3
Preparing to Research Real–World Problems

Chapter Preview

Before you dive in
Reading for Research
Designing Method
Developing a Proposal

'Spectacular achievement is always preceded by spectacular preparation.'

- Robert H. Schuller

BEFORE YOU DIVE IN

Once armed with a 'researchable' question, the next stage in the research journey is to work on and develop your 'game plan'. For my money, there are three distinct stages to the development of this plan. The first is reading. Reading for research is essential. Knowledge builds, and it is virtually impossible for researchers to work towards the production of new knowledge, if they don't have a good handle on the current state of play.

The second stage is to develop your methodological design. This is the 'how' section of your research plan; how you will move from questions to answers, how you will collect your data, and how you will analyse that data. It will have elements that are as broad as questions related to paradigm, and as specific as questions dealing with the nuts and bolts of who, where, when, how and what.

The final stage in developing your game plan is the formal write-up of the plan itself; also known as the research proposal. Now when it comes to researching real-world problems very few projects get off the ground without some sort of approval. It may be as simple as verbal approval from your lecturer or employer. But it might also require a more formal approval process gained through an ethics committee, a corporate executive board, or a funding body. And of course

you may need approval from more than one of the above. In all of these situations, clear articulation of your plan will be necessary in order for you to *sell* your project. Specifically, you will need to articulate: (1) what you are trying to find out; (2) why finding it out is important/significant; and (3) how you plan to find it out. And the best way to start this process is by reading.

READING FOR RESEARCH

There really is no way around it; reading is an essential part of the research process. Why? Well because you can't really engage in research from a platform of ignorance. When you are learning and your goal is to take on board knowledge that is already out there – well, then it doesn't really matter if you know a little or a lot. The goal is self-education, which needs to, and should, start from wherever you are.

Conducting research is a bit different. When you are conducting research, you are engaging in a process of knowledge production. You are producing knowledge that you hope others will learn from, act on and improve situations with. That demands responsibility for knowing what you are talking about. Sure, a lot of knowledge can come from experience – and I strongly advocate drawing on your experience. But even rich experience is likely to be seen as anecdotal if it is not set within a broader context. Reading is what can give you that broader context.

The purpose of reading

Reading acts to both ground and expand your thinking. It can help generate ideas, it can be significant in the process of question formation, and it is instrumental in the process of research design. It is also crucial in supporting the writing process. A clear rationale supported by literature is essential, while a well-constructed literature review is often a prerequisite in research proposals and research accounts.

Reading will help you:

- *Focus your ideas and expand relevant background knowledge* – nobody knows everything about a particular topic and reading can certainly help you get up to speed.
- *Develop appropriate questions* – popular media covering current debates, controversy and disputes around a particular issue can help generate questions of societal significance, while engagement with more 'scientific' literature can point to knowledge 'gaps'.
- *Argue the relevance of your works* – a well-articulated rationale is part and parcel of any research proposal and writing one will require you to draw on literature that can argue the societal and scientific significance of your study.

- *Inform your thinking/approach with theory* – almost every discipline area, for example, nursing, education, management etc., as well as broader areas of sociology and philosophy, rest on rich theory that can add both depth and credibility to your study.
- *Design suitable methods* – reading can support the design of methods in a number of ways. Reading can: (1) support learning related to relevant methodologies and methods; (2) allow you to critically evaluate, and possibly adopt, methods considered 'standard' for exploring your particular research question; (3) help you in assessing the need for alternative methodological approaches; and (4) support you in the design of a study that might overcome methodological shortcomings prevalent in the literature.
- *Construct and write a literature review* – a thorough and critical review of past research studies conducted on your topic and/or similar topics is often a criterion of fundable/rigorous research.

Types of literature

The array of literature you might find yourself delving into may be a fair bit broader than you first imagine. Because reading for research is something that informs all aspects of the research journey, almost any type of reading is fair game. For example, you are likely to call on:

- *Discipline-based reference materials* – if you are relatively new to a particular discipline or paradigm, subject-specific dictionaries and encyclopedias can help you navigate your way through the discipline's central terms, constructs and theories.
- *Books* – this might include introductory and advanced texts, anthologies, research reports, popular non-fiction and even fiction works that can provide background and context, or inform theory and method.
- *Journal articles* – these take you beyond background readings to readings providing rigorous research accounts. This type of literature is therefore instrumental when you are getting serious about conducting research.
- *Grey literature* – this refers to both published and unpublished materials that do not have an International Standard Book Number (ISBN) or an International Standard Serial Number (ISSN), including conference papers, unpublished research theses, newspaper articles and pamphlets/brochures.
- *Official publications statistics and archives* – these materials can be a valuable source of background and contextual information, and often help shape a study's rationale.
- *Writing aids* – this includes bibliographic reference works, dictionaries, encyclopaedias and thesauruses, almanacs, yearbooks, books of quotes, etc. Such resources can offer significant support during the writing-up process, and can be used to: (1) improve the linguistic style of your work; (2) add points of interest to the text; (3) check facts; and (4) reference those facts.

