1. Where should you search for literature when planning a social research project?
2. Describe the use of keywords and search terms when interrogating a library database.
3. Explain what wildcards, Boolean operators and reference management software can be useful for.
4. What principles should you bear in mind when taking notes from reading?
5. How do you know when to stop reading for a literature review?
6. Describe the purpose and some of the procedures used in carrying out systematic reviews. How do these reviews differ from conventional (non-systematic) reviews?

Workshop and discussion exercises

1. For a given research topic (take, for example, one of the topics listed in Box 27.10 on page 492 explore and compare the coverage of two or more of the following resources for finding academic literature on the subject:

   (a) Your university library catalogue.
   (b) A searchable journal database.
   (c) An Internet search engine such as Google.

2. Examine a journal article reporting original social or cultural research on a topic that interests you. Consider answers to the following questions:

   (a) To what extent is the literature review separated from the rest of the report?
   (b) What connections are made between the analysis of data and the literature review?
   (c) Many literature reviews have a funnel structure, with broad concerns being discussed at the outset, narrowing down to specific questions explored in the research study. Is this literature review like this? Identify sections where broad concerns are discussed and where specific research questions are identified.
   (d) In the concluding section of the report, what references are made by the author to the concerns raised in the literature review?
   (e) Try to find an important article or book on this subject that this researcher has failed to spot.

3. Find and consult a systematic review of randomised controlled trials:

   (a) How explicit does it make its procedures?
   (b) How do these differ from an article reporting a conventional (not 'systematic') review of literature?

7

RESEARCH QUESTIONS AND PROPOSALS

Moira Kelly

Chapter Contents

This chapter describes the process of developing a social research project and writing a research proposal. This process is closely linked to research design (see Chapter 8). A research proposal incorporates a research question, a plan for investigating it, and attends to the wider context in which a study conducted. The proposal is a key tool for developing a research project. It is a document that can be used to communicate your planned study to others, to manage your study as a project that produces data and analysis, and also serves as a template for writing up your study. The emphasis of this chapter is on the practicalities of developing research that works, or in other words, produces analysis that adds to what is already known, is rigorous, relevant and accessible to the audiences you wish to reach. After an initial discussion of the importance of developing skills in constructing viable research studies, this chapter will review approaches to devising good research questions and provide guidelines as to what a research proposal should contain, and why.

From theory to practice

Becoming a social scientist as opposed to someone with a qualification in a social science is demonstrated by the ability to apply the knowledge gained during academic study to social research. As Weber (in Gerth and Mills, 1948) points out, unlike art 'scientific work is chained to the course of progress' (p. 137). As social scientists, we aim to build on what is already known. In the same way that medical practice is defined by the application of medical knowledge in the treatment of illness, the craft of the social *scientist* is research (see, for example, Becker, 1998). To refer to Weber again, we need as social scientists to achieve a balance between creativity and passion for a topic with rigorous scientific endeavour:

> Ideas come when we do not expect them, and not when we are brooding and searching at our desks. Yet ideas would certainly not come to mind had we not brooded at our desks and searched for answers with passionate devotion.
> (Weber in Gerth and Mills, 1948: 136)

This can be taken here to apply to the relationship between creativity and practice in empirical social research. Practical skills in effective planning and application of the methodologies described in this text are valued by employers of social science graduates. These are sometimes referred to as skills in project management. For example, the main social research funding body in the UK, the Economic and Social Research Council (ESRC), states that its activities (as a research funding body) should 'advance knowledge and provide trained social scientists who meet the needs of users and beneficiaries' (ESRC, 2003). Contemporary research involves considerable attention to pragmatic concerns linked to good practice. Part of the training expected by institutions such as the ESRC is a hands-on understanding of research design and process. Social science students, whether undertaking undergraduate or postgraduate courses, are expected to carry out at least one research project. This is where the emphasis shifts from education to training in order to facilitate the development of transferable skills in developing, carrying out and writing up research projects, with researchers demonstrating the ability to apply skills rather than just to acquire them.

Research questions

All research includes four basic ingredients: the initial research question; finding out what others have done; refining the initial question; and answering the question (Thomas, 2009: ix). The research question and its development is therefore the foundation stone for the whole research project (Thomas, 2009) and consequently it is necessary to take care in constructing it. This may seem counter-intuitive. We ask questions all the time, so how hard can it be? Developing good research questions, however, involves a level of craft. One way of thinking about the value of good questions is to consider how news interviewers ask questions. There are many news interviewers, but only a few are household names, known for their skill in framing questions in such a way as to find out what they want to know, from often resistant interviewees. Even seemingly straightforward research questions need to be considered critically. They need to be relevant, achievable and clear. New researchers often underestimate the importance of spending time working on research questions (and developing proposals around them), putting this work to one side in their enthusiasm to get going on the project.

