

Data collection in research

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When collecting and analysing data, quantitative research deals with numbers and statistics, while qualitative research deals with words and meanings.

Quantitative data research

Quantitative data research is expressed in numbers and graphs. It is used to test or confirm theories and assumptions. This type of research can be used to establish generalizable facts about a topic. Common quantitative methods include experiments, observations recorded as numbers, and surveys with closed-ended questions.

Sources of Quantitative Data

Surveys, whether conducted online, by phone or in person. These rely on the same questions being asked in the same way to a large number of people. Quantitative data is based on numbers. The results are often reported in graphs and tables.

Qualitative data research

Qualitative data research is expressed in words. It is used to understand concepts, thoughts or experiences. This type of research enables to gather in-depth insights on topics that are not well understood. Common qualitative methods include interviews with open-ended questions, observations described in words, and literature reviews that explore concepts and theories.

Qualitative data collection methods

- Interviews: Asking open-ended questions verbally to respondents.

- Ethnography: Participating in a community or organization for an extended period of time to closely observe culture and behaviour.
- Literature review: Survey of published works by other authors.

Qualitative data is more difficult to analyse than quantitative data as it consists of text, images or videos instead of numbers. Quantitative research is perhaps the simpler to define and identify.