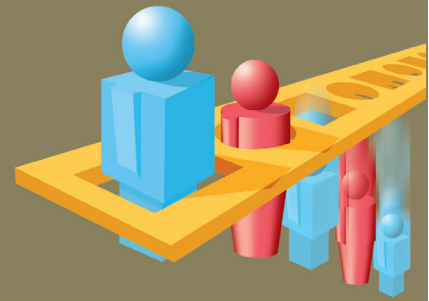


Chapter



Exploring the use of mixed methods in the context of research



By the end of this chapter you will be able to:

- understand and evaluate the concepts of methodological pluralism and triangulation
- consider and evaluate ways that choice of research method and topic are affected by practical, ethical and theoretical research considerations

For the purpose of explanation in previous chapters, we've discussed:

- **research methods** in terms of quantitative or qualitative data
- **research design** in terms of positivist and interpretivist methodologies
- **research methodology** in terms of aligning positivism with quantitative and interpretivism with qualitative methods

While the split between positivism and interpretivism does have some basis in reality, there's a tendency to overlay both the distinction and the barriers between them. It is implied that positivists would never use qualitative methods and interpretivists would never try to test a hypothesis. Positivism is frequently portrayed as a form of 'naive empiricism' where everything must be quantified and anything unquantified is sociologically worthless, while interpretivism is portrayed in mirror-opposite terms as insisting that no behaviour can or should be quantified and reducing sociological research to a kind of 'informed journalism'.

In the real world of sociological research things are not always this simple, clear-cut or crude. There is a strong argument that, outside of sociology textbooks, 'pure positivism' and 'untainted interpretivism' have little or no basis in reality, for two reasons.

First, these labels (positivism, interpretivism) are simply categories we create to help us make sense of the sometimes bewildering array of methods and methodologies used by sociologists. (Similarly, identifying 'sociological perspectives' like functionalism and

feminism helps us to conveniently categorise an array of different ways of looking at the social world.) They are mental constructs we use for theoretical convenience. They are useful, for example in helping us to understand methodological principles such as reliability and validity. However, we shouldn't expect to meet them in their 'pure forms' in the messier world of real sociological research.

Second, sociologists routinely use a variety of quantitative and qualitative methods in their research. As Payne et al. (2004) argue, sociologists have generally taken the view that 'provided they were not forced into research using methods they personally found uncongenial, there was no absolute reason to prevent others from using alternative methods'.

On this basis, we can examine the use of 'mixed methods' in terms of two concepts: methodological pluralism and triangulation.

Methodological pluralism

The term 'methodological pluralism' can be broken down in the following way:

- 'Methodological' refers to a general framework that specifies the various steps in the overall design of a piece of research (as exemplified in the hypothetico-deductive model we outlined earlier); in earlier chapters we've outlined two sociological methodologies, positivism and interpretivism.
- 'Pluralism' ('more than one') involves the idea of combining research methodologies — and more importantly research methods — so that the strengths of one methodology can be used to offset the weaknesses of another.

Methodological pluralism means that rather than stick rigorously to the principles of a single methodological approach (such as positivism or interpretivism) a researcher is free to combine these methodologies. As Payne et al. (2004) put it, 'sociological research methods are no longer characterised by "intolerance, indeed bigotry" toward rival styles. Many sociologists subscribe, at least in principle, to methodological pluralism', an idea they define as 'tolerance of a variety of methods in sociological research' that 'even extends to either side of the dubious dichotomy between "quantitative" and "qualitative" methods, a dichotomy that remains useful as a shorthand description but which is ultimately unsustainable'.

Methodological pluralism can also be justified on the grounds that quantitative and qualitative methods can be used to complement each other — to improve levels of reliability and validity, for example, by offsetting the weaknesses of one method against the strengths of another (as we suggested, for example, when we outlined the idea of focused extensions — quantitative questionnaires combined with qualitative group interviews). In other words, it recognises that no single research method is perfect — all have their strengths and weaknesses — so it would make sense to combine them, where necessary.



Define 'methodological pluralism'.



Triangulation

If methodological pluralism represents a theoretical justification for using mixed methods, the main question it asks is how to collect data that has the highest possible levels of reliability and validity (regardless of the actual methods or data types used). The practicalities of answering this question involve the idea of **triangulation**. This is the means through which the theory is put into practice and specifically refers to the various ways a researcher can attempt to improve research reliability and validity.