Research questions provide direction for your study (O'Leary, 2010), so when asking a research question it is important to consider the possible ways in which it may be answered and refining it in relation to what you are interested in finding out about. This is the basis of devising a 'good' research question. Most questions have numerous possible answers and ways in which they can be answered. Take, for example, an apparently simple question such as a child might ask a parent: 'Why do people have wars?' They are likely to receive an answer such as 'Because people do not like each other'. A child may accept such an answer but an adult is unlikely to do so. As we get older and know more, we learn how to focus our questions and ask them in such a way that the response will add to what we know. When you ask a question it is framed, usually unconsciously, to elicit the answer you require in the form you would like it in. Research questions are also 'framed' in this way, but the process of developing them makes the framing more explicit, subjecting it to critique and justification, at a conscious level. Social research projects are not conducted in social isolation as a personal pursuit. They are meant to produce findings that contribute to current knowledge about topics, often for a range of audiences. This means that you need to be able to confidently describe how you came to make decisions regarding your choice of topic and question, such as 'Why this topic?', 'Why this research question?', 'Why now?' and 'Why not other questions?'.

Research questions take many different forms and may also be referred to as *research problems*, *research aims* or *hypotheses*. Some of the different types of research question can be seen in Box 7.1. There is often a lot of interest in asking questions that require explanations. However, it may be appropriate to undertake a descriptive study first. For instance, consider a study of political protests. Our question may be 'Why do people take part in political protests about climate change?' Before we ask this question we arguably need to know what political protests about climate change look like, whether there are different forms of protest, and what the different forms look like. In this sense we need a good description of political protests about climate change before we can ask why people take part in them. If we do not have this information, we make unexamined assumptions about the phenomenon we are studying. This information might already be available in the research literature, and if it is, we need to be clear about the context in which our question has been constructed.

BOX 7.1

TYPES OF RESEARCH QUESTION

Describing	What forms do political protests take?
Taking an aspect of the issue of interest and examining it in detail	What form does women's involvement in climate change protests take?
Explicitly drawing upon theory to examine an issue	Does social movement theory explain the emergence of climate change protest groups?
Comparing attributes	Does age group affect the likelihood of participating in a political protest?
Explaining	Why do some political protests involve violent conflict and not others?
Assessing whether an intervention works	Does specialist training for police officers who police large political protests reduce arrests?

The way a research question is asked will be influenced by the social science discipline we come from. For example, a psychologist may frame the question 'Why do people take part in political protests?' in terms of the social psychology of group participation. A sociologist may frame it in terms of power relationships between the public and the state. An anthropologist may frame the question in terms of the culture of political protest. The way questions are framed also implies the methodological approach to be taken (see also Chapter 3 on theory and research). If it is framed as 'How many people take part in political protests?', a quantitative design will be appropriate. If it is framed as 'Why do people take part in political protests?', either a quantitative or qualitative design could be appropriate. If the question is 'What are the stories told by people who take part in political protests?', a qualitative design is most likely to be suitable. Decisions to use a quantitative or qualitative approach should be influenced by the nature of the research question, with the approach chosen being appropriate to the question asked. However, most researchers will have a preference for one methodological approach or the other and this is likely to influence the way in which they formulate their research question.

Quantitative research

Quantitative research involves deductive reasoning, meaning that all the relevant variables are identified before data collection begins. The two main quantitative research designs in social research are the *survey* and the *experiment* (see Chapter 8 for a full account of the design of these kinds of study). In survey research questions may be descriptive, such as 'Who takes part in political protests?' This would involve identifying a number of categories and possible characteristics of people such as age, gender, socio-economic status and ethnicity. If this information is already available, the relationship between different variables can be examined and comparisons made. These relationships are often presented in the form of a hypothesis. This is a statement specifying the relationship between two or more variables. The hypothesis is accepted or rejected depending upon there being a statistically significant difference between the variables.

For example, a hypothesis could be stated as: 'Men are more likely than women to take part in political protests.' This hypothesis would then be tested by seeing if gender and participation in political protests are associated, and often by using a statistical test to see if this association is likely to hold true in the population from which the sample of people included in the survey has been drawn at random (see Chapters 9 and 19).

The experimental method in social research is used to evaluate the effect of an intervention on behaviour. A hypothesis is set up at the start and then tested. A study may be set up with participants randomly allocated to an 'intervention' or 'control' group. For example, a hypothesis 'Exposure to negative information about climate change positively influences support for political protest against climate change' could be constructed. Under 'laboratory' conditions, volunteer participants in the intervention group could be shown a film about the negative effects of climate change and the control group shown a film about a neutral topic such as teaching languages to children. A questionnaire about political protests could then be given to assess whether support for protest against climate change differs between the control and intervention group.

Qualitative research

Qualitative research is often based on *induction* (see Chapter 2). This means that efforts are made to avoid assumptions about what the research findings might look like before the data are collected and analysed. Given the inductive model, some qualitative researchers may be resistant to setting out a formal question and specifying details of how to answer it at the start of a project. However, even the most avowedly 'unstructured' qualitative research eventually involves the identification of a research question, even though this is developed and refined during data collection, having been no more than a 'foreshadowed problem' at the outset (see Chapter 14 on ethnography). At the very least, a general topic will need to be defined, and an initial research site chosen.

