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Research Proposals

A Practical Guide

2nd edition

- Essential help for student researchers
- Top tips on how to write successful proposals
- Numerous examples that bring points to life
- Clear explanations of key ideas and basic principles
- Guidelines for writing a persuasive proposal

Martyn Denscombe

Research Proposals

Second Edition

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A practical guide

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Praise Page

"Everything that you need to know about how to put together a research proposal is in this book. It's the perfect guide for students and early career researchers who are writing a research proposal and have not had much experience. Impressive in its clarity and common sense, Denscombe's practical guide tells you not just what to do but why as he takes you step by step through the process. The book is crammed with useful tips, helpful examples, effective graphics, and a great checklist appendix. Highly recommended!"

Rosalind Edwards, Professor of Sociology and co-director of the ESRC National Centre for Research Methods, University of Southampton, UK

"This is a highly practical book about the art of communicating why your research ideas are worthwhile, feasible and should be supported. It takes away any mystery about the process and so instils confidence."

Melanie Nind, University of Southampton, UK

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Acknowledgements

There are those close to home who contribute to the completion of a book by putting the author in a position to start, sustain, and finish it. For this reason, and many others, I would like to dedicate this book to my daughter Ash, my son George, and especially to my wife Viv.

Martyn Denscombe
Leicester

Introduction

The basic aims of a research proposal are not complicated, and anyone who needs to produce a research proposal will have a much simpler task if they constantly bear in mind just three core things.

First, **research proposals need to persuade their audience that the proposed research will be *worthwhile***. The proposal needs to show that there are some clear and obvious benefits to be gained from undertaking the investigation and that some genuine need will be met by the investigation. The specific kinds of things that will qualify as being worthwhile will vary according to the audience that is being addressed.

Second, **research proposals must convince their audience that the proposed research is *feasible***. It is not sufficient to have a good idea for a piece of research: that idea needs to be something that will work in practice. This means that the scale of the research needs to be realistic in terms of the available time and resources, and that the investigation must abide by relevant codes of research ethics.

Third, **research proposals involve *selling an idea***. The success of a proposal depends in large part on how good it is at persuading its readers about the value of the proposed research. This means it needs to be effective in the way it communicates its ideas to a specific target audience and persuades them that the proposed research warrants support.

This book develops these themes and provides practical advice on how to produce a successful research proposal. It does not assume any previous experience of conducting research projects and does not rely on any familiarity with particular research techniques or methodologies. Examples are included to show how things are done, 'Top tip' boxes highlight the key issues, and useful 'Link-up' icons make it easy to connect related ideas. In clear language and straightforward terms, it describes what needs to be included in a research proposal and explains why this is the case.

The guidance provided by this book is relevant for a wide range of situations where research proposals are required. This is because research proposals produced for different kinds of research, in different disciplines, across different continents, tend to have a lot in common in terms of their basic aims and structure. It is easy to see a similarity in proposals written for research in the social sciences, the natural sciences, the humanities and the arts, and proposals linked to funding for large-scale research with huge budgets will share much with proposals written for small-scale research using minimal resources.

That said, this book is geared primarily to the needs of *social science* students – those who need to undertake research in areas such as business studies, education, health studies, media studies, marketing, politics, sociology, economics, and psychology. It also focuses on the needs of students who are required to undertake a *small-scale* research project that involves *empirical*

data collection. While invaluable for a much broader range of students and academics, this book is particularly useful for those who need to write a research proposal for:

- a bachelor's degree project;
- a master's degree dissertation; or
- an application for acceptance onto a PhD programme.

PART 1

What is a good research proposal?

Part 1 of the book examines the nature of research proposals and what they are trying to achieve. It focuses on *what* research proposals look like and *why* they tend to have a similar structure. It outlines the roles of research proposals, with particular emphasis being placed on their use for evaluating the quality of the proposed research, and it explains why successful research proposals need to address seven key questions.

Chapter 1

The logic and structure of research proposals

What is a research proposal?

A research proposal is a relatively brief document that contains an outline plan for a research project. It is produced at the beginning of the research process in advance of any data collection. It describes what will be done, explains how it will be done, and justifies why the research should be undertaken. It is normally produced to enable the proposed research to be evaluated by someone with the authority to allow, or prevent, the proposed research from being put into practice.

Aims of a research proposal

There are two reasons for producing a research proposal. The first is that a proposal forms an essential part of the preparation and planning process for a research project. A good proposal is based on careful thought about how the project will be conducted and involves the kind of advance planning that is

required if a project is to run smoothly. There is a useful analogy here with house-building. No one would seriously consider starting work on a house without first having drawn up plans for the building. Without such plans, it would be virtually impossible to work out exactly what materials will be required, when they are to be delivered, and how they will fit together. The same applies to a research project. Before embarking on a research project, the researcher needs to prepare the groundwork and give careful thought to the practical issues involved at the implementation stage of the research.

The second is that proposals generally form part of an evaluation process in which the merits, or otherwise, of the proposed research are judged by people who cast an expert eye over the proposal and then decide whether the research should go ahead. The analogy with house-building is once again useful for this point. No reasonable person would start the construction of a house without having sought permission from relevant authorities to embark on the construction. Plans have to be drawn up to show that the house will be structurally sound and that it will meet all the necessary requirements in terms of building regulations. In the same way that there are regulations and procedures that are designed to protect the public from rogue builders constructing houses that are likely to collapse or that fail to meet environmental standards, there are standards and procedures that researchers need to take into account to avoid poor research designs that are likely to fail. The blueprint for research contained in research proposals provides the kind of information that allows people to check whether the proposed research will accord with the necessary procedures and regulations, and it thus allows those who authorise research to make judgements about the quality of the proposed investigation.

Seven key questions

When evaluators make a judgement about a research proposal, there are *seven key questions* they will have in mind, and they will be looking for satisfactory answers to each of these questions within the proposal. As Figure 1.1 indicates, these questions follow a logical sequence with each question building on the previous one in a way that helps to build up a clear picture of what the research entails. Of course, the sophistication of the answers provided to these questions will vary according to the circumstances; much will depend on the purpose of the proposal and the level of expertise expected of the researcher. Good research proposals, however, have this in common: they manage to address the seven key questions in a way that satisfies the requirements of their particular audience.

Question 1: What is it all about?

First of all, readers will be looking for information about the subject matter of the research. They will want to know the answers to the following questions: What is the topic? What is the research trying to achieve? Without such information, readers cannot evaluate the proposal; they cannot judge whether

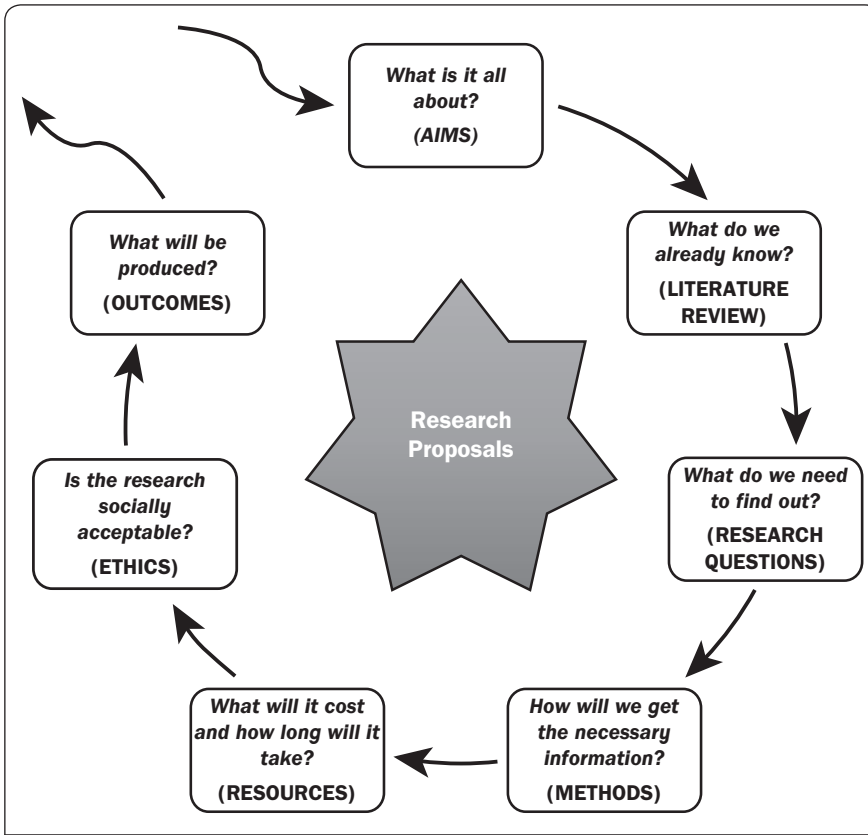


Figure 1.1 The logic of research proposals

the methodology is appropriate or whether there will be sufficient time and resources to complete the project; and they will get frustrated and annoyed if they do not get this information supplied clearly, precisely, and succinctly at the beginning of the proposal.

Question 2: What do we already know about the subject?

Having addressed the question of what the research is about, the next logical thing that readers of a proposal will ask is: What do we already know about the subject? What has previous research revealed? These are relevant and important questions to pose because, by looking at the knowledge that has already been accumulated on the proposed subject, it decreases the probability of repeating research that has already been done elsewhere. There is no point in 'reinventing the wheel'. If the information already exists, it could well be a waste of time and money to duplicate the research (unless, of course, we have the specific aim of checking the validity of the earlier findings).

Question 3: What does the research need to find out?

Once readers are clear about the aims of the research and what is already known about the topic, the next logical step is for them to ask: What *new* information is needed? A review of the existing information not only tells us what we already know, it tells us what we *don't* know and what it would be useful to find out. This allows the proposed research to be targeted where it will be most useful. It helps to pinpoint the kind of things that need to be studied in order to shed new light on the topic.

Question 4: How will we get the necessary information?

Having established precisely what the research needs to find out, the next question is fairly obvious: How will the information be obtained? A description of the research methods is called for in order to answer this question. Proposals always include an account of how the researcher intends to collect the data, how much data will be collected, and what techniques will be used to analyse the data. Armed with such information, readers can draw their own conclusions about whether the methods are suitable for the task at hand and whether the proposed methods are likely to work in practice.

Question 5: What will it cost and how long will it take?

Research takes time and costs money, and this is something that those who evaluate research proposals will have in mind when they assess the feasibility of the proposed project. They will want to know: What resources are necessary for the successful completion of the research? They will be looking for evidence within the proposal that the researcher has planned the research in accordance with the amount of time that is available and the amount of money at his or her disposal for the completion of the project – the proposed research needs to be *doable*.

Question 6: Is the research socially acceptable?

Society places certain restrictions on what can, and what cannot, be done in the name of research. For this reason, readers will want to feel assured that the proposed research will be conducted in a manner that meets socially accepted standards governing research activity. Any doubts on this point and the research project will not be allowed to proceed. The proposal therefore needs to include assurances that the research will be conducted in a manner that abides by relevant principles of research ethics and accords with the law of the land.

Question 7: What will be the end product of the research?

Last but not least, readers will expect a piece of research to be justified on the basis that it will produce some specific, identifiable outcomes. Indeed, it is rarely the case that research can be justified 'for its own sake', especially in the social sciences. For this reason, it is important for research proposals to

address questions about the outcomes of the research and the end products that it is hoped will arise from the research. They need to contain a clear account of the 'deliverables' from the project and an explanation of who, or what, might benefit as a direct result of the project.

The structure of research proposals

The seven key questions provide a rationale for the way that research proposals are organised and they can be used as a template for the structure of a proposal. Their sequence and subject matter can be transformed into a series of sections that introduce the vital material in an efficient manner and in a sequence that allows readers to understand things quickly, easily, and with the minimum of effort. To this extent, the headings used in Table 1.1 provide a generic structure for proposals, one that will be applicable across a wide range of circumstances.

Table 1.1 The generic structure of research proposals

Typical headings/sections	Key questions	Location of guidance in this book
Title Keywords Aims Background	What is it all about?	Chapter 4
Literature review	What do we already know?	Chapter 5
Research questions	What do we need to find out?	Chapter 6
Methods	How will we get the necessary information?	Chapter 7
Resources	How long will it take and what will it cost?	Chapter 8
Ethics	Is the research socially acceptable?	Chapter 9
Outcomes	What will be the end products?	Chapter 10

Top tip

Research proposals should always adhere to the structure or guidelines provided by the organisation to which they are submitted. In the absence of any such structure or guidelines, Table 1.1 provides a good template for writing the proposal.

While Table 1.1 provides a good generic template for research proposals, it should not be regarded as a 'one-size-fits-all' template, one that can be used at all times under all circumstances. There are two reasons for this. First, proposals can vary in the emphasis they place on particular types of information depending on the nature of the research and the subject discipline involved – Appendix 3 demonstrates this point. Second, the agencies and organisations that receive research proposals often produce bespoke forms to suit their purposes. Although these will largely echo the headings in Table 1.1, they can also include some difference of emphasis, or use slightly different terms or, indeed, ask for additional information that is specific to the area of inquiry and that would not appear on a more generic research proposal. This means that when it comes to writing a research proposal, the first thing that a researcher must do is check whether the proposal needs to be submitted using a particular form or needs to adhere to specific guidelines provided by the body to which the proposal will be submitted. If so, then there is no option but to use the headings and sections as supplied. This is an absolute must. Any attempt to change the stipulated headings and sections is likely to jeopardise the proposal's prospects of success.

The logic of research proposals

The seven key questions identified in Table 1.1, as we have seen, provide a rationale for the structure of research proposals. They explain why certain sections and headings are typically found in research proposals and why they tend to appear in a particular sequence. But, more than this, the seven questions reflect an underlying logic to research proposals that ties together a number of criteria for judging whether a proposed piece of research warrants support. Figure 1.2 provides an overview of this logic and indicates where the specific criteria are dealt with in Part 2.

Evaluation of research proposals

Research proposals are normally written with a view to being evaluated by individuals or committees who have the authority to allow the research to go ahead, or to prevent it from taking place. This applies whether the proposal is written for an undergraduate research project, a master's degree dissertation, or an application for entry to a doctoral or PhD research programme. It also applies when proposals are written as part of a bid for funding.

Who approves research proposals?

