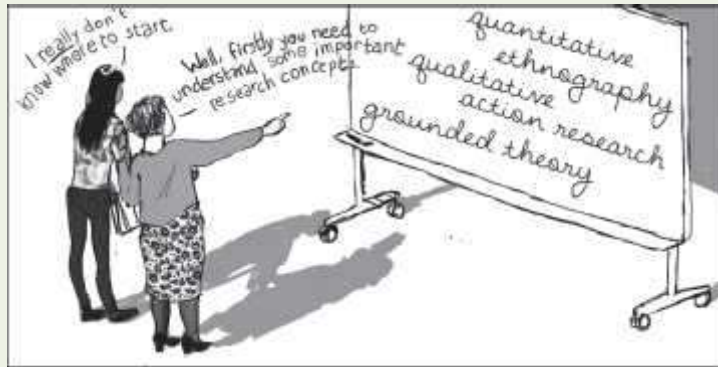


2 Approaches to Research

INTRODUCTION



This chapter provides you with an overview of the various approaches you might take to your research project. It offers brief summaries of the different research styles and methodologies, and further reading to help you to understand the approach your own research might take. In this chapter, you will find:

- An explanation of the difference between quantitative and qualitative research.
- An overview of action research, case study, survey and experimental approaches, their advantages and limitations.
- An introduction to ethnographic research, grounded theory and narrative theory.
- Detailed further reading lists on each of the main approaches described so that you can do preparatory reading before beginning your project.

Key terms

Quantitative	24	Applied research	32
Qualitative	24	External validity	33
Mixed methods	24	Experiment	33
Hypotheses	24	Ethnography	35
Triangulation	25	Grounded theory	36
Action research	27	Theoretical sampling	36
Case study	28	Thematic analysis	38
Survey	31	Narrative inquiry/stories	39

Styles of research

It is perfectly possible to carry out a worthwhile investigation without having detailed knowledge of the various approaches to, or styles of, research. However, a study of different approaches will provide insight into different ways of planning an investigation and, incidentally, will also enhance your understanding of the literature. One of the problems of reading research reports and reading about research reports is the terminology. Researchers use terms and occasionally jargon that may be incomprehensible to most people. It is the same in any field, where a specialized language develops to facilitate communication among professionals. So, before considering the various stages of planning and conducting investigations, it may be helpful to consider the main features of certain well-established and well-reported styles of research.

Different styles, traditions and approaches use different methods of collecting data, but no approach prescribes or automatically rejects any particular method. **Quantitative** researchers

approach processes or automatically rejects any particular method. Quantitative researchers collect facts and study the relationship of one set of facts to another. They use structured and predetermined research questions, conceptual frameworks and designs. Thus they use techniques that are likely to produce quantified and, if possible, generalizable conclusions. Researchers adopting a **qualitative** perspective are more concerned to understand individuals' perceptions of the world. They doubt whether social facts exist and question whether a scientific approach can be used when dealing with human beings. Qualitative research generally uses non-numerical data and usually has broader research questions at the outset that home in on a narrower range of issues as the research develops. There are occasions, however, when qualitative researchers draw on quantitative techniques, and vice versa. It will all depend on what data the researcher requires.

As the name suggests, **mixed methods** research uses a combination of quantitative and qualitative approaches to collect data. The research **hypotheses** or statements of belief are both quantitative and qualitative. An example would be research into the effectiveness of a new e-learning course on the theory questions for learner drivers. A quantitative hypothesis might be: 'An increased number of learner drivers answer the theory questions more quickly when taking the e-learning course than learner drivers who have not taken the course.' The accompanying qualitative hypothesis might be: 'Learner drivers who have taken the e-learning course feel more confident when approaching the test than learner drivers who have not taken the course.'

There is sometimes a third mixed methods hypothesis to accompany the quantitative and qualitative hypotheses. In our example, this could be: 'Learner drivers who have answered the theory questions correctly after taking the e-learning course continue to feel more confident six months after they have passed their driving test than learner drivers who did not take the e-learning course.'

By combining quantitative and qualitative data, the researcher reaches a more comprehensive understanding of the topic and reduces the weaknesses of using either method on its own. A major strength of the mixed methods approach is **triangulation** – approaching aspects of a topic from different perspectives by using a range of methods and techniques in order to come to a better understanding of it. The use of different methods can also lead to confirmation of the findings from different sources of data.

A mixed methods approach is often more challenging for the researcher, as two methods of data collection have to be integrated. The quantitative and qualitative findings often have an influence on each other as well as being significant in their own right, and this needs to be taken into account in the analysis and reporting of the data.

Classifying an approach as quantitative or qualitative, ethnographic, survey, action research or whatever, does not mean that once an approach has been selected, the researcher may not move from the methods normally associated with that style. Each approach has its strengths and weaknesses, and each is particularly suitable for a particular context. The approach adopted and the methods of data collection selected will depend on the nature of the inquiry and the type of information required.