As with quantitative studies, qualitative studies may involve different types of research question depending on the methodology chosen. Some studies may set out to describe the content of a dataset in quite a general, relatively superficial way. A simple research question may be 'Describe people's views about climate change'. However, initial analysis of the data may highlight further subquestions to be explored in more depth, possibly drawing upon relevant theory. For example, the question may arise, 'How are political affiliations used by activists to explain their involvement in climate change protests?' inspired by 'new social movement' theory that indicates political affiliations to be of potential importance in influencing activism.

In most studies (qualitative and quantitative) a number of additional research questions arise following the first phase of data analysis. Depending upon time available, these questions can be either flagged up as questions for future research or set up as new questions (related to the core question set at the start) and examined in further, in-depth analysis (see Kelly, 2010). Decisions will need to be made about which questions to pursue in depth. Having described the issues involved in setting research questions, let us consider the practical issues involved in developing a research question.

Developing a research question

What are you interested in investigating? You may have quite a clear question in your mind, or have a general topic you are interested in. Alternatively, you may have no ideas at all, or, as is more often the case, have too many ideas to choose from. Ideas for topics for social research projects may come from many different directions. Research projects often emerge from earlier research which has identified new research questions that need to be investigated. A researcher might want to see if findings from a study in one area can be replicated in another. For

example, one could apply a research design used to investigate people in another country to the UK context. Alternatively, research questions may emerge in response to social problems or need, or a news story about an interesting issue.

Most people have a few ideas of things they would like to investigate at the start, though sometimes these may be quite general topics, such as 'climate change' or 'childhood obesity'. One way of developing research topics is to brainstorm ideas. Work with a whiteboard or take a sheet of paper and write down whatever comes into your head when you ask yourself: 'What research topics interest me?' If you have a general topic that you are interested in but no ideas for possible research questions, take a piece of paper, put your topic in a circle in the centre and start to consider different aspects of your idea. Think about what you know about your idea, and what you would like to know. Write these down and make links. You may want to go through this process for a few topics. Having done this, you will find that some ideas shift into the foreground and start to form up as prototype questions. You can then produce concept maps of your research questions (O'Leary, 2010), highlighting possible ways you could look at

them and the assumptions that underpin your ideas. This will expand the possible ways you can formulate questions. It will also help to identify which literature may be relevant to your research questions. It is good practice to think expansively at the start and then focus in. It is also useful to talk to others about your ideas and use their comments to facilitate your thinking. For example, in a study of political protests you might be interested in the views and experiences of protesters, but discussion with peers or a supervisor may highlight other possible questions such as the views and experiences of the police regarding political protests. It is good to consider a range of options at the start.

Once you have decided on a research question that interests you, you will need to review the literature to see what is already known about the topic. This may lead to further development of your question and focusing it to address a particular gap in knowledge about the topic. It is helpful to record the process through which decisions are made about research questions as you go along as you may be asked about this later in your research. Box 7.2 shows stages in developing a research question. At this point you will be ready to put together a research proposal.

BOX 7.2

STAGES IN DEVELOPING RESEARCH QUESTIONS

- Identify possible research topics.
- Identify possible questions.
- Consider alternative questions.
- Break down your proposed question(s).
- Define your terms, identify assumptions that underpin the question(s).
- Choose a question.
- Check the literature to see whether the chosen question (in the form it is in) has already been answered.
- Refine your question if necessary.
- Develop a project proposal around your research question.
- If necessary, reframe question in the light of issues raised by constructing the proposal.
- Carry out your study.
- Go back to your question from time to time to check that you are still on the track you started on.

Peer review and critical appraisal

The key tool in research design is the research proposal. The main reason for writing a proposal is to present your research design for critical appraisal. This may be informal, such as discussing your research with peers. This is the 'friendly' version of peer review. It can be valuable to receive comments from others at various stages when designing a study. These can be from a supervisor or tutor, fellow student, colleague, experts in the field, or increasingly a person representative of the group of people who are going to be studied. Presenting ideas to someone for comment at an early stage helps to develop them. Comments may reinforce some areas, and highlight areas not presented clearly or which need more work, or aspects which are untenable in some way. Feedback can be on academic or practical issues, both of which are important. For example, there is a need to know that the research question has been well constructed, but also that it is possible to gain access to the data needed to answer it.

Research proposals may also be formally reviewed or assessed as part of a course of study, as an application for funding or for ethics committee approval. Presentation of the research design for critical appraisal means that the audience for your research is a central consideration from the start. The proposal is also a link to the social scientific community and to a wider community who may have an interest in your research.

It cannot be assumed that the audience to which your proposed study is presented will be passive; they may well want to influence your study. A key issue in research design is the way in which the research problem is defined and, as is argued in Chapter 4, social and cultural researchers need to evaluate critically the definitions of social problems offered to them by policy makers. It is important that we, as social scientists, use our skills and knowledge to define the research problem. Although we can use common-sense concepts up to a point, we cannot expect such

concepts to do the analytical work of theoretical concepts. The research proposal stage is often the point at which such issues are decided, and this will influence the conduct of the research. If you are clear about what you are doing and why, it is much easier to communicate this to others. Presenting the design in a proposal forces researchers to sort out their ideas and make them accessible to others at an early stage. This may seem like hard work but communicating our research to others is an essential part of the job. It also enables us to define the research on our terms, as social scientists.

