

# ONE

## INTRODUCTION

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**Key words**: data collection – case-centric – variable-centric – analytical induction – hypothesis-testing – epistemology – ethics – reliability – validity – preparation – proposal preparation

#### **SUMMARY**

An outline of the main concepts underlying social research, specifically: (i) case-centric or variable-centric research; (ii) analytical induction or hypothesis-testing; (iii) epistemological positions in the social sciences; (iv) issues of reliability and validity; and (v) fixed or fluid analytical framings or research, as well as an overview of ethical considerations and the precursors to research.

This textbook is intended for readers who are emergent researchers: undergraduate students, in particular students in the later stages of their degrees who are located in the social sciences, including sociology, social psychology, social anthropology, education, nursing or social work programmes. These programmes and disciplines have an interest in the empirical investigation of the social world, and in training their students how to do so. We have selected eleven research approaches that we think will be useful to emergent researchers in their future studies and employment. Taken collectively, the eleven approaches provide an overview of how social scientists do research. We have designed the textbook to be read in its entirety (of course!), but we have also tried to make each of the chapters self-contained. In each chapter we have tried to combine a how-to-do, methods-oriented, or practical element with a discussion of conceptual underpinnings and epistemology (we will discuss epistemology below).

This chapter deals with all the normal stuff that introductory chapters do. We outline the main concepts used: (1) case-centric or variable-centric research, (2) analytical induction or hypothesis-testing, (3) we reference three epistemological positions in the social sciences, (4) issues of reliability and validity, and (5) fixed or fluid analytical framings or research. This introductory chapter also follows the outline used in the others. There are sections on: *Doing data collection and analysis, Some issues in research, Putting the approach in context* and *Conclusion.* We discuss the main concepts used in the appropriate sections.

We also consider this chapter as a substantive one. It includes material about ethical considerations in research and some suggestions about things you might want to think about before starting research (precursors to research).

In accordance with our efforts to produce a book that is both a practical guide and discusses underlying concepts (both *how* and *why*) we have include two types of key point summaries: practice points and conceptual concerns. These briefly sum up or reiterate what we consider to be essential issues for the users of this book to grasp, as below.







## PRACTICE POINT 1

This textbook is intended for students in the second or third years of undergraduate degrees in the social sciences.

## DOING DATA COLLECTION AND ANALYSIS

In this section we discuss the origins of our approach to the book, and how this informs the book's structure. We introduce the key concepts which are used throughout, such as case-centric/variable-centric and analytical induction/hypothesis-testing. We also compare these concepts to the classic social research binary: qualitative/quantitative.

## Origins of the approach

It is our impression that most textbooks on research or methods give one-sided accounts of either how-to-do stuff (methods) or theories of knowledge (epistemology). If we push this idea further, we discover that research approaches that are fairly standardised also tend to be thoroughly positivistic in their orientation – such as survey research (see Chapter 6) or content analysis (see Chapter 9) – and have textbooks that gloss issues of epistemology. Those approaches that are very unstandardised are either lacking textbooks or have discussions about abstracted ideas that never touch on the humdrum how-to-do and method (see Chapter 11, semiotic analysis).

Jacques Derrida (1930–2004) said:

I have tried to mark the ways in which, for example, deconstructive questions cannot give rise to methods, that is to technical procedures that can be transposed by analogy – this is what is called a teaching, a knowledge, applications – but these rules are taken up in a text which is in each time a unique element and which does not let itself be turned totally into a method. (Derrida, 1995: 200)

Derrida was an important social theorist. His argument was that deconstructive questioning (which we address in the chapter on semiotic analysis) was a methodology, a logic of doing research that could not be transformed into a method (a set of replicable techniques) because of the unique nature of the texts he studied. We disagree, in so far as we think it is possible to discuss the procedures of semiotic analysis in a coherent way. Thus, we have stressed the need for emergent researchers to be familiar with a linguistic grammar, the analytical tools of semiotics. It is of the same importance as knowing about probability and statistical analysis is for readers contemplating survey research (see Chapter 6).

Overall we have strived to find a balance between the standardised how-to-do accounts and more abstracted debates about epistemology. This has meant that







our 'template' for chapters has had to be flexible. At times we have extended debates about fairly abstract issues because we think them pertinent to contextualising research. At other times we have endeavoured to distil a series of how-to-do procedures in the absence of such accounts.

#### Structure of the book

Every chapter discusses a specific research approach and contains a discussion of the key concepts of case-centric/variable-centric and analytical induction/hypothesis-testing as noted above. We also discuss reliability and validity, and the fixedness or fluidity of the approach throughout. These concepts are introduced further below. They tend to nest together, though there are some exceptions. For example, case-centric approaches, such as in-depth interviewing (see Chapter 2), tend to be fluid in their framing and use analytical induction, while the reverse is usually true for variable-centric approaches such as surveys.

This book is also structured around the degree of interaction required in the approach discussed, from the more to less interactive. For example, in-depth interviewing is focused on the interaction between the researcher and the person being interviewed (the research participant). Chapters 3–5 are similar in this regard. Chapter 6 on survey research, usually involves interaction, but at a shallow level – the participant merely responds to questions with little opportunity to add information. Experimental research, discussed in Chapter 7, certainly involves interaction between researcher and participant, but in contrast to the desire for collaboration between researcher and participant, which is a feature of in-depth interviewing, life history, and ethnographic approaches, this is much less intimate, more formulaic and prescribed by a set of protocols. The experimenter seeks to tightly control the interaction, directing the participant (or subject) to behave in a certain way, sometimes with the subject not even knowing the purpose of the research. Unobtrusive research (Chapter 8) seeks to avoid direct interaction, and where there is interaction it is minimised in the interests of avoiding any collaboration whatsoever. The remaining chapters are not interactive and do not involve other people at all.