Sourcing your readings

Recognizing the need for and purposes of reading doesn't put the literature in your hands. You still need to find and access it. Now there are two distinct strategies that can help you in your quest to find relevant literature. The first is to call on experts who can give you the advice you need to make a start. The second is to hone your search skills and hit the library and Internet.

Calling on 'experts'

If there is one resource you don't want to overlook in your hunt for relevant readings it's your local/university librarian. Information technology is changing at a rate of knots, so students, practitioners and professional researchers alike need to call on experts who can orient them to the latest computer/Internet searching facilities. It's also worth knowing that many university librarians are designated to a particular academic area, for example, social science, nursing, education, environment, etc. These 'specialists' can introduce you to relevant databases, journals (both hardcopy and electronic), bibliographies, abstracts, reviews etc., specific to your area.

'Academics' can also be quite helpful in your search for relevant literature. If you have access, talk to supervisors, professors and lecturers. They often know the literature and are able to point you in the right direction; or can at least direct you to someone better acquainted with your topic, who can give you the advice you need to make a start.

Finally, you can call on experts in the field. There is a good possibility that another researcher has recently sourced and reviewed your area of literature – or an area quite close. Have a look at relevant journal articles, as well as Master's and PhD theses.

These works generally require comprehensive literature reviews and thorough bibliographies that can give you a huge head start when it comes to sourcing your readings. And don't forget you can also turn to practitioners; those who actually work in relevant fields often know the literature.

Honing your search skills

On the up side, literature now abounds. Library search facilities often allow you to explore way beyond the confines of their local holdings. And, of course, an amazing amount of research literature is now accessible on the Internet using commonly available search engines. In fact, the popular search engine *Google* has recently launched *Google Scholar* (scholar.google.com), which allows you to search specifically for abstracts, peer-reviewed articles, books, theses and technical reports across a variety of disciplines.

Now the downside of this incredible availability is an increasing need to develop skills for wading through it all. If you are regularly on the Internet, you have an

advantage because the skills you need to negotiate the Web are the same as those you need to find literature. Basically, you need to be able to run a search engine using key words. It is, therefore, essential to be able to identify your topic, subtopics, variables, theories, theorists, methods, key concepts, etc. in the form of key words. You can then search for works by both single and combined key words searches.

Say, for example, you were interested in the relationship between *high-density housing* and *health*. You would start your literature hunt by running a search using these key words. Now this is likely to lead you to a mass of relevant literature, which can then be culled by adding key variables you find particularly relevant or interesting. For example, say, *socio-economic status*. Using this process you can add additional key words to narrow your search, remove keywords to capture more literature – or swap key words around to see what you come up with.

Figure 3.1 highlights the relevance of the generated literature based on key concepts and their interrelationships. Now some areas of intersection may not

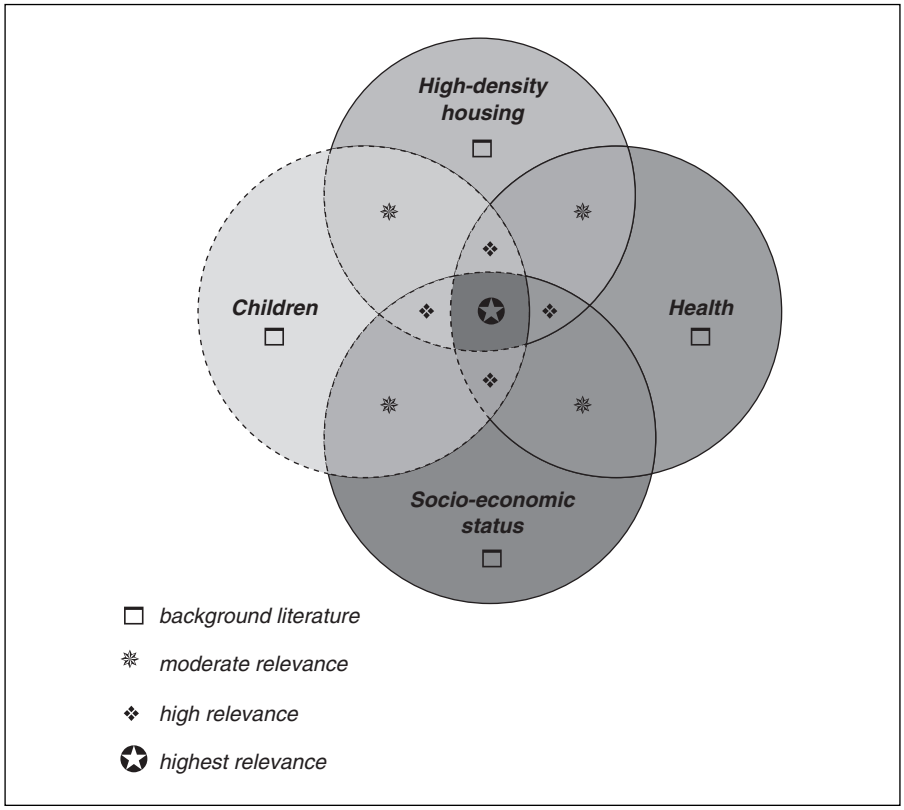

FIGURE 3.1 INTERSECTING AREAS OF LITERATURE

yield much literature, but if you keep playing around with ideas, concepts and variables, you are bound to build a solid literature base.