The research proposal as design tool

The need to produce a proposal in a particular format to satisfy the requirements of others may at times seem like a constraint. However, writing a proposal enables the researcher to set out the study from beginning to end so that the different elements that need to be included can be considered. It can be used to develop ideas and consider different methods, meaning that the initial draft of the proposal may look quite different from the final version. We often see things more clearly when we write them down. Drafting a research proposal allows you to design the study that you would like to do within the constraints you have, such as time, access to the population you are interested in and competence in particular methods.

Proposals for quantitative research could be said to be relatively straightforward, with information fitting into certain categories. Standards used in quantitative research have to some extent influenced expectations for qualitative research proposals. This can present a challenge for those proposing to carry out exploratory qualitative studies in which it may be counterproductive to pre-specify everything at the proposal stage. When using qualitative methods there is, therefore, the need to be creative and flexible in putting ideas across, especially if the audience is used to receiving proposals for

quantitative work. The most important thing is to be clear about what you are doing and why.

Writing a research proposal

The start of a research project is a time when you can think quite broadly about topics and methods. Later on you will need to focus in and be more specific about how you intend to turn your idea into a project. This is the stage at which it is useful to begin to identify and develop possible research questions. Let us consider developing a research proposal for a study about students' experience of paid employment.

Some possible questions related to this topic are given in Box 7.3. Writing down such questions is the first part of drafting a proposal. It can be seen how one topic can generate a wide range of possible research questions. To develop the project requires moving beyond the stage of jotting down questions, and structuring the project so that what you are planning to do, why you are planning it, and how you intend to do it are clear. Krathwohl (1988) suggests that signposts in the way a proposal is presented are helpful. These may be subheadings indicating main areas to be included. I will use one such sequence of subheadings now, to explain what can usefully be placed under each.

Title

The title should describe briefly what the project is about. For example:

Employment patterns in full-time undergraduates: proposal for a survey of students in London

In this title, information is provided on the subject area, target audience and where it will be carried out. Your name, and the names of any others involved if it is a collaboration, should also be stated with the title.

Abstract

Research proposals often have a short summary of approximately 200–300 words after the title. This is usually written after the proposal has been developed. It should contain a short overview of your proposed study, including a brief introduction to your chosen topic, your research question, an overview of the methods to be used and how the findings are likely to be applied. It is good practice to develop the skill of writing abstracts as they can be used to tell people in a brief, clear way about your research. Abstracts for two proposed studies are shown in Box 7.4.

╔═══════════════════════════════════ BOX 7.4 ═╗

ABSTRACTS FOR TWO STUDIES USING
CONTRASTING METHODS

Employment patterns in full-time undergraduates: survey of students in London

The reduction of state funding for undergraduate education in the UK means that an increasing number of students need to work part-time in order to support themselves during their degree courses. Little is currently known about the impact part-time paid employment has on students, both in terms of the effect on their academic performance and on their overall quality of life, including stress. This study aims to describe the patterns of part-time employment in a sample of second-year students studying at a large London university. A questionnaire will be sent to 500 students, randomly sampled from a list of all part-time and full-time students registered at the university, covering four main areas: demographic characteristics; type of job; academic performance; and quality of life. SPSS will be used to carry out the data analysis. Findings will be disseminated to students via relevant websites and to policy and research audiences with a focus on undergraduate education.

Employment patterns in full-time undergraduates: qualitative interview study

The reduction of state funding for undergraduate education in the UK means that an increasing number of students need to work part-time in order to support themselves during their degree courses. Little is currently known about the impact part-time paid employment has on students, both in terms of the effect on their academic performance and on their overall quality of life, including stress. This study aims to describe the experiences of part-time paid employment in students at one London university. Qualitative interviews will be conducted with 20 second-year students (10 male and 10 female, in a variety of subject areas). The interview will cover four main areas: the nature of the paid work engaged in; reasons for working; effect on academic performance; and effect on their quality of life. Thematic analysis of the interview data will be conducted with the assistance of NVivo qualitative analysis software. Findings will be disseminated to students via relevant websites and to policy and research audiences with a focus on undergraduate education.
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Background or introduction

It is then important to introduce the subject and supply some background information. Social science covers all aspects of social life, and uses a wide range of theoretical perspectives and methodologies. Potential readers may need to be able to understand your proposal without necessarily having a thorough knowledge of the particular field. Similarly, they may not be an expert in the methodological approach chosen. The main aim of a reader may be to appreciate the nature and feasibility of the study, rather than to gain in-depth knowledge of the subject and methodology.