## **Defining social research**

social science

noun [mass noun]: the scientific study of human society and social releationships.

[count noun]: a subject within the field of social science, such as economies or politics. (Oxford Dictionary of English)

The term 'social research' refers to research conducted by social scientists, for example, anthropologists, geographers, historians, social psychologists and sociologists, as well as scientists in allied fields interested in human society, such as







law and medicine. The idea that human society could be studied 'scientifically' developed throughout the western world during the nineteenth country, largely as a result of successes of the natural science, such as biology and physics. If the application of scientific methods to the natural order increased knowledge and enabled us to create new technologies, might not the application of the scientific method to human beings enable us to understand ourselves?

Social scientists employ a range of method in order to analyse a vast range of social phenomena. As will be discussed in the following chapters, the choice of method often depends on what the researcher intents to explore. For example, a researcher may be interested in why people drink alcohol. Variable-centric methods, such as surveys, can help to describe issues statistically: how many people drink, how drinking varies across different demographic groups, whether people are influenced by the drinking behaviour of friends or family, and so forth. On the other hand, these methods can not answer questions such as why someone started to drink, what they think about drinking, why some people may have influenced their attitude to drinking but others didn't, and other complex questions. For this level of detail, case-centric research methods, such as in-depth interviews, are more helpful. However, case-centric research methods can only tell us about the beliefs of the research participants, not the wider population. We will return to these issues later.

#### Case-centric or variable-centric research

Most textbooks and accounts of research make a distinction between qualitative and quantitative forms of doing research. This is a longstanding division that has its origins in the debates between the supporters of a positivistic social science and its radical, feminist and Marxist critics. These debates culminated in the 'science wars', regarding the status of feminist and radical scholarship in the 1970s (Oakley, 1998) and more recently of postmodernity (Matthewman and Hoey, 2006). What remains of these historical debates (that is the positivists lost, then no one got round to telling them – see Chapters 6, 7 and 9) is a sometimes useful template that portrays 'qualitative' and 'quantitative' research as a series of binary oppositions (i.e., either/or assumptions) (Table 1.1).

The points in Table 1.1 are by no means all-inclusive. However, they provide a useful starting point for discussion about the context of research. Whether research is regarded as an example of good science or not is ultimately determined by its context. For example, if a researcher conducts a piece of qualitative research that eschews traditional measures of validity and reliability, she or he will find it near impossible to get published in many top-ranked academic journals. This is regardless of any intrinsic worth in the research. Autoethnographers (see Chapter 12) regularly complain about the difficulty of getting their autobiographical research published in 'mainstream' journals, yet many consider themselves to be social scientists (Anderson, 2006).





Charles Ragin has published a fascinating series of monographs about research approaches which transcend the qualitative/quantitative divide. In Constructing social research: The unity and diversity of method (1994), he talks about case-centric and variable-centric approaches as a better symbolic and analytical marker than the oppositions of qualitative versus quantitative research. Elsewhere he also champions a comparative approach that combines the best features of each (Ragin, 1987, 2008; Ragin and Becker, 1992).

We have divided the research approaches used in this textbook into case-centric and variable-centric ones. We hope we have not overly bowdlerised Ragin's account. We have done so because this seems a better schema. In our opinion most of the research approaches we cover have moments of both qualitative *and* quantitative research. For example, survey research (Chapter 6) is surely the epitome of quantitative research and does indeed produce an analysis that may be strictly numerical. But the design of questions is a largely a qualitative process.

Cases and variables are close synonyms for 'examples' and 'characteristics', as used in Table1.1 above. Every piece of research has both cases and variables. In this textbook possible cases include: people as research participants, their life histories, their autobiographies, texts in the form of writing or images or objects, material traces, focus groups, communities, and more. Further, a single case can 'nest' other cases, if the research becomes more detailed. For example, a focus group (Chapter 5) can be thought of as a single case, if we wish to

**TABLE 1.1** Key elements of qualitative research and quantitative research

	Qualitative research	Quantitative research	
1.	Uses writing.	Uses numbers.	
2.	Data takes the form of words, texts, images, material traces, narratives of all kinds; in fact, almost anything.	Data take the form of counts, correlations and other statistical formulae.	
3.	Is used to study the multiple characteristics of a few (or singular) examples of something. Usually $(n < 50)$ .	Is used to study the limited characteristics of many examples of something. Usually $(n > 50)$ .	
4.	Emphasises the richness of accounts (using as many characteristics as possible in the description).	Emphasises the parsimony of accounts (using as few characteristics as possible in the analysis).	
5.	The researcher adopts a subjective stance. The aim is to interpret or reinterpret events.	The researcher adopts an objective stance. The aim is to control for and discount subjective understandings.	







count the group as a collective (as in one focus group), or several cases, if we wish to count the number of participants in the group (that is, typically six to nine people).

The range of variables or characteristics is, if anything, even wider than the possible type and number of case. Variables are the characteristics or features that are used to describe a case. They are always associated with a single value, in each particular case. Oftentimes in interactive research (where the researcher interacts directly with people) the variables are question. For example, 'What colour is your hair?' Values are the descriptors that make variables measurable. For example, 'hair colour' might be a variable used to describe some features of appearance. We might determine that there are 19 possible values for the variable 'hair colour'. Any case may be assigned only one value for the variable: flaxen blond, yellow blond, platinum blond, sandy blond, golden blond, strawberry blond, dirty blond, ash blond, auburn, brunette, dark brown, chestnut brown, medium brown, medium golden brown, light golden brown, light ash brown, lightest brown, black, and the best one, red.