Proposals are scrutinised by experts who use their experience to make judgements about the quality of what is being proposed and the prospects that it can be delivered. The people who approve or reject proposals, however, do not do

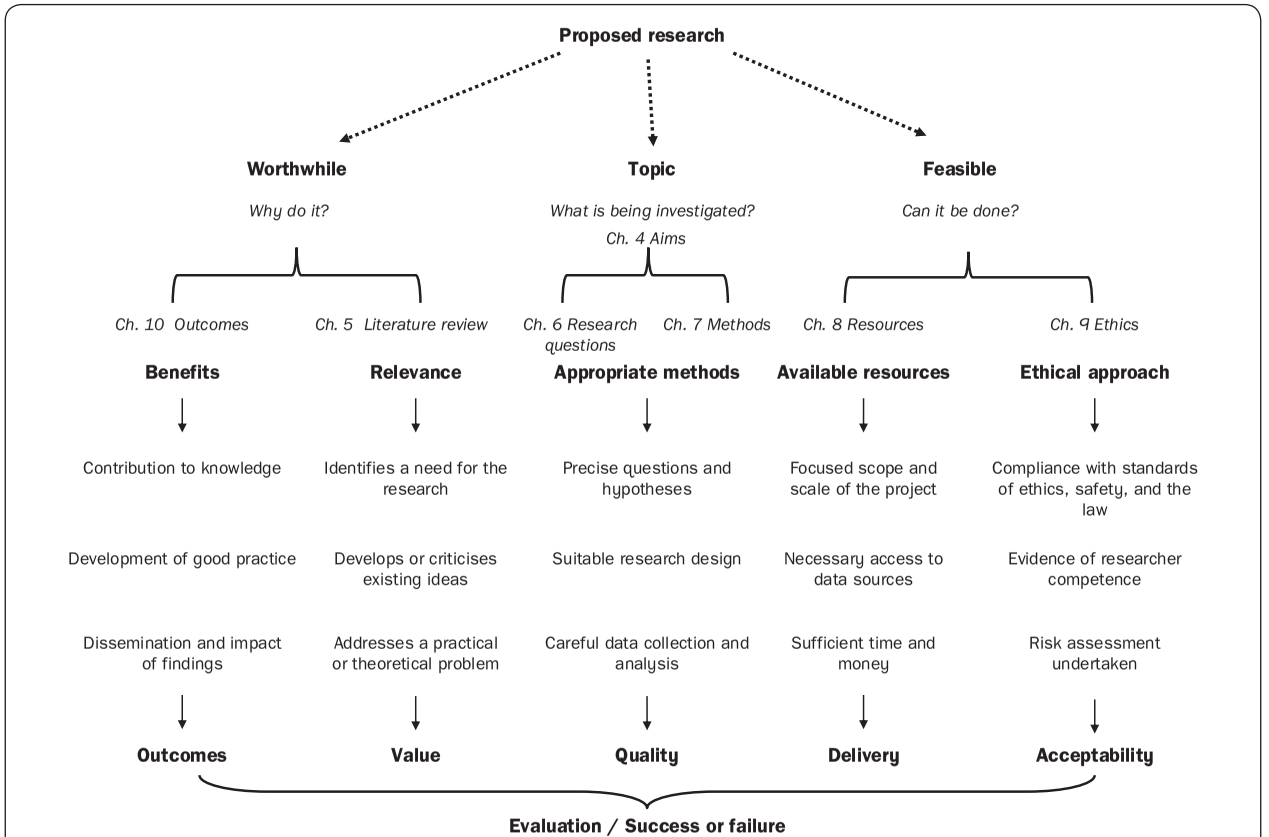


Figure 1.2 The essential elements of research proposals

Source: Denscombe, M. (2019), *Research Proposals: A Practical Guide* (2nd edition). London: Open University Press

so by virtue of a specific qualification in 'evaluating research proposals'. They do so as part of their broader professional duties as an academic, researcher, or practitioner in the field of study. Acting in this capacity, they are people who are charged with responsibility for ensuring that the plan of research meets an appropriate standard and, very importantly, that if the research is allowed to proceed, there will be no nasty repercussions for the institution they represent, the participants, or the researcher involved. The evaluators' role is to safeguard all concerned. Table 1.2 provides a broad overview of who normally has this role in the approval process.

Table 1.2 Who approves research proposals?

Purpose of the proposal	People who evaluate the proposal
Approval for research project on a degree programme	
• master's research	Dissertation supervisors
• undergraduate project	Project tutors
Applications for acceptance onto a research degree programme	
• PhD application	Research committees PhD supervisors
Funding applications	
• research grant	Review panels Subject experts

It is worth noting that there is often an overlap between the functions of a research proposal and the process of ethics approval. In either case, approval is needed before the research can begin and that approval depends on an evaluation of the proposed plan of work that takes into consideration details of how the data will be collected, who will be involved, what the benefits of the research are, and what measures are in place to protect the interests of the participants.

Link-up with
Ethics Approval:
p. 106

What happens to a research proposal once it is submitted?

When a proposal has been submitted, the amount of scrutiny it receives will vary according to the nature of the research being envisaged and the amount of resources involved. If the research is straightforward and uses well-established methods to investigate uncontroversial topics, then the evaluation might be 'light touch' with the proposal being approved or rejected on the basis of evaluation by just one person. This is most likely to happen with small-scale projects like those at undergraduate level where project supervisors will take responsibility for vetting the proposal. For larger projects involving higher-level

research, the evaluation generally involves more than one person. As a matter of routine, the proposal will be sent to two or more individuals, or possibly a committee with many members, and it will be a collective decision as to whether the proposal should be approved or rejected. This is the kind of approach to be expected in the case of proposals for entry to a PhD degree or with applications for research funding.

Alternatively, the evaluation might involve a multi-stage system with an element of 'triage'. In this case, risky proposals are sifted from safe ones at an initial stage and subjected to further scrutiny at a second stage of evaluation. This is the kind of process that is associated with proposals at any level of research where an initial reading of the proposal indicates that there might be safety or ethical issues that warrant further deliberation. Research into some forms of illegal activities or into sensitive aspects of personal health are typical of the type of proposal that might be seen as posing such a risk and, thereby, worthy of further scrutiny. The triage process is widely used because:

a) it saves time by avoiding delays to proposals that involve relatively routine research, while also
b) giving added attention where required through a second level of scrutiny for any proposals that, at first glance, appear to carry the risk of producing poor results or causing harm to anyone involved in the research.

If the proposal is submitted as part of a competitive selection process, there could be a number of stages to the evaluation. This is typically the case for funding applications, where initial stages involve sifting out projects that are seen to have little chance of success and subsequent stages hone down the number of eligible proposals towards a shortlist and ultimately a decision about which proposals are successful.

The amount of *feedback* provided following the evaluation process varies according to the decision that is arrived at and the purpose of the proposal. The evaluation, at its simplest, could result in the decision to 'approve' the project. In this instance, it is not likely that there will be much feedback unless, that is, the proposal forms part of an assessed piece of work for an academic qualification. Where 'conditions' are attached to the approval, then there must be some feedback. It is effectively provided through the comments on items and areas where improvement is required. There will be specific aspects of the proposal that will identified as in need of change or further work. In cases where the proposal is 'rejected', the amount of feedback varies. If the proposal is part of an assessed piece of academic work, for example at bachelor's or master's degree level, then it is to be expected that there will be a fair amount of feedback. This will point to the strengths and weaknesses of the proposal and, stipulate things that need to be corrected before the proposal can be approved. If, on the other hand, the rejection relates to applications for a place on a PhD programme or applications for research funding, then there might not be much explanation of the reasons. The rejection could offer little more than polite condolences termed in generalities about strong competition and the limited availability of places or funds.

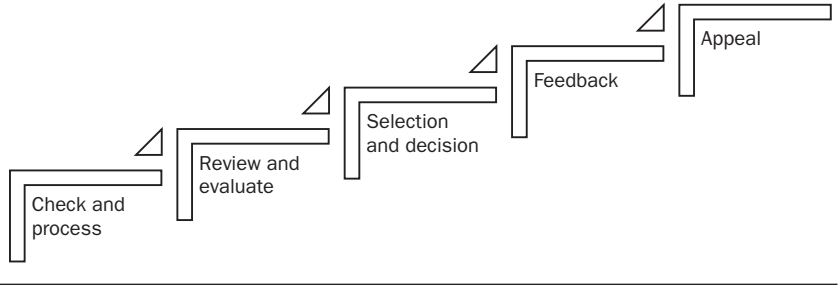


Figure 1.3 The five stages of research proposal reviews

If the research proposal is rejected, then there may be a process of *appeal* against the decision. This will have been made clear in the documentation available in connection with the submission process. In reality, though, even if there is a process of appeal, it is unlikely to lead to a reversal of the original decision. Figure 1.3 illustrates the five general stages for each research proposal review.

Further reading

Krathwohl, D.R. and Smith, N.L. (2005) *How to Prepare a Dissertation Proposal: Suggestions for Students in Education and the Social and Behavioral Sciences*. Syracuse, NY: Syracuse University Press (Chapters 1–3).

Locke, L.F., Spirduso, W.W. and Silverman, S.J. (2014) *Proposals that Work: A Guide for Planning Dissertations and Grant Proposals* (6th edition). Thousand Oaks, CA: Sage (Chapter 1).

Punch, K. (2016) *Developing Effective Research Proposals* (3rd edition). Thousand Oaks, CA: Sage (Chapter 2).

Summary of key points

Research proposals contain a brief plan for a research project that describes the purpose of the research and how it will be conducted. This chapter has indicated how, from the perspective of the researcher, this is valuable as a planning exercise that involves the kind of forethought that is necessary to enable the project to run smoothly. However, this chapter has focused on another role of research proposals – one that is equally, if not more, important. Proposals provide a basis for judging the quality of the research, allowing evaluators with responsibility for authorising projects to reach a verdict and either approve the project and allow the research to proceed or reject the proposal and effectively prevent the work from taking place.

These people – the *evaluators* or *readers* – whatever their research tradition or academic discipline, will have certain questions in mind that they would ask about any proposed research. This chapter has therefore identified the *seven key questions* that they will want answers to in a research proposal. These questions are a rational response to the task of evaluating any proposed research, asking for information about the project that is required in order to arrive at a judgement about whether the proposed research is worthwhile and feasible. There is a logical order to these questions, as shown in Figure 1.1, with the answers to one question providing the basis for asking the next. There is also a rationale underlying the questions that translates into the generic structure of research proposals outlined in Table 1.1. The seven key questions provide a framework that, as Figure 1.2 shows, ties together the essential elements of a research proposal.

Chapter **2**

Successful research proposals

Worthwhile research

Feasible research

Unsuccessful proposals

Distinctive proposals – what will make a proposal stand out from the rest?

The people who evaluate research proposals are basically concerned with two things: first, does the proposal convince them that the research is a good idea – is it *worthwhile*? Second, does the proposal appear to be doable in a practical sense – is it *feasible*? To be successful, a research proposal needs to develop an argument that persuades the readers that the answer is 'yes' to both questions.

Worthwhile research

Research needs to be 'worthwhile' because it takes time and money to undertake and the evaluators will believe, quite reasonably, that resources should not be wasted on activities that are unlikely to produce results of real value. This would be a waste of the researchers' time and, perhaps more importantly, a waste of participants' time. Any research proposal needs to recognise this point. It has to address the issue head-on and persuade the reader that the topic of the investigation is something that matters and that the research is likely to produce some clear and specific benefits.

A need for the research

The most obvious way to convince readers that a piece of research is worthwhile is to pinpoint the *need* for the research. The need might be practical, with the

research aimed at a particular real-world or tangible problem that has been identified, or the need might be more theoretical, with the research driven by an issue concerned with ideas and concepts relating to the topic. This is where the *literature review* section of a research proposal comes into play, providing the opportunity to convince evaluators that there is a specific gap in our knowledge and therefore a need for the new research outlined in the proposal.

Link-up with Chapter 5: Literature Review

Outcomes from research

Research activity is not a frivolous pastime – it is not undertaken on a whim or done just for fun. It must be directed towards something positive and have a clear purpose from which benefits can arise. Proposals should demonstrate to the readers that the research is likely to lead to some positive benefit that warrants the use of the time and money needed to achieve it. To address this point, the proposal should indicate what the *outcomes* of the research are anticipated to be. This is not to be confused with trying to state what the *findings* will be; the findings are something that can only be stated once the research has been completed. The outcomes, however, can be identified in advance because they concern the kind of 'deliverables' that researchers *anticipate* as the end product of their research activity.

Link-up with Chapter 10: Outcomes

Top tip

Be clear about the outcomes from the research. Specify what will be produced and what will be the likely benefits arising from the study.

Use of appropriate methods

If research is to be worthwhile, it needs to use appropriate methods. No matter how important or valuable the topic might be, if it is researched poorly then the findings are likely to be partial or misleading and, ultimately, of little value. For this reason, evaluators will scrutinise the proposal to check that the data collection procedures and the data analysis techniques are fit for purpose. The methods need to be the right ones for the job, ones that will meet the particular needs of the situation and produce the kind of data that will be helpful when it comes to shedding light on the topic of the research. To arrive at some judgement on this, the readers of the proposal will look to the Literature Review and the Methods sections (see Table 1.1) where they will expect the proposal to provide them with a clear vision of:

- what the research is trying to find out;
- what specific data will be required; and
- how the data will be collected and analysed.

Link-up with
Chapter 6: Research Questions and Chapter 7: Methods

Top tip

A good topic poorly researched is of little value. Planning and forethought need to be put into deciding what kinds of data will be most useful and what strategies will best overcome any practical obstacles to the collection of that data.

Feasible research

No matter how good an idea for research might be in principle, it will not provide the foundation for a successful research proposal unless it can be put into practice. So, within the proposal it is the researcher's responsibility to make the case that there is a real chance of the research working at a practical level. The proposal needs to persuade the evaluators that the research is feasible and likely to meet its objectives, and this involves addressing any questions readers might have about the following four things:

1 ethics;
2 access to data sources;
3 the scope and scale of the research; and
4 available resources.

Let us now consider each of these in turn.

Ethics

The success of a proposal is built on the presumption that the research can be completed without infringing the rights of the people involved, without jeopardising their safety or well-being, and without breaking the law. Evaluators of research proposals will have such matters to the front of their minds when judging whether a proposal is feasible, and they will want to be convinced from reading the proposal that the nature of the proposed research does not violate ethical principles and that there are no other legal or safety issues likely to be thrown up by the research that will make it unacceptable.

Link-up with
Chapter 9: Ethics

Top tip

Research that is not ethical, is not acceptable; research that is not acceptable, is not feasible.

Access to data sources

The feasibility of research hinges on gaining access to the necessary data sources; if this is not possible, or even if it is seen as problematic, it represents a major stumbling block for the proposal. This is one of the fundamental concerns of anyone evaluating a research proposal and, if there are any doubts about this, the proposal is unlikely to be successful. It is incumbent on researchers, therefore, to ensure that they can gain access to the kind of data necessary to investigate the proposed topic and, within the proposal, they need to provide reasonable assurances that they can obtain access to the people, situations, events, and databases that are necessary for the research.

Link-up with
Chapter 7: Methods

The scope and scale of the research

Research proposals should never promise outcomes that cannot be delivered. There is a danger, however, that in an effort to impress evaluators, the proposal might aim too high and become over-ambitious. This can backfire and have the opposite effect because promising too much will be regarded as a sign of inexperience or naivety on the part of the researcher. In practice, the readers of the proposal will be far more impressed by a submission that has a relatively narrow focus but that looks as though it can be investigated reasonably within the timescale and using the money that is available.

Link-up with
Chapter 4: Aims

Top tip

Do not bite off more than you can chew. Focus on a topic that is sufficiently narrow that it can be completed using the resources that are readily available.

Available resources

Research occurs within constraints imposed by the available resources to complete it. Time and money are factors that cannot be ignored and, as we have seen, the scope and scale of the proposed project need to be in balance with the resources available. So, when evaluators look at a proposal, they will ask themselves: Can the research be done properly with the resources that are available? They will want to be confident that the research project is based on a time and money budget that can be met, and that the researcher is not being unrealistically optimistic about what can be accomplished.

Link-up with Chapter 8: Resources

Top tip

Estimate what resources will be needed to conduct the research and provide assurances within the proposal that the research can be completed within the relevant constraints of time and money.