Advantages and disadvantages of quantitative and qualitative research methods

Quantitative research methods

Advantages	Disadvantages
• More objective • Findings can be generalized to whole populations • Statistical tests can be applied to the data in making statements about it • Survey responses can be automated	• No account taken of human thoughts and feelings • Research is dependent on tool chosen • Can provide descriptive data of large populations but there can be difficulties with identifying reasons for the data or interpreting it • Focus of research cannot be changed in the middle of the study, as this will invalidate the findings

Qualitative research methods

Advantages	Disadvantages
• Can explore theory of behaviour in the 'field' • Study of more culturally based or inter-personal topics possible • Can provide data about emotions, beliefs and personality characteristics • Allows you to reflect on your own experience as a researcher as part of the process • Usual to restrict research to a small number of participants • Allows the use of an 'insider' perspective • Can be used to identify how people define constructs, such as anxiety, which are hard to quantify • Focus of study can be changed in the middle of the study if necessary	• May lead to unanticipated results or results that contradict the hypothesis • Ethics of participants' permissions can be time-consuming • Research process can be more complicated and time-consuming • Findings cannot be tested with statistical significance • Findings cannot be generalized to whole populations • Less statistical power than large-scale studies • Greater risk of researcher bias affecting the results

It is impossible in the space of a few pages to do justice to any of the well-established styles of research, but the following will at least provide a basis for further reading and may give you ideas about approaches you may wish to adopt in your own investigation.

Action research and the role of practitioner researchers

Action research is an approach that is appropriate in any context where 'a problem involving people, tasks and procedures cries out for solution, or where some change of feature results in a more desirable outcome' (Cohen *et al.* 2011: 344). It is not a method or a technique. As in all research, the methods selected for gathering information depend on the nature of the information required. It is applied research, carried out by practitioners who have themselves identified a need for change or improvement, sometimes with support from outside the institution, other times not. The aim is 'to arrive at recommendations for good practice that will tackle a problem or enhance the performance of the organization and individuals through changes to the rules and procedures within which they operate' (Denscombe 2010b: 12).

Action research often leads researchers to ask themselves questions about the impact of their research project, such as:

- Can I improve my practice so that it is more effective?
- Can I improve my understanding of this practice so as to make it more effective?
- Can I use my knowledge and influence to improve the situation?

These and similar questions can serve as a starting point for action research but when the investigation is finished and the findings have been considered by all participants, the job is still not finished. The participants continue to review, evaluate and improve practice. The research involves 'a feedback loop in which initial findings generate possibilities for change which are then implemented and evaluated as a prelude to further investigation' (Denscombe 2010a: 126). Denscombe goes on to argue that, while generalizations are unlikely to emerge from findings of 'practice-driven and small-scale' research, it:

'... should not lose anything by way of rigour. Like any other small-scale research, it can draw on existing theories, apply and test research propositions, use suitable methods and, importantly, offer some evaluation of existing knowledge (without making unwarranted claims). It is the rigour, rather than the size of the project or its purpose, by which the research should be judged.'

(Denscombe 2010a: 134)

There is nothing new about practitioners operating as researchers, but as in all 'insider' investigations, difficulties can arise if dearly held views and practices of participants are

challenged, as can happen if the research evidence appears to indicate that radical changes are needed if progress is to be made. The participatory nature of action research means there is a question as to who owns the research and its outcomes:

‘Who is in charge? Who calls the shots? Who decides on appropriate actions? Who owns the data? These and similar issues need to be worked out sensitively and carefully by the partners to *ensure that there are shared expectations about the nature of participation* in action research.’

(Denscombe 2010a: 131; emphasis in original)

Denscombe also reminds us that:

‘Because the activity of action research almost inevitably affects others, it is important to have a clear idea of when and where the action research necessarily steps outside the bounds of collecting information which is purely personal and relating to the practitioners alone. Where it does so, the usual standard of ethics must be observed: permissions obtained, confidentiality maintained, identities protected.’

(Denscombe 2010a: 132)

Of equal, or perhaps even greater importance, is that before the research begins, everyone involved must know why the investigation is to take place, who will see the final report, and who will have responsibility for implementing any recommended changes.

Case study

Even if you are working on a 100-hour project over a three-month period, the **case study** approach can be particularly appropriate for individual researchers because it provides an opportunity for one aspect of a problem to be studied in some depth. Of course, not all case studies have to be completed in three months, or even three years. For example, a study by Francis *et al.* (1994) of what led to the closure of a large psychiatric hospital took five years to complete. Sadly, you will have to wait until you are head of research in your hospital, local authority, university or government department before you will be in a position to undertake, and to obtain the funding for, such a venture, so, for the time being, be realistic about the selection of your case study topic. Yin reminds us that ‘case studies have been done about decisions, about programmes, about the implementation process, and about organizational change. Beware these types of topic – none is easily defined in terms of the beginning or end point of the case.’ He adds that ‘the more a study contains specific propositions, the more it will stay within reasonable limits’ (Yin 1994: 137). Good advice and well worth following.

