Analysis in Qualitative Research

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The University of Texas at Tyler
3:00pm, Friday, February 10, 2023

Series offered by The Office of Research, Scholarship, and Sponsored Programs (ORSSP)
This workshop will explore...

...some of the many kinds of analytic approached and frames available to the qualitative researcher

1. Please enter your name, position and department in the chat.

2. This presentation will take about 30-40 minutes which will allow for plenty of time for discussion and questions.

3. Please hold your questions until the end and/or put them in the chat.
QUICK REVIEW....ATTRIBUTES OF QUALITATIVE RESEARCH
Qualitative Research is Focused.... On meaning; lived experiences of the participants

Examine perceptions, motivations, and experiences that are significant (meaningful) to people

Analyze texts (written word, images), talk (spoken word, conversations), and interactions (encounters, events) --rather than numbers and statistics,

Examines social processes, not probabilities or predictions

Qualitative research is an iterative and you could say, creative craft; no single “recipe” for qualitative research.

More information? Visit the resources bank of the ORSS. See especially several excellent recorded webinars on Qualitative Research.


Qualitative Data Analysis

Data Collection
- Observation
- Interviews
- Document Recording

Data Reduction
- Selection
- Focusing
- Simplifying
- Abstracting
- Transforming

Data Display
- Matrices
- Graphs
- Networks
- Charts

Conclusion Drawing
- Give Meanings
- Confirming
- Verifying
So, what data are we analyzing?

And Why.....

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Analyze texts (written word, images), talk (spoken word, conversations), and interactions (encounters, events) --rather than numbers and statistics,

Examines social processes, not probabilities or predictions
### First Cycle Coding Methods Related to Ontological Research Questions
(Capturing participants’ realities)

<table>
<thead>
<tr>
<th>Coding Methods</th>
<th>Function</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attribute Coding</strong></td>
<td>Coding features of research site(s), participant(s), and material(s) being studied</td>
<td>Participants’ age, gender, &amp; educational level</td>
</tr>
</tbody>
</table>
| **Emotion Coding**        | Coding participants’ sentiments, feelings, reactions, excitement and sensations  
                           • From participants’ viewpoint  
                           • From researcher’s standpoint | Hopelessness  
                           Anxiety  
                           Pessimism  
                           Denial |
| **In Vivo Coding**        | Coding by using participants’ own words                                   | “Never again”  
                           “Pay back time”  
                           “No negotiation” |
| **Value Coding**          | Coding participants’ “values [V], attitudes [A], and beliefs [B]” (p. 268)  | [V] – Education  
                           [A] – Sense of uncertainty  
                           [B] – Existence of discrimination |
| **Narrative coding**      | Coding participants’ stories including their interaction with others and retelling them | They can be structured as follows:  
                           (1) Abstract [summary],  
                           (2) Orientation [characters, setting & time]  
                           (3) Complicating action [response & reaction]  
                           (4) Evaluation [essence]  
                           (5) Results [consequence]  
                           (6) Coda [lessons & conclusion] |
Where to start: Process of refining codes for qualitative inquiry

- Open coding
  - Generate ideas about the data
- Axial coding
  - You begin to draw connections between codes.
- Selective coding
  - Finalizing categories codebook

Memoing

Great basic discussion and examples [HERE](#)
Excellent and short discussion of open, axial, selective coding [HERE](#)
Your turn
Q: And so, so you told me a little bit about the writing that you do in school that’s significant to you. **How about writing that you doing outside of school?** Any kind of whether its lists or diary or texting, I mean, you name it anything that has to do with.

Umm, it could sometimes be really important or it could be something from like homework or its either like an essay I am writing about like why you want to be in this or why you want to be in that.

my Mom really encourages me and my sister to write “thank you” letters to our teachers or yeah, umm I don't really text a lot. It's either usually for my Mom if she is like driving or something?

Umm and I only have like I rarely text a lot because I am not on like on a device all the time.
Sample Transcript with Timestamps at Regular Intervals

Steve: Welcome back, Brad. This is the second part of our interview, and I want to get through these as quickly as possible because I know you have somewhere to be.

Brad: Thank you. It's my pleasure.

Steve: It says on the website you worked doing graphic design for a local branding agency before branching out and [00:15] starting your own business.

Brad: Yes.

Steve: Was that a conscious choice?

Brad: Yes.

Steve: Sorry, one sec. We can hear the fan.