Unsuccessful proposals

When a research proposal is unsuccessful, it is usually for one of two reasons. The first is an inadequacy in terms of meeting one or more basic threshold criteria. The failure, in this case, results from the fact that the people responsible for evaluating the proposal are left with doubts about whether the research will be worthwhile or feasible. This means that the proposal has not satisfactorily addressed the seven key questions outlined in Chapter 1 with the result that it gets rejected for the kind of reasons listed in Table 2.1.

The second reason that research proposals might not be successful is that there is a limit to the number of proposals that can be approved. In this case, rejection is not necessarily the result of submitting a weak proposal. The harsh reality is that some research proposals will get rejected simply because there

Table 2.1 Common reasons for the rejection of proposals

- The purpose of the research is not stated clearly enough
- The plan for the research is generally too vague and underdeveloped
- The significance of the research has not been demonstrated persuasively, or the proposal does not indicate adequately the ways in which the research might be beneficial
- The literature review does not cover relevant sources or does not do justice to some key research findings linked to the topic
- There is a failure to delimit the boundaries of the research, or the scope of the proposed research is too wide and unlikely to get completed within the time available
- The research questions or hypotheses are not sufficiently well-defined
- The sources of data required for the research cannot be accessed
- The methods do not seem to be appropriate and are unlikely to produce valid information
- The proposal does not adequately address foreseeable ethical issues arising from the research
- The researcher does not have the skills necessary for the kind of research being proposed

are not enough places (e.g. applications to a PhD programme) or there is not enough money (e.g. with funding applications). This means that some perfectly good research proposals will be unsuccessful – which is a bitter pill to swallow for the researchers involved. The point here, though, is that proposals are often produced in a competitive environment in which evaluators are faced with the task of sifting through many good proposals and selecting just the best of the bunch. In such cases, being good may not be good enough.

Top tip

Sometimes, to be successful, a research proposal not only needs to be good – it needs to be better than the rest.

Distinctive proposals – what will make a proposal stand out from the rest?

In a competitive environment, the proposal really needs to contain something that will make it get noticed and stand out above others. It needs to have qualities that make it a particularly attractive proposition – things that not only make it worthwhile but that make it *more* worthwhile than alternative proposals on offer. There are six things that can help in this regard:

1 originality;
2 timeliness;
3 a topic of special interest;
4 wider application;
5 precision; and
6 telling the story.

Originality

Unless you are testing the validity of another piece of research, the more that a proposal includes an element of originality, the more it is likely to impress those who evaluate it. The prospect of doing 'original' research might, of course, appear rather daunting, especially to those writing proposals for bachelor's projects and master's dissertations. But it need not be, for two reasons.

First, expectations will differ according to the level of work involved. Certainly, with proposals linked to PhD theses and funding applications, the evaluators will be looking for clear and definite signs of originality. With proposals linked to bachelor's projects and master's dissertations, however, the expectations will be adjusted to the level of award for which the work is being

produced, and there will be less emphasis placed on the need for originality. Second, the quest for originality is not necessarily as intimidating as it might sound. In practice, the proposal does not need to offer something that is ground-breaking. Something far more modest can still tick the box when it comes to originality, and the reason for this is that the notion of originality tends to be treated as meaning 'difference' (for further discussion on this point, see Denscombe 2010). When evaluators are looking for evidence of originality, they will not expect to find something akin to a Nobel-prize winning breakthrough that will change the world. Instead, they will be satisfied to find how the proposed research will be *different* from that which already exists.

Bearing this in mind, when writing a research proposal it is important to highlight those elements or features of the proposed research that distinguish it from other investigations on the topic. To do this, some search of the existing literature must have taken place. The element of originality can be flagged up briefly in the 'Aims' section of the proposal but mostly it is within the 'Literature Review' section that the researcher has the opportunity to evaluate the existing research in the area and to argue that the research he or she is proposing can make a contribution that is in some way or other new, different, unique – in some way *original* – and all the more worthwhile for it.

Link-up with Chapter 5: Literature Review and Unique Selling Point: p. 29

Timeliness

Research proposals that are 'timely' will have an advantage when it comes to persuading evaluators that the research warrants support. The evaluators will be impressed by evidence contained within the proposal that the topic is engaging with something that is of current interest. They will be looking for something that is 'up to date' because such research will be regarded as more likely to make a valuable contribution to the field than anything that appears to be 'off the pace'. Yet again, it is worth emphasising that expectations about the timeliness of the research will vary according to the level of the research, but the point to recognise is that research proposals will have a competitive advantage when they can persuade the reader that the proposed research is:

- topical and timely in respect of current issues; and
- based on an awareness of current thinking and positions in the field of study.

There are a couple of fairly straightforward ways in which it is possible to persuade readers that the proposal is abreast of the times. The first is to include a few well-chosen *buzzwords* in the proposal. The websites and publications of organisations and individuals who evaluate proposals often emphasise certain terms or concepts that are in vogue and considered pertinent in relation to their current research agenda. Without going to excess, an impression of being up to date can be gained by incorporating a few of these into the proposal. Second,

and perhaps more crucially, the proposal should always include some references to recent studies in the field. It is fine to cite classic studies as a foundation for the proposal but, to complement these, care should be taken to ensure that at least some of the sources have been published in the current or previous year. The date of publication of such studies acts like a signal to evaluators that the research is topical and that the researcher is aware of current thinking and positions on the topic. The corollary is that any proposal that includes only 'old' references is likely to jeopardise the prospects of success by suggesting to the evaluator that the proposed research is rather 'old hat'.

Top tip

Show that the proposal comes from a position of awareness of current thinking.

A topic of special interest

Whether the proposal is being written as part of an academic degree or as an application for research funding, it is more likely to attract attention if the topic of the proposed investigation is of special interest to those who are evaluating the proposal. In the case of applications to funding organisations, there are likely to be very clear statements about the topics they will support and what their current priorities are, and the aim must always be to keep the topic within those tight boundaries. Where proposals are produced in connection with academic degrees, there are advantages to be gained by ensuring that the topic of the proposed piece of research fits neatly with the current priorities of the department, the programme and, possibly, even the potential supervisor. Particularly with PhD proposals, potential supervisors are likely to favour proposals that closely match their sphere of expertise. The important point is that the chances of success are improved when the proposal 'pushes the right buttons' and appeals to the reader.

Link-up with Target Audience: p. 28

Wider application

The value of a project will be enhanced when there is some clear link between the specific findings from the research and more general issues linked to the topic. The specific findings can be useful in their own right, perhaps addressing a practical problem or some localised concern. However, the value of the research will be enhanced when the proposal incorporates a vision of how the findings can be applied more generally.

The wider application of the findings will mean different things depending on the nature of the research that is being proposed. Broadly speaking, it can

involve the quest to apply the particular findings (a) in a *practical* sense to other settings or (b) in a *theoretical* sense to the development of ideas and concepts linked to the topic. A wider practical application could involve a consideration of how far the findings from research in one location might be expected to apply to other locations. So, for example, case studies of work settings will benefit where there is an explicit attempt to explore how the findings from the case study organisation might apply to similar organisations. A wider application in a theoretical sense could involve the use of the findings to develop or criticise an existing theory on the topic. It could involve challenges to current beliefs or understandings about a topic, or it might involve the generation of new ideas and concepts.

Top tip

The prospects of success will be increased if the proposal indicates how it might be possible to apply the findings in a practical or theoretical way beyond the immediate context of the proposed research.

Precision

Precision plays an important role in the success of a research proposal. First of all, proposals are normally brief documents and there is little space within them for the inclusion of material that is not absolutely pertinent. This means that the wording needs to be precise in order for the readers to be provided with all the information they need within the limited boundaries of a proposal. Second, it is vital that the readers are provided with a crystal-clear vision of exactly what is being proposed. If the proposal offers only a vague impression of what is being proposed – fuzzy on detail or lacking in relevant facts and figures – evaluators will be rightly suspicious about the value of the research. They need to be convinced that the proposed research has been carefully thought through and that the researcher has a good grasp of what needs to be done and how it will be done. Information needs to be provided on the data that are to be collected (who, what, where, when, and how many), and this information should be *precise*. Do not use words like 'try' or 'hope'. Use something more positive and definite like 'will' or 'intend'. Furthermore, do not use words like 'some' and 'many' because they are vague. State a specific amount. Although it might not be possible to state exact details in advance, good proposals always provide *anticipated* numbers and amounts. Third, successful proposals need to be precise in their use of relevant ideas and concepts; there should be no room for ambiguity on this score. This means paying close attention to:

- *Definitions*: The research will almost certainly involve key terms and concepts and great care should be taken to define them precisely (see Chapter 5: Literature Review).

- *Research questions or hypotheses*: Good proposals manage to convert broad ideas about research into very precise statements about the specific things that will be focused upon to shed light on the research problem. Hypotheses or research questions serve this function (see Chapter 6: Research Questions).

A proposal that contains precise information sends all the right *signals* to the readers. It provides them with what they need to know and it says to the readers that the proposal should be taken seriously. The opposite, of course, is equally true: if a proposal lacks precision, then the message this sends to the readers is that the proposal has been thrown together at the last moment by someone who cannot be bothered to pay attention to detail and should therefore have their proposal rejected.

Top tip

Use words that are specific and positive.

Telling the story

Persuading readers that the proposed research is worthwhile is a task that is made easier by constructing a *narrative* around the proposed work – by 'telling its story'. To be clear, this does not mean adopting a literary style that uses flowery language and intricate plot lines. However, the chances of success will be improved if the proposal is built upon a narrative that gives the reader some flavour of the back-story to the proposed research and that brings to life what might otherwise be a rather dull sequence of facts relating to the research. From the initial idea for the research, through trigger points that prompted further ideas, through moments of serendipity and times of frustration encountered with developing the proposal, there is a story to be told that can bring things to life and portray the proposed research as something that warrants further support.

Top tip

The secret to success is to write a proposal that anticipates the kind of things that the evaluators will be looking for and to include the sort of information that will encourage them to arrive at a positive judgement.

Further reading

Fraenkel, J., Wallen, N. and Hyun, H. (2015) *How to Design and Evaluate Research in Education* (9th edition). New York: McGraw-Hill Education (Chapter 25).

Leedy, P.D. and Ormrod, J.E. (2018) *Practical Research: Planning and Design* (12th edition). Cambridge: Pearson (Chapter 5).

Ogden, T.E. and Goldberg, I.A. (2002) *Research Proposals: A Guide to Success* (3rd edition). San Diego, CA: Academic Press (Chapter 2).

Summary of key points

Successful research proposals need to persuade evaluators that the research is worthwhile, and this chapter has suggested ways in which this can be done. In particular, proposals should make the case that that there is a need for the research, that there are clear benefits to be gained from the research, and that appropriate methods will be used to conduct the inquiry.

To be successful, proposals also need to persuade evaluators that the research is feasible, and to do this it is important to establish that the research project is realistic in terms of its aspirations and that its ambitions are proportionate to the available resources. The prospects of completing the research depend on other factors as well as time and money, and the chapter has highlighted the need to convince evaluators that it will be possible to gain access to the necessary data sources and that the research will comply with appropriate ethical standards.

When proposals are submitted in a competitive environment, there is a need to go beyond satisfying the basics – the proposal has to have something extra that makes it *distinctive*. It needs to have qualities that make it 'stand out from the crowd', and this chapter has indicated some ways in which this can be accomplished. Proposals that are topical, timely, and contain an element of originality have a special advantage in this respect, so too are those that have a good level of precision – avoiding any ambiguity or vagueness relating to definitions, data, or planning – and those that can point to potential wider applications of their findings.

Chapter **3**

Selling an idea

Selling an idea (proposals as advertisements)

The sales pitch (keeping things brief)

Clear message (a no-frills approach)

Target audience (meeting expectations)

Unique selling point (generating enthusiasm for the topic)

Telling the truth

Successful research proposals address seven key questions and provide evaluators or readers with the necessary information for them to approve the proposed research. This much has been established in Chapters 1 and 2. The seven questions invite researchers to provide vital bits of information and package them in a particular, well-recognised fashion. It would be wrong, however, to imagine that the activity of writing a research proposal somehow becomes reduced to a mechanical process of filling in predetermined spaces on a form using stock phrases in what almost amounts to a 'cut and paste' exercise. Certainly, there is a structure to the information contained within a proposal but there is still scope for *crafting* that information in a way that improves the quality of the proposal. This chapter explores this facet of writing a successful proposal, highlighting how researchers can put their proposal's message across in a persuasive manner.

Selling an idea (*proposals as advertisements*)

Good research proposals 'sell' an idea for research to their readers. They are written on the premise that no matter how good the idea for research might be, the success of the proposal depends on its ability to communicate the idea in a fashion

that will attract the attention of the readers and ultimately convince them that the proposed research is worth doing. In this respect, research proposals have much in common with advertisements. In essence, they share with advertisements the aim of *persuading an audience*. In the case of an advertisement, this could mean persuading potential customers to buy a product; for research proposals, it means persuading the readers to 'buy into' an idea for a research project. Either way, the principal purpose is to describe a product or idea in a way that makes it desirable and persuades the reader to accept it, agree with it, and support it.

This similarity between research proposals and advertisements is something that is useful to keep in mind when writing a proposal. At one level, it provides a kind of mindset about the writing that helps to keep the proposal 'on track' by consistently reminding the researcher about the broader aim of the proposal and the need to think of it as something of a marketing exercise. It prompts the writer to ask: 'Am I doing a good job of selling the benefits of this research project to the readers?'

At another level, the parallel with advertisements can be useful because it casts light on specific aspects of the task of producing a persuasive message. These aspects are summarised in Table 3.1 and explored in more depth subsequently in the chapter as a means of helping researchers to think clearly about the best ways of crafting their proposals and capturing the attention of those who will evaluate them.

Table 3.1 Research proposals: An advertisement for a research idea

Advertising needs to:	**Research proposals need to:**
. . . be *brief*	. . . fit within strict word limits
. . . create *awareness*	. . . give a *clear* description of the proposed research
. . . allow *comprehension*	. . . meet *expectations* about the format of the proposal
. . . capture *interest*	. . . hit the *right target* audience
. . . foster a *desire*	. . . generate *enthusiasm* for the project
. . . induce a *preference*	. . . show the *unique* benefits from the research
. . . lead to *action* (product purchase)	. . . get *approval* and support

Top tip

When writing a research proposal, think of it as 'selling an idea' – as an advertisement, the aim of which is to persuade the readers that the project is both worthwhile and feasible.

The sales pitch (*keeping things brief*)

Research proposals and advertisements both suffer severe constraints when it comes to the time, space, or words they can use to get their message across. When promoting a product, it is the cost factor that puts pressure on advertisers to get their message across as quickly as possible. Time and space are always at a premium. It is a similar situation with research proposals, which, by their nature, are rather short documents. In the case of proposals, however, the need for brevity is driven by a different kind of resource constraint. If proposals were longer, they would impose an intolerable workload on readers or evaluators. These people are often required to read many proposals, one after another in a short period of time and so, of necessity, they need the proposals to be brief. Hence, there tend to be strict limits on the number of words and pages within which the proposal must fit. The maximum length of the proposal is generally stated in the 'guidelines for submission', and it is not at all unusual to find limits of between 1,000 and 4,000 words being imposed. The limits are likely to be lower in the case of small-scale projects, for example those linked to bachelor's or master's degrees, but even at the other end of the scale, the restrictions are severe. Applications for funding up to £1 million might find themselves restricted to just six sides of A4, and those over £1 million to just 12 sides of A4.

