Digital Qualitative Analysis Tools

Dr. Annamary Consalvo, Associate Professor
The University of Texas at Tyler
3:00pm, Tuesday, April 18, 2023

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

...some basic ways that qualitative analysis software can assist the researcher. In this workshop participants will consider some of the pros and cons of a few of the vast array digital tools for qualitative analysis.

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

2. This presentation will take about 30-40 minutes which will then allow 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 seeks to....

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

Explore social processes, not probabilities or predictions

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

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


Must read, and read some more. Many helpful books and articles out there.
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.....

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
Where to start: Process of refining codes for qualitative inquiry

Great basic discussion and examples HERE
Excellent and short discussion of open, axial, selective coding HERE
Tools for Qualitative Analysis
Material Tools
for qualitative analysis
Part of the analysis process
And visualizing…

Material analytic methods
Beginning to establish codes and themes – next is needed memoing, and establishing stable codes.

Material analytic methods
Inexpensive and widely available

MS Excel
MS Word
Excel spreadsheet of focus group interview, showing how comments were coded as anxiety or coping. The moderator comments were not coded. 3.6 Within-Case Analysis 3.6.1 Step 6: Qualitative analysis of quantitative data

Using Microsoft Excel to code and thematically analyse qualitative data: a simple, cost-effective approach. 

Inexpensive, easy to find/use software: MS Excel
Qualitative Data Using **MS Word Comments** by Karsten Knoch [HERE](#) Helpful blog post. Pretty extensive

inserting codes directly into document then using FIND feature to gather.
9. Create a header row. Go to the top row of your table, and insert a row. Label that top row as specified in the top row of the sample table here.

<table>
<thead>
<tr>
<th>Code</th>
<th>ID</th>
<th>Q #</th>
<th>Turn #</th>
<th>Data</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**Code:** You will use this column during Stage 3 to label and code emerging themes in the data.

**ID:** You will use this column to label the participant that is speaking. You should use a code number that you have assigned and tracked accordingly.

**Q #:** In this column, you will record the number of the question that was asked to elicit the participant's response in that row.

**Turn #:** This column is very important: It will allow you to sequence the text of the interview so that you will be able to quickly locate and track information within the interview. This feature is akin to what many in qualitative research refer to as a line number. I prefer the term *turn*, because sometimes the “turn” will be a line, a sentence, a passage, or a whole paragraph, for example. This is, in essence, the indicator of where this “chunk” is in your data.

**Data:** This column will contain the actual text from the data, divided into meaningful segments.

**Notes:** This column provides you space to record you personal notes, hunches, insights, and so forth. You can also use this column to make explicit links to the research questions driving your project if that’s helpful.

**Note:** These are helpful to add add. preferences.

See

**Ruoana (2005) Using MS Word as an Analysis Tool**
The following is an excerpt of a coding scheme used in the analysis of a set of data surveying HRD professionals' ideas on issues and trends affecting the profession. The codes provided are the ones needed to understand the coding of Interviewee #6 on Appendix A: Analyzed & Coded Interview.

10000 Driving Forces
10100 International/Globalization
10200 XXXX
10300 XXXX
10400 XXXX
10500 XXXX
10600 Changing Organizations
10610 XXXX
10620 XXXX
10700 Changing Workforce
10710 XXXX
10720 XXXX
10730 XXXX
10800 War or tragedy
10900 Value of Human Resources

11000 HRD Work/Competitive Adv.
11100 E-Learning
11200 XXXX
11300 Learning
11310 XXXX
11320 XXXX

12000 Business/Orgl. Credibility
12100 Boardroom (increased recognition)
12200 XXXX
12300 XXXX

Figure 14.2 Sample Coding Scheme

Figure 14.3 Sample of Master File Data through Stage 4

See Ruona (2005) Using MS Word as an Analysis Tool
selected function qualitative analysis software

### 15 Best Transcription Software In 2023
[Audio/Video To Text](linked article)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Software</th>
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</thead>
<tbody>
<tr>
<td>#1</td>
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<tr>
<td>#2</td>
<td>GoTranscript</td>
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<tr>
<td>#3</td>
<td>Descript</td>
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<td>#4</td>
<td>Otter</td>
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<td>#5</td>
<td>The FTW Transcriber</td>
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<td>#6</td>
<td>Audext</td>
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<td>#16</td>
<td>Amberscript</td>
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</tbody>
</table>
Transcription Software (audio & video)

Rev
The software integrates with YouTube, Vimeo, JW Player, and more platforms.
$ more a service – cost per minute

GoTranscript
Human-Based Transcription.
$ more a service – cost per minute

InqScribe
Simple and affordable transcribing. InqScribe is a transcription software for Windows as well as Mac that supports audio and video files from your hard drive, flash drive, CD, server, or URL (HTML5).

