



Framework analysis according to Gale et al. 2013*

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* Gale et al. (2013) Using the framework method for the analysis of qualitative data in multi-disciplinary health Research, *BMC Medical Research Methodology*, 13:117, <http://www.biomedcentral.com/1471-2288/13/117>

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Glossary of key terms used in the Framework Method (Gale et al, 2013, pp.1-2)

- Analytical framework:

A set of codes organised into categories that have been jointly developed by researchers involved in analysis that can be used to manage and organise the data.

The framework creates a new structure for the data (rather than the full original accounts given by participants) that is helpful to summarize/reduce the data in a way that can support answering the research questions.

- Analytic memo:

A written investigation of a particular concept, theme or problem, reflecting on emerging issues in the data that captures the analytic process

Glossary of key terms used in the Framework Method (Gale et al, 2013, pp.1-2)

- Categories:

During the analysis process, codes are grouped into clusters around similar and interrelated ideas or concepts. Categories and codes are usually arranged in a tree diagram structure in the analytical framework.

While categories are closely and explicitly linked to the raw data, developing categories is a way to start the process of abstraction of the data (i.e. towards the general rather than the specific or anecdotal).

- Charting:

Entering summarized data into the Framework Method matrix

Glossary of key terms used in the Framework Method

- Code:

A descriptive or conceptual label that is assigned to excerpts of raw data in a process called 'coding'

- Data:

Qualitative data usually needs to be in textual form before analysis. These texts can either be elicited texts (written specifically for the research, such as food diaries), or extant texts (pre-existing texts, such as meeting minutes, policy documents or weblogs), or can be produced by transcribing interview or focus group data, or creating 'field' notes while conducting participant-observation or observing objects or social situations.

- Indexing:

The systematic application of codes from the agreed analytical framework to the whole dataset.

Glossary of key terms used in the Framework Method

- Matrix:

A spreadsheet contains numerous cells into which summarized data are entered by codes (columns) and cases (rows)

- Themes:

Interpretive concepts or propositions that describe or explain aspects of the data, which are the final output of the analysis of the whole dataset. Themes are articulated and developed by interrogating data categories through comparison between and within cases. Usually a number of categories would fall under each theme or sub-theme.

- Transcript:

A written verbatim (word-for-word) account of a verbal interaction, such as an interview or conversation.

Gale et al, 2013, p.4

- Experienced qualitative researchers become more skilled at **sifting through data and analysing it in a rigorous and reflexive way.**
- Qualitative researchers cannot be too attached to certainty, but **must remain flexible and adaptive** throughout the research in order **to generate rich and nuanced findings** that **embrace and explain the complexity of real social life** and can be **applied to complex social issues.**
- It is important to remember when using the Framework Method that, unlike quantitative research where data collection and data analysis are strictly sequential and mutually exclusive stages of the research process, in **qualitative analysis** there is, to a greater or lesser extent depending on the project, ongoing **interplay between data collection, analysis, and theory development.**
- New ideas or insights from participants may suggest potentially fruitful lines of enquiry, or close analysis might reveal subtle inconsistencies in an account which require further exploration.

Procedure for analysis (Gale et al, 2013, p.3)

- **Stage 1: Transcription**
- **Stage 2: Familiarisation with the interview**
- **Stage 3: Coding**

Inductive approach

After familiarization, the researcher carefully reads the transcript line by line, applying a paraphrase or label (a 'code') that describes what they have interpreted in the researcher in advance.

Themes are generated from the data through open (unrestricted) coding, followed by refinement of themes.

Deductive approach

Themes and codes are pre-selected based on previous literature, previous theories or the specifics of the research question.

Combined inductive and deductive approach

Specific issues to explore, but also space to discover other unexpected aspects of the participants' experience or the way they assign meaning to phenomena.

Procedure for analysis (Gale et al, 2013, p.4)

- **Stage 3: Coding continued**

After familiarization, the researcher carefully reads the transcript line by line, applying a paraphrase or label (a 'code') that describes what they have interpreted in the passage as important.

Inductive approach

'Open coding' takes place, i.e. coding anything that might be relevant from as many different perspectives as possible.

Codes could refer to:

- substantive things (e.g. particular behaviours, incidents or structures),
- values (e.g. those that inform or underpin certain statements, such as a belief in evidence-based medicine or in patient choice),
- emotions (e.g. sorrow, frustration, love) and
- more impressionistic/methodological elements (e.g. interviewee found something difficult to explain, interviewee became emotional, interviewer felt uncomfortable).