The need for brevity has a significant impact on the way in which advertisements and research proposals are written. It demands a certain skill at getting the message across succinctly. There is absolutely no room for waffle, and still less for meandering trains of thought. Every word needs to count and, on this score, any researcher attempting to write a proposal can benefit from noting a similarity between their task and what is known in marketing as the 'sales' or 'elevator' pitch.. The idea of a sales pitch is nicely illustrated in the popular UK television series *Dragons' Den* where budding business people and entrepreneurs give a presentation to a panel of wealthy venture capitalists in an attempt to get them to invest in a new product or service. The time is short and attention is focused squarely on persuading investors to buy into the particular (business) proposition. The elevator pitch emphasises the same thing with the following scenario: you step into a lift (elevator) in the lobby on the ground floor. In the lift is a senior business executive. You have the time it takes for the lift to travel from the lobby to the investor's offices on the top floor to make your pitch. This means you have just one or two minutes to persuade the busy senior business executive to invest in your product.

The value of these scenarios is that they paint a vivid picture of the task at hand when writing a proposal, reminding the researcher of the need to deliver his or her message efficiently and effectively. In the same way that a sales pitch demands a slick presentation that wastes no words, research proposals need to communicate the key points succinctly, honing down the message so that the essential information and persuasive argument can all be included within the restricted space available.

Clear message (*a no-frills approach*)

Sometimes in advertising the delivery of the information can be subtle, with the advertisement cleverly getting over a message about the product in a way that might be challenging and far from obvious. The advertisement can deliberately challenge the audience to work out the meaning and decipher the message that is being communicated. On other occasions, advertisements can set out to be entertaining, using impressive imagery or situational humour to capture the attention of the audience. There is also a third style of advertising that relies on hammering home a message in a much more explicit fashion, using blunt facts about the product and its utility, about price and availability. There is no beating around the bush with such advertisements; their aim is simply to alert the audience to some great offer or new product, and they use no frills to get the message across. Now, when it comes to similarities between advertising and research proposals, there should be no doubt that research proposals should accord with the no-frills approach rather than the others. Research proposals should contain factual information and an explicit account of the research idea – the equivalent of typical advertisements for double glazing. Their audience should not be put in the position of trying to interpret the meaning of the message or of trying to infer what the benefits might be. Information needs to be laid out in a straightforward and unambiguous way.

Top tip

Research proposals are not mystery novels. There is no benefit to be gained from trying to entertain the reader by holding back key bits of information until the end or making the reader guess how things will fall into place.

Target audience (*meeting expectations*)

Advertisers talk of pitching their message to the right person, in the right place, and at the right time. They do so because they understand that their message will be more effective if it is aimed at a receptive audience, one that is already well predisposed to the particular message that is being put across. As Table 3.2 shows, there is a parallel here with research proposals and their target audience, which, in this case, is the people who will evaluate the proposal.

As noted in Chapter 2, those who evaluate proposals are likely to be attracted to proposals whose topic aligns with their own areas of interests and expertise. And they will also be more open to persuasion if the chosen topic comes at a time when attention is being focused on that area, bearing in mind that agendas for research change over time with certain issues and topics coming to prominence while others fade into the background.

Table 3.2 Targeting the research proposal: Right person, right place, right time

	Advertising	Research proposal
Item	Product, service, and opinion	Idea for research
Target	Right place Right person	Supervisor with expertise on the topic, university faculty interested in the topic, or a relevant funding body for the topic
Time	Right time	Topic of current interest

Top tip

When crafting a research proposal, it is important to tailor the message to meet the interests of the target audience.

Link-up with
A Topic of Special Interest: p. 21 and Timeliness: p. 20

Unique selling point (*generating enthusiasm for the topic*)

Matching the content of the proposal to the interests of the audience is a necessary condition for success, but it might not always be sufficient in its own right to guarantee success. When proposals are submitted in a competitive scenario where only the best ones get selected, success can depend on converting a general interest in the topic into a positive enthusiasm for what is on offer.

A good way of doing this is to show that the proposal has something the others do not have. In a marketing sense, the proposal needs to have a 'unique selling point' (also known as the 'unique selling proposition' or 'USP'). This USP is a feature of the product or service that allows it to stand out from others, that makes it special and gives it a unique identity. It could be linked to the desirability of the product (a particular brand), the quality of the service (speed of delivery), the urgency of need (charity campaign), or the unique benefits to be obtained from the particular product or service. Whatever form it takes, a USP gives a competitive advantage in the market, and advertisers will wish to capitalise on this by promoting the product or service as offering something that competitors cannot match.

Research proposals, likewise, can gain an advantage if they can identify a USP that sets the research apart from alternatives. This USP might be based on a 'once in a lifetime' opportunity to study a situation or to use techniques not previously available, or it might involve access to data not normally available.

In one way or another, if the research can offer something that cannot be accomplished by other proposals, it has an advantage. And research proposals that have such a USP will benefit when it comes to competing for limited money (funding proposals), limited places (PhD applications), or the award of higher marks (projects and dissertations).

Link-up with Originality: p. 19

Top tip

There is a better chance of selling the research idea if it possible to generate not just an interest in, but an *enthusiasm* for, the proposed project.

Telling the truth

Research proposals should be wholly truthful in their descriptions of what the research entails and what benefits will be produced; advertisements, however, might have some leeway in this respect. Though advertisements should not lie or make unsubstantiated claims, they might make clever use of association and oblique references to conjure up a belief or feeling about a product that is not wholly based on fact. Research proposals, for their part, need to 'play it straight'. They need to be honest and transparent and should never involve statements intentionally designed to trick or mislead the reader. The tactics of persuasion should never resort to *implying* things that are not true or that cannot be substantiated, nor should the proposal deliberately omit information that is known to have a bearing on relevant matters (e.g. if there are risks associated with obtaining the necessary data, then this should be made explicit in the research proposal). Proposals should be open and explicit about their scope and their limitations and never give the impression that the research will produce outcomes that it is unlikely to deliver.

Top tip

Be open and honest about the nature of the proposed research and, when appropriate, acknowledge its limitations.

Further reading

Aronson, E. and Aronson, J. (2017) *The Social Animal* (12th edition). New York: Worth (Chapter 3).

Cialdini, R. (2007) *Influence: The Psychology of Persuasion.* New York: HarperCollins (Chapter 1).

Hatton, A. (2007) *The Definitive Business Pitch.* Harlow: Pearson (Chapters 1 and 8).

Summary of key points

This chapter has explored a similarity of purpose between advertising and writing a research proposal. Both aim to generate enthusiasm for a product, cause, or idea; both are written in a way that is designed to persuade their audience that a particular product, cause, or idea is desirable; and both are trying to sell or secure investment in something. In the case of research proposals, of course, it is a matter of 'selling an idea' – the idea for a piece of research.

When it comes to writing a research proposal, the parallels with advertisements can be instructive, and the chapter has looked at some of the ways in which it can be helpful to think of research proposals as a marketing exercise. The chapter has shown how things like 'the sales pitch', 'the elevator pitch', the 'target audience', and the 'unique selling point' provide useful pointers to the way research proposals should be written. Viewed as an advertisement for a proposed piece of research, the message needs to be communicated quickly and clearly, and it needs to be tailored where possible to meet the particular expertise and interests of the target audience. Added to this, the message needs to be packaged and presented in a suitable fashion. This means that information in research proposals must tell readers what they need to know, when they want to know it: they should not have to flick back and forth through the proposal to piece together the information they need. And, just like an advertisement, the proposal should never lose sight of its principal aim: to persuade the reader that what is on offer is very desirable.

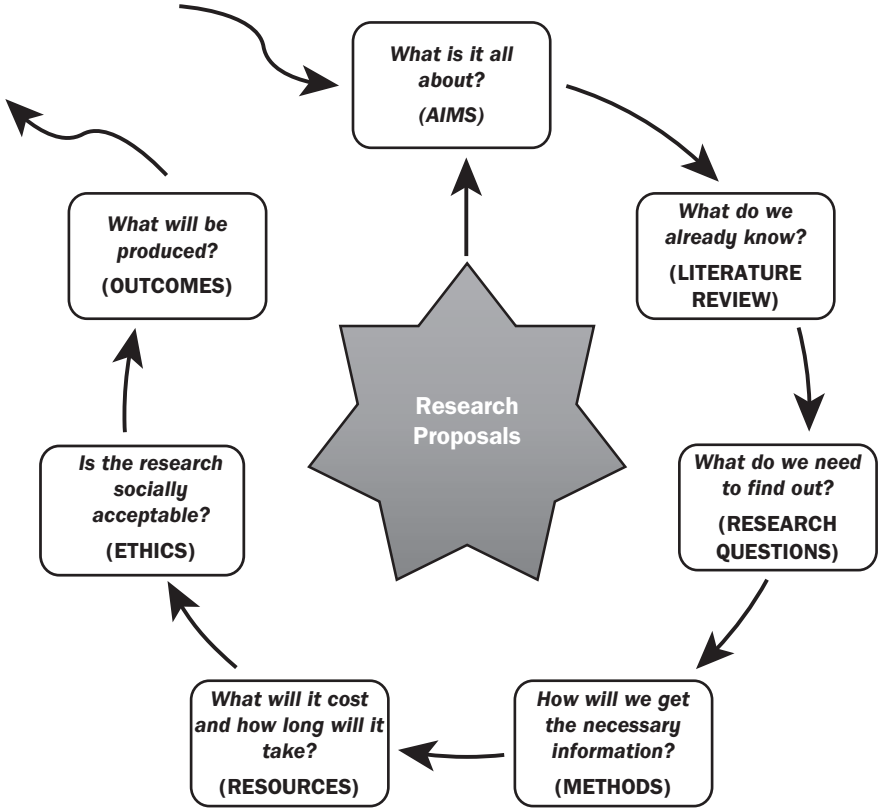
PART 2

Seven steps to writing a good research proposal

Part 2 focuses on *how* to write successful research proposals. It looks more closely at each of the seven key questions that need to be addressed, providing detailed guidance on the necessary content and an explanation of why that content is vital. Practical advice and concrete examples are used to bring the issues to life and help researchers to envisage what is required when writing their own research proposal.

Chapter 4

Aims: *What is it all about?*



Title
Keywords
Aims
Background

What is the research trying to do? This is the first thing that readers of a research proposal will wish to know. They will want to have this information to hand in order to assess how worthwhile and how feasible the proposal is likely to be. Without knowing the aims of the research, they cannot judge whether the methodology is appropriate or whether there will be sufficient time and resources to complete the project. So, the research proposal needs to provide readers with the relevant information 'up front' (i.e. near the beginning). Reflecting this need, information about the aims of the research is to be found in *the title* of the proposed project, in the *keywords* associated with the investigation, in the statement of *aims*, and in the description of the *background* to the research (see Table 1.1).

Title

The title is the headline feature of any proposal and its importance is hard to overstate. It is the most prominent and immediate description of the proposed research that the reader will see – and first impressions count. Writing a good title, however, is not always easy because, within the space of just a few words, the researcher has to capture the essence of the research in a way that is clear, accurate, and precise.

To do this, the title needs to contain the *right amount of information*. It should be long enough to include sufficient detail to inform the reader about the nature of the proposed research, but not so long that it loses focus, clarity, and persuasiveness. There is a bit of a balancing act to be performed here. If the title is too brief, say four or five words, it will not satisfy the need for precision because inevitably it will be wide in terms of its scope and not contain enough information about the specific nature of the inquiry. If it is too long, say 40 or more words, it will probably get too complicated and fail in its task of capturing the essence of the project 'in a nutshell'.

To accomplish this balancing act, the titles for research proposals tend to adopt a particular *format*. There is no absolute rule that dictates they must always do so, but there is a convention about the construction of titles that it would be prudent to observe. This involves dividing the title into two components that are separated by a colon (:). These components consist of:

- a *main title* outlining the general area of the research; and
- a supplement that includes more specific information. This tends to be a bit longer and to include more specific details about things such as the factors

being investigated, the methods being used, the location, and the timescale of the study.

Adopting this format, titles tend to be around 10 to 30 words in length, as in the following examples:

'Motivation in the workplace: A case study of full- and part-time employees in a department store in Aberdeen.'

'Household income and educational attainment: A comparison of examination success rates for A-level students in five cities in England and Wales, 2018–19.'

'Uncertain identities and health-risking behaviour: A survey of young people and smoking in the era of late modernity.'

There are a few other things that are worth bearing in mind when it comes to writing titles. In terms of the wording of the title, it is important to be aware that titles do not normally include the use of *acronyms*. Although there are some circumstances when this is permissible, the general advice is to avoid them because their use opens up the possibility of misunderstanding. For example, the use of 'IT' in a title could refer to 'Information Technologies' or 'Intermediate Treatment'. Although the exact meaning will become apparent subsequently in the proposal, in the title it is generally safer to spell out the term in full to avoid any possibility of confusion.

It is also important to remember that proposals are serious, formal documents, and this might not be the best context in which to use *humorous language*, puns, or other kinds of clever eye-catching headlines that might be better suited to newspapers and magazines. Even titles that take the form of a question are frowned upon by many readers. There is no absolute rule that says such things are unacceptable but the point to appreciate is that a title should not try to be entertaining or clever if this compromises the clarity of the title. It is better to play it safe and keep things serious.

There are also two fundamental errors relating to the title that need to be avoided. These are worth double-checking because, although they should never occur, if they were to 'slip through the net' they would have very damaging consequences for the proposal. On the matter of the accuracy of the title, it is important to check that the title reflects the nature of the proposed research. If a title has been written at some early stage in the process of developing the proposal, things might have moved on and changed so that the original title no longer accurately portrays the revised project. Any inconsistency between the title and the contents of the proposal would be a serious problem because the readers will have their vision of the project shaped by the title and will then be surprised and frustrated if what is presented in the body of the proposal does not faithfully reflect that title. They are likely to infer that the researcher does not have a clear vision of the project and that the mismatch is a result of some muddled thinking about what the research is all about. Any mismatch will send a bad signal to those who evaluate the proposal and will harm the proposal's

prospects of success. In similar vein, the title must be *grammatically correct* and free from spelling errors. There is no excuse for any linguistic errors in the title but, if any such mistakes were to slip through the net, they would send an unflattering message to readers about the likely quality of what is to follow in the rest of the proposal.

Top tip

Check that the title exactly matches the content. Ideas develop and change during the course of planning a project. So, when you have finished writing the proposal, go back to the beginning, look at the title afresh, and make sure that it still accurately depicts the research you propose to undertake.

Keywords

In the context of a research proposal, 'keywords' are things that denote the content of the proposed research in a way that can be used when searching indexes, directories, and catalogues. They usually consist of three to six terms that pinpoint the core ideas behind the research. They are presented either as a bullet-point list or as a series of words on a single line. Although it is not their primary function, keywords can be useful for those who evaluate proposals because they provide a brief but carefully considered insight into the core features of the proposed research. Like the title, keywords capture the essence of the research 'in a nutshell'.

Keywords do not have to be individual words; it is quite common to find a keyword that consists of two or three words, which, when combined, specify a concept or issue that can be recognised for the purposes of defining what the research is about. So, a keyword might be something like 'supply chain management', 'health-related behaviour', or 'educational achievement'. If we were to separate these words, they would not work (i.e. the individual components would not help to provide useful search results). Combined, however, they serve as valuable 'keywords' that could be used for indexing purposes.