Case studies may be carried out to follow up and to put flesh on the bones of a survey. They can also precede a survey and be used as a means of identifying key issues that merit further investigation, but are usually carried out as freestanding exercises. Researchers identify an ‘instance’, which could be the introduction of a new way of working, the way an organization adapts to a new role, or any innovation or stage of development in an institution. Evidence has to be collected systematically, the relationship between variables studied (a *variable* being a characteristic or attribute) and the investigation methodically planned. Although observation and interviews are most frequently used, no method is excluded.

All organizations and individuals have their common and their unique features. Case study researchers aim to identify such features, to identify, or attempt to identify, the various interactive processes at work, to show how they affect the implementation of systems and influence the way an organization functions. These processes may remain hidden in a large-scale survey but could be crucial to the success or failure of systems or organizations.

Critics of case study

Critics of the case study approach draw attention to a number of problems and/or disadvantages. For example, some question the value of the study of single events and point out that it is difficult for researchers to cross-check information. Others express concern about selective reporting and the resulting danger of distortion. A major concern is that generalization is not always possible, although Denscombe (2010a: 60) makes the point that, ‘The extent to which findings from the case study can be generalized to other examples in the class depends on how far the case study example is similar to others of its type.’ He illustrates this point by drawing on the example of a

example is similar to others of its type. He illustrates this point by drawing on the example of a case study of a small primary school. He writes that: 'this means that the researcher must obtain data on the significant features (catchment area, the ethnic origins of the pupils and the amount of staff turnover) for primary schools in general, and then demonstrate where the case study example fits in relation to the overall picture' (Denscombe 2010a: 61).

In his 1981 paper on the relative merits of the search for generalization and the study of single events, Bassey used the term 'relatability' rather than 'generalizability'. In his opinion, 'an important criterion for judging the merit of a case study is the extent to which the details are sufficient and appropriate for a teacher working in a similar situation to relate his decision-making to that described in the case study. The relatability of a case study is more important than its generalizability' (Bassey 1981: 85). He considers that if case studies 'are carried out systematically and critically, if they are aimed at the improvement of education, if they are relatable, and if by publication of the findings they extend the boundaries of existing knowledge, then they are valid forms of educational research' (1981: 86).

Writing about an education case study in 1999, Bassey adds to his 1981 thoughts. He recalls that:

'Previously I had treated the concept of generalization (of the empirical kind, that is) as a statement that had to be absolutely true. This is the sense in which physical scientists use the term. It is the basis of their concept of scientific method . . . in which a hypothesis stands as a generalization (or law) only if it withstands all attempts at refutation. I argued that there were very few generalizations (in this absolute sense) about education – and even fewer, if any, that were useful to experienced teachers.'

(Bassey 1999: 12)

He makes it clear that he still holds to this view as far as scientific generalizations (of the absolute kind) are concerned but now acknowledges that there are two other kinds of generalization that can apply in the social sciences, namely, statistical generalizations and 'fuzzy' generalizations:

'The statistical generalization arises from samples of populations and typical claims that *there is an x per cent or y per cent chance* that what was found in the sample will also be found throughout the population: it is the quantitative measure. The fuzzy generalization arises from studies of singularities and typical claims that *it is possible, or likely, or unlikely that* what was found in the singularity will be found in similar situations elsewhere: it is a qualitative measure.'

(Bassey 1999: 12; emphasis in original)

The pros and cons of case study will no doubt be debated in the future, as they have been in the past. It is as well to be aware of the criticisms but, as I said at the beginning of this section, case study can be an appropriate approach for individual researchers in any discipline because it provides an opportunity for one aspect of a problem to be studied in some depth. You will have to decide if it suits your purpose or not.

Survey

It would be nice to have a clear, short and succinct definition of **survey** but, as Aldridge and Levine (2001: 5) point out, 'Each survey is unique. Therefore, lists of do's and don'ts are too inflexible. A solution to one survey may not work in another.' Moser and Kalton (1971: 1) agree that it would be pleasant to provide a straightforward definition of what is meant by a 'social survey' but make it clear that 'such a definition would have to be so general as to defeat its purpose, since the term and the methods associated with it are applied to an extraordinarily wide variety of investigations'. They continue by giving examples of the range of areas that might be covered by a survey:

'A survey may be occasioned simply by a need for administrative facts on some aspects of public life; or be designed to investigate a cause-effect relationship or to throw fresh light on some aspect of sociological theory. When it comes to subject matter, all one can say is that surveys are concerned with the demographic characteristics, the social environment, the activities, or the opinions and attitudes of some group of people.'

