

## TOPIC: Analysis of Qualitative Data through coding

**TAGS:** Qualitative, Research, Non-lab projects

### BRIEF DESCRIPTION

Qualitative data can be defined as any non-numerical and unstructured data. Coding is the process of labelling and organising your qualitative data to identify the different themes and relationships between them. By assigning codes to words and phrases in each item, you can capture what the responses are about which, in turn, helps you better analyse and summarise the results of the study.

### APPROACHED TO CODING QUALITATIVE DATA

A primary division between coding approaches is **concept-driven coding** versus **data-driven coding** (or open coding). The two types of coding methods have their pros and cons, but the final result should be similar.

Concept-driven coding	Data-driven coding
Data is approached with a developed system of codes, and the researcher looks for concepts/ideas in the text that match those codes. The codes are developed before your data collections start. Based on your reading of the area or prior knowledge. The codebook can change as you code on with new codes being added and categories re-organised.	In this approach, you are looking for ideas/concepts in the text without a preceding conceptualisation (knowledge of the themes). It is used when you know little about the research subject or are conducting exploratory research. In this case, you're building your code book from scratch based on your data.

### CODING IN PRACTICE

A code in a qualitative inquiry is most often a word, short phrase or letter. Each item is assigned a code. This can be done simply in excel or more sophisticated packages such as NVivo.

1. Read through your data and get familiar with it. At this point, you don't have to develop sophisticated codes for the data, but rather just an idea of what the overall data looks like.  
Tip: Code sections as you go for future reference.
2. Detailed coding involves reading line by line the transcripts. Sections of data are assigned a coded or codes based on the text. Keep track of who performed the coding. e.g. 'feel more engaged with the lecture' could be coded Engagement or E

### ANALYSING THE CODES

1. Categorise the data by placing similar codes into the same area. By analysing and sorting your codes, you will be able to detect consistent and overarching themes for your data. The more prominent categories are the overriding themes, while the sub-categories are supporting ideas.
2. Codes can be used to group data for statistical analysis. For example, items with a given code are more likely to be stated by males than females or students who report that lectures are engaging are more likely to gain higher marks.

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