Conventionally, 'triangulation' refers to the use of two or more research methods — what Denzin (1970) has termed methodological triangulation. However, Denzin suggests triangulation can also take other forms: researcher triangulation and data triangulation. Each of these concepts is discussed below.

Methodological triangulation

One basic idea here is that the researcher can offset the weakness of one method with the strengths of another as a means of improving the reliability and validity of their research. For example, a general weakness of questionnaires is that the researcher must assume a respondent is telling us the truth. However, a researcher could offset this by using an observational method to check whether people actually do what they say they do. A combination of different methods can give a much more rounded picture of someone's life and behaviour; a researcher could, for example, observe a respondent's behaviour using participant observation and also question them about why they did particular things or behaved in one way rather than another.

Alternatively the researcher could compare the results from two different methods used with the same people (such as a semi-structured interview and a focus group): if the conclusions drawn are broadly the same this will help confirm the reliability and validity of the data. Hughes et al.'s (1997) examination of 'the appeal of designer drinks to young people', for example, used 'group discussions' (focus groups) and structured interviews, the data from one being used to cross-check and confirm data from the other (for example, each showed a strong pattern of age-related differences in attitudes to designer drinks).

We can further divide methodological triangulation into two subtypes:

➤ **Within-method triangulation:**

Bryman (2001) characterises this as 'the use of varieties of the same method to investigate a research issue'. On a simple level this might involve asking open and closed questions in the same questionnaire.



This advert for a designer drink is aimed at young people

TopFoto

- **Between-method triangulation:** Jick (1979) calls this 'the most popular use of triangulation' and Bryman (2001) characterises it as the use of 'contrasting research methods, such as a questionnaire and observation'.

Researcher triangulation

In studies that rely heavily on researcher interpretations to generate data, one way to control reliability and validity is to use different researchers:

- If different researchers using the same research technique arrive at the same results, this will help to confirm data reliability.
- Using researchers from different ethnic, age, gender and class groups can help to guard against observer and interviewer bias.

Data triangulation

Data triangulation involves gathering data through differing **sampling strategies**, such as collecting data at different times, in different contexts and from different people. This idea can be extended to include gathering data from both the individuals involved in a particular situation and the researcher's own experiences in that situation. Venkatesh (2009), for example, was able to make sense of certain forms of behaviour (such as dealing crack cocaine) and experiences (such as being black and poor) in ways that would not have been possible if he had not been involved in the world he was studying. He gathered data both from those involved (their understanding of what it meant to be black and poor, for example) and from his own experience of living in their world.

Advantages of triangulation

Compensators

While all research methods have their strengths and weaknesses, a researcher can use the strengths of one method to compensate for the shortcomings of another. Parke and Griffiths (2002), for example, argue:

One obvious advantage of non-participant observation is that it relies only on observing behaviour. Since the researcher cannot interact in the behavioural processes, most data collected will be qualitative, interpretative, and to some extent, limited. However, by using other methodological research tools (e.g. structured interviews), suspicions, interpretations and even hypotheses can be confirmed.

Aggregates

By gathering and aggregating different types of data (quantitative and qualitative) and sources (such as respondents and participant observers), the researcher is more likely to get a complete, fully-rounded ('holistic') picture of the behaviour they're studying



Reliability and validity

By using different methods and sampling strategies, a researcher can generally improve overall data reliability and validity. More specifically, data collected using higher-reliability methods (such as questionnaires) can offset reliability weaknesses in observational methods (with the reverse being the case for validity). Finlay (1999), for example, compared accounts of the same events given by different respondents in semi-structured interviews and added a further check by comparing 'the oral record of those events with the contemporary documentary record in...local newspapers'.

Data confidence

A researcher's confidence in the accuracy of their data can be increased using triangulation. As Bechhoffer and Paterson (2000) argue: 'If we are...able to base part of an explanation on unstructured interview material, on documentary evidence and on the results of a survey, our confidence in our findings is likely to be greatly increased.'



Disadvantages of triangulation

Resources

Triangulation adds another layer of time, effort and expense to research, in terms for example of the time needed to analyse different data types created from a number of different methods, the need to employ more researchers and the general coordination of a much larger research project.

Assumptions

While the principle of 'offsetting strengths with weaknesses' generally holds true, we should avoid the simple generalisation that quantitative methods are always highly reliable but low in validity while qualitative methods are the reverse. Official marriage statistics, for example, are both reliable (the definition of 'a marriage' doesn't change from year to year and every marriage is officially recorded) and valid (marriage statistics measure exactly what they claim to measure).

