

# Basics of qualitative research techniques – Axial coding

- This section describes the steps and considerations involved in open coding. An essential initial step in open coding is ‘naming or ‘labeling.’ This is about assigning names to key incidents, ideas, events, and actions, using participants’ words or explicit interpretations by researchers.
- During the labeling process, it is crucial for researchers to jot down memos. These memos document their thought processes, especially the different options for second-order codes, and enable comparisons between current interpretations and original labels
- Following the development of labels, researchers begin to identify categories by observing the similarities among the codes. These categories are more conceptual and abstract, informed either empirically or by the researchers’ prior knowledge and relevant literature. Categories can also be informed by the in vivo codes to capture the vividness of the data.
- Then, the researchers can define specific attributes of these categories, such as properties, dimensions, and characteristics, to detail aspects like why, when, duration, extent, speed, and height. This step can enrich our understanding of the category and gain insights into different types, properties, dimensions, and frequencies of the concept. For example, we can categorize ‘use’ in terms of high vs. low, limited vs. intensive use.

# Key learnings

- As these 'labels' or 'names' can often be spontaneously created during the coding process, and requires revisions later on, doing memos is an important tool to document the researchers' thought processes and further interpretations as coding proceeds. They enable researchers to revisit and refine these initial labels and names.
- When developing categories informed by theory, researchers have the opportunity to build upon prior work and make novel contributions by expanding the existing meanings of these concepts. However, researchers should be mindful when adopting pre-established concepts, as their existing meanings could bias or restrict the researchers.
- Categorization does not need to wait until all open coding is complete. Instead, researchers can follow certain 'recipes' to seek the properties and dimensions of each category. In this way, we can learn fast adjust the categories as necessary. It can also guide the theoretical sampling in iterative research processes to identify cases with either similar or completely different properties and characteristics
- Sometimes, it is also beneficial to shift the coding strategy, from line-by-line coding to examining paragraphs or entire transcript. This can help researchers grasp the overall message of an interview and code with the larger context in mind.