The distinction between case-centric and variable-centric research highlights what it is that the researcher starts with, or grabs his/her attention, or initiates the research process. Case-centric research starts with a case. The traditional example of case-centric research is the anthropological ethnography (Chapter 4) in which the researcher (a western anthropologist) lives among indigenous peoples for a sustained period and in doing so details their daily lives, rituals and customs. There isn't so much traditional anthropology done in the twenty-first century - the villagers around the world are not so keen - but there is a huge amount of other case-centric research undertaken by social scientists.

The main features of case-centric approaches are that the researcher:

- begins with a *case* that is somehow defined by a spatial, temporal or conceptual boundary (e.g., a village in Wales, an occupation, TV game shows of the 1990s, military uniforms of the Cold War) and
- must then discover the most significant variables and values to describe the case or commonalities between cases (what makes them unique or alike).

Variable-centric research works in the opposite direction. The researcher begins with some ideas about variables, normally about the relationship between variables, and then seeks a sufficient number of cases to explore this relationship. The easiest to grasp of the variable-centric approaches is survey research (Chapter 6). Here the researcher may start with an idea about the relationship between a couple of variables, for example 'educational achievement' and 'income'. She/he may believe that higher levels of educational achievement are associated with higher levels of income. Once the survey researcher has:





- (1) determined how she/he is going to test her/his hypothesis by developing appropriate *variables* and values for her/his questionnaire, the next task is
- (2) to find sufficient cases (survey respondents) of the right type to complete the survey.

There is one more dimension to the case-centric versus variable-centric divide. That is, case-centric research usually combines a single or few cases with many variables and values, while variable research is the opposite – few variables with many cases. This reflects the differing focuses of research. Research on cases tends to be in-depth, seeking richness and completeness, and therefore requiring a diversity of variables and values. For example, what would be the minimum number of variables and values a researcher would need to describe the unique properties of the students in any of your tutorials? We imagine it would be many hundreds. In contrast, variable-centric research tends to focus on a restricted number of variables, or propositions about variables, and to seek out as many appropriate cases as possible.

#### CONCEPTUAL CONCERN 1

We have divided the research used in this textbook into case-centric and variable-centric approaches. Case-centric research has a single or few cases and many variables and values. Variable-centric research has few variables and values and many cases.

We use the terms case-centric and case-first, variable-centric and variable-first interchangeably. What we want to emphasise (after Ragin) is that case-first research centres on finding the best variables/values to describe the case(s), while variable-first research centres on finding the right number and types of case. Our breakdown of case-centric and variable-centric research approaches is shown in Table 1.2.

We discuss six case-centric approaches and five variable-centric ones. We note that unobtrusive research is only weakly variable-centric. It does not fit cleanly into our schema. This is because the approach is commonly undertaken as a supplementary form of research and may rely on fortuitous or found data (see Chapter 8). Conversely, focus group research is only weakly case-centric because it is often used in hypothesis-testing, especially as a preliminary to survey research (see Chapter 5). Semiotic analysis is another slightly uncomfortable fit in terms of our terminology. Here we have dropped the term 'research' in favour of 'analysis'. This reflects that semioticians tend to rely on found data (in the form of signs) rather than engage in coherent search and data collection strategies. A discussion of data collection pertaining to signs or texts (i.e., written, visual or material objects that can be 'read')







**TABLE 1.2** Case-centric and variable-centric approaches

TABLE TIE Gade contine and variable contine approaches			
Approach (in order of chapters)	Case-centric or variable-centric	Notes	
In-depth interview research	A case-centric approach		
Life history research	A case-centric approach	Often single-case research	
Ethnographic research	A case-centric approach	Often single-case research	
Focus group research	A case-centric approach	Weakly case-centric; often used to test- hypotheses or as preliminary research	
Survey research	A variable-centric approach		
Experimental research	A variable-centric approach		
Unobtrusive research	A variable-centric approach	Weakly variable- centric; often a supplemental approach; data sometimes found rather than collected	
Content research	A variable-centric approach		
Secondary research	A variable-centric approach		
Semiotic analysis	A case-centric approach	Often single-case research; data (signs) tend to be found rather than collected	
Autoethnographic research	A case-centric approach	Often single-case research	

is covered in the chapters on content research (Chapter 9) and secondary research (Chapter 10).

## **Analytical induction or hypothesis-testing**

The case-first versus variable-first schema has a further advantage over the qualitative versus quantitative variant in that it provides a better base for understanding the two logical processes of doing research that we use in this textbook: (1) analytical induction and (2) hypothesis-testing. We argue that case-centric approaches tend to favour analytical induction and variable-centric ones – forms of hypothesis-testing.







#### CONCEPTUAL CONCERN 2

We have divided the logical processes of doing research into: (1) analytical induction and (2) hypothesis-testing. Analytical induction is used to develop new theory. Hypothesis-testing is used to assess existing theory.

We have tried to emphasise that case-first research centres on finding the best variables/values to describe the case(s), while variable-first research centres on finding the right number and types of case. This means that researchers who start with exploring a case do so with something of a blank slate. This is not to say that they have forgotten all that they know of anthropology, or psychology, or sociology, etc., but it does mean that they enter the field with a lot to learn. Often this is called an inductive approach. Inductive means reaching a conclusion based on observation. Some textbooks describe inductive research as a bottom-up approach. The researcher builds up a new theory from observations and then develops propositions and hypotheses about them. In other words, beginning with a case (or a limited number of cases), the researcher has to determine what are the key variables and associated values and what are the significant relationships between them. Howard Becker (1993, 1998, 2009) has done much to refine and explain the research process of induction. He uses the term analytical induction – which we also prefer. Key techniques used in analytical induction include grounded theory and thematic analysis - see the next chapter.

In contrast, hypothesis-testing is a top-down approach to theory and research. It is a deductive way of doing research. A deductive approach means finding the solution to a problem based on evidence. A more formal name for this approach to research is 'hypothetico-deductive reasoning' (Blaikie, 2007). The researcher begins with a developed problem, in the form of a hypothesis about the relationship between some variables, and seeks a solution by testing this theory across a number of cases.

