

Coding is the process of organizing, analyzing, and interpreting primary research data to identify patterns, themes, or insights. According to Denny and Clark, coding is essential for making sense of qualitative data, which often includes open-ended survey responses, interviews, or observational notes (87). The first step in coding involves organizing and preparing the data, which may include anonymizing participants to maintain ethical integrity (91). After preparation, researchers should conduct an initial reading to gain a general sense of the responses, marking early patterns or trends (92). The third step is open coding, where the researcher assigns labels or short descriptions to segments of data without predetermined categories (94). This ensures that themes emerge naturally from the data rather than being imposed by researcher bias. Next, codes are refined into categories and themes, allowing researchers to group similar responses together and analyze the frequency and significance of key ideas (96). Finally, the coded data is interpreted and reported, ensuring that findings are clearly communicated and supported by evidence (97). This step-by-step approach allows researchers to transform raw qualitative data into meaningful conclusions that align with their research questions.

Ensuring the ethical interpretation of primary data is crucial to maintaining research integrity. Denny and Clark emphasize that anonymity and confidentiality must be preserved throughout the research process to protect participants (91). Additionally, they warn against cherry-picking, where researchers highlight only the data that supports their argument while ignoring contradictory findings (98). To avoid this, researchers should strive for representative sampling, ensuring that the conclusions drawn reflect the full range of participant responses. Furthermore, intercoder reliability—having multiple researchers code the same data—can help reduce bias and ensure consistency in interpretations (97). Ethical reporting also means avoiding misleading statistics or overstating conclusions, as data should be framed in an honest and transparent manner (99). By following these ethical guidelines, researchers can ensure that their data analysis remains objective, reliable, and reflective of participants' actual perspectives.