Managing the literature

Now a mound of literature is only so helpful if you're not systematic and it ends up sitting in a pile in the corner of your office or study. Crucial to using literature is your ability to manage it, and this involves being able to: (1) quickly and efficiently assess relevance; (2) systematically keep track of sources; and (3) make relevant notes.

Assessing relevance

The ability to quickly and economically wade through literature in order to assess relevance and 'get the gist' is important to efficient researching. If you are reading a journal article, have a look at the abstract or executive summary. This should give you a good sense of relevance. In a book, peruse the table of contents, the back cover blurb and the introduction. Also have a look at both chapter and overall conclusions. Within a few minutes you should be able to assess whether a work is likely to be of value to your own research process.

Being systematic

Nothing is worse than looking for a lost reference that you really need. It could be a quote with a missing page number, or a fact with no citation, or a perfect point that needs to go right there – if only you could remember where you read it. If you can incorporate each of your resources into a management system you will be saving yourself a lot of future heartache. Systematically file your papers, keep rigorous references and use a consistent style. Yes it can be a pain, but if you are organized and diligent now – it will certainly pay off when it's time to call on your resources. You might also want to consider using bibliographic file management software such as *Procite, Endnote* or *Reference Manager*. These programmes can automatically format references in any number of styles, such as Harvard/author–date, Vancouver, etc., once basic bibliographic details are entered.

Keeping notes

Again, it may sound like a pain, but I strongly recommend developing a systematic approach to note taking that allows for a methodical and organized review of materials from first read. Keep in mind that the last thing you probably want to do is read and then reread your materials because you forgot stuff or it gets jumbled in your mind.

Keeping notes or 'annotating' your references can help remind you of the relevance, accuracy and quality of your sources. Now this doesn't mean you need to take huge amounts of formal notes. Annotations are generally for your eyes

only and are jotted down in order to minimize the time it takes to incorporate these works into your own. Things you might want to note while reading include:

- *Author and audience* – the Internet is full of propaganda, uninformed opinion and less than credible research. Ask yourself, who is doing the writing? What are their qualifications? Are they professionals, politicians, researchers, unknown? And who is the work written for? Is it for an academic audience, general public, constituents, clients? This process can help you assess a work's credibility.
- *Summary* – the aim here is to note key points that will help you research and write. Write what you think you will want to know later on, and try not to fall into the trap of trusting your memory. Now keep in mind that you can write annotations in any manner/style you want; you don't have to be formal. Doodles, mind maps, quotes, page numbers, etc. are all fair game.
- *Critical comments* – while summary is important, it is just as important to capture your critical reflections. Now this doesn't mean you have to be 100% negative. In academic reviewing, the word 'critical' means informed and considered evaluation. Ask yourself: Is this new? Is this old? Is this cutting edge? Is this just a rehash? Are there fundamental flaws in the methodology? Are author biases coming through? Do you believe the results are credible? In other words, what did you *really* think of this particular work.
- *Notes on relevance* – this is where you try to make the connection between what others have done and what you want to do. Ask yourself how this work sits in relation to your own. Is there anything in the work that makes a light bulb go off in your head? Is there some flaw in the thinking/methods that makes you want to explore this area/topic/question from a different angle? Is there a quote, passage, or section that really gets to the heart of what you are trying to do or say?

If you can get into the habit of treating your readings systematically, you will be in a position of strength when it comes time to call on those reading throughout the research process.

Conducting and writing a 'literature review'

While not necessary in all real-world research write-ups, a formal 'literature review' is often required in funding proposals and formal research reports. And yes, the task can be daunting. Conducting and writing a good literature review isn't easy. You need to negotiate multiple purposes, work towards logical structure with appropriate content, and make convincing arguments.

The purpose

You'd think that the purpose of a literature review was to simply review the literature – but it's actually much more. A well-written literature review will:

- ***Inform*** *readers of developments in the field* – the literature review should provide your readers with an up-to-date account and discussion of relevant theories, methods and research studies that make up a particular topic's body of literature.
- ***Establish*** *researcher credibility* – the literature review allows you to establish credibility through: (1) rigorous and critical evaluation of relevant research works; (2) a demonstrated understanding of key issues; and (3) the ability to outline the relationship of your own work to that of the rest of the field.
- ***Argue*** *the need for, and relevance of, the present study* – the literature review needs to make an argument for your own research agenda; it needs to set your study within the context of past research.