Continuing the example of a hypothetical study of students and paid employment, I would now write about the following things:

One reason for choosing this topic is the continuing debate about funding for higher education in the UK. State funding has been cut and there is a lot of media coverage on the hardship faced by students, suggesting that an increasing number of students have to work part time in order to support themselves. I would like to explore this phenomenon, to see if this is really the case, to what extent it is happening, and what effects it is having on students who have to work to help support themselves. For example, it may affect the time that students have to study, thus producing poorer examination results, or it may affect their social lives in adverse ways.

An introductory statement would point out all of this, but do so quite briefly, in order to give the reader a quick preview of the problems addressed by the research project.

Literature review

Following the introductory statement, it would be important to undertake a brief review of the relevant literature (which would be expanded in the main research report). The literature review is important because one of the first things a reader will want to know is whether this research has been done before. Any major research in the field needs to be described. It can then be shown how the project will add to current knowledge. Librarians can advise on a range of resources which may be helpful. A major source of relatively up-to-date information can be accessed through the Internet and computer databases that contain abstracts of recently published research. Chapter 6 contains more detailed guidance on this aspect of doing research.

The literature review will reflect whether the study is aiming to influence social policy or social theory, as our continuing example shows:

One way of taking forward my proposed study of students is to include reference to current and previous higher education *policy* in the literature review. This emphasises the policy relevance of my research.
Alternatively, or in addition, I could discuss literature with a strong social *theory* perspective, such as interactionist studies (see Chapter 3) of the meanings students attach to paid employment while studying full time.

Thus, the type of literature explored here will have a bearing on the eventual use of the findings of your study. It is a good idea to highlight recent publications from both theory and policy. Most contemporary social research is expected to discuss policy implications on some level, and many policy makers now understand the value of social theory in providing novel ways of seeing social issues. The literature reviewed may therefore need to include reference to both of these.

The extent of the literature review at the proposal stage will depend on the nature of the study, the time available, and to whom it will be submitted. Funding bodies will send a proposal out for peer review, so you need to ensure that you have included research by any key people in the field. On the other hand, it is important to be selective in your reading, and stick to the things that are directly relevant to your research. This is a skill in itself. Finding and exploring the literature can be very time-consuming. If you have time, you may wish to contact people who are currently working in the field who can give you an idea of any work in progress.

A qualitative research proposal may involve a less comprehensive literature review at this stage, as data analysis may inform which literature is relevant. For example, if you are undertaking an exploratory study of students and paid work, you could assume that working is found to be stressful and undertake an extensive review of the literature on student stress. However, it may be that your data analysis indicates that students find working a positive experience which enables them to make friends outside college and gives them money to go out. In this case it would be better to review some of the relevant literature at the proposal stage, but allow the data analysis to inform a more extensive literature review. However, you will need to ensure that you build in time at the data analysis stage of the project to do this.

Aims and objectives

Now that the relevance of the area to be investigated has been highlighted, the research question needs to be defined more precisely. In research proposals, research questions are often framed as *aims*, which describe what your research intends to achieve. How specific the research question is made at this stage will depend on what is to be discovered. You may wish to set up a hypothesis. For example, one could try to see whether the following statement is true or false:

Full-time undergraduate students who are in paid employment are more likely to experience psychological stress than those who do not work.

On the other hand, a research question for a quantitative or qualitative study could be:

To describe the effects of paid employment on the lives of undergraduate students.

A number of objectives may be drawn up which describe what you need to do to achieve your aim, and thus address your research problem. For example, in relation to a research problem similar to the first one shown in Box 7.4, an objective could be:

To undertake a survey of full-time undergraduate students to describe the patterns of undergraduate employment in London.

This would include the number of students who work, their income, the number of hours worked per week, factors influencing the decision to take up or not take up work, their perceptions of the effects of the work upon their studies, and their examination results.

Objectives must be clear, and it should be easy to decide whether they have been achieved or not. Definitions of the research problem or hypothesis and objectives are, as previously stated, an important part of a proposal. It is therefore important to spend some time working these out. In exploratory research, the objectives may need to be quite broad. It is not uncommon for inexperienced researchers to get carried away with the methodology or idea and lose sight of whether the method will achieve the objectives. It is advisable to check them against each other regularly when developing your proposal. Pragmatic factors such as the time available may influence your research problem and objectives.

Methods

The way in which aims and objectives will be achieved will be set out in this section. An explanation of the *methods* of data collection and analysis to be used (e.g. a survey based on random probability sampling, or discourse analysis of interview transcripts) and an explanation of why these methods are the most appropriate will be needed. For example, I could say:

> In order to ascertain patterns of part-time employment in students a survey of a random sample of 100 undergraduates in one university will be undertaken.

Alternatively, I could propose that:

> Unstructured interviews with five working and five non-working students will be carried out. A comparative analysis of interview transcripts will be carried out, using discourse analysis, to explore how the students construct the meaning of employment and studying in their lives.

The methods section should also include other information about how the research will be carried out, including the sampling, recruitment of respondents, establishing access to the field and, in quantitative studies, what variables you intend to include in the analysis. The emphasis here will be influenced by the method. For example, a survey of students could be through face-to-face interview, a postal questionnaire or telephone interview. Therefore I need to specify how I will carry out the survey. In a study using discourse analysis of interview transcripts, I need to set out what form the interviews with students will take, such as how I introduce the topic, and what areas will be covered.