(Moser and Kalton 1971: 1)

The census is one example of a survey in which the same questions are asked of the selected

population (the population being the group or category of individuals selected). It aims to cover 100 per cent of the population, but most surveys have less ambitious aims. In most cases, a survey will aim to obtain information from a representative selection of the population and from that sample will then be able to present the findings as being representative of the population as a whole. Inevitably, there are problems in the survey method. Great care has to be taken to ensure that the sample population is truly representative. At a very simple level, that means ensuring that if the total population has 1000 men and 50 women, then the same proportion of men to women has to be selected. But that example grossly oversimplifies the method of drawing a representative sample and, if you decide to carry out a survey, you will need to consider what characteristics of the total population need to be represented to enable you to say with a fair amount of confidence that your sample is reasonably representative. These characteristics may include age, education, postcode, ethnic group, political affiliation, income, and so on, depending on the purpose of your research.

In surveys, all respondents will be asked the same questions in, as far as possible, the same circumstances. Question wording is not as easy as it seems, and careful piloting is necessary to ensure that all questions mean the same to all respondents. Information can be gathered by means of self-completion surveys (as in the case of the census), by using an online survey tool such as Survey Monkey (see [Chapter 10](#)) or face-to-face by an interviewer. Whichever method of information gathering is selected, the aim is to obtain answers to the same questions from a large number of individuals to enable the researcher to both describe and compare, to relate one characteristic to another and to demonstrate that certain features exist in certain categories.

Surveys can provide answers to the questions ‘What?’, ‘Where?’, ‘When?’ and ‘How?’, but it is not so easy to find out ‘Why?’. Causal relationships can rarely, if ever, be proved by the survey method. The main emphasis is on fact-finding, and if a survey is well structured and piloted, it can be a relatively cheap and quick way of obtaining information, particularly if you use online web-based survey software, such as Survey Monkey, to send your surveys by email.

Applied research

Applied research refers to scientific study and research that aim to solve practical problems. It is used, for instance, to find cures for illness, and to point the way for the development of technological solutions. It is frequently used by the medical profession and by psychologists investigating human behaviour, including within organizations.

Examples of applied research in psychology include:

- Investigating which treatment is the most effective for treating depression
- Researching how employees respond when under pressure to hit targets
- Analysing the most effective way to approach people when asking for volunteers to help a charity.

These examples illustrate that applied research has the underlying intention of solving a problem. Applied research is often combined with other research methods. Applied research into the causes of stress among social media users, for example, may also include data on the use of social media by different age groups. While accessing this data does not use an applied research method, it will make a contribution to the goal of the applied research.

Applied research involves aiming for **external validity**. This means that the findings of the research study will apply to people and contexts outside of the research study. So, in the example of applied research into the causes of stress among social media users, the conclusions reached by researching into a representative sample of users would also apply to the general population. External validity is important in all research, but especially so in applied research involving drug trials or psychological interventions where the application of the findings can have medical consequences for the general population. Applied research frequently uses experiments as one of its key research methods.

The experimental style

It is relatively easy to plan **experiments** that deal with measurable phenomena. For example, experiments have been set up to measure the effects of using fluoridated toothpaste on dental

experiments have been set up to measure the effects of using fluoridated toothpaste on dental caries by establishing a control group (whose members did not use the toothpaste) and an experimental group (whose members did). In such experiments, the two groups, matched for age, sex, social class, and so on, were given a pre-test dental examination and instructions about which toothpaste to use. After a year, both groups were given the post-test dental examination and conclusions were then drawn about the effectiveness or otherwise of the fluoridated toothpaste. The principle of such experiments is that if two identical groups are selected, one of which (the experimental group) is given special treatment and the other (the control group) is not, any differences between the two groups at the end of the experimental period may be attributed to the difference in treatment. A causal relationship then appears to have been established. It may be fairly straightforward to test the extent of dental caries (though even in this experiment the extent of the caries could be caused by many factors not controlled by the experiment) but it is quite another matter to test changes in behaviour.

Experiments may allow conclusions to be drawn about cause and effect, *if the design is sound*, but large groups are needed if the many variations and ambiguities involved in human behaviour are to be controlled. Even allowing for the collection of data in online surveys or via a survey in an email attachment, both of which can be delivered to a large population in a matter of minutes, large-scale experiments are expensive to set up and take more time than most students working on 100-hour projects can devote. Tests that require only a few hours (for example, to test short-term memory or perception) can be very effective, but in claiming a causal relationship, great care needs to be taken to ensure that all possible causes have been considered.

It is worth noting at this point the ethical issues that are associated with experimental research. Permission to conduct the research must be obtained from the heads of institutions or units concerned and from the participants themselves, all of whom must be fully informed about what is involved. Proposals may have to be considered by ethics committees and/or research committees in order to ensure that research participants will not come to any harm as a result of the research. It is particularly important to seek parents' permission if children are to participate in the research. If your research brings you into contact with children or vulnerable adults, you must have DBS clearance. Either you or the organization that is supervising your research must apply for a criminal records check to confirm that you have not been convicted of a crime involving young people under the age of 18 or against adults who are vulnerable. It can take several weeks for you to receive your certificate, so make sure that you leave plenty of time for it to arrive before beginning to collect your data.