The writing process

Now a literature review is actually an argumentative piece of writing that needs to go well beyond a 'he said'/'she said' report. Remember, the goal here is to *inform*, *establish* and *argue.* And to do this well, you'll need to:

- *Read a few good, relevant reviews* – you need to have a sense of what a good literature review is, before you are in a position to construct your own.
- *Decide on coverage* – this can involve exhaustive coverage that cites all relevant literature; exhaustive coverage with only selective citation; representative coverage that discusses works that typify particular areas within the literature; coverage of seminal/pivotal works; or a combination of the above.
- *Write critical annotations as you go* – if you can sort and organize your annotations by themes, issues of concern, common shortcomings, etc. you may find that patterns begin to emerge. This can go a long way towards the development of your own arguments.
- *Develop a structure* – your literature review might be organized by topical themes, the tasks that you need the literature review to accomplish, or the arguments you wish to make.
- *Write purposefully* – the literature review is driven by the researcher and needs to have and make a point. If your audience doesn't know why you are telling them what you are telling them, you need to reconsider your approach.
- *Use the literature to back up your arguments* – rather than review, report, or even borrow the arguments of others, use the literature to help generate, and then support, your *own* arguments.
- *Adopt an appropriate style and tone* – the trick here is to avoid being over-critical, but to also avoid being too deferential. Keep in mind that when you are writing a literature review you are doing so as a fellow researcher who is engaging, learning, debating, arguing and contributing.
- *Be prepared to redraft* – whether you are a student or professional researcher, you're not likely to get away without a redraft or two (or three or four).

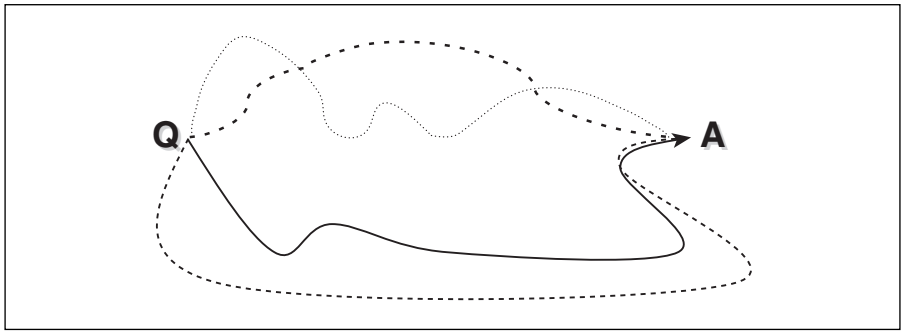

FIGURE 3.2 FROM QUESTIONS TO ANSWERS

DESIGNING METHOD

It may sound incredibly obvious, but the goal in designing method is to have your approach either (1) answer your well-articulated research question or (2) test your skilfully constructed hypothesis. Now clearly this implies that to design method you need to have either a well-articulated question or a skilfully constructed hypothesis, and this is true (see Chapter 2). If you don't know where you want to go, you simply can't determine a path for getting there.

So let's talk about paths for a minute. Is there only one path that can get you from questions to answers or are there several options? And if there are several options, how do you go about choosing the path you should travel along?

Well, rarely is there only one path to get from A to B or from questions to answers. As indicated in Figure 3.2, there are almost always possibilities. Paths can be varied and diverse, but in all likelihood there will be more than one way to generate the data that will lead to credible answers.

The question then becomes how can you find yourself travelling along the most productive path; how can you make decisions that will ensure you are approaching your study in a manner that will best lead to credible data and trustworthy results?

Well to figure that out, you really need to know and understand the criteria relevant to working through the gamut of possibilities. For my money there are two such criteria. The first is that your methodological design addresses your question(s). The second is that all elements of your design are practical or 'doable'. This means that you have, or can develop, the skills and interests needed to implement your design, and that you will not be undone by a lack of ethics approval, stakeholder support, time, resources, or access.

Addressing the question

When you know what it is you want to know, it's generally not too hard to figure out how to get there. As discussed in Chapter 2, a well-articulated research

question defines an investigation, sets boundaries, provides direction and acts as a frame of reference for assessing your work. In this way your question acts as a blueprint for decision making related to method.

Now this does not mean your question must be set in stone from its first articulation. Research is generally an ongoing and iterative process of development and redevelopment that may see questions shift at various stages throughout the research process. What needs to be stressed, however, is that in the end, there needs to be a goodness of fit between your final questions and your methodological design. One, the other, or both may evolve, but in the end, your questions and your design need to have the tightest of relationships.

Working towards aims and objectives

The aims and objectives related to your research question will be a key determining factor in your exploration of potential methodologies. Now when researching real-world problems, you are generally trying to do one or more of the following: (1) understand a problem; (2) find workable solutions; (3) work towards that solution; or (4) evaluate success and/or failure. And as discussed below, each of these distinct goals tend to be aligned with particular methodological approaches.

- *Understanding a problem* – attempting to develop better understanding of a problem situation might involve looking outwards towards broad societal attitudes and opinions, or inwards using deeper exploration into the intricacies and complexities of your problem situation. Take, for example, the issue of workplace stress. You might want to know, 'How common is stress in the workplace?' If this were your question, outward exploration, say a population study using a survey approach, might be called for. If, however, your interest was in understanding how a particular staff group reacts to stress, or what it feels like to live with workplace stress, you might look at more inwardly focused strategies that allow you to delve deeper into complexity, for example ethnography or phenomenology. (The strategies mentioned above are covered fully in Chapter 7.)
- *Finding workable solutions* – the quest to find workable solutions might involve: assessing needs and visioning futures; locating potential programmes, interventions, and/or services; or exploring the feasibility of particular change initiatives. For example, sticking with the issue of workplace stress, your goal might be to understand what can be done to reduce such stress. Specific questions might be, 'Is workplace stress a priority issue for employees?', 'What vision do employees have for a different workplace culture?', 'What programmes have been introduced in other settings to reduce stress?', or 'Will programme X be suitable/cost effective for my workplace?' Now these types of question are sometimes referred to as 'front end analysis' and are common

approaches in applied/evaluative research. So if this is where your aims/objectives are pointing, you'd need to explore this area of literature. (Strategies for finding solutions are covered more fully in Chapter 8.)