> I will pilot the questionnaire with a small group of students before sending it out to the main sample. I will check to see whether any of the questions are ambiguous and interpreted differently by different people.

Statistical methods that will be used to ensure that findings from the survey are valid and reliable can also be stated. Statistical methods can be used to assess the likelihood of findings coming about through chance because a sample has been studied rather than the whole population.

Data analysis

A short summary of how you intend to analyse the data should be included. This is relevant to both quantitative and qualitative research. For example, you need to include the key variables you will use for subgroup analysis such as age, sex, ethnic group. Any statistical data analysis packages you plan to use should be stated (e.g. SPSS). Methods of qualitative analysis should also be included where possible, and any qualitative data analysis computer programs specified (e.g. NVivo). How you will ensure the reliability and validity of your findings should be clarified here and in the methods section (see Chapter 30).

For example, in an online questionnaire survey of students, I might seek to establish trust in reliability and validity by saying:

In order to use such statistics you need to ensure that you have included enough people in your sample. Methods of sampling and making statistical inferences about the population from which the sample has been chosen are explored further in Chapters 9 and 19.

Reliability and validity are also important in qualitative research, though, as you will see in Chapter 30, it is sometimes felt necessary to modify quantitative criteria for establishing these things in qualitative studies. However, the broad principles are often the same, and frequently involve ensuring consistency and accuracy in the way the data are collected and analysed. In a study involving open-ended interviews with students I might say that:

> I plan to use a short topic guide with all the interviewees, but also to use open-ended questions which will allow any new topics I had not initially incorporated to be added to the topics included.

I would state that:

> In order to maximise the reliability of the findings all interviews will be transcribed and a number of categories produced based on an initial reading of the transcripts. Each interview will then be systematically analysed using these categories. Written analysis will be supported through extracts from the data.

Ethical issues

As shown in Chapter 5, social researchers are expected to take ethical issues into account when doing research, and this needs to be discussed in the proposal. This largely involves attention to ethical principles regarding the treatment of research participants. The amount of attention to ethical issues required depends upon the sensitivity of the study proposed. For example, ethical issues surrounding interviews about sexual health are likely to be much more sensitive than interviews about work patterns. It is important that no harm, physical or psychological, will come to anyone taking part in your research.

Ethical issues in social research are not always clear-cut, but a key one is the preservation of confidentiality and the privacy of people involved. For example, in my proposed study I need to consider how I will ensure that individual students will not be identifiable when I present my findings. I also need to consider how I will gain consent from the students I want to interview. One possibility would be to state that:

> I will give all potential interviewees a letter with information about the study and its purpose, and ask them to sign a consent form. I will ensure that the interviews will be identifiable only by myself through a coding system.

Some organisations that sponsor or fund research require that under certain circumstances (e.g. research involving human or animal participants) formal approval from a research ethics committee is gained from the outset. This is particularly common in health-related research. If this is the case, a letter indicating approval by such a committee may need to be attached to the proposal.

Dissemination and policy relevance

Dissemination of research findings is an issue that is receiving increasing emphasis, especially from bodies that fund research. Social and cultural research findings are used in two main ways: application to social policy, and building social theory. Social scientists have been criticised in the past for not sharing their research findings with those who may use them. Many funding bodies now require that applications for funding include plans for communication and details of how findings will be shared with users.

Continuing my hypothetical example, I might say that:

> The research will contribute to knowledge about the effects of employment on academic standards and student welfare.

I could argue that it has policy relevance in that:

> The research will provide direction for the development of support services for students and will contribute to policy debates about levels of government financial support for students.

The study could also contribute to the development of social theory. For example, I could argue that:

> Discourse analysis of interview transcripts will contribute to new understandings of how people construct narratives of self-identity in relation to work and studying.

Additionally, I might say that:

> A report will be written and submitted to the National Union of Students and the university Student Welfare Department, and it is planned to submit a paper to the next Psychology Association conference.

References and appendices

Any references to other studies made in the text should be listed at the end of the proposal. Referencing should be done according to a standard system such as the Harvard referencing system (if you type this into Google, there are many links to websites with guides explaining this), which requires standard information about books and articles to be presented in a particular order (e.g. author, date, title, publisher). Place any appendices after the references, in the order in which they have been mentioned. Appendices will include any relevant papers you intend to use, such as questionnaires, topic guides and consent forms.

Resources

Good project planning will consider what resources are needed in order for the proposed study to be successful. Resources include: money (funding); appropriate skills and training (e.g. in literature searching; computer-aided data analysis skills); access to sites and participants; time; and supervision and support. Possible resources needed for a survey and a qualitative interview study can be seen in Box 7.5.