Deductive approach

Codes may have been pre-defined (e.g. by an existing theory, or specific areas of interest to the project) so this stage may not be strictly necessary and you could just move straight onto indexing, although it is generally helpful even if you are taking a broadly deductive approach to do some open coding on at least a few of the transcripts to ensure important aspects of the data are not missed.

Coding aims to classify all of the data so that it can be compared systematically with other parts of the data set. At least two researchers (or at least one from each discipline or speciality in a multi-disciplinary research team) should independently code the first few transcripts, if feasible.

Procedure for analysis (Gale et al, 2013, p.4-5)

- **Stage 3: Coding contd.**

As well as getting a holistic impression of what was said, coding line-by-line can often alert the researcher to consider that which may ordinarily remain invisible because it is not clearly expressed or does not 'fit' with the rest of the account.

In this way the developing analysis is challenged; to reconcile and explain anomalies in the data can make the analysis stronger.

- **Stage 4: Developing a working analytical framework**

After coding the first few transcripts, all researchers involved should meet to compare the labels they have applied and agree on a set of codes to apply to all subsequent transcripts.

Codes can be grouped together into categories (using a tree diagram if helpful), which are then clearly defined. This forms a working analytical framework.

It is likely that several iterations of the analytical framework will be required before no additional codes emerge.

It is always worth having an 'other' code under each category to avoid ignoring data that does not fit; the analytical framework is never 'final' until the last transcript has been coded.

Procedure for analysis (Gale et al, 2013, p.5)

- **Stage 5: Applying the analytical framework**

The working analytical framework is then applied by indexing subsequent transcripts using the existing categories and codes.

Each code is usually assigned a number or abbreviation for easy identification (and so the full names of the codes do not have to be written out each time) and written directly onto the transcripts.

... putting the data into a qualitative analysis software package does not analyse the data; it is simply an effective way of storing and organising the data so that they are accessible for the analysis process.

- **Stage 6: Charting data into the framework matrix**

Qualitative data are voluminous (an hour of interview can generate 15–30 pages of text) and being able to manage and summarize (reduce) data is a vital aspect of the analysis process.

A spreadsheet is used to generate a matrix and the data are 'charted' into the matrix.

Charting involves summarizing the data by category from each transcript.

Good charting requires an ability to strike a balance between reducing the data on the one hand and retaining the original meanings and 'feel' of the interviewees' words on the other.

The chart should include references to interesting or illustrative quotations.

It is helpful in multi-disciplinary teams to compare and contrast styles of summarizing in the early stages of the analysis process to ensure consistency within the team. Any abbreviations used should be agreed by the team.

Procedure for analysis (Gale et al, 2013, p.5)

- **Stage 7: Interpreting the data**

It is useful throughout the research to have a separate note book or computer file to note down impressions, ideas and early interpretations of the data.

It may be worth breaking off at any stage to explore an interesting idea, concept or potential theme by writing an analytic memo to then discuss with other members of the research team

Gradually, characteristics of and differences between the data are identified, perhaps generating typologies, interrogating theoretical concepts (either prior concepts or ones emerging from the data) or mapping connections between categories to explore relationships and/or causality.

If the data are rich enough, the findings generated through this process can go beyond description of particular cases to explanation of, for example, reasons for the emergence of a phenomena, predicting how an organisation or other social actor is likely to instigate or respond to a situation, or identifying areas that are not functioning well within an organisation or system.

It is worth noting that this stage often takes longer than anticipated and that any project plan should ensure that sufficient time is allocated to meetings and individual researcher time to conduct interpretation and writing up of findings.

Procedure for analysis (Gale et al, 2013, p.7)

Summary

- The Framework Method is an excellent tool for supporting thematic (qualitative content) analysis because it provides a systematic model for managing and mapping the data.
- The Framework Method is most suitable for analysis of interview data, where it is desirable to generate themes by making comparisons within and between cases.
- The management of large data sets is facilitated by the Framework Method as its matrix form provides an intuitively structured overview of summarised data.
- The clear, step-by-step process of the Framework Method makes it is suitable for interdisciplinary and collaborative projects.
- The use of the method should be led and facilitated by an experienced qualitative researcher.

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