- *Working towards solutions* – when I talk about working towards solutions, I'm referring to research goals that go beyond the production of knowledge. I'm referring to research that has the goal of change directly embedded in its research agenda. Now this might refer to improving practice, shifting systems, or even working towards some level of fundamental or radical change. For example, let's say your goal was to collaborate with staff on a co-learning project that developed and implemented a stress reduction strategy. Now whether you want to work on changing employee behaviours, workplace practices or the broader corporate culture, your desire to produce knowledge while actioning change is likely to lead you towards the literature related to 'action research'. (Action research strategies are covered fully in Chapter 9.)
- *Evaluating change* – the goal here is to answer the question, 'Has a change initiative/programme been successful?' Now your interest in evaluation might be related to outcomes, that is, Did programme X meet its objectives? But it might also be related to process that is, How and how well is programme X being implemented? So, for example, if you wanted to evaluate a recently introduced stress reduction programme you might ask, 'Has programme X reduced stress?' This question would lead you to literature related to 'outcome' or 'summative' evaluation. If however, you wanted to ask, 'What are the strengths, weaknesses, opportunities, threats, etc. related to the implementation of this programme?', you would need to explore 'process' or 'formative' evaluation literature. (Evaluation research is discussed more fully in Chapter 10.)

From question to methods

Once your broader methodological approaches are in line with your aims and objectives, you will need to go a step further and think about the actual methods that will be best suited for collecting and analysing your data.

Now there is a real tendency for researchers, and that includes student, practitioner, and professional researchers alike, to be quite wedded to particular methods. They might have it in their minds that they will do a survey or a series of interviews – even before they've really engaged in a critical examination of what their question logically demands. But keep in mind that the goal in developing method is working towards what is most appropriate for answering your question. It is important that you don't fall prey to the belief that one way of doing things is inherently better than another, or to think that it's okay to stay within your comfort zone. Methods need to fall from questions.

Now if you followed the guidelines for question development covered in Chapter 2, it should be quite easy to see how and why questions point to methods. The process of question development should leave you with clear articulation of

not only your topic and context, but also your goals, the nature of your question and who might hold the answer to that question. A well-articulated question should lead you to: who you need to talk to; what you need to ask; and as an extension of this, what data collection methods/tools you might use.

For example, say you were interested in the impact of working nightshifts on nursing practice. If you attempted to design your study from here – there would be all kinds of possibilities. You could look at stress manifest in the workplace, turnover rates, level/occurrence of 'mistakes', job satisfaction levels – of nurses, patients, doctors, etc., etc., etc. And because there are so many possibilities, you don't have enough definition to take you down any particular methods path.

But say you were to able narrow your question to, 'Is there a relationship between nurses working nightshift and a tendency to burn out of the profession?' Because this is more clearly defined, it can more readily point to method. Right away you know who you are talking about, that is, nurses who work nightshift – so you have your population. You also know you have to look at the construct of 'burnout'. Now you might be able to get out some data from employment records – but you probably need to get some information straight from nurses themselves. So that gives you a couple of choices: you can survey, you can interview, or you can do a bit of both. And this decision will likely depend on your goals, that is, whether you want to assess the extent of a problem and be able to generalize from your sample, in which case a survey approach is likely to work; or whether you are interested in more in-depth exploration and engagement, in which case you would probably want to go with more in-depth interviews.

In any case, clarity and precision in your question can readily lead to a range of method possibilities that can be explored and considered on the basis of both their logic and practicality.

Assessing practicality

Once you have worked through research approaches that will meet your objectives and fall neatly from your question(s), there will still be a need to assess the practicality of your approach. It is worth keeping in mind that the best possible design is worthless if you are going to come up against major barriers to implementation.

By running through the following questions, you can quickly assess the practicality of your methodological plan.

- ☑ **Do you have/can you develop necessary expertise?** Interviewing, observing, theorizing, surveying, statistical analysis – various methods of data collection and analysis will require certain skills. And while you can develop new skills, time/interest can be an issue. Remember that competence is not a luxury – it is required. Your skills or lack thereof will affect the quality of the data you collect and the credibility of the findings you generate.