Some research has to be approved by ethics committees. Check with your supervisor. If you intend to collect data from young people under the age of 18 or from vulnerable adults, you must obtain DBS clearance to prove that you have no criminal offences against these groups. Make sure you leave plenty of time before starting your research to obtain your certificate.

Cohen and colleagues object to the principle of 'manipulating' human beings. They write that:

'... notions of isolation and control of variables in order to establish causality ... may be appropriate for a laboratory, though whether, in fact, a social situation ever *could become* the antiseptic, artificial world of the laboratory or *should become* such a world is both an empirical and moral question ... Further, the ethical dilemmas of treating humans as manipulable, controllable and inanimate are considerable.'

(Cohen *et al.* 2000: 212; emphasis in original)

Exactly, though ethical issues have to be considered in all research, regardless of the context. If you decide to undertake an experimental study, ask for advice, consider any implications and requirements – and be careful about making claims about causality.

Ethnography and the ethnographic style of research

Brewer defines **ethnography** as:

'The study of people in naturally occurring settings or "fields" by methods of data collection which capture

their social meanings and ordinary activities, involving the researcher participating directly in the setting, if not also the activities, in order to collect data in a systematic manner but without meaning being imposed on them externally.’

(Brewer 2000: 6)

Ethnographic researchers attempt to develop an understanding of how a culture works and, as Lutz points out, many methods and techniques are used in that search:

‘Participant observation, interview, mapping and charting, interaction analysis, study of historical records and current public documents, the use of demographic data, etc. But ethnography centres on the participant observation of a society or culture through a complete cycle of events that regularly occur as that society interacts with its environment.’

(Lutz 1993: 108)

Participant observation enables researchers, as far as possible, to share the same experiences as the participants and to understand better why they act in the way they do. However, it is time-consuming and so is often outside the scope of researchers working on 100-hour projects or on time-limited Master’s degrees. The researcher has to be accepted by the individuals or groups being studied, and this can mean doing the same job or living in the same environment and circumstances as the participants for lengthy periods.

Time is not the only problem with this approach. As in case studies, critics point to the problem of representativeness. If the researcher is studying one group in depth over a period of time, who is to say that group is typical of other groups that may have the same purpose? Are nurses in one hospital (or even in one specialist area) necessarily representative of nurses in a similar hospital or specialist area in another part of the country? Are canteen workers in one type of organization likely to be typical of all canteen workers? Critics also refer to the problem of generalization but, as in the case study approach, if the study is well structured and carried out, and makes no claims that cannot be justified, it may well be relatable in a way that will enable members of similar groups to recognize problems and, possibly, to see ways of solving similar problems in their own group.

The grounded theory approach

Glaser and Strauss (1965, 1968) developed the **grounded theory** approach to qualitative data analysis in the 1960s during the course of a field observational study of the way hospital staff dealt with dying patients. So what does it involve? Strauss tells us that:

‘The methodological thrust of the grounded theory approach to qualitative data analysis is toward the development of theory, without any particular commitment to specific kinds of data, lines of research, or theoretical interests. So, it is not really a specific method or technique. Rather it is a style of doing qualitative analysis that includes a number of distinct features, such as theoretical sampling, and certain methodological guidelines, such as the making of constant comparisons and the use of a coding paradigm, to ensure conceptual development and density.’

(Strauss 1987: 5)

He defines **theoretical sampling** as: ‘sampling directed by the evolving theory; it is a sampling of incidents, events, activities, populations, etc. It is harnessed to the making of *comparisons* between and among those samples of activities, populations, etc.’ (Strauss 1987: 21; emphasis in original).

The theory is not pre-specified. It emerges as the research proceeds (hence ‘theoretical’ sampling). Over the years, there have been some adjustments to the original 1960s approach to grounded theory, but the principle remains much the same, that theory evolves during actual research by means of the analysis of the data. Some researchers view grounded theory as an approach or strategy rather than a theory, the purpose of which is to generate theories from the data gathered.

At first sight, this seems straightforward enough, but as Hayes makes clear:

‘The process of conducting grounded theory research isn’t just a matter of looking at the data and developing a theory from it. Instead, it is what researchers call an iterative process – that is, a cyclical process in which

theoretical insights emerge or are discovered in the data, those insights are then tested to see how they can make sense of other parts of the data, which in turn produce their own theoretical insights, which are then tested again against the data, and so on.

(Hayes 2000: 184)

She continues by reminding us that:

‘The theory which is produced using a grounded theory analysis may sometimes be very context-specific, applying only in a relatively small number of situations; but because it is always grounded in data collected from the real world, it can serve as a very strong basis for further investigations, as well as being a research finding in its own right.