We discuss the logic of analytical induction and hypothesis-testing throughout this textbook. Table 1.3 contains the main differences in the logic of research. It is important to stress that this distillation to two logical approaches is not universally accepted. Blaikie (2007), for instance has four logics or research strategies: induction, deduction, abduction, retroduction, and also some combinations. Such fine-grained discussion of the logics of research is primarily philosophical in character and does tend to see the procedures of research methods as overly determined by epistemology (see below).

## SOME ISSUES IN RESEARCH

In the following section we discuss epistemology, explaining the three positions used in this book to discuss the approaches: positivism, social realism and social







**TABLE 1.3** Key elements of analytical induction and hypothesis-testing

	Analytical induction	Hypothesis-testing
1.	Inductive: bottom-up in build-ing theory.	Deductive: top-down in testing theory.
2.	Begins with a case(s) and seeks to understand the key variables and values needed to describe the case.	Begins with a theory or hypothesis about the relationship between variables and seeks to test this proposition across a range of cases.
3.	Has a limited number of cases explored in-depth through multiple variables.	Has a restricted number of variables tested across many cases.
4.	Emphasises the richness of accounts (using as many variables as possible in the description of the case(s)).	Emphasises the parsimony of accounts (using as few variables as possible in the hypothesis-testing).
5.	Describes a single-case or relatively few cases in-depth.	Measures the covariance of or correlation between different sets of variables across a large number of cases.

constructivism. We also discuss reliability and validity – the key means of evaluating research. We finish with a discussion of ethics, from the perspective of why ethical issues are given priority in research, and as a practical guide to ethical research.

## **Epistemology**

Epistemology refers to the theory of knowledge that informs how research is shaped in its broadest sense. It is primarily a philosophical debate. Eskola (1998) describes the three most important epistemological positions in the social sciences. These three can be thought of, as Eskola notes, as differing attitudes to observation and the possibilities for science. We label them: (1) positivism, (2) social realism and (3) social constructivism.

Let's illustrate these ways of thinking with the help of a story of three baseball umpires who are discussing how each one of them whistles a foul ball. The one who believes in the possibility of describing the world objectively says: 'I whistle the ball foul when it is a foul ball.' The subjectivist who understands the constructive, observer- and instrument-dependent nature of knowledge confesses: 'I whistle a foul ball when it seems to me that it is a foul ball.' The third umpire, for whom the world is socially constructed, says: 'The ball is foul when I whistle it a foul ball.' (Eskola, 1998:14, cited by Engeström, 2000: 302, also see Sarbin and Kitsuse, 1994)







In Eskola's metaphor, the baseball umpires are, of course, researchers, and the 'foul balls' are social phenomenon.

As an aside, in preparing to write this section, we made an interesting discovery. We had two versions of this story, one of which cites an article written in 1979, which in turn cites an article written in 1976. The other version, written more recently, does not credit a previous source, giving the impression that they came up with the analogy. So an ironically pertinent question arises – whose knowledge (or intellectual property) was this story originally and how was the story in the most recent version constructed?

#### PRACTICE POINT 2

Epistemology refers to the theory of knowledge that informs how research is shaped in its broadest sense. This textbook discusses research approaches in terms of three epistemological positions: (1) positivism, (2) social realism and (3) social constructivism.

The three epistemological positions outlined in this textbook have differing approaches to doing social science and what might be considered scientific. In each case these are political as well as philosophical positions:

- 1. Positivism ('I whistle the ball foul when it is a foul ball'): Positivists accept as true a social reality that exists independently of our perceptions of it. The ball is foul, and this is an observable fact. As a result, they have the greatest confidence in the ability of social scientists to reveal the truth. Positivists stress the techniques of observation and measurement and the potential for scientists to form objective/unbiased understandings of the social world. For them, good science is objective science, and the methods of doing research are largely about eliminating a subjective stance or bias on the part of the researcher and the research participants. This is an important - but tacit - 'political' agenda and as a result positivism is commonly accused of ignoring issues like power, subjectivity (meaning) and cultural relativism. For example, positivists are unlikely to accept as 'good science' any research approaches that rely on single case studies (e.g., life history, ethnography, semiotic and autoethnographic research) because they 'lack' the number of cases needed to test for positivistic measures of reliability and validity.
- 2. Social realism ('I whistle a foul ball when it seems to me that it is a foul ball'): Social realists also believe in an external and measurable social reality, but one that exists through the mediation of our perceptions of it and our actions. Social realists argue that revealing the social world is far more problematic than suggested by positivists. For social realists, doing science is a legitimate







goal, but it is understood as a project that is limited by factors that social scientists have great difficulty in controlling for or being objective about. Where positivists strive for objectivity, social realists emphasise subjectivity – perspective – and the appreciation of factors like power, meaning and the need for researcher reflexivity (self-awareness). Any search for truth is always clouded by, among other things, the ways in which researchers and institutions impose bias. Controlling for institutional and researcher bias becomes an important component of socialist realist efforts at doing science, whereas positivists, in their narrow focus on methods, tend to discount these political underpinnings of science. Social realists tend to make explicit the political assumption about epistemology and how it impacts method. This textbook or, more properly, both its authors are oriented to a social realist position. We believe that social realism is the mainstream position within the social sciences today.