- ☑ **Is your method ethical?/Is it likely to get required ethics approval?** A clear criterion of any research design is that it is ethical; and ethicality is likely to be audited by an ethics committee. If a study calls for interaction with people, it will often require formal workplace and/or university ethics committee approval. Chapter 4 talks about ethics in some detail, but to summarize, an ethical study takes responsibility for integrity in the production of knowledge and ensures that the mental, emotional and physical welfare of respondents is protected.
- ☑ **Do you have required access to data?** A major challenge for researchers is gaining access to data. Whether you plan to explore documents, conduct interviews or surveys, or engage in observation, the best-laid plans are worthless if you can't find a way to access people, places and/or records.
- ☑ **Is your timeframe realistic?** If you have not given yourself long enough to do what your design demands, you are likely to: miss deadlines; compromise your study by changing your methods mid-stream; do a shoddy job with your original methods; compromise time that should be dedicated to other aspects of your job/life; or finally, not complete your study at all.
- ☑ **Do you have required financial/organizational support?** Whether you need to cover the cost of materials, postage, transcription etc., or the cost of bringing in a professional researcher to help with data collection or analysis, you will need finances. It is important to develop a realistic budget for your study. Research into any problem, no matter how worthy, will not be practicable, or in fact, possible if you cannot cover costs. Also make sure that, if appropriate, you have organizational support for time to be dedicated to your project. Not being able to find time can be as debilitating to your study as not being able to find money.

Getting down to details

Once you feel comfortable with your general research plan – that is, you think your approach will meet your aims and objectives and will answer your research question in a way that is quite practical, it is time to really get down to the nuts and bolts of that plan.

Okay, so what constitutes nuts and bolts? Well as shown in Table 3.1, getting right down to the nitty gritty is about being able to answer fundamental questions related to the who, where, when, how and what of your approach. If you can answer these questions, you are well on your way to articulating a clearly defined plan.

Can you over-design?

Before leaving the nuts and bolts of method, I want to briefly touch on the issue of over-design. Now I am a strong believer in having a plan and thinking your

TABLE 3.1 GETTING DOWN TO DETAILS

Who	
Who do you want to be able to speak about?	➢ *This is your 'population', or the realm of applicability for your results. For example, are your findings applicable to employees of only one hospital, all hospitals in Chicago, all hospitals in the US?*
Who do you plan to speak to/observe?	➢ *This is your sample. As discussed in Chapter 5, it is quite rare to be able to speak to every single person you wish to speak about, so the key is ensuring that your sample is either intrinsically interesting/ valuable or is representative of a broader population*
Where	
What is the physical domain of your sample?	➢ *This relates to working out how far afield you need to go in order to carry out your methods. Will you need to travel to different georaphic areas? Are there various sites you need to visit?*
Are settings relevant to the credibility of your methods?	➢ *This involves considering how place can impact method. For example, if you wanted to conduct job satisfaction interviews with teachers, you would need to consider whether an informal chat at a pub on a Friday night will generate data distinct from that gathered at a staff meeting*
When	
How do your methods fit into your timeframe?	➢ *It can take longer than you think to collect, analyse and draw conclusions from data. It is important to make sure your methods fit into your overall timeframe*
Is timing relevant to the credibility of your methods?	➢ *This involves considering how timing can impact method. For example, a community survey conducted between the hours of 9 and 5 is likely to lead to a large under-representation of workers, and an over-representation of stay-at-home mothers and retirees*
How	
How will I collect my data?	➢ *As discussed in Chapter 6, this involves deciding on the methods and tools you will use to collect, gather and/or generate your data*

TABLE 3.1 (CONTINUED)

How will I conduct my methods?	➢ *This involves even further consideration of nuts and bolts. For example, considering if you will tape record your interviews or take notes; or whether your observations will involve you joining an organization, or just sitting in on a number of meetings*
What	
What will you look for/what will you ask?	➢ *Depending on your methods, this might involve developing questionnaires, drafting interview questions, creating observation checklists, and/or developing frameworks for document analysis. The best advice here is to get support. These tools are difficult to get right, and it may take a few trials or pilots to develop them to a point where you are comfortable with the data they generate*

way through the best possible approach for conducting your study, and most of the time this will mean being able to define and articulate the details that make up your approach. There are, however, several situations where you'll need to leave some give or flexibility in your plan.

Okay, to start with, life is unpredictable, and research really isn't any different. You can have a plan – but that won't stop circumstances from arising to which you will need to be responsive. Whether it's surveys that aren't returned, a workplace that suddenly won't give you access, or a key informant that drops out of the picture, hurdles will arise, and if you want to get over them you'll need to be flexible.

Another scenario that demands flexibility is when your plan involves developing research protocols based on what emerges from initial data. This is common in 'grounded theory' where initial data collection protocols are defined, but subsequent data collection and analysis are highly emergent. In this type of research your plan actually 'evolves as you go'.

Finally, if you are working together with stakeholders on a research project, it is important that all stakeholders feel comfortable with, and even have a chance to contribute to, methodological protocols. Action research, for example (discussed in Chapter 9), is a highly participative and collaborative type of approach in which defined research designs are outside the full control of the lead researcher. In fact, the action research process is emergent and often cyclical, and is based on collaborative input from the stakeholder/researcher team. Flexibility is a part of design.

DEVELOPING A PROPOSAL

Say you have worked towards a well-informed and well-defined research plan. Chances are you will now need to write it up as a proposal. Now many see the development of a proposal as an opportunity to clarify thinking, bed down ideas and articulate thoughts in a way that will provide a study outline and a blueprint for future action. And yes, it is all these things. BUT – and this is important – a proposal is not something you write for yourself. It is, without a doubt, a sales pitch. Your proposal is your opportunity, and sometimes your only opportunity, to sell your project and get your study off the ground.