Formal applications for funding will usually require detailed budget breakdowns. A proposal should show that plans have been tailored so that they are feasible within budgetary limits. Let us imagine that in my study I had planned to send a postal questionnaire to all the 2,000 full-time undergraduate students at my university. I have managed to gain a small grant from an interested organisation for postage and printing of questionnaires. However, taking into account all the postage and printing costs, I can survey only 500 students. Similarly, in the study involving unstructured interviews I need to visit interviewees in their homes, which means that I need a budget for travel. This, together with other factors such as the time involved in travelling, has prompted my decision to limit the number of interviews I will undertake.

Schedule or timetable

It is valuable to have some form of structured timetable for a project. We often set ourselves unrealistic timescales for projects, such as underestimating how long it will take to gain access to

the people we need to interview, or by not foreseeing that we may need to send out a second questionnaire to increase our response rate. For example, in considering my hypothetical project I realise that I need to allow time to negotiate access to student names and addresses through the university. The time available is 32 weeks from start to finish. I have been advised that it will probably be easiest to contact students during term time, so I need to take this into account in my plan. Box 7.6 shows a plan for the qualitative interview study.

Box 7.7 shows the same thing for a survey proposal. It can be seen that a longer time has been allowed for data analysis in the qualitative study. This will include time to explore relevant literature. The plan for the survey study follows similar lines, but has more structure. Study timetables may also be presented as a chart, such as in a Gantt chart (see Figure 7.1).
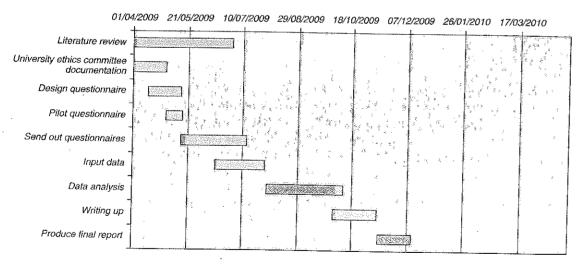

FIGURE 7.1 Gantt chart for a survey study

Revising the proposal

A proposal will start off as an outline and usually require several revisions. Each section mentioned here affects the others. For example, your time schedule will influence the method you have chosen, which has been influenced by your research problem. You need to make sure that all aspects of the proposal look as if they will work in relation to each other. It is useful to think in terms of how the human body functions. If we undertake strenuous physical exercise like running a marathon, we will need to drink a lot more fluid than usual in order not to become dehydrated and to last the course. We thus need to plan ahead and to make sure we have access to fluid along the way. The main thing to check is that the method will enable you to achieve your objectives. Researchers tend to be over-ambitious in the amount they set out to do. Feedback from others may be useful here. Alternatively, they may suggest new lines of inquiry, whose practical implications need to be thought through.

As discussed earlier, relevant audiences for your research need to be considered at an early stage. It is important to present work in a way that is accessible to other people. Strunk and White (2000) provide a useful guide, based on examples, on how to develop a good writing style. They suggest that 'the approach to style is by way of plainness, simplicity, orderliness, sincerity' (2000: 69). We all develop our own personal writing styles over time. It is valuable to ask others for their comments. For example, did they understand the reason for carrying out the research from the proposal? It is easy to get very wrapped up in the subject and think that, because we are convinced of the particular value of our research, others will be too. The way in which the proposal is presented can enable the reader to appreciate what you are planning to do. Box 7.8 shows an extract from Strunk's *The Elements of Style* (1918). Though originally written some 100 years ago, the advice in this book, which is available in full on the Internet, remains relevant today. Note that the examples totalling 38 words are reduced to just 12 words by the replacements suggested, indicating that brevity as well as clarity is enhanced by the application of Strunk's advice.

Ideally, a research proposal should be concise. This may seem impossible considering the amount of detail given here about what to put into a proposal. This is where revision and writing style is important. The reader will want to see easily what you are proposing, whilst at the same time have their attention held by the content. Krathwohl (1988) suggests that the proposal should be easy for the reader to skim. Dividing the proposal up using some of the headings discussed here will help with this. Effective use of language is important. For example, where possible use short, simple sentences.

Managing your research project

Producing a research proposal constitutes your study as a *project*, which implies that all the various aspects will be integrated. It provides the template for how you will manage your project. Researchers are accountable for the conduct of their research and need to demonstrate that they know what they are doing and that the project is likely to work as intended. This may seem daunting, but, as discussed earlier, you do not have to go it alone. It is often useful to access advice and

support from peers when planning and conducting research. Feedback from friendly peers can help to prepare you for later appraisal by less sympathetic audiences. Critical appraisal works as a form of quality control in the wider research community and is a feature of all research. However, whilst it is important to be open to the comments and advice of others, at the same time you need to make the research your own. You are the one who will have to describe and explain your rationale, and use the methods set out in the proposal. You therefore have to take responsibility for it.

Collaborating with others and submitting joint proposals for funding are common, which is another reason for getting used to sharing research ideas with peers. Collaboration might also include seeking advice from someone with particular expertise. For example, when undertaking quantitative research it is common to get advice from someone with statistical expertise at an early stage. Although it is not usual in research projects undertaken for a course of study, research is often undertaken by a team, sometimes including a range of different disciplines. Larger research projects usually have an advisory or steering group set up to discuss the study design and progress. If you are part of a

research team it is important that all team members are clear about the research design and that agendas are made explicit. One way of doing this is to ensure that there is clear documentation of how all decisions are made and of how the research progresses.

