Qualitative Research 101

Erin E. Sullivan, PhD, Research Director
Harvard Medical School Center for Primary Care
October 25th, 2017
How comfortable are you with qualitative research?

1. Not at all/don’t use qualitative skills
2. I formally learned about qualitative research (for example in graduate school), but do not use regularly
3. Somewhat comfortable
4. Very comfortable
1. What is qualitative research?
2. Why qualitative research?
3. What are some limitations?
4. What are some data collection methods and how are they used?
Qualitative Research

- Answers the *why’s* and *how's* of human behavior, opinion, and experience
- Addresses questions about people’s ways of organizing, relating to, and interacting with the world
Quantitative Methods
• Founded in the positivist paradigm - views the object of the study as independent of the researcher
• Reality as a concrete structure which can be tested and measured and generalizable rules generated
• Tend to be deductive in nature

Qualitative Methods
• Funded in subjectivist paradigm - sees the object of study as something that is socially constructed to a greater or lesser extent
• Knowledge is context and time dependent
• Tend to be inductive and descriptive in nature

(Morgan and Smircich, 1980; Krauss, 2005)
## Comparing qualitative with quantitative data

<table>
<thead>
<tr>
<th>Qualitative Data</th>
<th>Quantitative Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Open-ended</strong> information, gathered through interviews, observing sites, or gathering documents from a public or private source</td>
<td><strong>Closed-ended</strong> information, often on attitude, behavior, or performance instruments</td>
</tr>
<tr>
<td><strong>Constructivist philosophy:</strong> value-bound research with explanations generated inductively from the data</td>
<td><strong>Positivist philosophy:</strong> social science inquiry revealing <strong>time- and context-free</strong> generalizations</td>
</tr>
<tr>
<td>Used to answer questions about <strong>why</strong> a given intervention does or does not work</td>
<td>Used to answer questions about <strong>whether or not</strong> a given intervention works</td>
</tr>
<tr>
<td>Analysis entails <strong>aggregating</strong> the words or images collected into information <strong>categories</strong> and presenting the <strong>diversity of ideas</strong></td>
<td>Analysis entails <strong>statistically analyzing scores</strong> collected on instruments, checklists, or public documents to <strong>test hypotheses</strong></td>
</tr>
</tbody>
</table>
What a qualitative approach brings...

<table>
<thead>
<tr>
<th>Qualitative</th>
<th>Quantitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ‘Complex’, rich data</td>
<td>• ‘Simple’, numeric data</td>
</tr>
<tr>
<td>• Meaning</td>
<td>• Measurement</td>
</tr>
<tr>
<td>• Understanding</td>
<td>• Explanation</td>
</tr>
<tr>
<td>• Interpretation</td>
<td>• Prediction</td>
</tr>
<tr>
<td>• Contextual Account</td>
<td>• Generalizable account</td>
</tr>
<tr>
<td>• Purposive</td>
<td>• Representative Population Sample</td>
</tr>
<tr>
<td>• Representative/ perspective sample</td>
<td>• Hypothesis-testing</td>
</tr>
<tr>
<td>• Exploratory</td>
<td>• Claims objectivity</td>
</tr>
<tr>
<td>• Accepts Subjectivity</td>
<td>• Closed system (experimental control)</td>
</tr>
</tbody>
</table>
## Methodological Fit

**Archetypes in Field Research**

(Edmondson and McManus, 2007)

<table>
<thead>
<tr>
<th>State of Prior Theory and Research</th>
<th>Nascent</th>
<th>Intermediate</th>
<th>Mature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Questions</td>
<td>Open-ended inquiry about a phenomenon of interest</td>
<td>Proposed relationships between new and established constructs</td>
<td>Focused questions and/or hypotheses relating existing constructs</td>
</tr>
<tr>
<td>Type of data collected</td>
<td>Qualitative, initially open-ended data that need to be interpreted for meaning</td>
<td>Hybrid (both qualitative and quantitative)</td>
<td>Quantitative data; focused measures where extent or amount is meaningful</td>
</tr>
<tr>
<td>Illustrative methods for collecting data</td>
<td>Interviews; observations; obtaining documents or material from field sites relevant to phenomena of interest</td>
<td>Interviews; observations; surveys; obtaining material from field sites relevant to the phenomena of interest</td>
<td>Survey; interviews or observations designed to be systematically coded and quantified; obtaining data from sites that measure extent or amount of salient constructs</td>
</tr>
</tbody>
</table>
Limitations of qualitative approaches

• Sample sizes are small
• Snowball sampling can bias the sample and reduce replicability
• Open to different interpretations by different analysts
• Causal relationships are difficult to establish since variables are not controlled for
• Labour intensive and time consuming
How do we overcome these limitations?

Commonly used methods of overcoming qualitative research limitations include the triangulation of data and use of mixed methods research approaches.
In one word, what would you like to use qualitative methods for in your current role?
What are some qualitative approaches?
Qualitative Data Collection Methods

- Interviews
- Ethnography
- Focus Groups
- Observation
- Text Analysis
- Case Studies
Qualitative Data Collection Methods

- Interviews
- Ethnography
- Observation
- Focus Groups
- Text Analysis
- Case Studies
Conversation vs. Interview

Conversation
Communication, often but not always, on a particular topic. For successful conversation, the partners must achieve a workable balance of contributions.

Interview
Conversation where interviewer asks questions to obtain information from the interviewee. Interviewer initiates and controls the exchange to obtain quantifiable and comparable information.
Semi-structured Interview Technique

1. There is an attempt to establish rapport with the participant
2. The ordering of questions is less important
3. The interviewer is free to probe/prompt discussion of interesting issues that may arise
4. The interviewer can follow the respondent’s interests or concerns
5. Questions to be open-ended, rather than closed
6. Questions should be neutral rather than leading
7. Questions to be framed in the language and terms of the participant

(Adapted from Smith, 1995)
Focus Groups

Focus groups can be used to gather information on collective views, and the meaning that underpins those views. They generate a rich understanding of participant’ experiences and beliefs.

Suggested criteria for using focus groups includes:
• A standalone method, for understanding and analyzing group norms, meanings, and processes
• In a multi-method design, to explore group language and narrative at a later point
• To clarify, qualify, extend, or challenge data collected using other qualitative approaches
• To communicate results to research participants

(Gill et al 2008)
## Skills for Effective Communication

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sender</strong></td>
<td>Speaking and gesturing</td>
</tr>
<tr>
<td><strong>Receiver</strong></td>
<td>Active listening and seeing</td>
</tr>
<tr>
<td><strong>Active listening skills</strong></td>
<td>Reflecting back and summarizing, eye-contact, facial expression, and nodding</td>
</tr>
</tbody>
</table>
Interview Preparation

• Selected key informants and interview subjects
• Write questions in advance and have them out at the time of the interview
• Be familiar with the questions and practice beforehand
• Have recording equipment on hand and ready for immediate use
• Know how long the interview will take
More Tricks of the Trade

- Be on time and prepared
- Maintain eye-contact
- Keep in mind the interviewees’ responses may be affected by their relationship to you
- Give the interviewee time to think as well as talk
- Use probing questions to clarify responses and obtain more information
Managing Your Data

Transcription should be:

• Be immediate
• Use transcription protocols
• Be stored in a way that preserves confidentiality (as per the terms of your IRB/institutional standards)
Analyzing Your Data

Beyond the scope of what we have time for today

• NVivo (QSR International)
• Atlas.ti
• Dedoose
THANK YOU!

Erin E. Sullivan, Ph.D.
Research Director
Erin_Sullivan@hms.harvard.edu