What Is the Value in Qualitative Data?

Nicola Bulled

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What is the value in qualitative data?
What is the value in qualitative data?
✗ I don’t think it is easy to pay for what you don’t trust. (A doctor in Abia)

✗ If you make it (EVV) free, people will somehow think that you are trying to use them for a test. If you make Ebola vaccine expensive, like five thousand naira (USD25), people will actually ask you less questions. (A doctor in Enugu)

✗ I think we have little and limited information about the vaccine. We don’t know the side effects. There is no adequate follow-up to know the level of protection one can get, the efficacy is not established, and the long term side effects are not known. So the information we have is not enough to build trust for the vaccine. (A doctor in Abia)

Pros of qualitative research

Qualitative research methods are able to explore the complexity of human behavior and generate deeper understandings of illness behaviors and therapeutic interactions.

✗ Formative/primary research

✗ Filling in the gaps or interpreting quantitative research

✗ Fluid, responsive, and accepting of complexity

✗ Low cost
Cons of qualitative research

- Qualitative research is not valued as highly by the biomedical community
- Not generalizable
- Not predictive
- Can be subject to researcher bias
- If not constructed well, can lack rigor
1. Quant or Qual?

The selection of a data collection method all depends on the type of questions you want to answer.
Are you studying behavior in a **CONTROLLED SETTING** or in a **NATURAL ENVIRONMENT**?

Are you testing an hypothesis, making predictions or understanding something more generally?

Are you measuring a precise variable or identifying factors that may impact the value of the variable?

Do you want your final data to be statistical means, correlations, mathematical models, or contextual descriptions, narratives and direct quotes?

Are you explaining and predicting or are you exploring, discovering, and constructing?
## Qualitative Research Overview

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Scientific method</th>
<th>View of Human Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>To understand &amp; interpret social</td>
<td>Exploratory or bottom–up: the researcher generates a new hypothesis and theory from the data collected. Subjectivity is expected.</td>
<td>Dynamic, situational, social, &amp; personal.</td>
</tr>
<tr>
<td>interactions.</td>
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</table>

<table>
<thead>
<tr>
<th>Common Research Objectives</th>
<th>Focus</th>
<th>Nature of Reality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explore, discover, &amp; construct.</td>
<td>Wide–angle lens; examines the breadth &amp; depth of phenomena.</td>
<td>Multiple realities; subjective.</td>
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# Qualitative Research Overview

<table>
<thead>
<tr>
<th>Nature of Observation</th>
<th>Group Studied</th>
<th>Variables</th>
</tr>
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<tbody>
<tr>
<td>Study behavior in a natural environment.</td>
<td>Smaller and not randomly selected.</td>
<td>Study of the whole, not variables.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Type of Data Collected</th>
<th>Form of Data Collected</th>
<th>Type of Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Words, images, or objects.</td>
<td>Open-ended responses, interviews, participant observations, fieldnotes, reflections</td>
<td>Identifying patterns, features and themes.</td>
</tr>
</tbody>
</table>
2. Types of Qualitative Research Methods?

interviews and focus groups
Interviews

**Structured**
Same questions asked to each individual with no adjusting of language, no clarifications, and no changes in question order.

**Pros:**
- Illiterate population
- Longitudinal studies
- Multiple researchers
- Large sample populations
- Statistical analysis (quantitative)

**Semi-structured**
An interview schedule exists, but there is flexibility in the question order, language clarifications, addition or deletion of questions.

**Pros:**
- Good for thematic exploration
- Ensures that participants understand the questions asked
- Allows for testing of question phrasing and language
- Explore new ideas
- Comparison across interviews

**Unstructured**
No set questions or wording, interviewer prompts a conversation on a topic and probes for details.

**Pros:**
- Good for uncovering new information and deep topic exploration, no assumption of knowing all the dimensions
- Question language, phrasing, ordering can all be adjusted to obtain different information
## Interviews

### Structured

**Cons:**
Researchers assume that the questions scheduled in their interview instrument are:
- sufficiently comprehensive,
- sufficiently simple, and
- that the meanings are sufficiently identical for each subject.

...to elicit from nearly all subjects the relevant information. These remain "untested articles of faith."

### Semi-structured

**Cons:**
- Not effective with a large research team as consistency in data recovery can’t be controlled (not everyone will be asked the same questions)
- Not quantifiable

### Unstructured

**Cons:**
- Not effective with a large research team
- Time intensive both in conducting interview and analyzing the data recovered
- Not quantifiable
Conducting an interview

USEFUL TIPS

Slow things down... don’t hesitate asking people to repeat, or saying that you want to confirm what you heard.

Recording interviews often results in a false sense of security, and takes a lot of work to transcribe... better to take good notes during and right after the interview.

Don’t schedule interviews back-to-back.

Don’t forget to let your informant know when you are changing topics on them.

“Okay, now what I’d like to do is ask some questions about...”

“The next series of questions will consider...”

CONSIDER YOUR ROLE

Be an active listener... you need to predict what question is appropriate to ask next but also comprehend what the informant is saying so that you don’t miss something important.

Present yourself as a professional... what are you wearing, how do you introduce yourself, what type of language do you use.