Charlene: [inaudible 00:27]

Steve: No, no, that's perfect. Thanks, [00:30] Charlene. Good.

Was starting your own company intentional, or did you just sort of fall into it?
Brad: Actually, sort of both. I started out doing it as a favor for a friend. I didn't really know what I was doing at the time, but at some point I found out I was having some success with that, and so I started doing it for local businesses and restaurants.

Then it kind of took off from there, and then I figured, well, if I'm going to be taking on all these new clients I might as well get a website going and make something out of this, you know?

Steve: Sure. What kind of challenges did you experience when you were starting out, that you weren't expecting?

Brad: Hmm, challenges I wasn't expecting.

Steve: [laughs] I keep putting you on the spot. I don't think I put that one in the questions either. We're just ad-libbing here.

Brad: No, it's fine. So, challenges ...

Steve: Yeah. It could be funding or anything. I forgot to ask you earlier, did you bootstrap?
Memo writing
Memoing: Hunches, ideas, thoughts, Write the Memo!!! Observational, theoretical, methodological…. Can lead to open codes; or to axial codes; or to your final categories. Can help you capture your rationale for your code book.


**Observational notes** are statements bearing upon events experienced principally through watching and listening. They contain as little interpretation as possible, and are as reliable as the observer can construct them. Each ON represents an event deemed important enough to include in the fund of recorded experience, as a piece of evidence for some proposition yet unborn or as a property of context or situation. An ON is the Who, What, When, Where, and How of human activity. It tells who said or did what, under stated circumstances (p. 100).

**Theoretical notes** represent self-conscious, controlled attempts to derive meaning from any one or several observation notes. The observer as recorder thinks about what he has experienced, and makes whatever private declaration of meaning he feels will bear conceptual fruit. He interprets, infers, hypothesizes, conjectures; he develops new concepts, links these to older ones, or relates any observation to any other in this presently private effort to create social science (p. 101).

Excellent blog see more [here](#)
Memo-writing as a way to capture your ongoing thinking.

- A **methodological note** is a statement that reflects an operational act completed or planned: an instruction to oneself, a reminder, a critique of one’s own tactics. It notes timing, sequencing, stationing, stage setting, or maneuvering. Methodological notes might be thought of as observational notes on the researcher himself and upon the methodological process itself; as complete a chronicle as the recorder finds necessary or fruitful. Were he to plan on writing for later publication about his research tactics, he would take detailed notes; otherwise his MN consists mainly of reminders and instructions to [the researcher] (p. 101).

  Schatzman & Strauss, 1973,
  Excellent blog see more [here](https://example.com)

- **Why write memos?**
  For example, Charmaz (2000, p. 518) writes that memo writing helps researchers to:
  1. grapple with ideas about the data
  2. to set an analytic course
  3. to refine categories
  4. to define the relationships among various categories, and
  5. to gain a sense of confidence and competence in their ability to analyze data.

Analytic memoing is the generally known term

- After coding
- Expansion
- Pondering
- Examples here (expanded)

Series of questions

Analytical memo

Are there therapeutic approaches favored by participants, or are they a range of therapeutic 'options' which all participants can take, depending on the individual patient and their situation?

What are the influencing factors which might result in a participant favouring a particular therapeutic approach? How has this developed and what are the conditions?

Can participants change their approach? If so what are the triggers and what are the consequences? Can others not change their approach? Why?

What are participants ‘doing’ and what is ‘going on’ when participants adopt a particular approach? What are the consequences of this process?

Some participants appear to be more rigid in their practice, whilst others appear more adaptable. Why is this the case?
Your turn

Go back to your open codes.

See if you can jot even a micro-memo – about method, theory, analysis, -- anything -- ponder “out loud, on paper”
One way of visualizing data (color). Other ways can include creating tables, story boards and more.