(Hayes 2000: 184)

Most grounded theory researchers will begin with research questions but they do not start with a hypothesis, nor do they begin their investigation with a thorough review of the literature relating to their topic. They build up theory from their data and they do not wait until all data are collected before they begin the analysis stage. Instead, analysis takes place as the data are collected. The researcher examines the findings of an interview or of participant observation and then proceeds to the analysis of those findings before any other data are collected. As the research proceeds, there will be more data collection and more analysis, and so on until theoretical saturation is reached, or the stage at which the collection of further data will not generate new theories. It is at this point that the researcher can be confident that the research process has been both comprehensive and exhaustive.

In a small-scale research project, however, your decision to stop collecting data might be governed by time or financial constraints, rather than when all avenues for data collection have been explored. If you can answer ‘yes’ to the question, ‘Have I collected sufficient data to be able to develop a theoretical perspective from it?’, you can be confident that you can proceed to the next stage of your research. It is worth pointing out that, even in long-term research studies, of the kind that lead to Masters’ degrees or Doctorates, the researcher has to guard against going down one more data collection path or pursuing just one more line of enquiry. That may lead to becoming trapped in the maze of research, following different paths but not reaching the exit and completing the research study, which is, after all, the aim of data collection in the first place.

Glaser (1992) also expressed some concern at the way grounded theory developed over the years, in particular the use of code and retrieve software, such as NVivo, which generates theory from qualitative data on grounded theory lines. He considers that more subtle procedures are required to tease out the layers of meaning that emerge, and this cannot be achieved by narrow analytical procedures.

The analysis of grounded theory data is, to me at least, quite complex. It requires the researcher to identify concepts, codes, categories and relationships in order to bring order to the data, and the time taken to become skilled at identifying and applying them is considerable. I confess that I find the level of abstraction and the language used, which appear to be implicit in grounded theory, difficult to absorb. However, that is no more than my perception of the difficulty of teasing out those layers of meaning. Many colleagues and former students whose views I respect and who have successfully completed research based on a grounded theory approach disagree with me. They tell me that the software can cope with the layers and the complexity perfectly well. So, all I can say is that before you decide to commit yourself to a grounded theory approach, read as widely as time permits and, as always, take advice before you finally decide how to proceed.

Thematic analysis

Thematic analysis is often confused with grounded theory. In their paper ‘Using thematic analysis in psychology’ (2006), Braun and Clarke emphasize that, although it shares a similarity with the grounded theory approach in that it involves exploring qualitative data with an open mind, it has a different purpose. In contrast to generating a theory from the data, a theme ‘captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set’ (2006: 82).

Braun and Clarke go on to explain that usually a significant theme in the data will emerge from

the number of times the theme occurs in the data. However, they point out that this is not always the case and a theme 'might be given considerable space in some data items, and little or none in others, or it might appear in relatively little of the data set. So researcher judgement is necessary to determine what a theme is' (2006: 82).

The following example might serve to clarify how thematic analysis might be used in a research project.

Louise is exploring how patients at one GP surgery feel about the length of time they have for a consultation. She has gathered data from surveys and interviews with patients. She reads through the responses to an open-ended question on the survey: 'Write a sentence to explain how you feel about the time you are given to see your doctor.' Louise also reads carefully through the interview responses. Participants were given opportunities to talk about their experience by being asked open questions such as: 'Tell me how you feel about the time you have been allocated when you leave the doctor's consulting room.' Louise notices that a number of participants refer to feeling 'rushed', 'under pressure to finish' and 'feeling that the doctor was preparing for the next patient' and similar phrases. She makes a note that this is a significant theme, since the majority of patients mention it. Two patients also refer to how the doctor stands up to show them to the door at the end of the consultation and that this makes them feel that he is hurrying them out of the consulting room. Although there are only two responses, Louise concludes that this is an important theme, as it is likely that the doctor would end the consultation in this way with more than the two participants who reported it.

Ideally, Louise would go back to the participants and ask them a supplementary question, perhaps via email or by phone, to ascertain if the doctor behaved in the same way at the end of their consultation and, if so, how they felt about this. However, contacting the participants of a research study again is often impossible and Louise might have to be content with noting this theme as of potential importance when writing up the research.

Narrative inquiry and stories

The use and interpretation of narratives and, in particular, the acceptance of stories as valuable sources of data are well established in qualitative research, although perhaps less represented in books on research methodology than other sources. Stories are certainly interesting and have been used for many years by management consultants and others who present examples of successful (and unsuccessful) practice as a basis for discussion as to how successful practice might be emulated and disasters avoided. What has always taxed me has been how information derived from storytelling can be structured in such a way as to produce valid research findings. It took an experienced group of postgraduate and post-doctoral students who had planned their research on **narrative inquiry** lines to sort me out and to explain precisely what was involved. I was not even sure what narrative inquiry actually meant and so, always believing the best way to find out is to ask an expert, I asked one member of the group, Dr Janette Gray, to tell me. She explained as follows:

