



Introduction to Qualitative Research Methods

This resource introduces qualitative research methodology and presents a context for thinking about when qualitative methods are appropriate/useful. It also overviews the qualitative research process, common data collection methodologies, and data analysis strategies. It may be helpful for community partners and research teams unfamiliar with qualitative methods to review and consider this background in advance of those conversations.

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Overview of this Resource

- Introduce qualitative methodology
- Provide context for thinking about when qualitative methods are appropriate, useful
- Outline the qualitative research process
- Overview 3 common qualitative data collection methodologies
- Present common qualitative data analysis strategies
- Provide resources for further investigation

What is qualitative research?

- Method of inquiry
- Focused on gathering in-depth understanding of human behavior & reasons for behavior
- Investigates the why & how of decision making, not just what, where, when...
- Context specific --smaller samples, produce information only on the particular cases studied –not for generalizing to larger contexts

Characteristics of qualitative research

- Study of social phenomena
- Done in “natural” settings
- Often used for discovery/exploration of topics where little is known
- Used to develop concepts vs. confirm theories
- Emphasis on understanding
 - meaning: meaning of actions, what concepts mean to people
 - experience: how people experience the world
 - multiple perspectives: how participants see the world vs. objective “truth”

Epistemological underpinnings of qualitative research methods



Like all inquiry, the Qualitative approach is based on an epistemological orientation

- Quantitative orientation is based on a positivist view of science
 - Describing what is observed
 - No interpretation
 - No subjective points of view
 - Thoughts, beliefs, emotions –cannot be investigated
- Qualitative orientation is based on a post positivist view of science
 - All humans have inherent bias –use theories to interpret the world
 - Measurement is fallible, need for multiple methods
 - Constructivist –we construct our world view (theories) based on perception/experience

Theoretical orientations to qualitative methods: major approaches



- Phenomenology –what is the meaning of X for this group of people?
- Social interaction -what shared set of symbols/understandings have emerged to give meaning to people’s interactions?
- Ethnography –what is the culture of this group of people?
- Ethnomethodology –how do people make sense of their everyday activities so as to behave in a socially acceptable way?

Qualitative vs. Quantitative methods

- Qualitative
 - Practical, applied, action oriented, exploratory, discovery
 - Depth (thick description)
 - Multiple perspectives
 - Can cover long periods of time (historic perspective)
 - Interviews, group discussion, observation, document analysis
 - Data format: usually words
- Quantitative
 - Theory testing, theory derived
 - Breadth
 - Standardized measures
 - Usually 1 point in time; sometimes longitudinal
 - Surveys, tests, experiments
 - Data format: usually numbers

Qualitative methods may be an appropriate choice when...

- there is little empirical data available
- previous understandings seem biased, incomplete, contradictory, confusing
- theory development is needed
- study participants have low literacy levels
- You are working w/hard to reach participants/subjects
- Your research involves “sensitive” topics (e.g. illicit behaviors..)
- you want to learn about the way participants experience a process, context, situation...

Qualitative Methods May Not be Appropriate for

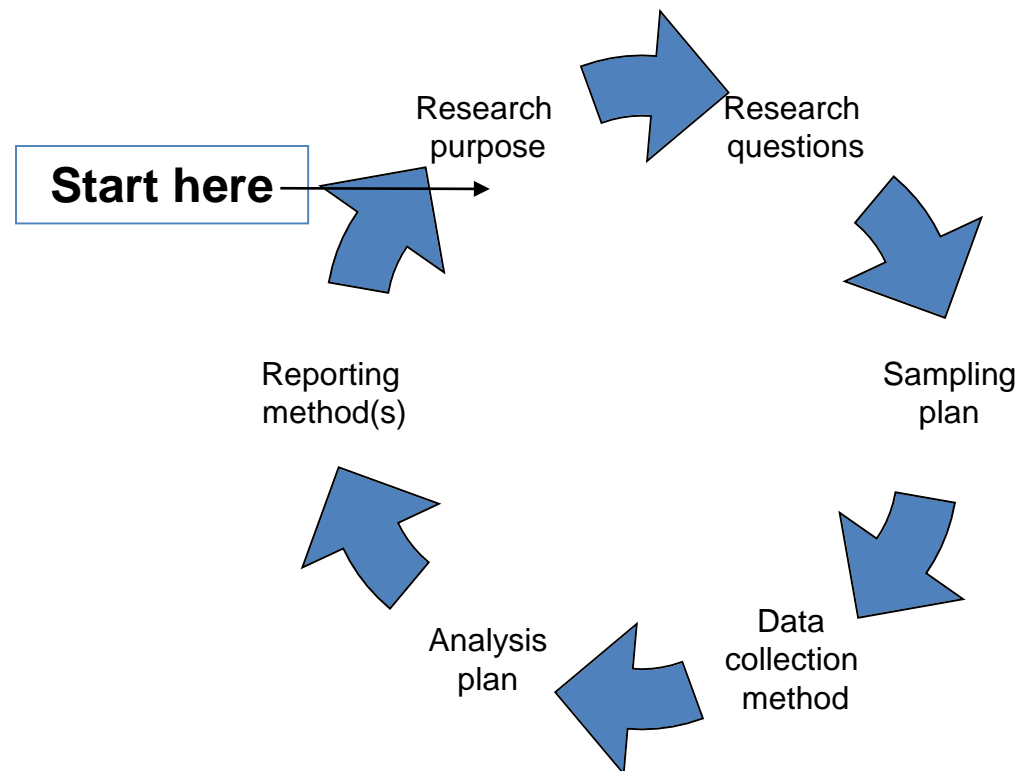
- Testing a developed theory/hypothesis
- Quantifying prevalence
- Generalizing findings beyond your study population
- Studies with low resources
 - money
 - time
 - expertise