The role of the proposal

Pretend for a moment that you believe you have a really great study ready to go. With just a bit of funding you will be able to get your project off the ground and maybe make a real difference. The only problem is your workplace cannot fund every project that gets proposed. In fact, this year they have five lots of $20,000 up for grabs, but they have received 18 proposals. Without a doubt it is a competition. So the question is, what can you do to walk away with the cash? Well I think you need to convince the powers that be of three things:

1. *That your problem and your question are worth exploring* – and, even tougher, worth funding. You need to argue the significance of the problem you are addressing and why research can make a difference to that problem. This is the job of your proposal's introduction and rationale.
2. *That you are the right woman/man for the job* – now this might be done through a resumé or CV, but within the proposal itself it is generally done by showing critical engagement with the literature. If you are arguing that you should receive funds that will allow you to conduct a study aimed to produce new knowledge, you need to show that you are conversant with the body of knowledge/literature as it currently exists. In other words, you need to show that you are a player – and this is the job of your proposal's literature review.
3. *That the methodology you are proposing is logically and ethically sound* – does it make sense, will it answer your question, is it practical, is it ethical? The methods section of your proposal needs to convince readers that your approach is an efficient, effective and ethical way to get credible answers to your questions.

Now keep in mind that the weight given to these three elements will vary based on the type of committee you are addressing and the type of approval you are seeking. For example, a proposal written to get you into a PhD programme really needs to sell you as a potential researcher. A proposal written for an ethics committee needs to focus on the relationship between methods and participants, while a workplace proposal would have a strong emphasis on practicalities.

Elements of the proposal

In my experience, when a person or a committee has the power to make major decisions about someone else's work/future, they like to wield that power, and they often like to wield it in very pedantic ways. When it comes to assessing research proposals, this translates to committees wanting what they want, the way they want it, and when they want it. For the person writing the proposal this means:

- constructing your proposal according to, or as close to, the recommended section/headings as possible
- being meticulous about spelling and grammar
- keeping to word limits
- adhering to deadlines

Also remember to be concise and succinct, direct and straightforward. Clarity is key. Try not to ramble or show off intellect by using flowery language. And one more thing – remember to write in the future tense. A proposal is about what you *will* do, not what you are doing now, or have done in the past.

Now as far as content, varying expectations of each committee make it hard to offer a definitive proposal proforma. But generally, you can expect to include some combination of what is highlighted in Box 3.1.

Box 3.1 Elements of a Research Proposal

Most proposals will need to include some combination of the following:

Title

Go for clear, concise and unambiguous. Your title should indicate the specific content and context of the problem you wish to explore in as succinct a way as possible.

Summary/abstract

Proposals often require a project summary – usually with a very tight word count. The trick here is to briefly state the what, why and how of your project in a way that sells it in just a few sentences – and trust me, this can take quite a few drafts to get right.

(Continued)

Box 3.1 (Continued)

Aims/objectives

Most proposals have one overarching *aim* that captures what you hope to achieve through your project. A set of *objectives*, which are more specific goals, supports that aim. Aims and objectives are often articulated in bullet points and are generally 'to' statements, for example, to develop …; to identify …; to explore …; to measure …; to explain …; to describe …; to compare …; to determine …; etc. In management literature you are likely to come across 'SMART' objectives – SMART being an acronym for **S**pecific, **M**easurable, **A**chievable, **R**elevant/results-focused/realistic and **T**ime-bound. The goal is to keep objectives from being airy-fairy or waffly; clearly articulating what you want to achieve aids your ability to work towards that achievement – a message that certainly holds up when researching real-world problems.

Research question/hypothesis

As discussed in Chapter 2, a well-articulated research question (or hypothesis) should define your investigation, set boundaries, provide direction and act as a frame of reference for assessing your work. Any committee reviewing your proposal will turn to your question in order to get an overall sense of your project. Take the time to make sure your question/hypothesis is as well-defined and clearly articulated as possible – and this may involve defining key terms.

Introduction/background/rationale

The main job of this section is to introduce your topic and convince your readers that the problem you want to address is significant and worth exploring and even funding. It should give some context to the problem and lead your readers to the conclusion, that yes – research into this area is absolutely essential if we really want to work towards situation improvement or problem resolution.

Literature review

As discussed earlier in this chapter, a formal 'literature review' is a specific piece of argumentative writing that engages with relevant scientific and academic research in order to create a space for your project. The role of the literature review is to inform readers of developments in the field while establishing your own credibility as a 'player' capable of adding to this body of knowledge.

Theoretical perspectives

This section is more likely to be required for academic proposals than workplace-based proposals and asks you to situate your study in a conceptual or

Box 3.1 (Continued)

theoretical framework. The idea here is to articulate the theoretical perspective(s) that underpin and inform your ideas, and in particular, to discuss how 'theory' relates to and/or directs your study.