3. Social constructivism ('The ball is foul when I whistle it a foul ball'): Social constructivists take the political-philosophical criticism of positivism further than their social realist colleagues, to the point where it challenges the notion of science as a legitimate concept. They don't accept social reality as an independent phenomenon, or a straightforward idea of truth or of science. They have no faith in science as a project that generates anything resembling universal rules or laws. In this epistemology it is impossible to differentiate truth-claims based in science, or folklore, or common sense, or metaphysics, because individuals or actors actively create the social world and all potential measures of that social world. They argue that it is impossible to have a scientific stance – meaning an objective position outside the data and its analysis (if you are a positivist), or to control/filter the subject effects of power, meaning and bias (if you are a social realist). This does raise the issue of whether social constructivists can be considered social scientists at all. We have given them the benefit of the doubt, in so far as the radical imagining of what a constructivist science might look like is worth exploring.

## Reliability and validity

Doing good science is about rigour of the research, and its two most important measures are reliability and validity. Reliability measures the extent to which the analysis of data yields reliable results that can be repeated or reproduced at different times or by different researchers. Validity measures the extent to which the research is accurate and the extent to which truth-claims can be made, based on the research – i.e., that it measures what is intended.

For example, we may decide to measure intelligence by having students sit exams. If the same students get good results every time they sit exams, we can say that the results are reliable. However, the reason they get good results might be because the markers are very generous, therefore the results would







**TABLE 1.4** Prevailing epistemologies of research approaches

The training opinion organization approaches		
Approach	Case-centric or variable-centric	Prevailing epistemology
In-depth interview research	A case-centric approach	Social realism/social constructivism
Life history research	A case-centric approach	Social realism
Ethnographic research	A case-centric approach	Social realism/social constructivism
Focus group research	A case-centric approach	Social realism/positivism
Survey research	A variable-centric approach	Positivism/social realism
Experimental research	A variable-centric approach	Positivism
Unobtrusive research	A variable-centric approach	Positivism/social realism
Content research	A variable-centric approach	Positivism/social realism
Secondary research	A variable-centric approach	Social realism
Semiotic analysis	A case-centric approach	Social realism/social constructivism
Autoethnographic research	A case-centric approach	Social realism/social constructivism

not be valid. We think we're measuring intelligence, but we're actually measuring marker generosity.

Sometimes distinguishing the two can be confusing. A common way to tell them apart is to think of the researcher as an archer, shooting arrows at a target. When the archer gets her/his arrows near the target's bulls-eye, then the results are valid (accurate). When the archer gets a good cluster, then the results are reliable (repeatable). The most rigorous research is both reliable and valid (Figure 1.1).

However, the standards and measures of reliability and validity are very much influenced by the epistemological position that has shaped the research (or, more pertinently, has shaped the opinions of potential journal editors). Positivists have the clearest and most developed measures of reliability and validity. This reflects their dominance in the hard sciences, the longstanding desire of social scientists to emulate 'real' scientists, and that positivists have the narrowest range of variables or research findings to measure.







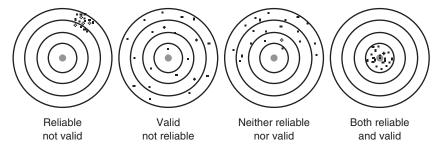


FIGURE 1.1 Validity and reliability illustrated by the archery metaphor

### PRACTICE POINT 3

Reliability refers to the extent to which the analysis of data yields results that can be repeated or reproduced at different times or by different researchers. Validity refers to the extent to which truth-claims can be made, based on the research – it is dependent on the research measuring the appropriate phenomenon.

Where research involves data collection and analysis that cannot be reduced to numbers, measures of rigour are far more problematic. Thus, case-centric research carries a double burden: (1) it tends to undertake analysis that is not reducible to numbers (qualitative research, in other words), and (2) it lacks a number of cases that might facilitate measures of covariance or correlation. Single-case research is even more problematic (and disturbing for positivists). Nevertheless, social realist and social constructivist researchers continue to challenge positivism in this area, and come up with innovative attempts at new measures of reliability and validity. For example, we draw attention to the work of Robert Yin (2003), who suggests that a case protocol can assist reliability in case-centric research, including single-case research (see Chapter 3 on life history research and Chapter 12, on autoethnographic research).

#### **Ethical considerations**

A key concern that contributed to the decrease in popularity of some research approaches in the social sciences, notably unobtrusive approaches (particularly observation) and experiments, is that of ethics, especially with regard to informed consent. Most chapters of this book deal with ethical issues specific to the approach discussed. In this section we deal with general considerations.

The most important aspect of ethically appropriate research is *voluntary informed consent*. It is generally considered to be an essential requirement of ethical research, in the context of minimising the risk of harm (and, a cynic might say, the risk of lawsuits). Let's briefly look at the three words that make up this important term:







- Voluntary: referring to the recruitment of participants, this includes the notion of free will that it is just as easy for a potential participant to decline to take part as it is for them to agree. This is most easily effected by making information available to appropriate people via some form of advertising, rather than directly approaching them.
- **Informed:** simply providing potential participants with enough information about what will be asked of them, so that they can make an informed decision about taking part (often via a written participant information sheet).
- Consent: a formal process in which the participant affirms, usually in writing, that they have been provided with all the information they require and are agreeing to take part of their own free will. A standard form is usually provided to all participants for this purpose.

The process of gaining informed consent usually has several steps:

- 1. **Recruitment of participants:** This necessitates the development and distribution of recruitment materials, such as flyers or posters, to stimulate potential participants' interest and to provide them with the contact details of the researcher(s). Once contact is made by the possible participant, the next step is usually ...
- 2. Provision of a participant information sheet (PIS): As the name suggests, the PIS contains all the information a possible participant needs in order to be able to make an informed decision about participation, such as: what is involved; where the research will take place; how long it will take; who has reviewed the research for ethical appropriateness and how to contact them; and a statement about the ability to change one's mind after volunteering, to refuse to answer questions, to withdraw data, and so forth. If the possible participant makes contact at this point to volunteer to take part, this is followed with a ...
- 3. Formal consent process: Usually at the beginning of an experiment, interview, focus group, or whatever the case may be, the researcher restates the key points covered in the PIS, asks the participant if she/he has any questions (and answers any such questions) then asks the participant to sign a form attesting to the fact that she/he has been provided with all the information she/he requires and agrees to take part.

