
- Involves inductive data analysis
  - Theories and hypotheses evolve from the data.
  - Data analysis is ongoing; begins with specific observations and builds towards general patterns.
  - Involves immersion in the details and specifics of the data to discover important categories, dimensions, and interrelationships – not testing of theoretically derived hypotheses.
  - Could derive theory or provide insight on an existing theory
- Involves winnowing of data
Data analysis steps

- Step 1: Organize and prepare the data for analysis.
- Step 2: Read through all the data to obtain a general sense of the information and to reflect on its overall meaning.
- Step 3: Begin detailed analysis with a coding process. Coding is the process of taking text data or pictures, segmenting sentences (or paragraphs) or images into categories, and labeling these categories with a term, often a term based on the actual language of the participant.
- Step 4: Use the codes to generate a description of the setting or people as well as categories or themes for analysis. Description involves a detailed rendering of information about people, place, or events in a setting. Researchers can generate codes for this description.
- Step 5: Advance how the descriptions and themes will be represented in the qualitative narrative.
- Step 6: Evaluate the lessons learned from the data and make interpretations (or meaning) of data.
VI. Determining quality of data

| Verification, rather than internal validity. | -Triangulation of data  
| Are findings accurate from the standpoint of the researcher, the participants, or the readers of an account? | -Member checks  
| | -Rich, thick description  
| | -Clarification of researcher stance and preparation  
| | -Negative or discrepant information  
| | -Prolonged time in the field  
| | -Collaborations: of peers, using external auditor and peer debriefing  

| Transferability, rather than generalizability: Lincoln and Guba propose that is up to the reader, rather than the original investigator, to determine if the findings can be transferred or applied to another setting. | -Rich, thick description  
| | -Triangulation to strengthen study’s usefulness for other settings  
| | -Use peer debriefer to review and ask questions about the study so that the account will resonate with people other than the researcher  

| Dependability (Marshall & Rossman, 1995). Dependability of the researcher’s account of the changes inherent in any setting as well as changes to the research design as learning unfolded. | Dependability comes from capturing the changing conditions that occur in the setting and the study design in response to this reality  

| Confirmability (Marshall & Rossman, 1995). Confirmability deals with whether another researcher outside of the study could independently confirm the findings. | Checks to control for bias in interpretation  
| | -Check and recheck data and search for rival hypotheses  
| | -Bracket researcher assumptions, personal values and beliefs  
| | -Conduct an audit of the data collection and analytic strategies  

VII. Reporting qualitative findings

1. Note patterns and themes
2. See plausibility – make initial, intuitive sense
3. Cluster by conceptual grouping – group things that seem similar
4. Make metaphors – a kind of figurative grouping of data and to achieve more integration among diverse pieces of data
5. Count – see what’s there and keep oneself honest
6. Make contrasts and comparisons – by clustering and distinguishing observations
7. Partition variables – to unbundled variables that have been prematurely grouped
8. Subsume particulars into the general, shuttling back and forth between first-level data and more general categories.
9. Factor – reduce the number of variables, similar to grouping variables by a category or theme
10. Note relationships between variables
11. Find intervening variables
12. Build a logical change of evidence – integrating categories, subcategories, themes into a logical, coherent whole
13. Make conceptual/theoretical coherence
FAQ about Qualitative Research

- **Are qualitative findings generalizable?** Qualitative researchers are not as concerned about the generalizability or transferability of their findings to other contexts and people. Qualitative researchers recognize that each setting is unique and that the perspectives captured are uniquely tied to that setting. While, most often, generalizability is left to the end-user to determine if the study is applicable to their setting of interest, the qualitative researchers assists the reader by providing rich, description, grounding the study in theory, and using multiple sources of data.

- **What about the researchers’ opinions, prejudices, and other biases, and their effect on the data?** These are considered part of the richness of qualitative data. The researcher is the instrument for data collection and through which information flows. The researcher is trained to guard against values judgments, to report biases in their memos, to provide findings that are trustworthy—detailed record keeping, and methods such as member checking, triangulation of data sources, confirming and disconfirming evidence to check the validity of the data.

- **Doesn’t the presence of the researcher change the behavior of the people he or she is trying to study?** Yes, all forms of research have the potential to change what is being studied. Qualitative researchers are in the field for prolonged periods of time, interacting with participants in their natural environments after having gained their trust. Data collection then takes on a mutual exchange of information between trusted parties.

- **Will two researchers independently studying the same setting or subject come up with the same findings?** This question really gets to whether the study is reliable. That is, would the same findings happen in the same way at a different point and time? Qualitative researchers are not really concerned about reliability in the traditional quantitative sense. Instead, researchers are interested in the accuracy and comprehensiveness of their data, so that there is a match between what occurs in the setting under study and what they record as data.

- **Can qualitative and quantitative approaches be used together?** Yes, although is best to have training and experience in both methodologies before choosing to combine them. Again, as in choosing any research design, it depends on the research problem and the personal experiences of the researcher.

- **Is qualitative research really scientific?** Yes, qualitative research meets the standards of scientific research: rigorous and systematic empirical inquiry that is data based.