A useful way of envisaging what the keywords might be is to imagine that the proposed research has already been conducted and that it is available online. Now, if someone wanted to locate this work using an internet search engine, which terms would they need to enter to bring up a link to the research at the top of the list? These are the terms that can be used as keywords.

Top tip

Think of the keywords as terms you would recommend to someone if they wanted to conduct an online search to find your research.

One further point is worth mentioning with regard to keywords. In practice, they are likely to echo some of the words in the title. This is not a problem. Indeed, it would be troubling if the keywords did not also appear in the title because this might suggest that the title is not doing its job of describing exactly what the research is about. Some overlap between the words in the title and the keywords is a good thing. For example, suppose the title of the proposed research was:

> 'The perceived risks of online banking: A survey of online shopping behaviour and bank customers' feelings about security and fraud in relation to their use of internet banking.'

For this title, the keywords might include:

> online shopping, internet banking, shopping behaviour, customer satisfaction, banking security, internet fraud.

Aims

The *Aims* section of a research proposal identifies the direction in which the research will go and the target that the research hopes to hit. It guides the reader's expectations about the nature of the proposed investigation. There is no need at this point to justify the choice of topic or explain why the research will be conducted in a specific manner; that can be done in the *Background* section (where the substantive, practical issues can be described) and the *Literature Review* (where the existing theories and evidence can be used to justify the approach adopted by the proposed research). At this stage, the idea is simply to provide the bare outlines of where the research is hoping to go.

Types of research aims

It is important to be clear about which type of aim is being pursued by the proposed research. From the reader's point of view, this helps to provide a clear picture of the overall purpose of the research. It is also important because different types of aims call for different approaches; they tend to be associated with different research traditions or paradigms. Within any statement about the aims of research, therefore, it is good practice to identify clearly whether the research is attempting to do one or more of the following:

- explain the causes or consequences of something;
- criticise or evaluate some theory or belief;
- describe something;

- forecast some outcome;
- develop good practice; or
- empower a social group.

Scope and scale of research aims

The aims not only show the direction in which the research will go, they also indicate the scale and scope of the proposed investigation. In doing so, the aims should alert the reader to the size of the task the researcher is planning to embark upon. There is a danger here that, in an effort to do research that is perceived as worthwhile, the researcher might be too ambitious. It is a common mistake to set targets that cannot reasonably be achieved within the available time and resources. It is important, therefore, to ensure that the aims that are stated have been scoped and that they are realistically achievable.

Link-up with Delimitations and Scoping the Research: p. 57 and The Scale of the Project: p. 95

Presentation of aims

The research aims can be written in two ways:

1 they can be written as part of a paragraph using normal prose, or
2 they can be listed using a series of bullet-points.

Although writing the aims as part of a normal paragraph is acceptable and is not in any sense the 'wrong' way of doing things, it has become more conventional to use the bullet-point method because this clearly separates the aims into various sub-components and presents them in a way that is easy to digest. This is particularly useful for those who evaluate proposals.

The bullet-point approach normally divides the aims into something like three to six sections, although there is no strict rule about exactly how many should be used. You should start with the broadest of the aims, and then put the list in a logical sequence that becomes more narrow and precise in terms of its focus (this principle also applies when writing the aims within a normal paragraph of text). So, in the following example, the list starts with the broad aim of conducting research into mass transport systems. This establishes at the start what the whole thing is about. Even at this stage, though, this is qualified by restricting the area of interest to *large cities*. Next on the list we see that this particular research will focus on one aspect of mass transport systems: buses. And, specifically, it will look at the phenomenon of *bunching* on urban routes. The list goes on to indicate what approach will be used and, finally, what the product of the research will be.

Example: Research into mass transport systems

- *To investigate* the effectiveness of mass transport systems in large cities.
- *To study*, in particular, the bunching of buses on urban routes.
- *To describe* the frequency and impact of bunching on urban routes.
- *To analyse* the causes of bunching using probability statistics and queueing theory.
- *To develop* recommendations for reducing the incidence of bunching on urban routes.

General

Specific

Background (*or the 'problem statement'*)

Having established exactly what direction the research will take, the proposal needs to put this in context and demonstrate why this piece of research is worthwhile. To persuade readers about this, the proposal needs to supply them with some information about the background to the proposed research. The amount of background detail that can be supplied is limited by the tight constraints on the overall length of the proposal and, bearing this in mind, there can be a temptation to launch straight into some finer technical details, assuming that readers will already be familiar with the general situation within which the research arises. However, proposals should never take for granted what readers already know. They should operate, instead, on the premise that some readers *do not* know the circumstances surrounding the proposed research and that it is not clear to them why this piece of research is being proposed. Furthermore, even when readers are familiar with the background, if they are evaluating the proposal they might want to see 'the bigger picture' outlined briefly – simply to reassure themselves that the researcher understands the wider context of the research that is being proposed. As a matter of good practice, then, it is safer for research proposals to ensure that a broad background to the research is stated explicitly and clearly so that *all* readers of the proposal should be able to understand the significance of what is offered by the research.

Link-up with
Narrowing the Focus: p. 63

Top tip

Do not make too many assumptions about what the reader might know about the subject area of the research.

Context

The *Background* section provides an opportunity to outline the context within which the research will take place. Depending on the nature of the proposed research, this can focus on the historical background and look at developments that have preceded the project. Alternatively, it can focus on contemporary circumstances within which the research is to take place. On many occasions, the *Background* section will incorporate elements of both the historical and the contemporary context. What matters most is that it blends together the kind of background information that most usefully explains to the readers *the bigger picture*. This can involve locating the proposed research within one or more of the following contexts:

- *Historical context*: Are there particular events or trends that provide a backdrop to the research (e.g. a banking crisis, an ecological threat, or an environmental disaster)?
- *Policy context*: Do recent changes in policies, regulations, laws, or political views need to be recognised in order to understand the purpose of the research?
- *Practical problems*: Does the research arise in response to certain practical problems, such as within a work setting, or does it look for new ways of doing things that address such problems?
- *Key ideas*: Are there particular theories, authors, or opinion leaders whose ideas form a backdrop to the proposed research?

It is worth emphasising that the *Background* section might include a combination of two or more of these kinds of contextual information.

Top tip

Use the *Background* section to set the scene for the proposed research.

Evidence, events, and publications

The account of the context should not only be clear and concise, it should also include some *evidence*. It is good practice to support the argument being made by:

- citing publications linked with prominent theories/writers/approaches in the field;
- noting the findings from recently published research in the area;
- using relevant data, including facts and figures (e.g. to do with trends, prevalence rates, proportions, or volumes);

- referring to key events; or
- specifying details of relevant legislation, regulations, policies, and official reports.

By incorporating reference to such things within the *Background* section, the researcher provides supporting evidence relating to the context of the proposed research. This means that the persuasiveness of the case being presented does not depend on the reader simply accepting the researcher's impression of how significant and beneficial the proposed research might be. The case is now bolstered by drawing on key published works, backed up by hard facts and figures, and, where relevant, directly linked to events in the real world.

How many references and how much data should be included? Well, there is not enough space in the *Background* section to include masses of relevant supporting information. However, a few well-chosen bits of supporting evidence can have a significant impact on the credibility afforded to the research and on the prospects of the proposal being successful.

Top tip

Use facts, figures, and other evidence to back up your statements about the context and to provide a more persuasive message about the value of your proposed research.

Selecting the most significant points

Clearly, it is not possible to cover every aspect of the context because this would take too long and, more significantly, it would not really help to explain to the reader why the proposed research is significant. In practice, the researcher needs to be selective about what to include and what not to include. Being selective means making choices and judgements about which of the many contextual factors are the most relevant. This can be a demanding task. Inevitably, within the constraints of the space available, it requires the researcher to include only the most important points. The consequence of this is that the researcher needs to make brave decisions about what to leave out. There is not the space to 'play it safe' and includes lots of material just in case it ought to be there. Only the things that are vital can be included.

Further reading

Creswell, J.W. and Creswell, J.D. (2018) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th edition). Thousand Oaks, CA: Sage (Chapter 6).

Leedy, P.D. and Ormrod, J.E. (2018) *Practical Research: Planning and Design* (12th edition). Cambridge: Pearson (Chapter 2).

Marshall, C. and Rossman, G. (2016) *Designing Qualitative Research* (6th edition). Thousand Oaks, CA: Sage (Chapter 4).

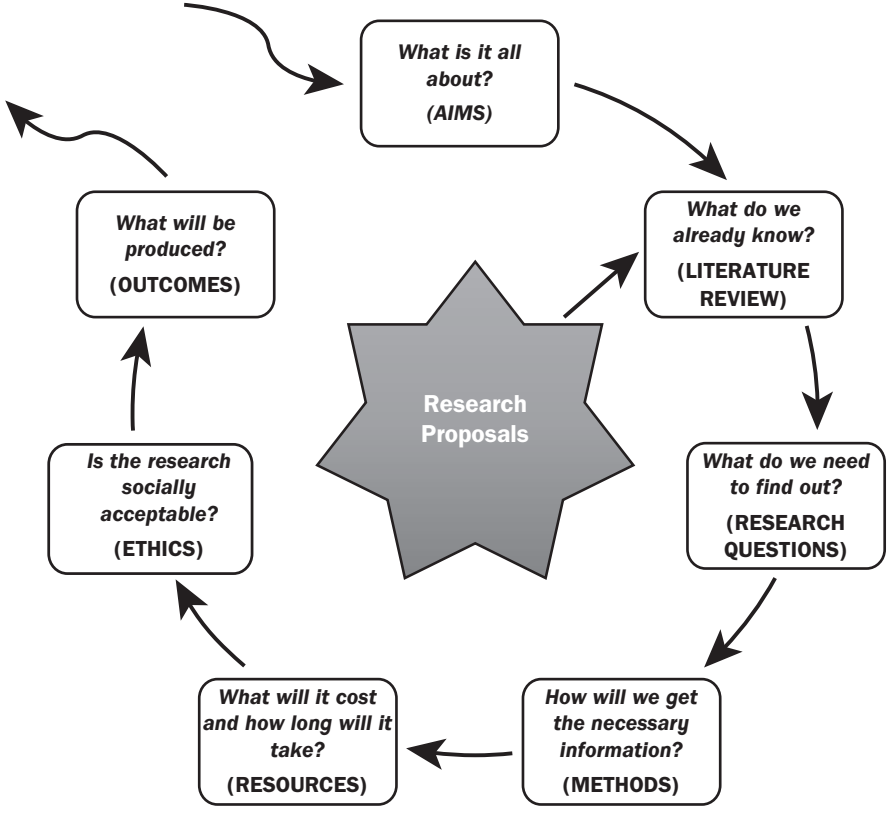
Summary of key points

This chapter has highlighted the value of presenting the aims of the research at the beginning of a proposal. The reason for this is that they provide a logical starting point for understanding what the research is about and what it is trying to achieve. Clarity on these points is particularly important for evaluators of a proposal because they need it in order to make a judgement about whether the proposed research is worthwhile and feasible. Given the pressures of time under which they are likely to be working, readers will want to find the research aims presented up front in a clear and succinct manner, readily available and easy to find.

There are conventional ways of presenting research aims, and these have been explored in this chapter. Attention has been given to ways in which the title, keywords, a bullet-point list of aims, and a brief account of the background to the research provide the means of establishing the intended direction of the research and for constructing an initial case for the value of the proposed research.

Chapter **5**

Literature Review: *What do we already know?*



The literature review examines key ideas, issues, and findings contained in publications relevant to a specific area of study. The purpose is to find out what we already know about the subject and to use this as the basis for deciding the specific things that need to be investigated in order to make a worthwhile contribution to the topic.

Literature review in a research proposal

Within the confines of a research proposal, any literature review will be preliminary: it will provide a basic starting point that lays the foundation for the proposed research. This is the inevitable consequence of two things. First, research proposals are brief documents and there are normally tight constraints on the number of words or pages that the researcher is allowed to devote to the literature review. This means that the discussion must focus on just the most central and significant pieces of published work. Second, the proposal is a plan for research and it is written before the investigation gets under way. There is a practical limit to how much time and effort can be put into the literature review in preparation for the research compared with how much effort will be put into it once the proposal has been approved and the project has begun. In the case of bachelor's research projects and master's dissertations, the bulk of the review tends to take place after the proposal has been accepted – during the time allocated to the research project or dissertation itself. When proposals are written for entry to a PhD programme or as part of a funding bid, they will be expected to be longer, cover a wider number of sources, and be more developed. Even here, though, work on the literature review will occur after the application has been accepted and it will continue during the lifetime of the research.

In terms of both length and timing, then, there is a distinction to be made between the literature review as it appears in a research proposal – which provides a brief, preliminary review – and the more developed literature review that will appear in any final report that is written at the end of the research.

Top tip

For research proposals, the literature review tends to be preliminary. It will be continued and extended during the project once the research has gained approval and got under way.

How many sources should be included?

There is no fixed rule about how many works should be included in a proposal's literature review. But to provide some ballpark figure for guidance, a proposal is likely to include reference to somewhere between five and 20 sources. The number will vary depending on the particular subject area of the proposal and it is worth bearing in mind that the number will be considerably lower than that which will eventually appear in the full literature review produced at the end of the research.

Top tip

Check how many sources are generally included in similar proposals.

Literature search

There are five ways of identifying published material on a specific topic. These are:

1 *Expert advice*. As a good starting point, there is no simpler or more effective way of finding out which authors and which theories are the most important than to seek expert advice. Students can seek advice from their supervisors and can refer to lecture notes provided by tutors as a straightforward departure point for their initial search.
2 *Internet searches*. The simplicity of conducting searches using the internet makes it an attractive option for researchers. Using suitable keywords (see Chapter 4), it can be highly productive, opening up access to relevant literature on a global scale and including the latest research from a huge variety of

sources. For academic articles, Google Scholar is useful. For general information, any of the search engines can be employed. For details of published books, the websites of online book retailers can be trawled.

3 *References in textbooks*. Textbooks identify crucial works on particular topics and they frequently contain suggestions for further reading at the end of each chapter. In these ways, they steer the researcher towards works that are regarded as particularly important and relevant within the area of study.

4 *Online databases*. Online databases include bibliographies, indexes, and archives that contain compiled lists of books, articles, abstracts, and many kinds of documents of value to researchers. They usually have advanced search facilities based on topics, authors, dates, and type of publication. The researcher ought to check early on whether a bibliography already exists that covers the topic to be investigated. Libraries are the obvious place to check first. Access to databases can be restricted but researchers linked to universities can often obtain wide-ranging access to online databases – if applicable, see your university library's website for more information.

5 *Review articles*. Review articles map out the area by identifying the main issues, core themes, key authors, and key studies associated with a particular topic. They provide expert opinion and a 'state-of-the-art' commentary on current ideas that relative newcomers can use as a foundation for their inquiries. Another reason to consult existing review articles is that they can be used as examples of how to do a review. They will illustrate how to analyse, synthesise, and draw conclusions from the literature.

Top tip

Review articles provide a useful guide to the main ideas and themes in a topic area.

A systematic approach to the search

It is good practice to approach the search for literature in a systematic fashion and to explain how the literature will be found. The account does not need to be very detailed. It only needs to identify the databases and keywords to be used for searches. But this is important because it serves to reassure the evaluators of the research proposal that the research will not be guided by some haphazard approach that could all too easily have missed key sources of information.

