

## Qualitative and quantitative research

### Qualitative research

Qualitative research focuses on the *quality* of things – what is their nature? What are they like? How can they be described? It often involves the views or internal worlds of participants, and may include data generated through the use of interviews, focus groups, etc. Qualitative research often gathers data from relatively small samples of people, and can provide a ‘micro’ view of whatever issues you are examining. The relatively small amount of data does not, however, make the researcher’s job easier. Because qualitative data often take the form of words, narratives and descriptions, which are not easy to analyse, the researcher must do a lot of intelligent interpretation of these data to identify relevant themes and to make these understandable and credible for the reader. The more interpretation involved in the analysis of your data the greater the need for explanation and justification of your decisions in your methodology section.

The limitations and strengths of your chosen methods should be discussed in your methodology section. What are some advantages and limitations of qualitative research methods?

Advantages of qualitative research	Limitations of qualitative research
<p>Rich, in-depth detail is possible (e.g. participants can elaborate on what they mean)</p> <p>Perceptions of participants themselves can be considered (the human factor)</p> <p>Appropriate for situations in which detailed understanding is required</p> <p>Events can be seen in their proper context / more holistically</p>	<p>Not always generalizable due to small sample sizes and the subjective nature of the research</p> <p>Conclusions need to be carefully hedged</p> <p>Accusations of unreliability are common (different results may be achieved on a different day/with different people)</p>

## Quantitative research

Quantitative data focuses on the *quantity* of things – how many are there? What are the statistical patterns? It generally takes the form of numbers, and their analysis involves counting or quantifying these to draw conclusions. Larger sets of data will be involved than is the case with qualitative research, and statistically rigorous techniques are used to analyse these. Quantitative data often provide a ‘macro’ view, in that they involve large samples.

The limitations and strengths of your chosen methods should be discussed in your methodology section. What are some advantages and limitations of quantitative research methods?

Advantages of quantitative research	Limitations of quantitative research
Larger sample sizes often make the conclusions from quantitative research generalizable	Does not always shed light on the full complexity of human experience or perceptions
Statistical methods mean that the analysis is often considered reliable	Can reveal <i>what / to what extent</i> , but cannot always explore <i>why</i> or <i>how</i>
Appropriate for situations where systematic, standardised comparisons are needed	May give a false impression of homogeneity in a sample

## Points to note

It is common to combine qualitative and quantitative research. Quantitative approaches can be used to gather qualitative data (e.g. a questionnaire or survey that includes open-ended questions). Similarly, one type of research can facilitate another. For example, a small number of interviews (qualitative) may be used to inform the design of a MCQ questionnaire (quantitative).

Most qualitative research includes some element of quantification (e.g. statements such as “more than/less than”), and much quantitative research includes some discussion of qualitative issues.

When you write your methodology section, bear in mind that the data themselves and the analysis of the data are two different things – do not conflate them. For example, if you ask people about their motivations for leaving a company, you are collecting qualitative data, but if you analyse this counting the number of ‘push’ and the number of ‘pull’ factors, you are analysing the data quantitatively.