Can you mix qualitative and quantitative methods?

- Yes! Often desirable
 - Examples: using qualitative research to develop a survey (make sure asking questions use right language/concepts)
 - To add depth/description/meaning to survey data
 - To understand seemingly conflicting findings
 - To add methodological rigor (triangulation)

Qualitative Research Design

- Requires planning ahead
- Decisions are cumulative --one leads to another
- Iterative/flexible/responsive --often changes mid-stream



Qualitative research design

- Iterative –not linear
 - Data analysis occurs during data collection
 - Research questions are refined during data collection as analyses is undertaken
 - Analysis methods may change as data are collected (e.g. coding strategy)
- Flexible –you have to be willing to be informed/make informed changes during the research process

Choosing a Qualitative research question

- Questions to ponder:
 - Is the scale of available resources in line with the scale of the question?
 - Will I have access to necessary data sources?
 - What else is known in this area? e.g. are you trying to:
 - Confirm a theory?
 - Develop a hypothesis?
 - Explore a concept?
 - What data collection method is best suited to the question? Do I have the resources to pursue that?

Sampling strategy considerations



- Can I realistically access the participants I want to reach?
- What biases are inherent in the sampling strategy?
- In qualitative method there is no absolute rule for sample size

Sampling ideas

- Deviant cases
- Intensity
- Maximum variation
- Homogenous samples
- Typical case
- Critical case
- Snowball
- Criterion
- Theory based
- Confirming/disconfirming cases
- Convenience



Qualitative data gathering techniques

Choice driven by research questions & sampling strategy...

3 common data gathering techniques

- Interview
- Observation
- Focus groups

Qualitative data collection strategies: Interviewing

Interview characteristics

- one-on-one conversations
- Purpose: learning about things we cannot observe
- Maximum of 2 hours in length

Interviewing useful for:

- finding out about things we cannot observe
 - thoughts, feelings, intentions,
 - behaviors that took place earlier in time
- sensitive topics
- Working with low literacy populations

Interviewing not useful for

- Projects with very limited resources
 - Expertise --Quality is highly dependent on interviewer skills
 - \$ --interviewing and analysis is time consuming

Data collection strategies:

Interviewing

- Unstructured interviews
 - Questions generated through the natural flow of interactions
 - Conversational
 - Focus built on “sensitizing concepts” and overall purpose of the study

Advantages

- opportunity for flexibility, responsiveness to individuals/situations

Challenges

- takes longer to collect data
- data difficult to analyze

Data collection strategies:

Interviewing

- Semi-structured
 - Follows a guide outlining issues to be explored but does not require exact order/wording
 - Advantages
 - Allows for probing/spontaneity More systematic than unstructured –provides list of topics to explore

Data collection strategies:

Interviewing

- Standardized interviews
 - Each participant is asked the same set of questions in the same sequence and using exactly the same wording
 - Good for when important to minimize variation in questions posed to interviewees
 - Useful in larger projects with multiple researchers
 - Advantages
 - Compensates for variation in skill
 - Challenges
 - does not allow pursuing topics not anticipated when interview was developed

Qualitative data collection strategies: Observation



Systematic gathering of data by watching behavior, events or noting physical characteristics of a setting