Be respectful of the time and effort that people are taking to help you, be courteous but don’t be afraid to challenge them to clarify their ideas or provoke additional thinking.
Conducting an interview

Develop an interview guide/schedule

Keep in mind the nature of your investigation and the objectives of your research

Generate a list of the broad categories you feel relevant to your study

Create questions for each item listed

✗ No rules for how to order the questions for an interview schedule
✗ Usually begin with questions that are easy for the informant to answer
✗ Questions that are not threatening or sensitive
✗ Demographic questions about education level, age, location of residence, etc.
✗ They result in quick responses
✗ They establish rapport between you and the informant
✗ The informant feels invested in the interview and is less likely to stop
✗ Don’t spend too long on these, get to point
✗ Don’t establish a pattern of short response questions as you may discourage the longer answers when you need them
Conducting an Interview

Include all types of questions

**Essential Questions** – designed to elicit specific information

**Extra Questions** – worded differently from the essential questions to act as reliability checks (consistency of responses)

**Throwaway Questions** – questions that you don’t really need but may establish rapport or be used to regain a level of comfort if you have asked something too sensitive

“*Oh, by the way, before we go any further, I forgot to ask you...”*

**Probing Questions** – a way to draw out more complete information

“*Could you tell me more about that?”*

“*What happened next?”*

“*How come?”*
Conducting an Interview

**Consider your word choice and phrasing**

- Neutralize the question as much as possible so that you can get the information you want... this may require that you
- Assume the event already occurred and you ask specifics about it
- Use theoretical situations to make sensitive situations more abstract
- Don’t double-barrel
- Only one question at the time, NOT “How many times have you seen a doctor, or have you only seen a nurse?”
- Don’t ask complex questions
- Avoid Yes/No questions
Focus groups

Aim to identify shared ideas
how people respond to other’s opinions, when they
challenge other’s views, how they interact, what language
they use, how opinions are formed, and what views surface
as dominant

✗ Ideally 5-7 strangers
✗ Emphasis is on interaction between participants
  rather than with the researcher
✗ The researcher assumes the role of discussion
  moderator to ensure different perspectives are
  considered
✗ Each focus groups counts as one data point
Focus groups

Focus groups are very challenging to do well

Motivations: people participate in focus groups for different reasons, rarely altruistic.

Honesty: people may not consciously lie, but they may feel a social pressure not to be honest in how they feel.

Influence: groupthink is the desired outcome, but hard to control if one or two people force it

Negativity: people trend towards expressing what is not right, but rarely talk about the good or the way to fix something

Validity: everyone’s opinion is important, but some people may be better informed about a topic and therefore able to make more useful judgements
Conducting Focus groups

1. **Introduction and introductory activities**
   Breaking the ice activities to get everyone comfortable

2. **State the basic rules or guidelines for the interview**
   How you plan to run the discussion
   Have group members establish the rules of interaction

3. **Short question-and-answer discussions**
   Specific questions such as a semi-structured interview guide that everyone answers, but be brief don’t get them into a habit

4. **Ask the main question to start the discussion**
What about sampling?
“Whom should you select to interview and observe?

Anyone willing to teach you what you need to know. Look for potential informants everywhere. Talk to anyone or everyone. If your informants don’t agree, you might wonder who’s the next expert? Here’s the answer: everyone’s an expert in what he/she knows.

W. P. Handwerker
**Sampling**

**Sampling frame** is a complete list of all the members of the population that you are studying. Getting a representative sample of this complete population is ideal, but not always possible.

<table>
<thead>
<tr>
<th><strong>Probability Sampling</strong></th>
<th><strong>Non-probability Sampling</strong></th>
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<tbody>
<tr>
<td>Mathematical representation of the larger population</td>
<td>Sample that is not necessarily representative</td>
</tr>
<tr>
<td><em>Simple</em> -- each person has an equal and independent chance of inclusion</td>
<td><em>Convenience</em> -- people close at hand</td>
</tr>
<tr>
<td><em>Systematic</em> -- every nth person selected from a complete list beginning at a random spot</td>
<td><em>Purposive</em> -- selection of people that represent a specific population or display certain attributes</td>
</tr>
<tr>
<td><em>Stratified</em> -- population is divided into strata and independent samples from each are selected with sampling fractions applied to ensure representativeness</td>
<td><em>Snowball or respondent driven</em> -- seeding the population and using informants to identify other individuals</td>
</tr>
<tr>
<td></td>
<td><em>Quota</em> -- specific attributes are selected (age, gender) with proportions of each attribute calculated based on representation in the full-study population</td>
</tr>
</tbody>
</table>
How many interviews are enough?

“Saturation”
No new information is being recovered

This requires constant assessment and analysis of the data, asking new questions if a new idea emerges to see if it holds value to someone else.
Using data from a study involving sixty in-depth interviews with women in two West African countries, Guest, Bunce, and Johnson (2006) assessed just how many interviews are sufficient in the case of purposive (nonprobabilistic) samples. Based on the data set, they found that saturation occurred within the first 12 interviews, although basic elements of meta-themes were present as early as six interviews.

Ryan and Bernard (2003) assert that when and how saturation is reached depends on:

1. The homogeneity of the group being studied
2. The number and complexity of data
3. Investigator experience and fatigue
4. The number of analysts reviewing the data
Thanks!

Any questions?

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