Top tip

Describe the search process you have used. It needs to be 'transparent' and open to scrutiny by the readers.

Criteria for the selection of key sources

Relatively few sources can be included in the proposal's literature review and it is likely that the initial literature search will identify many more relevant sources than can be used. Consequently, it is necessary to trim the number of potential sources down to a small number of *key* sources. This process has important ramifications for the proposal, and it needs to be done strategically to ensure that the sources that are selected are ones that will (1) bolster the case for further research in the areas identified in the proposal, and (2) help the proposal's aim of persuading the readers that the research is justified. This means, first and foremost, selecting works on the basis of how *relevant and useful* they are for convincing readers about the potential value of the research. When making the selection, researchers might ask themselves questions such as:

- Is the source a well-established work that acts as a signpost to the direction of the research and demonstrates the researcher's familiarity with the subject area?
- Will the inclusion of a work show familiarity with current developments in the field and indicate that the proposed research is up to date?
- Will the selected works provide the right balance of books, articles, and other sources that are appropriate for the field of investigation?

Added to this, the *credibility of the source* of publication is a significant factor when deciding which works to include. The more credible the source, the more weight it will carry in terms of persuading the readers that the research is worthwhile. Certain sources are authoritative and represent a safe choice in terms of their eligibility for inclusion (see Table 5.1). These include, for example, official publications from government departments. Articles in academic journals, likewise, can be considered as a credible source. This is because they normally go through a review process involving experts in the field – they are 'refereed' to check their quality. Works that have been published in traditional formats (i.e. books) by publishing companies that have established reputations can also be considered credible because the publishing process generally

Table 5.1 Credible sources of published work for inclusion in the literature review

• Academic journals (refereed articles) • Academic theses and dissertations • Books • Conference proceedings (especially in fast-moving subject areas such as computing and information technologies)	• Reference materials (subject dictionaries and encyclopaedias) • Practitioner journals of professional bodies (e.g. medicine, law) • Government and NGO websites • Official publications (e.g. government publications, United Nations and European Union publications, policy documents, or law reports)

involves relevant quality checks. Government websites and the websites of major international nongovernmental organisations (NGOs) such as the United Nations can also be treated as credible sources.

When it comes to material published online, the credibility of the source cannot be taken for granted. A crucial point here is that publication, in its own right, can no longer be treated as something that allows a work to be treated as worthy of inclusion in a literature review. The internet has opened up an avenue for making literature publicly available without the kind of quality checks traditionally associated with publications and, today, practically anyone can publish something online.

Top tip

Before including online materials in the literature review, carefully check the credibility of the source.

What if nothing has been written on the topic?

It is virtually impossible to find a topic on which nothing of relevance has been written. Bearing this in mind, it would be disastrous in the context of a research proposal to say that 'nothing has been written on this topic'. This is not to deny the fact that if the topic is narrowly defined or based on a specific instance (e.g. a company or a city), then a literature search might produce a nil return. Indeed, in one respect this is a good thing because it would mean that there is some new contribution to be made by the research – it is not replicating work that has been done already. But this should never lead the researcher to conclude that there are no publications to include in the review. Research proposals operate on the premise that there will always be published works that are related to the topic or that have a bearing on how the topic can be investigated. So, for example, if a literature search for research into 'customer satisfaction among customers of the Costalot energy supply company' were to reveal no previous publications on this exact topic, then this should not be taken to mean that 'nothing has been published on the topic'. Instead, as Table 5.2 shows, the search should proceed to look for literature that is relevant to different aspects of the topic.

Top tip

If you think there is nothing written on your chosen topic, think again!

Table 5.2 Literature of relevance to a research topic: An example

Topic: Customer satisfaction among customers of the Costalot energy supply company.			
Search for literature on . . .	Types of literature relevant to the topic		
. . . *customer satisfaction*	Publications dealing with the significance of customer satisfaction and/or how to conduct research into it.	Examples of customer satisfaction surveys conducted elsewhere.	Business theories underlying a belief in the benefits of customer satisfaction.
. . . *Costalot*	Descriptions of the company, its location, its size, its history, etc.	Reports about the company's performance.	Comparisons with main competitors.
. . . *energy supply companies*	Reviews of the broad business environment in which energy supply companies currently operate.	Economic and technical issues currently facing energy supply companies in general.	Policy documents relating to political pressure encouraging competition between energy supply companies.

How do I 'review' the publications?

Analyse the material

Having searched for sources that appear to be relevant to the topic, the researcher is then faced with the task of reviewing this literature. This task should be undertaken in a systematic fashion. It needs to be systematic in the sense that, from the start, attention needs to be paid to logging the bibliographic details of publications and collecting vital details about the aims, methods, and findings of the works. The researcher needs to have a system for collecting and cataloguing the various works that he or she reads and that might be eligible for inclusion in the review. There are a variety of computer software programs that have come to be essential tools for research in terms of their capacity for storing, searching, and retrieving such information. Word-processing packages, spreadsheets, and databases can all be used inventively to manage literature, but packages are available that have a dedicated functionality for searching and managing research literature (e.g. RefWorks, End-Note, Mendeley, and Zotero).

Top tip

Use a suitable software package to manage your research literature.

A thorough and systematic approach to storing, searching, and retrieving the research literature provides a good foundation for the review. But the success of a review really owes more to the creative intellectual skill of *analysing* and *evaluating* the works. It is not sufficient to simply describe what various authors have written and leave it at that. Certainly, it is important as part of any research project to have a summary of the ideas and research findings linked with key writers who have contributed to what is currently known about a particular topic. But within the literature review, the aim is to go beyond this. Rather than providing a list of who said what, the idea is to *analyse* the material. The process of analysis involves searching for the component parts that make up the whole entity that is being studied, and in practice this means that the review should be looking for *themes* running through the works that are being reviewed. So, rather than describing the content of each work that is being included in the review, the aim should be to map out the area and take an overview of the works and ask what they represent as a whole. This involves asking questions such as:

What are the key studies and who are the main authors in the area?	Mapping out the area
What are the key theories and perspectives running through the literature?	
What are the core issues and problems addressed by the literature?	
What are the common areas of agreement among the authors?	Taking an overview of the area
What are the overall findings from their research?	
Where are the areas of disagreement, contradictions, and gaps in the material?	
What new research might be valuable to move things forward?	

Top tip

Don't just list what others have written. The literature review is not a catalogue or inventory of items. The idea is to compare and contrast the works, to look for common elements, and to note what strengths and weaknesses there are in the works – to *analyse* and *evaluate*.

Be critical

A review of the literature requires the researcher to adopt a critical stance. Being critical does not necessarily mean that the researcher should focus on the shortcomings of particular authors or deride their work. As Wallace and Wray (2016) suggest, it is more to do with approaching the existing material in an open-minded fashion – neither convinced of its truth nor determined to prove it wrong. Claims are not accepted at face value but are accepted depending on the ability of the author to present evidence and mobilise a good argument that supports their position. Before being persuaded that an author's ideas or findings are valid, the reviewer needs satisfactory answers to questions such as:

- Are the authors' claims warranted? That is, are they backed up by sufficient evidence and reasoning?
- Is enough information given about the methods used to collect and analyse their data?
- Are the authors impartial and objective? That is, how far do their values shape their conclusions?
- How recent is the work and how relevant are its findings for today's circumstances?
- How far is it reasonable to generalise from the particular findings?

Top tip

Criticise the ideas, not the authors. Don't get personal. It's the ideas that matter.

Draw conclusions

Conclusions, by definition, occur at the end of things and so it is with conclusions within a literature review – they are the last part of the review. The idea of a conclusion also involves a judgement or deduction arrived at on the basis of some preceding deliberation and it is this that lies at the heart of the matter. *Good reviews draw conclusions.* They do not leave strands of the discussion

'hanging in mid-air', nor do they 'sit on the fence'. They bring things to an end by reaching some judgement or deduction based on the analysis of the literature that has been undertaken.

Link-up with Chapter 6: Research Questions

In the context of research proposals, such conclusions should normally point to a number of research questions. The review of the literature, properly done, will lead to the conclusion that there are certain questions that need to be answered or issues that need to be addressed. These are precisely the questions and issues that are being promoted as worthy of investigation by the research proposal.

An iterative process

The version of the literature review that appears in the proposal should be short, neat, and logical. Ideally, it should contain a narrative – a story that unfolds in a logical sequence – that takes the reader on a journey in which they become persuaded that the proposed research is necessary and worthwhile. Facts and ideas are introduced in an orderly fashion and there are no 'loose ends' left dangling at the end of the review. The neatness of this end product, however, shrouds a messy process of construction. In reality, a literature review goes through a series of re-writes, which involve refining the thread of the argument as new sources of literature are encountered and new ideas are developed. As Figure 5.1 indicates, writing a literature review tends to be something of an *iterative* process involving a cycle of repetition in which the researcher frequently revisits the literature and revises the narrative.

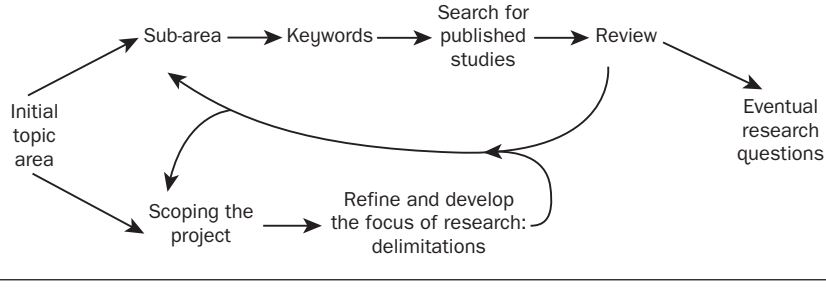


Figure 5.1 The literature review: An iterative process

What message should the literature review contain?

Despite its preliminary nature, the literature review plays a vital role in any research proposal. It may be shorter and less developed than a full review but it serves a similar function: it builds a case that the research is worthwhile.

To do this effectively, it needs to pre-empt the kind of questions that readers might have in their minds about the value of conducting the research, and this means the literature review needs to address the following:

Show that there is a need for the proposed research

It was established in Chapter 2 that the success of a proposal depends in large part on its ability to address a specific research need. The literature review is a key section of the research proposal in relation to this. Even though it will be brief and preliminary, it is the place where the exact nature of the need can be discussed and where some evidence can be introduced to support the claim that the need warrants attention.

There are broadly four types of need that underpin social research projects. These are not mutually exclusive, but they are alternative kinds of need, each of which can provide in its own right a persuasive rationale for a proposed research project. When writing the literature review, it can be useful to identify the extent to which the proposed research:

1 *Builds upon existing knowledge* – using the findings from previous research as a platform for expanding our knowledge base. Existing research provides the foundation upon which we might increase our stock of knowledge, and the aim of the literature review is to show how the proposed research will extend what we know already.
2 *Fills a gap in existing knowledge* – using the findings from previous research to identify areas that have been overlooked so far. At first glance, this might seem similar to the aim of building upon existing knowledge but the emphasis is more on finding significant things that have been missed rather than extending knowledge by staying on the path mapped out by existing research findings in a field.
3 *Adopts a critical stance* – reviewing the existing material with the aim of revealing the shortcomings and inadequacies of existing knowledge. The flaws within existing research might well owe something to the areas they do not cover and, in this respect, the critical stance has the aim of filling a gap in existing knowledge. However, the critical stance goes further, pointing to the flaws in earlier investigations and suggesting that an alternative approach has the potential to provide a different and better way of understanding the particular topic.
4 *Tackles a problem* – applying the knowledge from existing research to a practical problem for which a remedy is important. In the process of using what is already known as a means of dealing with a problem, there is potential to develop new knowledge in the form of recommendations and guidelines emerging from the research.

Argue that the proposed research meets that need

There is a distinction to be drawn between showing that there is a need for a particular piece of research and persuading the reader that what is contained in the research proposal meets that need. That is why it is vitally important

when reviewing the literature that the proposed research links what needs to be done to what is proposed should be done. Three things need to be borne in mind in this respect. The review should:

1 show how the research is *timely* – arguing that the subject matter of the proposed research is of particular significance in relation to contemporary events;
2 establish that the proposed methods are *suitable* – pointing towards the contribution that can be made by the kind of research that is being proposed; and
3 arrive at a *conclusion* – drawing together the threads of the discussion to arrive at a logical conclusion that points to the need for particular research questions to be investigated in order to 'fill in the gaps', 'take things further', or 'do a better job than has been done so far'. It is all too easy to assume the points have been made rather than capitalise on them by drawing things together with a powerful concluding statement.

Top tip

Use the literature review to argue that the research is needed and worthwhile.

Demonstrate your familiarity with key ideas in the area of study

Readers of a proposal will wish to feel assured that the researcher knows what he or she is talking about and is competent to embark on the proposed research. The review of literature has a role to play here. Properly done, the review demonstrates a familiarity with the main issues and debates in the field, and this can bolster the reader's confidence about the likely success of the proposed research. The degree of familiarity can be expected to vary depending on whether the proposal is written for a bachelor's project, a master's dissertation, a PhD application, or a research funding bid but, in all cases, the literature review gives an indication of what the researcher knows about the topic on which he or she proposes to conduct research.

Identify the intellectual origins of the work

The literature review serves to 'map out' the area of the proposed research and the approach that is to be taken to the investigation. It pinpoints the theories, ideas, and practices that shape the proposed research and, in so doing, locates the research within its intellectual origins. It acts as a series of signposts that show not only the direction in which the research is going, but also where the research is coming from – its discipline area and research tradition. As such, it allows the reader to understand the approach of the research and to get some feel for the assumptions underlying the proposed investigation. As well as this, the literature review provides the opportunity to acknowledge the contribution of others and the way the current research has been influenced by the writings of other people. This is good practice and, of course, defends against accusations of plagiarism.

Identify some element of originality associated with the research

The point has already been made that research proposals should contain some element of originality. The spirit behind this is that there is rarely any need for research to simply replicate what has been done before. It is more worthwhile to conduct research that moves things forward. The notion of originality is often interpreted in a fairly broad way and in practice it tends to focus on ways in which the proposed work is *different from* other pieces of research that already exist. The literature review provides the place in the proposal where researchers can make the case that their project offers something different in relation to the topic, method, theory, data, application, or analysis.

Define terms and clarify concepts

The research is almost certain to involve key terms and concepts and great care should be taken to define them precisely. There should be no room for ambiguity or misunderstanding about these core ideas. The task is to identify the key terms and concepts and then pinpoint what you understand these to mean and how you will use them during the course of the research. It is good practice to show how your definitions have been drawn from the works of established authorities in the field of study. Cite the sources and explain how your particular use of the terms or concepts relates to theirs. Perhaps you wish to adopt the definition provided by a particular expert in the field. That's fine, but you must explain *why* you have chosen to do so. What are the strengths of the definition? Is it a standard definition in the field? Or, perhaps you want to develop your own definition, in which case you need to explain why and, in doing so, refer to other possible alternatives and the reasons why you do not wish to adopt one of these.

Link-up with Precision. p. 22

Develop research objectives and refine research questions

Even within the confines of a research proposal, a good literature review should take the reader on a kind of intellectual journey. It should move the focus of attention from wide and general contextual issues through a review of the available literature towards specific research questions that can be investigated through empirical inquiry. Writing skills are important here in terms of being able to craft the written material in a suitable fashion.