'It involves the collection and development of stories, either as a form of data collection or as a means of structuring a research project. Informants often speak in a story form during the interviews, and as the researcher, listening and attempting to understand, we hear their "stories". The research method can be described as narrative when data collection, interpretation and writing are considered a "meaning-making" process with similar characteristics to stories (Gudmundsdottir 1996: 295). Narrative inquiry can involve reflective autobiography, life story, or the inclusion of excerpts from participants' stories to illustrate a theme developed by the researcher. A narrative approach to inquiry is most appropriate when the researcher is interested in portraying intensely personal accounts of human experience. Narratives allow voice – to the researcher, the participants and to cultural groups – and in this sense they can have the ability to develop a decidedly political and powerful edge.'

(Gray 1998: 12)

Colleagues to whom I had spoken and who had successfully adopted a narrative inquiry approach to one or more of their research projects had always made it clear that stories were not merely used as a series of 'story boxes' piled on top of one another, with no particular structure or connecting theme. The problem I had was in understanding how such structures and themes could be derived. Jan's explanation was as follows:

'All forms of narrative inquiry involve an element of analysis and development of theme, dependent on the researcher's perspective. Stories share a basic structure. The power of a story is dependent on the storyteller's use of language to present an interpretation of personal experience. The skill of the narrative researcher lies in

use of language to present an interpretation of personal experience. The skill of the narrative researcher lies in the ability to structure the interview data into a form which clearly presents a sense of a beginning, middle and an end. Even though the use of story as a research tool is a relatively new concept in the social sciences, historically story has been an accepted way of relating knowledge and developing self-knowledge. One of the major strengths of such a means of conducting inquiry is the ability to allow readers who do not share a cultural background similar to either the storyteller or the researcher to develop an understanding of notices and consequences of actions described within a story format. Narrative is a powerful and different way of knowing . . .

Data collection for narrative research requires the researcher to allow the storyteller to structure the conversations, with the researcher asking follow-up questions. So a narrative approach to the question of how mature-age undergraduates perceive their ability to cope with the experience of returning to study would involve extended, open-ended interviews with mature-aged students. This would allow the students to express their personal experience of the problems, frustrations and joys of returning to study. It might also involve similar “conversations” with other stakeholders in their education – perhaps family members; their tutors and lecturers – to provide a multiple perspective of the context of the education of mature-aged undergraduates.’

(Gray 1998: 2)

Jan added that ‘the benefit of considerate and careful negotiation will be a story allowing an incredibly personal and multi-faceted insight into the situation being discussed’. I am sure this is so. I have become convinced of the value of this approach and that stories can in some cases serve to enhance understanding within a case study or an ethnographic study. However, narratives can present their own set of problems:

‘Interviews are time-consuming and require the researcher to allow the storytellers to recount in their own way the experience of being (or teaching) a student. This may not emerge in the first interview. Until a trust relationship has developed between researcher and storyteller, it is highly unlikely that such intimate information will be shared. Such personal involvement with the researcher involves risks and particular ethical issues. The storytellers may decide they have revealed more of their feelings than they are prepared to share publicly and they may insist either on substantial editing or on withdrawing from the project.’

(Gray 1998: 2)

Problems of this kind can arise in almost any kind of research, particularly that which is heavily dependent on interview data, but the close relationship needed for narrative inquiry can make the researcher (and the storyteller) particularly vulnerable, as [Chapter 1](#) of this book explores, to being asked to adopt ‘unintentional’ roles.

When asked what had changed in terms of narrative inquiry as a methodology, Jan responded:

‘The last decade has seen a broadening of the theoretical basis of narrative inquiry to include a deeper appreciation of the impact of context on any interpretation of a participant’s “story”. This includes an acknowledgement of the need to consider the complex interactions between the personal, professional and social contexts within which the participant situates their story. Further, there has been a significant change in the international, multi-disciplinary recognition of narrative inquiry as a rigorous methodology focused on developing an understanding of personal and professional experience. For interested researchers, Clandinin (2007) provides a comprehensive rationale for the theoretical positioning of narrative inquiry as a methodology.’

(Gray 2009: 1)

Online diaries in the form of blogs (short for ‘web logs’: see Chapters 9 and 12), which combine self-reflection with content in the form of a narrative, can provide a rich source of information in narrative enquiry. In addition, YouTube and the professional video platform Ted contain vast archives of autobiographical reflections, interviews and presentations that may also be relevant to your research area.

That the narrative approach carries with it a number of potential difficulties, especially for first-time researchers and those operating within a particularly tight schedule, does not mean that it should be disregarded when considering an appropriate approach to the topic of your choice. Far from it – but as is the case with all research planning, I feel it would be as well to discuss the issues fully with your supervisor before deciding what to do, and if possible to try to find a supervisor who is experienced, or at least interested, in narrative inquiry.

Which approach?

Which approach?