Figure 1 illustrates how color can be used to differentiate between sentences that have been coded.
Part of the analysis process
And visualizing...
Beginning to establish codes and themes – next is needed memoing, and establishing stable codes.
Another kind of display – how you lay it out and arrange columns

<table>
<thead>
<tr>
<th>Line</th>
<th>Speaker</th>
<th>Transcript</th>
<th>Social Interaction (Relational)</th>
<th>Building Knowledge (Instructional)</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 1.   | KH      | Duration 37 seconds
"Pedro Gonzales" and "Luke" sitting in pair desks facing each other -- [00:11:28.29] KH walks up to them, then kneels in between them, hands close to her body, head turned to Pedro. | T reduces vertical distance by kneeling; | Approach – (A) |          |
<p>| 2.   | KH      | How are you guys doing? | Opening – sub text = how is the writing going? | Opening (B) |          |
| 3.   | KH      | (reads Pedro’s work by looking on – his writing is entirely in front of him – he owns it – she is not touching his work at all) | T keeps arms to her side and does not enter student desk space at all Uses S first name |          |          |
| 4.   | KH      | That's intense &quot;Pedro&quot; | Responds as a |          |          |</p>
<table>
<thead>
<tr>
<th>Step</th>
<th>Conversation</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>KH: Your opening -- it's a big deal</td>
<td>T responds again as a reader.</td>
</tr>
<tr>
<td>7.</td>
<td>Pedro: How do you spell loss....</td>
<td>S quickly changes subject. Distancing move -- keep T away from personal life -- keep her in her prescribed role (e.g., she who can spell).</td>
</tr>
<tr>
<td>8.</td>
<td>Pedro: Is it L-O-S-E or --</td>
<td>Spelling</td>
</tr>
<tr>
<td>9.</td>
<td>Pedro: Oh no that's &quot;lose&quot; [11:45 AUDIO]</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>KH: Right!</td>
<td>Validate/Evaluate</td>
</tr>
<tr>
<td>11.</td>
<td>Pedro: Lost is L-O-S-T</td>
<td>Spelling</td>
</tr>
<tr>
<td>12.</td>
<td>KH: You're right</td>
<td>Validate</td>
</tr>
<tr>
<td>13.</td>
<td>KH: You know the answer (11:59 audio)</td>
<td>Validate</td>
</tr>
<tr>
<td>14.</td>
<td>Pedro: &quot;loses&quot; L-O-S-E so &quot;losses&quot; L-O-S-S</td>
<td>Spelling</td>
</tr>
<tr>
<td>15.</td>
<td>KH: You knew that answer</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Pedro: Yah I just wanted to make sure [AUDIO 12:04] end on video [00:12:07.01]</td>
<td>S gets validated for what he knows and chooses to share. S can think through what he wants to say with teacher and she'll listen. What did S want to be sure of?</td>
</tr>
</tbody>
</table>
A good code carries five elements;
1. a name,
2. a definition of the theme concerns,
3. an elaboration of translating a theme to a code,
4. an explanation of inclusion or exclusion to the identification of theme, and,
5. listing of positive and negative examples.
Code book example (selected)

talk (interviews)

Citation


<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other influences on teachers</td>
<td>Teacher refers to influences on her practice and/or thinking (e.g., former professors, colleagues, students, other professional development experiences, etc.) excluding NMD</td>
<td>“You know, one of my professors at Meredith had the saying—and I’ve kind of forgotten it except the last part that said children can’t understand math’ til they hold it in their hand. And that has kind of been my guiding force the, you know, the years I’ve been teaching.”</td>
</tr>
<tr>
<td>Curricular references</td>
<td>Teacher makes direct/indirect or general/specific references to curriculum (e.g., Standard Course of Study, pacing guides, Trailblazers, Every Day Math, etc.)</td>
<td>“At my grade level, I think I know the curriculum”</td>
</tr>
<tr>
<td>Pedagogical struggles</td>
<td>Teacher expresses uncertainty, lack of clarity, and/or concern, about some aspect of the “how, what, or when” of classroom practice</td>
<td>“But my concern is, you know, two years down the road, is there going to be some stepping-stone that we’ve missed, that’s going to put that concrete fact . . . the child doesn’t have. So that’s probably my biggest concern.”</td>
</tr>
</tbody>
</table>

### Codebook for content analysis

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>Year in which the article was published.</td>
</tr>
<tr>
<td>Journal</td>
<td>Scientific journal in which the article has been published</td>
</tr>
<tr>
<td>Author</td>
<td>Name of the author(s) of the article</td>
</tr>
<tr>
<td>Objective</td>
<td>Objective of the article</td>
</tr>
<tr>
<td>Conclusion</td>
<td>Conclusions of the article</td>
</tr>
<tr>
<td>Method</td>
<td>Collection and analysis methodology used in the article</td>
</tr>
<tr>
<td>Theoretical</td>
<td>Concept study or literature reviews</td>
</tr>
<tr>
<td>Empirical</td>
<td>Applied studies (case studies, surveys, etc.)</td>
</tr>
</tbody>
</table>