Gaining informed consent is not always practicable, especially where deception is used, as in experiments (see Chapter 7) and unobtrusive research (see Chapter 8). Yet, as Page (2000) notes, ethical and good practice guidelines have increasingly frequently stipulated that 'good' research is 'with participants' who are collaborators rather than 'on subjects'. While we contend that it is almost always naive to suggest that research participants have equal power in the research relationship so that the process is truly one of joint collaboration, it must certainly be acknowledged that ethical review boards and publishers of academic works alike expect an explicit discussion of informed consent processes and the role of participants in the research.







After the issue of consent, the next most important consideration is the risk of discomfort or harm.

#### Ethical issues: risk of harm

Often the risk of harm to participants will be negligible – though one can never be certain that a participant has not had a negative personal experience related to the research topic (and so revisiting that experience could cause discomfort). In some cases, though, the research clearly carries with it a risk of emotional discomfort, for example, if the topic is domestic violence or any one of the other myriad sources of trauma that exist in modern society, and the participants are survivors. There are several steps that can be taken to minimise risk. These can include:

- Specifying a minimum age for participants, in the hopes that maturity will
  increase coping skills (in any case, it is common to exclude people aged under
  16 for reasons of power differences between researcher and participant,
  unless there are good reasons for not doing so).
- Specifying a minimum amount of elapsed time between the last experience and the research participation. For example, one of the authors has conducted interviews with survivors of suicidal behaviour and specified that at least one year should have elapsed since the last suicidal episode. By doing so, it was hoped that participants would have moved beyond suicidality and therefore be at less risk, and also that greater emotional (and temporal) distance would allow for greater or easier reflection and discussion.
- Explicitly discussing the potential for distress with possible participants during the recruitment process, including in the participant information sheet and any other written material, and asking participants to consider this carefully before volunteering.
- Suggesting that because it is a sensitive topic, they may like to plan something
  for immediately after the research takes place, such as visiting a friend or
  undertaking another enjoyable activity.
- Reminding participants of this possibility before commencing the interview or
  other research and giving them the opportunity to decline to be interviewed
  (and perhaps including a statement about this in the consent form, such as 'I
  am aware of the potential for the interview topic to cause distress and have
  considered this before consenting to take part').
- Inviting participants to bring a support person with them.
- Providing participants with a list of appropriate services and contact details, and perhaps forewarning these agencies of the research.

None of these steps guarantees that participants will not experience distress and researchers must consider how they would deal with this, should the situation occur. We will return to this topic below.







Lastly, ethics committee and review boards will often want to be assured of the value of the research. That is, will it make some useful contribution to knowledge? A director of a private research organisation that one of the authors briefly worked for used to rail against ethics committee and the amount of his valuable time taken up in preparing responses to such questions, but researchers should bear in mind that they are asking participants to give up their valuable time, and ethically, there should be some purpose to this beyond satisfying a researcher's curiosity or providing amusement (Ring, 1967). This may be of particular concern for some sectors of the population who are frequently asked to take part in research. For example, Maori, the indigenous people of New Zealand, are rumoured to be one of the most researched people in the world. Over recent years it has become difficult to recruit Maori participants in research, especially for non-Maori researchers, in part due to the prioritisation of the state in addressing gaps in well-being between Maori and other New Zealanders. This has required much research on Maori, supposedly to inform policy, but often with little apparent benefit: "Research" is probably one of the dirtiest words in the indigenous world's vocabulary' (Tuhiwai Smith, 1999: 1). As a result, ethics applications in New Zealand need to clearly demonstrate cognisance of these issues and explicitly state the relevance of research to Maori.

## Averting/dealing with discomfort

From time to time researchers may have to deal with a participant at risk of or becoming emotionally distressed. Paying attention to non-verbal cues is an important warning system. Most of us would readily pick up on these cues if they occurred while talking to a friend, but they may be missed in research situation because of a focus on the research process itself, or not being familiar with the participant's mannerisms. For example, drumming fingers on the table-top or rapid tapping of toes or other fiddling can indicate that the participant is becoming agitated, while hesitancy, a change in voice tone, speed or volume, and avoiding eye contact may indicate emotional distress. It's often fairly easy to prevent an uncomfortable situation developing by saying something like, 'If you feel you don't want to talk about that for a while, that's fine', 'Let's take a breather for a few minutes', or 'We can come back to this topic later, if you prefer'.

However, sometimes cues are not readily perceived or distress develops very rapidly. In such cases, it is best to immediately stop the interview (or experiment, etc.). Unless you are an experienced counsellor or therapist, you should attempt to minimise further discussion of the topic that has caused distress. Instead, express your sympathy and ask the participant what can be done to improve the situation: 'I'm sorry this has upset you. Let's stop the interview/experiment/discussion. Is there someone I can call?' You may wish to follow up with a phone call, email or note, reiterating your sympathy, though it should not be necessary to take the blame for the person's distress, providing they were given appropriate information about the topic beforehand. This can be distressing for the researcher also. If you have taken reasonable precautions to prevent distress







occurring, as discussed above, you should not be afraid to debrief with a supervisor, colleague or friend.

## **Ethical issues: deception**

Deception in research often applies to pretending that an experiment is about something different from what appears from be the case. Here we also use the term to refer to pretending that an experiment is a naturally-occurring, real-life event; for example, pretending that a deliberately planted letter has been accidentally dropped to see whether someone will post, ignore, or discard it.