They also offer a foot pedal for controlling media playback and allow exporting files in different formats, including Premiere, Final Cut Pro, DVD Studio Pro, YouTube, and XML. HTML, and more. The software is intuitive, simple, and highly useful at the same time. You can do mouse-free transcribing with the help of the keyboard and a USB foot pedal.

Much better for a researcher – may be other great options too!

See
Elinor Ochs’ (1979) Transcription as Theory
Look at various functions of Inqscribe ($99 for individual researcher license)

Unifying Text & Media Control in a Single Window

The main InqScribe window integrates resizeable video display, a transcription (or annotation) field, and a complete set of media controls. Here are some key features:

Insert your time codes anywhere, e.g.
...here's a good screenshot [00:00:37.29] for the screen grab. Click on the time code to jump to that point in the movie.

cmd+: inserts the time code. [00:01:55.04]
There are a ton of keyboard shortcuts that you can customize to your heart's content.

You can use emojis: 😄

Spellcheck and grammar checking can be turned on and off if you want want.

To create subtitles, just insert time codes into your text like this:

[00:00:05.08]
InqScribe works on Mac or Windows.

[00:00:12.27]
Using InqScribe couldn't be simpler.

[00:00:17.07]
Drag an audio or video file onto InqScribe's Media window.

[00:00:21.16]
Click Play, and start typing.

[00:00:24.27]
Overall Qualitative Analysis Software

What QDA can do for you:
- Organize
- Annotate
- Search
- Display

What QDA cannot do for you:
Short answer is “analyze”
You still have to conceptually direct the analysis of your data.

Johns Hopkins QDA page
<table>
<thead>
<tr>
<th>Software</th>
<th>Score 1</th>
<th>Score 2</th>
<th>Index</th>
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<tbody>
<tr>
<td>NVivo</td>
<td>9.5</td>
<td>6.8</td>
<td>95</td>
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<tr>
<td>ATLAS.ti</td>
<td>8.8</td>
<td>7.2</td>
<td>93</td>
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<td>Provalis Research Text Analytics Software</td>
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<tr>
<td>Datagrav</td>
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<td>6.7</td>
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</table>
Basic functions common to most QDA programs, and to NVivo and ATLAS.ti in particular:

- Coding
  - Application of a maintained set of terms and short phrases linked to segments of text or audio/video that can be queried and gathered for comparative analysis.

- Annotation
  - Longer narrative notes attached to text or a/v segments, or to codes

- Navigation / queries
  - Quick access to codes and segments that can be brought together in panel views for comparison, advanced Boolean search options, and flexible interlinking of segments, codes, and annotation

- Transcription
  - Most QDAS facilitates transcribing audio and video, ideally maintaining the links between transcript and A/V segments.

- Relationships/patterns
  - Gathering codes, segments, and annotations facilitates pattern discovery and further description of relationships. Some QDAS support social network analysis techniques and visualization

- Reporting / collating
  - A range of reports using queries and filters to assemble data and annotations facilitates analysis and writing results.

- Visualization
  - Typically includes code tables, social network graphs, and annotated A/V clips.

- Collaboration
  - Shared access to data & analysis, facilitating comments and discussion, and tracking contributor actions and changes.

Affordances of NVIVO & ATLAS.ti

- CODING
- ANNOTATION
- QUERIES
- TRANSCRIBE
- PATTERNS
- COLLATING
- VISUALIZE
- COLLABORATE
Figure 4: Coding pictures in ATLAS.ti. Qualitative methods often involve analysis of non-textual data.
These are two powerful QDA tools: There are others – which is best for you?

ResearchGate discussion over NVIVO vs Atlas

Side by Side Comparison web page
Questions? QDA 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.