Methods

Some form of 'methods' will be required in all proposals. The goal here is to articulate your plan with enough clarity and detail to convince your readers that your approach is practical and will lead to credible answers to the questions posed. Under the heading of methods you would generally articulate:

- *the approach/methodology* – for example if you are doing ethnography, action research or maybe survey research
- *how you will find respondents* – this includes articulation of population and sample/ sampling procedures
- *data collection method(s)* – for example surveying, interviewing, document analysis etc;
- *methods of analysis* – whether you will be doing statistical or thematic analysis and perhaps variants thereof.

Limitations/delimitations

This is generally a section required in 'traditional' or 'scientific' research. *Limitations* refer to conditions that may impact on results, for example small sample size, or access to records. *Delimitations* refer to a study's boundaries, that is, children of a certain age only, or schools from one particular region. Now remember that your overarching goal here is to convince readers that your findings will be credible in spite of any limitations or delimitations. So the trick is to be open about your study's parameters without sounding defensive or apologetic. It might also be worth articulating any strategies you will be using to ensure credibility despite limitations.

Ethical considerations

Whenever you are working with human participants there will be ethical issues you need to consider (see Chapter 4). Now if this were an application for an ethics committee you would need to focus much of your proposal on ethical issues. But even if this were a proposal for approval or funding – your readers would still need to be convinced that you've considered issues related to integrity in the production of knowledge and responsibility for the emotional, physical and intellectual well-being of your study participants.

(Continued)

Box 3.1 (Continued)

Timeline

This is simply superimposing a timeline on your methods, and is often done in a tabular or chart form. The committee reading your proposal will be looking to see that your plan is realistic and can conform to any overarching timeframes or deadlines.

Budget/funding

This is a full account of costs and who will bear them. While not always a required section for ethics proposals or proposals for academic student research, it will certainly be a requirement for a funding body. Now it is definitely worth being realistic – it is easy to underestimate costs. Wages, software, hardware, equipment, travel, transcription, administrative support etc. can add up quite quickly and running short of money mid project is not a good option. But also keep in mind that if you are tendering for a commissioned project, it is a good idea to get a ballpark figure of their budget. This will put you in a position to design your methods accordingly and hopefully make you competitive.

References

This can refer to two things. The first is citing references, the same as you would in any other type of academic/professional writing. Believe it or not, it's often missed. Second, is that some committees want a list of say 10 or 15 primary references that will inform your work. This information can help a committee assess your knowledge, your credibility and also give a better indication of the direction your study may take.

FURTHER READING

There are quite a few readings that can help you navigate your way through the complexities of working with literature, designing methods and developing research proposals. You may find the following sources a good place to start:

Reading for research

Hart, C. (2000) *Doing a Literature Review*. London: Sage.
Hart, C. (2001) *Doing a Literature Search*. London: Sage.
Galvan, J. L. (1999) *Writing Literature Reviews: A Guide for Students of the Social and Behavioral Sciences*. Glendale, CA: Pyrczak Publications.

Methodological design

Creswell, J. W. (2002) *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. London: Sage.

Tashakkori, A. and Teddlie, C. (eds) (2002) *Handbook of Mixed Methods Social and Behavioral Research*. London: Sage.

Research proposals

Locke, L. F., Spirduso, W. W. and Silverman, S. J. (1999) *Proposals That Work: A Guide for Planning Dissertations and Grant Proposals*. London: Sage.

Ogden, T. E., Goldberg, I. A. (eds) (2002) *Research Proposals: A Guide to Success*. New York: Academic Press.

Chapter Summary

- Once armed with a 'researchable' question, you will need to develop your 'game plan'. This plan involves engaging with literature, designing methods and developing a research proposal.
- Reading is an essential part of the research process that generates ideas, helps form significant questions and is instrumental in the process of research design. It can also support you in writing up your research.
- The range of literature you can call on is diverse. Reference materials, books, journals, grey literature, official publications, archives and writing aids are all fair game.
- When sourcing your readings you should call on librarians and supervisors, as well as other researchers. Their expertise, in conjunction with the development of your own search skills, should aid you in navigating your way through reading.
- Managing the literature requires skills that allow you to quickly assess relevance, systematically organize references and keep diligent and relevant notes.
- Literature reviews show engage with relevant scientific and academic literature in order to create a place for new research. A well-written literature review should inform readers, establish researcher credibility and argue a study's relevance.

- There are two main criteria in designing method: (1) your design addresses your question(s) – your methods should work towards meeting your aims and objective while offering a clear path for getting answers; and (2) your methods are feasible and practical.

- Getting down to the nuts and bolts of design involves being able to answer questions of who, where, when, what and how. There will be times, however, when you will want to have flexibility, particularly when working collaboratively with stakeholders or when using a grounded theory approach.

- A research proposal offers an opportunity to clarify your thinking, bed down ideas and articulate your thoughts in a way that will provide you with an outline of your study and a blueprint for future action. But it is also your opportunity to 'sell' your project and get your study off the ground.

- A good proposal will convince readers of three things: (1) that your problem/question is worth exploring; (2) that you are the right person for the job; and (3) that the methods you are proposing are logically and ethically sound.

- Proposals differ in requirements, but most will ask you to articulate some combination of the following: title; summary/abstract; aims/objectives; research question/hypothesis; introduction/background/rationale; literature review; theoretical perspectives; methods; limitations/delimitations; ethical considerations; timelines; budget/funding; and references.