

FAQ 2: How do I design a project with multiple data sources?

What's the issue?

It can often be valuable to approach a research question from many diverse perspectives. This may involve using different methods and also different data sources. The benefits of using multiple data sources depend on what they add to a particular piece of research. This could be related to diverse research contexts or to different information about the same subject.

Common practice

- The combination of methods may assume several forms, depending on the importance given to a specific method in the overall research and on the development of the research process itself. In what researchers might call a “sequential model”, you may begin with the quantitative (e.g. survey) to “map” a subject and then pursue with the qualitative (e.g. interview) to “get deeper” into some topics. Or you may start with the qualitative (e.g. observation, interviews) to explore a given subject and then turn to the quantitative. Alternatively, in what researchers might call a “concurrent model”, you may follow both approaches simultaneously, either to explore in different ways the same aspects of your subject or to cross-validate (or “triangulate”) information gathered through different methods (Lobe *et al.*, 2007).
- Multiple data sources may also confront researchers with different perspectives concerning the same subject. In some cases the only choice might be to combine sources in order to get all the information you need about your research object. In any case, defining the status of different data sources is mandatory in order to articulate properly all the information available and needed.
- Unlike cases in which researchers deal with different methodologies, different sources of information may be combined within the same methodology, as in the case of using different questionnaires to address the same problem. In this situation be careful to distinguish between the criteria used in the various sources of information (e.g. how a particular variable is measured in different questionnaires). When using different samples (collected throughout different periods of time), or a sample obtained in several populations, you are also combining different sources of information.

Questions to consider

Don't forget that comparing different sources (containing data gathered for different purposes) is not exactly the same as comparing information from a single data frame. In the first case you are considering secondary analysis; in the second case you are actually comparing data within the same (or an equivalent) dataset. This isn't only a problem of considering different sample designs, but also of being sure if (or to what extent) data are comparable, and in what way this comparison may be carried out. Asking the same questions of different individuals also confronts researchers with distinct perspectives in relation to what apparently is the same activity/practice/event. For example, when you ask parents about their children's activities and compare the answers with the children's own accounts, discrepancies are common.

Pitfalls to avoid

Researchers often overlook the fact that existing data can be used. They make use of multiple sources without having a clear goal of why they do so. They underestimate the complexity of such studies (qualitative, quantitative, parents, children).

Example of a study using multiple data sources

Hasebrink *et al.* (2009) used results from various studies conducted in Europe from 2000 to 2008 to identify and explain the pattern of cross-national similarities and differences in children's online use, skills, opportunities, risks, and safety. The report relied to a considerable extent on the Safer Internet Programme's 2005 and 2008 Eurobarometer surveys of parents, but then used the results of dozens of other studies to supplement and validate results obtained in the two surveys. The evidence collected from the various studies allowed the authors

to reveal a range of cross-national differences in relation to children's online use and risk especially, and to classify countries in Europe in terms of online risks and opportunities.

References and further resources

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