Link-up with Chapter 6: Research Questions

Delimitations and scoping the research

Somewhere within any proposal the researcher needs to address the matter of what is, and what is not, included in the research. Sometimes this is done under a separate heading that 'delimits' the research. Sometimes it appears within the *Methods* section. More often than not, however, the *Literature Review* provides the context for researchers to establish exactly what will be included in

the proposed research and what will not be included – and to justify why this is the case.

The term 'delimitations' is used in this context. To delimit means to demarcate, or to set the boundaries around something. It involves 'setting the limits'. The delimitations of a project are self-imposed boundaries decided upon by the researcher and are therefore distinct from 'limitations', which arise from factors beyond the control of the researcher. Delimitations are concerned with specifying things, such as:

- boundaries to the literature that will be *reviewed*;
- things that will be *done* in the research and things that will not be done – and why;
- items or people that will be *included* in the research and those that will not – and why;
- factors that will be *looked at* in the research and those that will not – and why; and
- the time span to be *covered* – and why.

Scoping a project serves a similar purpose. Like delimitation, scoping establishes what kinds of thing are (and are not) going to fall within the remit for the research. It entails decisions about what the research is (and is not) trying to achieve and it is a process that effectively sets boundaries around what is to be included and, importantly, what is to be excluded from the study.

These things are necessary for managing the expectations of the people who will evaluate the proposal. They spell out the intentions behind the research so that readers of the proposal know all they need to know about the purpose of the proposed research and its underlying premises. There are also various benefits for the researcher in doing this. First, it helps with the planning of the research to have a clear vision of the project. Second, and just as important, it means that the researcher will be less likely to be misunderstood as those who assess a proposal should not be able to misconstrue things or misunderstand what the proposed research is trying to do. The terms of reference for the proposed research are made clear through delimitations and the scoping process, and the evaluation of the proposal should be based on the premises that have been established by the researcher.

Further reading

Fink, A. (2019) *Conducting Research Literature Reviews: From the Internet to Paper* (5th edition). Thousand Oaks, CA: Sage (Chapters 1 and 5).

Hart, C. (2018) *Doing a Literature Review: Releasing the Social Science Research Imagination* (2nd edition) London: Sage (Chapter 2).

Machi, L.A. and McEvoy, B.T. (2016) *The Literature Review: Six Steps to Success*. Thousand Oaks, CA: Corwin Press (Chapters 2 and 5).

Ridley, D.D. (2012) *The Literature Review: A Step-by-Step Guide for Students* (2nd edition). London: Sage (Chapters 2, 8, and 10).

Summary of key points

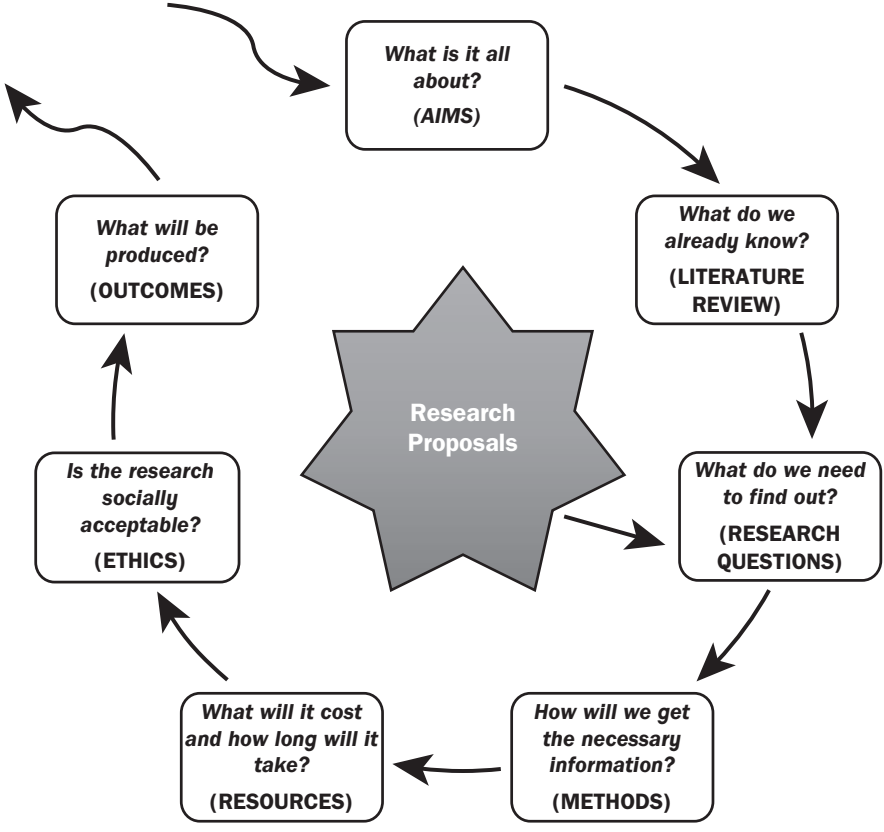
In the context of a research proposal, the literature review is a preliminary review that takes place before the start of the empirical research. However, this chapter has made the point that the literature review still has a vital role to play. It functions as the place where researchers can make a case in support of their proposed project by examining the existing literature on the topic and presenting an argument that persuades readers that the proposed research is worthwhile.

To do this, the first task is to identify suitable sources of evidence that can be incorporated into the review, and this chapter has provided guidance on how to conduct this search. It has also discussed the criteria that can be used for honing down the large number of sources that are eligible for inclusion into the small number of key sources required for the review.

This chapter has outlined how to construct a 'review' that collates and analyses the literature to provide an overview of what is currently known about a topic. The process of doing this tends to be 'messy' and the point has been made that writing a literature review is an iterative process. Having acknowledged that, the end product needs to present a logical argument supporting the value of the proposal. It should indicate how the proposed research will offer something that, in some way or other, is different from research that has already been conducted elsewhere. And, crucially, it should show how the research responds to some specific need. This chapter has outlined four different types of need that research proposals can address, noting that these are not mutually exclusive. As a conclusion to the review, a clear rationale should emerge for the choice of topic and the specific research questions to be investigated.

Chapter **6**

Research Questions: *What do we need to find out?*



What is a 'research question'?

Research questions can take one of three forms. They can be sentences that literally ask a question, they can occur as hypotheses, or they can be expressed as propositions. However, it is worth noting straight away that the term 'research question' is sometimes used in a rather general sense as an umbrella term that covers a range of things concerned with the subject matter of an investigation. It is possible to find occasions when, separately or together, the aims, objectives, and research problems are treated as falling under the broad heading of '*research questions*'. This can be confusing, especially for newcomers faced with the task of designing a small-scale research project. So, to avoid any doubt on the matter, this chapter focuses on *specific* research questions that take the form of questions, hypotheses, or proposals.

The role of research questions

Questions, hypotheses, and propositions might appear to be quite different from one another, and in some respects they are. But there are three things they have in common – things that are extremely important in the context of research proposals.

First, they all pose questions that are *vital for addressing the key concerns of the research*. They identify what the researcher needs to find out if the research is to add anything valuable to our knowledge about the topic being

covered. Research questions, so to speak, 'hit the nail on the head' by asking the most pertinent, revealing, and incisive questions about the issues or problems that are driving the research.

Second, whichever form they take, research questions are relatively *precise* and *specific*. With quantitative research, this is very much the case; with qualitative research, perhaps less so. But the point about research questions in general is that the questions they ask are not vague or abstract. Research questions transform the debates and ideas that have been analysed in the course of the literature review – things that might well have involved abstract concepts and general theories – and puts them into a format that can be investigated empirically. In doing so, they give an indication of the kind of *data that will be collected*.

Third, research questions occupy a *pivotal position* in the research proposal, operating as a bridge between 'what we already know' and 'what we are going to look at'. They provide a conclusion to the first part of the proposal where the researcher has established the overall aims of the project and discussed what is already known in relation to the topic. They are also the starting point for the second part of the proposal, which deals with the empirical investigation and how it will be conducted. This determines where the research questions are to be placed. They appear at that point in a research proposal that joins the preliminary discussion of existing knowledge to the proposed collection of pertinent data. In practice, this means that the questions, hypotheses, or propositions appear either

a) at the end of the *Literature Review*, as a conclusion (the most common position), or
b) in a separate, stand-alone section of the proposal (following the *Literature Review*), or
c) early in the *Methods* section of the proposal.

Benefits of good research questions

Bryman (2007: 6) makes the point that a well-formulated research question 'helps to militate against undisciplined data collection and analysis'. In doing so, he draws attention to the way that, by focusing on the most significant things in terms of the collection and analysis of data, good research questions enable the efficient use of time and resources. They avoid wasting effort collecting data that might prove to be irrelevant for the purposes of the research or wasting time exploring avenues of thought that might divert efforts away from the core purpose of the research. Because research questions identify the factors that matter most in terms of addressing the aims of the research project, they keep the data collection and analysis 'on target'.

Another reason that good research questions are important is that they signify a clear grasp of what needs to be done in order to address the aims of the research. The people who evaluate research proposals are likely to be fully aware of this point, using it as a key criterion for judging the worth of a proposal. They will regard well-formulated research questions as a good sign

for the prospects of a successful project and, by the same token, they will interpret the absence of clear research questions as meaning that the ideas behind the proposed research have not been given sufficient thought or that the researcher is not clear about how the aims of the research will be achieved. Obviously, this will not help the prospects of success.

How many research questions should there be?

There are no hard and fast rules about how many research questions should appear in a proposal. For qualitative research, it is possible that one well-constructed research question might be sufficient to specify exactly what is to be studied. Quantitative research, by contrast, can involve a list of hypotheses and alternative hypotheses that can be relatively lengthy. By way of some general guidance, however, it is quite normal for research proposals to have between three and seven research questions.

Narrowing the focus

The research questions, hypotheses, or propositions that appear in a research proposal should constitute a neat and logical conclusion to a discussion about the existing literature relating to the topic of the research. However, as with the literature review, this tidy version will be the end product of an iterative process rather than a one-way journey that travels a logical pathway from beginning to end. The messy process of developing the research questions, though, does not matter. What does matter is that, by the time it is ready for submission, the aims of the research get 'operationalised' into something on which firm data can be collected.

To get to this point, it is necessary to hone down the span of interest from something fairly general to something specific. In effect, this means converting the broad aims of the research (which are concerned with where it will go) into objectives and research problems (that indicate what the research is trying to do) into research questions that specify what factors and what relationships will be looked at (see Table 6.1).

Table 6.1 Narrowing the focus from aims and objectives to research questions

Aims	General ↓	Abstract ↓	Describe where the research will **go**; its direction and purpose
Objectives or Research Problems			Point to what the research will **do**; the issues or problems it will deal with
Research Questions	Specific	Concrete	Itemise what the research will **look at**; the factors that will be measured or investigated

Alongside this process, the focus in social science research projects needs to shift from abstract ideas towards more concrete items to be investigated. Research questions, hypotheses, and propositions, by their nature, avoid asking about vague or general things; instead, they concentrate on specific things, factual things, or things that have substance. In the case of phenomena that are directly observable or measurable, this could be a particular:

- event that will be observed;
- variable that will be measured; or
- behaviour that will be monitored.

Where the phenomenon being studied does not lend itself to direct observation or measurement, good research questions will look at manifestations of the phenomenon that lend themselves to being studied in a way that produces research data. Such *indicators* might be used, for instance, in relation to a particular:

- belief or motive that will be interpreted;
- experience that will be described;
- attitude or opinion that will be detected; or
- lifestyle or culture that will be portrayed.

When narrowing the focus, it is important to develop a clear rationale that allows the reader to see how the research questions address the aims of the research. There needs to be a narrative that locates the research within some broad area of interest, establishes the aims for the project, and then narrows these down to relevant questions. Figure 6.1 illustrates how this process might look, moving from a wide starting point (i.e. an interest in the area of employment and work motivation) through to a series of questions that pinpoint the exact indicators that will be looked at by the research.

Top tip

Make sure your research questions ask about 'things' that are:

- specific rather than general;
- precise rather than vague; and
- concrete rather than abstract.

Writing research questions

After having honed the broad aims of the research project into specific research questions, and after introducing them at an appropriate point in the research proposal, the remaining challenge when writing a research

		Example	*Comment*
AREA	Narrowing focus	Employment and work motivation	General area of interest (e.g. a sub-area of a discipline, or a work-related concern)
TOPIC		Absence from work	Specific topic of concern from within the general area
LITERATURE REVIEW		Absence rates are related to pay and job satisfaction as well as other factors, such as job security, work conditions, health and safety at work, worker morale, career and promotions	What is already known about the topic? Background research to identify the key issues and existing knowledge about the topic
RESEARCH AIMS		To investigate how rates of absenteeism are linked with levels of pay and levels of job satisfaction To gauge how far rates of absenteeism can be reduced through changes to the pay structure and changes to levels of job satisfaction To explore the link between these factors in the context of lower-paid workers	These are statements about the general purpose of the research. They are relatively non-specific, abstract indications of where the research is going – its ambitions, its targets, its *goals* It is 'all about' absenteeism, pay and job satisfaction
RESEARCH OBJECTIVES		To apply existing knowledge about the relationship between rates of absenteeism and levels of pay and job satisfaction to the specific situation of low-paid workers in the UK retail sector with a view to finding appropriate means for reducing absenteeism To focus on employees in three case study companies as a good example from which to draw more general conclusions	Here is a statement about what the research will *do* It will use existing knowledge, *apply* it to a particular context, and *develop* new knowledge that can have a particular value
RESEARCH QUESTIONS		Is there a statistical correlation between levels of pay and absenteeism among employees working for the three case study retailers? What is the profile of employees working in the shops (age, sex, etc.)? Do certain kinds of worker have higher absenteeism rates than others? Are certain kinds of employees more frustrated by their work role than others, and is this correlated with a tendency to take days off work? What reasons do employees give for being absent from work? What aspirations do the shop workers have in terms of intrinsic rewards from the job and career progression? To what extent is job satisfaction related to levels of pay?	These are the questions that the research will actually *ask* to find out what it wants to know They focus on specific *key indicators* and *relevant factors* on which information is needed

Figure 6.1 Developing research questions: Narrowing the focus

proposal is to present the research questions in a suitable way. The style of presentation will differ depending on whether the research questions are being formulated as questions, hypotheses, or propositions and, reflecting this, the following sections deal separately with the three types of research question.

Starting with research questions, the first point to bear in mind about the look of the questions is that they are normally a *clear and visibly distinct component* of a research proposal. They can be presented as a series of bullet-points or they can be listed as a sequence of statements, but they are not normally embedded within a paragraph of text or merged in some other way within a larger body of text.

The second point is that each research question needs to work as a *self-contained item*, asking about one thing at a time. It is important that the question does not make an unwarranted assumption that begs a further question in response. The question, 'Why is the bus system poorly managed?' is an example of a bad question in this respect. It is based on the assumption that the bus system is poorly managed. Is this true? It begs the question, 'What *is* the quality of the management of the bus system?' A good research question avoids the need for any such supplementary question. The question should also avoid combining what are really two or more separate issues within one question – so-called 'compound' questions. Again, a poor example would be a research question along the lines, 'Why are some bus companies run efficiently and others not, and what recommendations can be made from looking at the management of profitable bus companies?' In terms of being a research question, it needs to be broken down into its component parts with each research question being self-contained. For example:

> 'What are the distinctive features of the management of bus companies that are profitable?'
>
> 'In what ways, if any, do management practices in profitable bus companies differ from management practices in less profitable companies?'
>
> 'What elements, if any, of the management practices of profitable bus companies can be used to enhance the performance of less profitable companies?'