Useful for

- Seeing things people in the setting are unaware of
- Learning about things people may be unwilling to talk about in an interview
- Understanding an ongoing process or situation
- Looking at interactions between people
- Understanding a physical setting

Can be time consuming

Requires high level of skill

Focus groups

Group discussion on a focused topic

- Address a specific topic
- Small group (6-12 people)
- Best if from similar backgrounds
- Best if participants don't know one another
- 1 to 2 hours in length
- Max 10 questions

Focus Groups useful for

- Getting at decisions made in social context
- Learning about community/group norms/values
- Capturing discussion (interaction) among participants
- Learning what people think
- Learning how people think
- Finding range of opinions that exist in a group
- In-depth data
- identifying MAJOR themes

Focus Groups not useful for

- Sensitive/controversial topics
- Identifying subtle themes
- Dealing with bias –dominant participants may bias discussion
- Situations in which confidentiality is required
- Decision making
- Conflict resolution
- Training
- Brainstorming

Focus Groups pros/cons

Pros

- Cost effective
- Participant interaction can enhance data quality –serve as a check and balance –weed out extreme views
- Good for populations w/limited literacy
- Good for populations that might be different from moderator

Cons

- Limits # of questions b/c need adequate time for all to respond
- Moderator needs group process skills –keep people from dominating, get all to participate...
- Analysis can be challenging

Common Focus Group uses

- Obtain background information on topic
- Generating research hypotheses
- Stimulating new ideas
- Diagnosing potential problems w/a new program/service/product
- Generating impressions of products, programs, services, institutions
- Learning how respondents talk about the phenomenon of interest (may facilitate quantitative research tool dev)
- Interpreting previously obtained qualitative results

Source: Stewart and Shamdasani (1990, p. 15).



Qualitative data management

- Why: Helps you retrieve your data in a fast, efficient manner
- Need a system for record keeping data –assign case numbers to observations/transcripts. Depends on project. May want to track site, group, participant or some other condition...
- Recordings/ have backups
- Transcriptions/back ups
- Working copy –check/change identifiers to protect identity
- Header labeling system: date, participant id, other factors that may be important
- Software can help



Qualitative data analysis

- Done from 1st day of project. DO NOT leave until end. Why?
 - Miss opportunities to
 - follow up on interesting –emerging questions
 - seek clarifications
 - Reformat questions if you are not getting data you need
- **Coding: primary data analysis method**
 - organizing data into categories, themes
 - Interactive, iterative
 - Move data from unstructured to structured –specific to abstract
 - Techniques: posing questions, comparing, looking for exceptions, commonalities...
 - Multiple layers
 - Developing themes
 - Finding relationships
 - Identifying patterns
 - Almost all based on text (words)

Qualitative data analysis

Coding can be difficult: where to start?

- Frameworks for getting started:
 - Create a starting list of codes from literature
 - Create a list of phrases to code for
 - Code for conditions, interactions, strategies, consequences, acts, activities, participation, relationships, settings....

Codes are revised as you work through the data –based on prior coding

- Some will be dropped
- Some will be expanded
- Some will be broken down/refined

Reporting qualitative findings

- Report data to participants to check analysis
 - Both a way to report findings and a point of methodological rigor
 - Written reports are one option
 - Others: video, talks, brochures, peer-review articles, media, art exhibits

Resources for Qualitative Research



- Patton, M.Q. (2002). *Qualitative Research & Evaluation Methods*. 3rd edition, Sage Publications: Thousand Oaks, CA.
- Miles M.B. & Huberman A.M. (1994) *Qualitative Data Analysis: An expanded sourcebook*. 2nd Edition. Sage Publications: Thousand Oaks, CA.
- Kitzineger, J. Qualitative research: Introducing focus groups: *BMJ* 1995;311:299-302 (29 July).
- Mack N, Woodsong C, MacQueen K, Guest G and Namey E. Family Health International. “Qualitative Research Methods: A Data Collector’s Field Guide. http://www.fhi.org/en/rh/pubs/booksreports/qrm_datacoll.htm.
- Wong LP. Focus group discussion: a tool for health and medical research. *Singapore Med J* 2008;49(3):256-261.
- Family Health International. “Qualitative Research Methods: A Data Collector’s Field Guide. Module 4: Focus groups” (pp 51-82).
- Training: Group Dimensions International <http://www.gdiworld.com/>
- Free software download: NVIVO: http://www.qsrinternational.com/products_free-trial-software.aspx
- Free software download: atlas.ti: <http://www.atlasti.com/demo.html>



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