Newman and Krzystofiak (1979) asked whether deception is ever warranted, in the context of deception as it usually applies to unobtrusive research – a lack of awareness that one is engaging in research. They found that the answer to this question is yes, in some circumstances. This is illustrated by their own research. Their study of employment discrimination compared two methods: unobtrusive observation of employment decisions and a self-report survey of employment practices. Strikingly different results were obtained: when employers were unaware that they were taking part in a study, employment decisions tended to be made on the basis of the race of the applicant; when employers were aware of their participation, race did not play a part in decision-making. Newman and Krzystofiak argued that because we seek to present ourselves in a positive manner, self-reports may be 'distorted'. Therefore, deception may be required in order to produce accurate results. However, they cite three criteria for consideration, as discussed by Kelman (1972):

- the degree of deception involved balanced by the probability of harmful consequences,
- the importance of the research topic, and
- the availability of other data collection strategies that are both capable of producing similar information and are deception-free.

#### CONCEPTUAL CONCERN 3

Concerns about ethical issues had a major impact on the practice of unobtrusive approaches. Concern focused on the informed consent of participants and the use of deception. These concerns have also arisen with regard to experiments (see Chapter 7).

## **Ethical issues: debriefing**

Researchers – especially psychologists – have been criticised for consent and deception issues, particularly with regard to experiments (see Chapter 7). Informed







consent has also been an issue for anthropologists (particularly regarding observation in ethnographic research – see Chapter 4). However, with experiments, these issues are often ameliorated by debriefing at the end of the experiment: telling participants what the experiment was really about, talking through their experiences and minimising the risk of any ill effects caused by the deception. Similarly, though distress may occur in interviews or focus groups, there are strategies available for minimising this through a well-handled debriefing (see Chapter 2). This is rarely possible with unobtrusive approaches (see Chapter 8).

#### Ethical issues: where to from here?

Ethical conduct is a very real concern for social science researchers, and rightly so. However, with careful planning, research on most topics can safely be carried out. Specific issues likely to arise with the use of different approaches are discussed further in the following chapters, in particular with regard to interviews, experimental research and unobtrusive research.

## PUTTING THE APPROACH IN CONTEXT

In this section we focus on the framing of research, using a 'fixed or fluid' binary. This is followed by a practical guide to getting started with research; developing the research topic, preparing a proposal and ethics application; sampling and recruitment of participants, and so forth.

## Fixed or fluid framings or research

Ragin (1994) identifies three analytical framings of research, of which we use only two: fixed and fluid. Fixed and fluid framings relate primarily to the fixedness or fluidity of the sequence of steps or procedures that make up any research project. A fluid framing means that the researcher is free to revisit and significantly modify early stages of research. This can include the overall focus of the research. A fixed framing means that the researcher must adhere to a sequence of procedures. Earlier stages may not be revisited. Hence, survey research is very fixed (Chapter 6). For example, once participants have filled in the questionnaire it is normally impossible to add new questions. In contrast, autoethnographic research is highly fluid (Chapter 12). The researcher can revisit any aspect of the research at any moment, including in the process of writing a journal article! The main impacts on analytical framings are:

1. The size and complexity of the research: Small research projects that can be accomplished by a lone scholar also tend to be more fluid. This is an issue of management, of time and other resources – the lone scholar may more easily be able to revise the research process. Larger research projects, especially using research teams, are more likely to have fixed analytical frames because this simplifies issues of management. For example, research assistants can be given clear instructions at the start of the project.







- 2. The interactive or non-interactive aspect of research: Interactive research means the creation of data at the point of its collection. Interactive research requires exchanges between researcher and research participants (people) in the process of collecting data. For example, in-depth interviewing (Chapter 2), life history research (Chapter 3), ethnographic research (Chapter 4), focus groups (Chapter 5) and surveys (Chapter 6) create situations, encounters and pose questions that would not exist otherwise. For example, unless a researcher is posing questions, most people don't spend their days telling strangers about their preferences for public transport, etc. Interaction often creates an incentive for fluid framings in part because researchers want to respond and make changes in the face of interaction with participants. However, this isn't always the prevailing driver.
- 3. The analytical inductive versus hypothesis-testing elements of research: Research that seeks to build *new* theory and broadly uses induction (Becker, 1993) tends to have a fluid framing. In contrast, hypothesis-testing (finding the solution to an established 'problem') is closely aligned with a fixed framing.
- 4. It is always a combination of the above: As the Table 1.5 suggests, whether the analytical framing of a piece of research is fluid or fixed is always the result of a combination of factors:

**TABLE 1.5** Analytical framing of research approaches

Approach	Case-centric or variable-centric	Analytical frame
In-depth interview research	A case-centric approach	Fluid
Life history research	A case-centric approach	Fluid
Ethnographic research	A case-centric approach	Fluid
Focus group research	A case-centric approach	Fixed, especially if focusing on hypothesis-testing
Survey research	A variable-centric approach	Fixed
Experimental research	A variable-centric approach	Fixed
Unobtrusive research	A variable-centric approach	Fixed, especially if focusing on hypothesis-testing
Content research	A variable-centric approach	Fixed, with partial exception of very small-scale research
Secondary research	A variable-centric approach	Fluid; this is unusual for a hypothesis-testing approach, mainly because it is non-interactive
Semiotic analysis	A case-centric approach	Fluid
Autoethnographic research	A case-centric approach	Fluid







#### PRACTICE POINT 4

A fluid analytical framing means that the researcher is free to revisit and significantly modify earlier stages of research. This can include the overall focus of the research. A fixed analytical framing means that the researcher must adhere to a sequence of procedures.

#### Precursors to research

Most empirical research will follow the same set of procedures:

- 1. Developing the research topic.
- 2. Preparing a proposal and ethics application.
- 3. Sampling and recruiting participants.
- 4. Collecting and managing data.
- 5. Transcribing.
- 6. Analysing data.
- 7. Disseminating the findings.