Comparisons

Although collecting and comparing different types of data has its advantages, it also has its complexities; such data may not always be easily and neatly compared. As Bryman (2001) argues, 'Triangulation assumes that data from different research methods can be unambiguously compared and regarded as equivalent in terms of their capacity to address a research question.' This assumption may be incorrect: differences between the data from, for example, a structured interview and a focus group may have less to do with the reliability and validity of each method and 'more to do with the possibility that the former taps private views as opposed to the more general ones that might be voiced in the more public arena of the focus group'.

Excess

As Bryman (2001) notes, triangulation is sometimes seen as a way of getting at 'the truth' by throwing a vast array of resources, methods and data at a problem, based on the (naive) idea 'there can be a single definitive account of the social world'.

Reliability and validity

The issue of reliability and validity is linked to the point about comparisons above, in the sense that where a researcher gets contradictory data from two different sources it can be difficult, if not impossible, to disentangle 'truth' from 'falsity'. (If the researcher receives two opposing accounts of the same thing, which account is true? And more importantly, how can the researcher tell?).



Examples of research using triangulation

Despite these disadvantages, triangulation (or methodological pluralism) has been used in a wide range of sociological research:

- Barker (1984) used **overt participant observation**, **questionnaires** and **semi-structured interviews** in her research with the Unification Church (or 'Moonies').
- Hey (1997) studied girls' friendships in two London schools using a (perhaps unique) combination of **participant observation** and **personal documentation** (some of the girls allowed her to read their diaries and she was also given access to the notes girls passed each other in the classroom).
- MacKeogh (2001) studied the 'micro-politics of family viewing' in relation to how young people used television and their parents' attempts to control how and what they watched. Her primary method was **overt participant observation** (she wanted to understand the critical awareness of young people about the media they consumed). Her observation notes were complemented by notes made by her respondents as well as **semi-structured interviews** used to explore some of the issues raised in the observations.
- Garforth and Kerr (2010) examined 'women's under-representation in science', using a mix of **interviews**, **focus groups** and **participant observation**.



Briefly explain the meaning of triangulation in sociological research.

Fitness for purpose?

In this and preceding chapters we've outlined a range of primary and secondary, quantitative and qualitative research methods and sources of data within the general context of sociological research design. The underlying theme has been that sociological



research is not a random process; rather, it is highly planned and structured in ways that reflect a range of ideas — from how individual sociologists see the social world (positivism and interpretivism), through their choice of research methods that reflect these broad theoretical preferences, to the likely impact of ethical considerations on individual respondents, researchers and the research process as a whole.

In other words, ‘doing sociological research’ involves more than simply choosing a topic, selecting a research method and focusing on your chosen hypothesis or research question. Sociological research — whether it’s a large-scale, government-funded project lasting many years or a small-scale, personally funded piece of sociology coursework — is always surrounded by a range of **research considerations**. In this final section, we will draw these considerations together under the general heading of ‘fitness of purpose’. For convenience, we can group research considerations into three categories: practical, ethical and theoretical (‘PET’).

Practical research considerations: choice of method

Sociological research involves confronting and resolving a range of practical factors relating to choice of research method in the general context of an assessment of how and why these methods are ‘fit for the purpose’ of collecting data to test a hypothesis or answer a research question. As Dunican (2005) suggests, fitness for purpose ‘reflects how well the chosen research method is suited to the context of study. This is measured in terms of how well it is suited to answering the issues posed in the research question.’

A good illustration is provided by (what ended up as) Venkatesh’s (2009) overt participant observation study. He originally began ‘armed only with a questionnaire and a desire to learn more about the lives of poor black people’, but he got to ask only one of his questions — ‘How does it feel to be black and poor?’ — before realising that it was pointless to ask it; to understand what it was like ‘to be black and poor’ he had to experience these things and to do this he needed to participate in the lives led by the people he studied.

Funding is an obvious practical constraint. In a perfect world, money would always be available for research into any topic, using any method (my offer to study crowd behaviour at international football matches still stands), but in our imperfect world the amount of money you have to spend will directly influence the methods used. Questionnaires are generally cheaper than in-depth interviews, while interviews are generally cheaper than participant observation. The amount of funding available will also influence the size of any research team.