As we all know, even the best laid plans can go off course. A common problem when collecting quantitative or qualitative data is unforeseen difficulty in recruiting the samples proposed. The likelihood of such problems will be minimised if time is taken to prepare the design at the start. If your study does not go according to plan, given accurate recording of the process of the research, it will be possible to learn from the experience and share that learning with others. Additionally, solutions may be available more easily than you expect if you are prepared to re-think your original aims so that failing to fulfil original plans is turned into a *strength* of a newly conceived project. Chapter 31 contains advice on how you can do this, together with some fully worked examples.

Conclusion

A research idea is developed into a research project through the crafting of a good research question and research proposal. This involves developing and organising the study before data collection begins. The main features and benefits of research proposals are summarised in Box 7.9.

Learning to design research and write proposals is part of the professional development of social scientists. Writing a proposal helps you to design your study and is a way of communicating to others what you are planning to do and why. Your research proposal is a way of setting out the way you will manage your project so that it is successful. Proposals can be simple or detailed, depending upon the scale of the study. A proposal for a small-scale study will usually be quite short, with maybe only a couple of sentences on some sections discussed here. All the areas covered should be at least given some thought. A proposal should be as short as possible, whilst at the same time containing all the necessary information the reader will need to appreciate what you plan to do and why.

FURTHER READING

Bell (2005) and Thomas (2009) are good basic guides to carrying out a research project from start to finish. Kelly (2010) describes how to develop research questions in qualitative research studies. Punch (2006) is a helpful text on writing research proposals. Strunk and White (2000), first published in 1918, is an interesting and helpful little book on how to write well, containing lots of useful examples of good and not so good writing style.

Student Reader (Seale, 2004b): relevant readings

2 C. Wright Mills: 'On intellectual craftsmanship'

8 Research design

See also Chapter 32, 'Preparing and evaluating qualitative research proposals' by Janice M. Morse in Seale et al. (2004).

Journal articles discussing or illustrating the issues raised in this chapter

Sandelowski, M. and Barroso, J. (2003) 'Writing the proposal for a qualitative research methodology project', Qualitative Health Research, 13: 781–820.

Travers, M. (2009) 'New methods, old problems: a sceptical view of innovation in qualitative research', Qualitative Research, 9: 161–179.

A research proposal for a quantitative project:

Sayers, S.M., Mackerras, D., Singh, G., Bucens, I., Flynn K. and Reid, A. (2003) 'An Australian Aboriginal birth cohort: a unique resource for a life course study of an indigenous population. A study protocol', BMC International Health and Human Rights, 3: 1.

Web links

Research Proposal Guide: http://researchproposalguide.com/

Developing a research question www.esc.edu/esconline/across_esc/writerscomplex.nsf/0/f87fd7182f0ff21c852569c2005a47b7

Examples of research proposals: https://webspace.utexas.edu/cherwitz/www/ie/sample_diss.html

Dissertation proposal workshop: http://iis.berkeley.edu/DissPropWorkshop

ESRC How to Write a Good Application – guidelines for writing a successful application for a social science research project: www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Support/research_award_holders/FAQs2/Index1.aspx

The Elements of Style by Strunk (1918) – a guide to using good English: www.bartleby.com/141

KEY CONCEPTS FOR REVIEW

Advice: Use these, along with the review questions in the next section, to test your knowledge of the contents of this chapter. Try to define each of the key concepts listed here; if you have understood this chapter you should be able to do this. Check your definitions against the definition in the at the end of the book.

Dissemination	Research design
Harvard referencing system	Research questions
Hypothesis	Signposts
Objectives	Steering group

▣ Review questions

1 Name four types of research question.
2 Outline a question that can *only* be answered by quantitative methods, another that can *only* be answered by qualitative methods, and a third that could be answered by either.
3 What are the advantages and disadvantages of writing a research proposal at the start of a project?
4 What are the key components of most successful research proposals?
5 What is a Gantt chart and why is it useful in writing a proposal?

Workshop and discussion exercises

1 Developing a research question:

(a) Work in pairs or small groups.
(b) Brainstorm topics that you're interested in studying and write them down on paper or a white board. Spend about 15 minutes doing this.
(c) Organise the topics into groups if there are many.
(d) Select a topic and start to consider different ways you could examine it using a concept map or spider diagram.
(e) Consider alternative questions on the chosen topic.
(f) Decide on a research question.

2 Developing a research proposal

Take your research question and using the headings in this chapter begin to devise an outline research proposal. In particular set out the following headings and make notes as to what you would include under them.

* Introduction
* Research question or aim
* Objectives
* Methods
* Data analysis
* Dissemination

This will not work as a linear process – go backwards and forwards between the areas and make adjustments.

If you are working as a small group or pair as part of a larger group session, present your draft proposal to the larger group. Their questions and comments will help you to revise your research question and proposal.

Ask a friend or fellow student to summarise back to you what you are planning to do.