We will deal with the first three of these in this section, as they are fairly standard across approaches. The remainder are discussed in specific chapters, as appropriate.

## Developing the research topic

The initial idea for a piece of research can come from any one of many sources, such as a personal experience of the researcher or an opportunity to be paid to work on a project, or it may be limited by the availability of supervisors and their interests. In any case, the basic steps of developing the research topic are the same:

- 1. Start asking questions of yourself, colleagues, supervisors, etc. begin narrowing down your general area of interest into a specific area of enquiry (sometimes referred to as a conceptual variable).
- 2. Search the literature find out what is already known, and what is not.
- 3. Narrow your initial ideas down to an idea that can be studied. Begin shaping the idea into an operational research question(s): a manageable area of enquiry.

#### CONCEPTUAL CONCERN 4

An operational definition transforms the research topic from the abstract (conceptual) to the specific (operational).







During this process, be critical and analyse your observations (whether they are your personal observations, something you have read about, or something someone has told you). As you find out more, for example by a literature review, be open to revising your initial thoughts – or finding out that the question that you thought was original has already been answered.

## Preparing a research proposal

In some situations, beginning researchers may not find it necessary to prepare a research proposal, for example, if they are taking part in a class research project. However, preparing a proposal, serves several valuable purposes that will often be essential:

- Clarification of the research aims a well-written proposal must clearly state the aims of the research and how they will be achieved. In order to be sure that these aims will be met, researchers must engage in ...
- Clarification of the process exactly how will the research be carried out?
- Preparation of a document that can be used to provide necessary information to:
  - possible supervisors
  - collaborators
  - o administrators involved in university enrolments
  - ethics committees or institution review boards
  - o scholarship and other funding providers.

The length of the proposal will vary according to its purpose. For example, an initial proposal whose purpose is to provide a background document for discussion wit possible research supervisors may be less than a page. A proposal to accompany an ethics application will probably run to between three and ten pages, depending on the nature and complexity of the research and the requirements of the committee. A proposal to accompany a university enrolment may be a page or less for enrolment in a graduate dissertation, or 50 pages for confirmation of full enrolment in a doctoral programme, depending on the requirements of the institution. In all of these varied situations it will be expected that the proposal will include:

- Background information on the topic, including some discussion of existing research and what the proposed new research will add to this body of knowledge (the aims of the research).
- Discussion of the research methods to be used and the rationale for choosing the method. (Include the practicalities of the research, such as where interviews will take place, how long they are expected to take, how you will







record what is said, whether participants will be provided with a transcript and offered the opportunity to comment on it.)

A timeframe for the project, including dates for beginning work on the project in general, submission of the ethics application, beginning of recruitment of participants, beginning of data collection, end of data collection, beginning of analysis, completion of analysis, end dates for writing up of various sections or chapters of the resulting document (report, dissertation or thesis) and completion of the complete final version.

In our experience, the time required for recruitment and analysis are often underestimated by students. Recruitment, in particular, can involve waiting for responses to advertisements, letters of invitation, etc. Fortunately, some of the writing can be begun at this point, particularly the introduction and literature review and the basic elements of the method (obviously you won't be able to discuss the participants, but you should be able to discuss the methods used, and the underlying methodology).

## Sampling and recruiting participants

It used to be that the most common source of research participants for psychologists and some other social scientists (whether conducting their first piece of research or their fiftieth) were students. This has at least two inherent limitations. First, students may be different from the broader population in important ways and this can impact the results. They are likely to be better educated then the general population and they may have biases about the value or nature of the research. Second, as a group they may be more or less appropriate as a source of recruitment. For example, because of their relative youth they may be less able to talk about experiences normally associated with older sections of the population, such as employment or child-rearing, or, indeed, aging. Consider, then, how you can most readily access the particular population you're interested in and what recruitment tools can facilitate this, such as flyers, posters, newspaper advertisements. The following chapters include discussions of the recruitment issues specific to the approaches.

## CONCLUSION

We hope at this point that you have an understanding of what to expect from this textbook, and of the core concepts that underpin it. We've also introduced key terms that will be used throughout book and that structure each chapter. These include case-centric (beginning by determining what the case(s) will be as the primary consideration, e.g., who will be interviewed as participants) and variable-centric research (beginning by determining what the variables will be, e.g., the questions that will be asked in a survey); and analytical







induction (the process of developing a new theory or revising an existing one, from the data gathered) and hypothesis-testing (testing a hypothesis derived from an existing theory). We've discussed three epistemological positions in the social sciences – positivism, social realism and social constructivism – issues of reliability and validity, and fixed or fluid analytical framings or research. You'll see how these can be applied to the individual approaches as you continue, which should take care of any remaining 'fuzziness'.

As you read through the book you will see that we have endeavoured to discuss the advantages and disadvantages of each approach, along with the types of research question best suited to each approach. Where appropriate, we've included recent and current developments, such as the use of new technologies. Though as researchers ourselves we have our personal preferences, we believe that all of these approaches are useful to emergent researchers. We hope you also enjoy this book.

## **FURTHER READINGS**

As noted above, Charles Ragin has published a fascinating series of monographs about research approaches which transcend the qualitative/quantitative divide. His Constructing social research: The unity and diversity of method (1994) was important in shaping this textbook and our teaching. A second edition was published in 2011, just as we were finishing this textbook, but at the time of writing was not yet in our library. We are sure it will be of great use. Similarly, Howard Becker's Tricks of the trade: How to think about your research while you're doing it (1998) is an inspirational account of doing research. It is both sophisticated and clear.

Brinkmann and Kvale (2008) provide a useful discussion of the concepts underlying ethical research that we consider valuable to all emerging researchers, and those interested in case-centric approaches in particular.

We have found the Sage benchmarks in social research methods series to be extremely valuable and commend them to students seeking an in-depth understanding of a particular topic.

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