*Figure - available via license: Creative Commons Attribution 4.0 International
Content may be subject to copyright.*
Content/classification codebook with feature description and tweet example for tweets related to human papillomavirus (HPV) vaccination.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
<th>Example tweet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sentiment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Positive                 | The tweet contains supportive messages about the HPV vaccine and encourages its uptake | 1. Not only does the HPV vaccine protect against human papillomavirus, but it also reduces the risk of cancers  
2. #HPV vaccine can be #cancer prevention! Parents, #vaccinate your children at ages 11-12 |
| Negative                 | The tweet contains disparaging messages about the HPV vaccine or discourages its uptake | 1. Healthy 12-year-old girl dies shortly after receiving HPV vaccine  
2. RT @CBCHealth: The Gardasil Girls: How Toronto Star story on young women hurt public trust in vaccine http://t.co/... |
| Neutral                  | The tweet’s text holds no subjective opinions about the vaccine—purely facts repeated from sources | 1. State officials unveil campaign for HPV vaccination http://t.co/0I2sAWGXYs  
2. RT @DrJenGunter: About 10% boys have received 3 doses HPV vax |
| No mention               | The tweet does not mention the HPV vaccine                                  | 1. RT @Forbes: HPV is truly indiscriminate  
2. RT @CDCSTD: #Women: get screened & talk w/ your friends about the link between #HPV & cervical #cancer |
| Side effects             | The tweet refers to side effects caused by the HPV vaccine or effects that may be unknown to the user | 1. Healthy 12-year-old girl dies shortly after receiving HPV vaccine  
2. RT @ksbrownseyedgrl: It can happen to your child...to your family...#OneLess #Gardasil #CDCwhistleblower #vaccine... |
| Prevention/protection    | The tweet refers to the extent to which the HPV vaccine will protect the user | 1. Single HPV jab could prevent 70% of cervical cancers (http://t.co/Hg0KSIIk2A)  
2. A new HPV vaccine prevents nine strains of the virus http://t.co/ZFGvVqlq0U |

### Code Book

Note colors attached to codes and data exemplars

<table>
<thead>
<tr>
<th>Theme</th>
<th>Advantages</th>
<th>Quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer communication</strong></td>
<td>1. Passive tracking of consumer reactions. 2. Optimise response options and make them more prompt.</td>
<td>1. “Many companies already implement social listening to quickly learn about any criticisms or appraisals on social media”. 2. “The inability to respond to the consumers addressing your organisation in the public domain within several hours may already be recognised as ignoring them or having poor customer service quality”.</td>
</tr>
<tr>
<td><strong>Customer servicing</strong></td>
<td>Instantly identify loyal consumers returning with new orders.</td>
<td>“It may seem like a small thing but imagine making a second booking at the same hotel you stayed at with your family last year and receiving a reply, “John, thank you for choosing us again” or a Christmas greeting wishing all the best to your wife and two children”.</td>
</tr>
<tr>
<td><strong>Data processing</strong></td>
<td>Track all consumer operations longitudinally.</td>
<td>“Additionally, you may track the whole consumer journey rather than just the moment of the purchase to analyse your marketing effectiveness”.</td>
</tr>
<tr>
<td><strong>Performance monitoring</strong></td>
<td>Reliable productivity tracking.</td>
<td>“This also allows them to track their productivity and really know when they are performing well”.</td>
</tr>
<tr>
<td><strong>Services personalisation</strong></td>
<td>1. Better consumer experience. 2. Upselling.</td>
<td>1. “This personalisation is highly convenient for making every consumer feel valued”. 2. “At the individual level, personalisation supports upselling. If the system recognises the ‘business-type reservation’ on the basis of customer data, a live customer support specialist may offer additional services such as office space, a business lounge for work or photocopying and translation”.</td>
</tr>
<tr>
<td><strong>Predictive analytics</strong></td>
<td>Capability to optimise dynamic pricing and room management.</td>
<td>“This is especially important for hotels that need to use dynamic pricing and have to close some rooms for refurbishment or basic repairs”</td>
</tr>
</tbody>
</table>
Questions? Analysis experiences to share?

Thank you for attending. I am happy to talk with you on an individual basis.

You can schedule a meeting HERE or email me at aconsalvo@uttyler.edu

Visit the resources bank of the ORSS. See especially several excellent recorded webinars on Qualitative Research.
Visit the ORSS

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