Classifying an approach as ethnographic, qualitative, experimental – or whatever – does not mean that once an approach has been selected the researcher cannot move from the methods normally associated with that style. But understanding the major advantages and disadvantages of each approach is likely to help you to select the most appropriate methodology for the task in hand. This chapter has covered only the basic principles associated with different styles or approaches to research. This should suffice – at any rate until you have decided on a topic and considered what further information you need to obtain.

Always consult the library catalogue *and* the librarians and make sure you know which online facilities are available from the library and/or your department.



Self-reflection

You may not be able to answer these questions right now but you should come back to them when you are ready. Your answers will help you to make decisions about how you will carry out your research.

- Which approach to your research will you take? Quantitative? Qualitative? Or mixed methods?
- What approach are you most comfortable with? Least comfortable?
- Will it begin with a theory or hypothesis? Or will it be more open and generate a theory from the investigation – grounded theory?
- Will you study people in their natural setting – ethnography?
- Will your research help to find a solution to a problem – action research?
- Will it be a case study – an example of an event or situation?

Laying the Groundwork Checklist

After reading this chapter, you should:



- | | | |
|--|---|-------------------------------------|
| 1. Understand the main approaches to research. | At this stage, you will start to build an understanding of research methods, their characteristics, and advantages and disadvantages. | ☒ |
| 2. Understand the difference between qualitative and quantitative research. | You will be able to describe what each means to another student. | ☒ |
| 3. Start to build your research vocabulary. | Understand research terms, including ethnographic research, action research, grounded theory and narrative theory. | ☒ |
| 4. Extend your understanding of research methods. | Use the suggested further reading suggestions at the end of the chapter to develop your knowledge of techniques that appear most relevant to your research topic. | ☒ |
| 5. Focus on specific methods that interest you. | Consider how the various research methods work in practice, and how they could be applied to your area of study. | ☒ |
| 6. Reach a point where you feel ready to approach the planning stages of your own project. | Once you understand the basics, you are now in a position to plan your own project. Proceed to Chapter 3 ... | |

Further reading

Action research, case study, survey, experimental style, ethnography, grounded theory and narrative have been dealt with very briefly in this chapter and many general books about research methods will also include sections relating to all seven of these approaches. One of the most helpful is:

Denscombe, M. (2017) *The Good Research Guide for Small-scale Social Research Projects* (6th edn). London: Open University Press. Part 1 provides clear accounts of the advantages and limitations of surveys, case studies, Internet research, experiments, ethnography, phenomenology, grounded theory, action research and mixed methods research. Helpful checklists are provided at the end of main sections. Denscombe also includes sections on quantitative and qualitative research.

Quantitative and qualitative research

Brett Davies, M. (2007) *Doing a Successful Research Project: Using Qualitative or Quantitative Methods*. Basingstoke: Palgrave Macmillan. This useful book considers the differences between qualitative and quantitative research in the context of surveys, questionnaires, sampling, interviewing – and much more.

Case study

Cohen, L., Manion, L. and Morrison, K. (2011) *Research Methods in Education* (7th edn). Abingdon: Routledge.

Survey research

Aldridge, A. and Levine, K. (2001) *Surveying the Social World: Principles and Practice in Survey Research*. Buckingham: Open University Press.

Roberts, B. (2002) *Biographical Research*. Buckingham: Open University Press. [Chapter 6](#) considers oral history; [Chapter 7](#) deals with narrative, in particular narrative analysis; [Chapter 9](#) concentrates on biographical research.

The experimental style

Hayes, N. (2000) *Doing Psychological Research: Gathering and Analysing Data*. Buckingham: Open University Press. [Chapter 3](#), 'Experiments', provides useful information about causality in experiments.

Ethnography and the ethnographic style of research

Brewer, J.D. (2000) *Ethnography*. Buckingham: Open University Press.

Lutz, F.W. (1993) Ethnography: the holistic approach to understanding schooling, in M. Hammersley (ed.) *Controversies in Classroom Research* (2nd edn). Buckingham: Open University Press. This excellent chapter relates mainly to ethnographic research in education, but also has valuable advice about any type of qualitative research.

Narrative inquiry and stories

Clough, P. (2002) *Narratives and Fictions in Educational Research*. Maidenhead: Open University Press. Peter Clough provides interesting 'fictional' stories to demonstrate the use of narrative in reporting research, and discusses the potential merits and difficulties of such an approach.

Goodson, I.F. and Sikes, P. (2001) *Life History Research in Educational Settings*:

***Learning from Lives.* Buckingham: Open University Press.** This book explores reasons for the popularity of life-history research in education, although many of the examples considered are likely to have similar application to researchers in other disciplines.

Roberts, B. (2002) *Biographical Research*. Buckingham: Open University Press. [Chapter 6](#) considers oral history; [Chapter 7](#) deals with narrative, in particular, narrative analysis; [Chapter 9](#) concentrates on ethnography and biographical research.