An American street gang

In this respect, therefore, 'fitness for purpose' is not always determined solely by the researcher. While Dunican's (2005) observation that 'It seems logical that the selection of any research method should be based on the nature of the research question' is, of course, perfectly reasonable, it's not always possible for the researcher to follow this line of reasoning. As Boaz and Ashby (2003) note, 'Sensitivity to the sponsor's requirements can, of course, contribute to the fitness for purpose of research but can equally well introduce biases that conflict with the aim of producing objective, good quality evidence.'

Aptness is another consideration. Some topics may lend themselves more easily to one type of method than another. Quantitative methods tend to be used when the researcher wants reliable data to establish statistical relationships, as in Kessler's (2000) fascinating study of the relationship between sponsorship and small business performance, where his main objective was to establish whether 'those who are sponsored are more successful than non-sponsored individuals'. Alternatively, with studies such as Diken and Laustsen's (2004) rather more racy analysis of tourist behaviour in Ibiza and Faliraki, a qualitative approach is more appropriate, given the descriptive nature of the research.

Time is an important practical consideration. Some methods are more time-intensive than others. Whyte (1943), for example, spent years on his overt participant observation study of an American street gang. Between 1937 and 1940 he gathered extensive information about the behaviour of one gang in a small area of the country (Boston).

The **size and composition of the group** being studied may be a factor in choice of method(s). Social surveys and questionnaires lend themselves easily to the study of large, widely dispersed groups. Participant observation, on the other hand, may be more appropriate for the study of small, geographically localised groups.



Ethical research considerations

Ethics, as we've previously suggested, refers to the morality of doing something, and ethical issues in sociological research involve beliefs about what a researcher should or should not do before, during and after their research. Moral beliefs do, of course, extend into any consideration about whether a particular research method or practice is fit for purpose. Research ethics have been discussed in detail in Chapter 4.

Theoretical research considerations

Although some research methods have greater fitness for purpose in some research situations than others, Ackroyd and Hughes (1992) argue it's wrong to simply view methods as a set of 'tools' to be picked up and discarded on the basis of some objective measurement of fitness.



In this respect theoretical beliefs — that questionnaires are not a valid way of studying social behaviour, for example — play an important part. When collecting data, for example, a researcher has to make initial decisions about a range of factors:

- What counts as data (does it have to be quantitative or qualitative)?
- Should the data be statistical or descriptive?
- Do we try to test a hypothesis or simply report what respondents say?

Sociological research, in this context, involves confronting and resolving a range of theoretical questions, which we can express as the *how?* and the *why?* of choice of topic and research method.

Choice of topic

- **Purpose:** The researcher's aims can be influential; if testing a hypothesis, for example, the topic is likely to be much narrower in scope than if the objective is to provide a descriptive account of something.
- **Focus:** Research often changes to meet new interests and concerns; while it's rare for a central topic to change during the research (e.g. from family life to education), aspects of the topic may well change. As research develops, changes may be made to quantitative questions or new areas of interest may open up in the light of respondent comments or researcher observations — all of which relates to constantly revising ideas about a method's fitness for purpose in the light of changing ideas, interests and needs.
- **Values:** What is considered 'worthy of being studied' will be influenced by a range of values. These are both **personal** (if studying poverty holds no personal interest then a researcher is not likely to choose this topic) and, importantly for real-world research, **institutional**. Given that institutions such as universities and government departments are likely sources of research funding, the topics they value are likely to be the ones researched in the way they want them researched. If a government sponsor values quantitative statistical data about some aspect of the education system, research involving in-depth qualitative data is not likely to be considered fit for purpose.

Choice of method

Theoretical perspective: Although this influence is by no means as strong as some suggest, **interactionist** researchers tend to avoid using statistical methods, mainly because their objective is to allow respondents to talk about their experiences, rather than to establish causality. **Positivists** may take the reverse view, mainly because they're not particularly interested in descriptive accounts. There is, therefore, something of an association between interpretivist methodology and qualitative research methods, just as there is a similar association between positivist methodology and quantitative methods — but as we've noted, this relationship shouldn't be pushed too far.

Exploring the use of mixed methods in the context of research

Reliability and validity: These are always significant research concerns since beliefs about the reliability and validity of particular methods will affect decisions about whether or not they are fit for purpose — and these beliefs are related to the types of sociological methodology we've just noted.

Values: Researcher values are reflected in ethical beliefs about how something should be studied. If, like Polsky (1971), you believe covert participation is unethical and methodologically invalid, you're not likely to choose this research method.

Explain and evaluate the use of mixed methods to research the importance of work in shaping people's identities. (52 marks)