The third point is that research questions should be presented in a *sequential order* – logically building from one to the next. As indicated by the previous example, the questions should start with the most general and move to subsidiary questions that derive from the initial one.

Top tip

Keep research questions straightforward – one thing at a time.

And fourth, the questions should be introduced in a way that explicitly links them to the previous discussions within the proposal and emphasises the way the questions have been derived from literature review. For example:

> 'Having considered the relevant and significant research and debates associated with (the subject area), there appears to be a need for further research on (a specific topic). With this in mind, this research will ask the following specific research questions.'

How are they worded?

To help with writing research questions, the best advice is to start with the standard 'Ws' – what, when, where, who. You can also add 'do' to this list even though it does not fit so neatly in an alphabetical sense! To illustrate the point, imagine a piece of research that is interested in the efficiency of public transport and, in particular, the phenomenon of clustering or 'bunching' of buses along urban routes. (You wait for ages and then two or three buses come along together.) Suitable research questions might take the following forms:

- *What* is the frequency and extent of bunching on the bus routes?
- *When* does the bunching occur most severely during the day?
- *Where* does the bunching occur along the urban routes?
- *Who* are most affected in terms of the kinds of people using the bus route?
- *Do* bus companies currently take action to avoid bunching of buses along their routes?
- *What* is the relationship between the timetabled frequency of buses on a route and the occurrence of bunching?
- *Do* routes with fewer passengers experience the bunching of buses less frequently?

Things to avoid

There are two things to avoid when writing research questions. The first of these is the common mistake of simply reiterating the aims of the research as research questions. It should be clear from the discussion earlier in this chapter about the distinction between aims, objectives, and research questions that this would be wrong and would be regarded by the readers as a significant weakness in the proposal.

The second thing to avoid is a confusion of research questions as used in a research proposal with questions that might be asked during an interview or appear on a questionnaire. Such data collection questions will tend to be more detailed and developed to meet the requirements of the research instrument being used.

Writing hypotheses

Hypotheses are the classic, scientific way of formulating a research question. In essence, hypotheses propose a relationship between two or more *variables*. They do so on the basis of previous theories and findings on the topic and they do so in a way that is testable.

From this description we can see that there are four components to hypotheses, each of which deserves a little more attention. First, there is the matter of the *variables*. Variables, as the name suggests, are things that can change and take on different values. The different values can be numeric (such as in the size and weight of objects) or, indeed, anything that has either a quantity or a quality that varies. The scope is wide and covers objects, people, events, times, locations – anything that has a value (number or name) that is not a constant and that allows us to distinguish between the items being studied. This means that although hypotheses are more commonly linked with the use of quantitative data and statistical analysis, it is also possible to use them in conjunction with qualitative research where the variables can be classified or labelled (Creswell and Creswell 2018; Mason 2018; White 2017).

Second, hypotheses predict a *relationship* between particular variables. It is important on this point for the hypothesis to be clear about the nature of the relationship that is being predicted. For example, if the variables being studied are 'bunching of buses' and 'traffic congestion', the hypothesis should be clear about whether the link will be:

- non-directional (bunching of buses is linked to traffic congestion) or directional (the extent of bunching of buses increases when the level of traffic congestion increases); and
- causal (the bunching of buses is caused by traffic congestion) or correlational (the extent of bunching of buses varies in accord with the level of traffic congestion).

Third, hypotheses are based on previous theories and are logically derived from previous knowledge in the field in a transparent manner. As Clark (1987: 30) stresses,

> An hypothesis is not merely based on guesswork, but is a tentative, carefully thought out, logical statement of a predicted outcome. It is supported by a rationale and must be consistent with existing theory.

Fourth, hypotheses set out to test whether some relationship exists. They predict a relationship between variables in a way that can be *empirically* supported or refuted. The hypothesis takes as its starting point some existing state of affairs from which it is logically possible to deduce some further expected finding, and the research sets out to compare the 'logically expected' with what is 'actually found'. So, for example, if a research project was interested in the launch of a new product (product A), the following hypothesis might be developed:

'If . . . (i) consumers are motivated solely by financial self-interest, and (ii) product A offers better value for money than product B,

(*two theoretical premises*)

then . . . we can predict that consumers will switch from buying product B to buying product A

(*expected outcome*)

when . . . product A is introduced to the market and consumers have equal opportunity to purchase the two brands.'

(*under given conditions*)

Such a statement has the virtue of being succinct and of indicating exactly what the research needs to accomplish. The research will measure the extent to which traditional purchasers of product B shift to buying product A to test whether this holds true. If it does, the findings will support the hypothesis.

One further point on writing hypotheses. When they are introduced, it is a good thing to remind the readers that they have been developed on the basis of the evidence that has been reviewed previously in the proposal. For example:

'The evidence from existing research on (the topic) indicates that there is some lack of agreement about the role of (factor A) and the extent to which it is influenced by (factor B). In an effort to clarify this matter, the research will test the following hypotheses.'

Top tip

Never say that your findings will *prove* a hypothesis is correct. Results from research do not prove or disprove a hypothesis; they test the hypothesis and provide evidence that *supports* or *does not support* the hypothesis. It is important not to jump to conclusions on the basis of the findings, and the wording used to express what can and cannot be concluded from the findings is important. There is a vast philosophy of science behind the point but the basic thing to remember is that you must avoid making unwarranted claims on the basis of your findings.

Writing propositions

Research questions can be stated as propositions. These are declarative factual statements that propose things that generally can be checked to determine whether they hold true. As such, they work along the same lines as hypotheses

in the sense that they formulate the research question in a way that involves a positive statement about something that the research might expect to find. Propositions, however, do not always need to meet all the conditions that apply to hypotheses. They are still explicit about what will be focused upon during the research but they can be a bit looser than hypotheses when it comes to the way they stem from previous research, how variables will be 'measured', and how relationships will be 'tested'.

For these reasons, propositions are a useful format for research questions when researchers are investigating fairly uncharted territory and where the research evidence to date does not provide a well-established set of theories on which to base a hypothesis. A proposition can be based on more of a hunch or a bit of inspiration rather than firmly established knowledge about the topic. Continuing with the 'bunching of buses' example, research propositions might take the form:

> 'Reducing traffic congestion will ease the problem of buses bunching together along urban routes.'
>
> 'Styles of management influence the profitability of bus companies.'

Both of these statements are factual and either true or false. They are also testable. However, unlike hypotheses, they are not premised on predictions stemming from previous research, nor do they specify the exact conditions under which predicted findings might be expected. If they did, then the first example would read more like: 'Based on existing queuing theory, reducing the volume of traffic congestion by 12 per cent will cause a reduction of bunching by 24 per cent, controlling for weather conditions and the time of day.'

As with hypotheses and research questions, it is useful to introduce propositions in a way that indicates the fact that they are derived from a review of the existing research findings. This can be done using a statement such as:

> 'A review of the literature indicates that there is uncertainty about the existence of (factor A) and that further information about (factor A) will be beneficial in terms of our understanding of (the topic). For this reason, the research will address the following research propositions.'

The need for an open-minded approach

Research questions need to be written in such a way that the findings can either support or challenge any expectations the researchers might initially hold. Whether constructed as questions, hypotheses, or propositions, they need to offer a genuine chance of finding the unexpected. They should never pre-empt findings or suggest in any way that the findings are a foregone conclusion. Even when hypotheses and propositions posit a relationship that might be expected to exist, they do so in the spirit of an open-minded approach, the

purpose of which is to check whether a particular finding occurs rather than to assume it will exist.

This is more than just a matter of wording. It is important that research is conducted to check and test our expectations rather than to confirm what we already know. Researchers need to approach things with a genuine spirit of discovery and exploration in which they recognise that what they thought was true might not necessarily be borne out by the findings of their research. Researchers have to be open to the possibility of being wrong, of finding the unexpected, of discovering something new – and the wording of the research questions should reflect this.

Qualitative research and grounded theory approaches

There are types of qualitative research that have a particular concern about open-mindedness. Exploratory research, which sets out to describe things (e.g. types of ethnography and types of phenomenology) or to discover things (e.g. grounded theory) can sometimes take the position that researchers should start with a completely open mind about what will be found by the investigation and that researchers should not have their open minds tainted by prior expectations derived from reading previous work on the topic. The worry is that if researchers use existing theories as the basis for producing research questions, this will create a mental straitjacket that will constrain their thinking and cloud their minds. It will stop them from seeing things afresh and seeing things 'as they really are'.

In the context of writing successful research proposals, there are two points that are worth making about this approach. The first is that it is a fairly radical and controversial position to take. This does not make it 'wrong' – and this is not the context to engage in a discussion of the epistemological merits of such a stance on research – but it does mean that it is not a stance that is likely to be shared by the vast majority of those evaluating research proposals. Right or wrong, the practical reality is that the chances of a research proposal being approved are very slim if it says: 'I will approach the study with a completely open mind and will therefore not read previous work on the topic and will not have specific research questions before I begin the research.' The second point is that exploratory qualitative research can generally manage to get a suitable balance between the need to 'see things afresh' and the need to start research with some form of research questions in mind. Indeed, there is a definite need for qualitative research to do so. As Marshall and Rossman (1999: 38) state:

> The proposal should be sufficiently clear, both in research questions and design, so that the reader can evaluate its do-ability; on the other hand, the proposal should reserve the flexibility that is the hallmark of qualitative

methods. This suggests that the research questions should be general enough to permit exploration but focused enough to delimit the study.

To accomplish this balancing act, the proposal is more likely to formulate its research questions in the form of statements than hypotheses or propositions, and the statements are likely to be rather general. As Creswell and Creswell (2018) recommend, they should take the form of a central question followed by associated sub-questions that narrow the focus of the research and that, keeping within the spirit of emergent research designs, should start with appropriate verbs. Creswell and Creswell suggest the following possibilities:

- Discover . . . (e.g. grounded theory)
- Seek to understand . . . (e.g. ethnography)
- Explore a process . . . (e.g. case study)
- Describe the experiences . . . (e.g. phenomenology)
- Report the stories . . . (e.g. narrative research).

A worked example: Research on the distribution of bakery products

The following example brings together the themes developed in this chapter and illustrates them in relation to an imagined investigation into the delivery of bakery products. The researcher is approaching the topic in a way that draws on two 'disciplines': management practice and transport logistics. These two strands will provide the starting points for reviewing the literature and for getting a feel for the theories and practical concerns that are important for a good understanding of the topic. A review of the literature might well reveal that two factors are particularly important: the costs of transport and the punctuality of deliveries. The nature of bakery products with relatively small profit margins and a particularly short shelf life makes these two factors important for the commercial survival of bakery companies. The researcher has limited time and resources to conduct the research and, in light of this, opts to conduct a case study of a company where the researcher already has personal contacts – Broadbread Ltd. In the proposal produced by the researcher, the research questions could be presented as questions, hypotheses, or propositions depending on the kind of research that is to be carried out and the kind of research tradition from which the researcher comes. Some indication of what these might look like is provided in Table 6.2. But whatever approach is taken, note how:

- the research questions *link to the aims and the objectives*, and
- the research questions involve specific *factors that are to be 'looked at'* in order to meet the aims of the research.

Table 6.2 Research questions: An example

Topic	The distribution of bakery products	Comments
Aims	• To evaluate transport logistics in relation to the delivery of bakery products. • To identify elements of 'good practice' that can be applied at an industry-wide level. • To make recommendations for reducing the cost of delivering bakery products and improving the punctuality of deliveries to local stores.	*This indicates* what *the research will be about and* why *it should be. The aims explain where the research is going and what its targets are.*
Objectives	*To do this, the research will*: • Describe and analyse existing delivery practices at Broadbread Ltd. • Compare practices at Broadbread Ltd with best practice in the transport industry. • Examine the key cost components influencing vehicle purchasing in the company. • Identify the main causes of delays in the delivery schedule.	*This identifies what the particular areas of investigation will be. The objectives point to what the research will do.*
Research questions . . .		
as Questions	1. What are the main factors disrupting the punctual delivery of the bakery products? 2. How frequently do delays occur in the delivery of bakery products to local stores in East Anglia? 3. What measures are taken at Broadbread Ltd to deal with the occurrence of delays? 4. What proportion of Broadbread Ltd's annual budget is spent on the purchase of new delivery vehicles? 5. Are there particular features of Broadbread Ltd's transport management that can be held responsible for delays in deliveries?	*The questions focus on key factors that need to be investigated. They do not rely entirely on existing theories and allow for exploration of new factors.*

(continued)

Table 6.2 (continued)

Topic	The distribution of bakery products	Comments
as Hypotheses	1. If management fails to take advantage of transport logistics software and if costs/delays continue at current rates, then Broadbread Ltd will lose 12% of its market share within the next two years. 2. If industry best practice with respect to transport management is implemented at Broadbread Ltd, then this will lead to a 10% improvement in the punctuality of deliveries to local stores. 3. If leasing agreements replace current purchasing and maintenance arrangements at Broadbread Ltd, then overall transports costs will be reduced by 15%, all other things being equal.	*Hypotheses involve specific predictions about the result of introducing new factors. They rely on detailed knowledge and are based heavily on well-established theories.*
as Propositions	1. Management practices at Broadbread Ltd do not accord with current best practice in the industry. 2. Cost savings can be made through changes to company policy relating to vehicle purchasing. 3. The punctuality of deliveries can be improved by the use of transport logistics software to reduce the impact of predictable and avoidable delays.	*Propositions assert a fact that the researcher can proceed to investigate to see if it is supported by the evidence. The predictions are less specific than those associated with hypotheses.*

Further reading

Andrews, R. (2003) *Research Questions*. London: Continuum (Chapters 2, 3, and 6).

Bryman, A. (2016) *Social Research Methods* (5th edition). Oxford: Oxford University Press (Chapter 4).

Creswell, J.W. and Creswell, J.D. (2018) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th edition). Thousand Oaks, CA: Sage (Chapter 7).

Fraenkel, J., Wallen, N. and Hyun, H. (2018) *How to Design and Evaluate Research in Education* (10th edition). New York: McGraw-Hill Education (Chapters 2 and 3).

White, P. (2017) *Developing Research Questions: A Guide for Social Scientists* (2nd edition). Basingstoke: Palgrave Macmillan (Chapters 2–4).

Summary of key points

Research questions can take the form of questions, hypotheses, or propositions, and this chapter has offered guidance on how each of these can be devised and written in the context of a research proposal.

It has been stressed that well-formulated questions, hypotheses, and propositions are important because they improve the prospects of the proposal being successful. They are likely to impress those who evaluate the proposal because they reflect a good degree of precision in the researcher's thinking and planning about the research. The absence of crisp, precise research questions, on the other hand, will jeopardise the research proposal's chance of success because readers will regard it as evidence of fuzzy thinking or poor preparation for the project.

As well as practical guidance geared to the writing of each separate type of research question, the chapter has drawn attention to a range of attributes that they have in common. There are some essential features of questions, hypotheses, or propositions that define them as functioning 'research questions', and this chapter has drawn attention to the necessity for them to be:

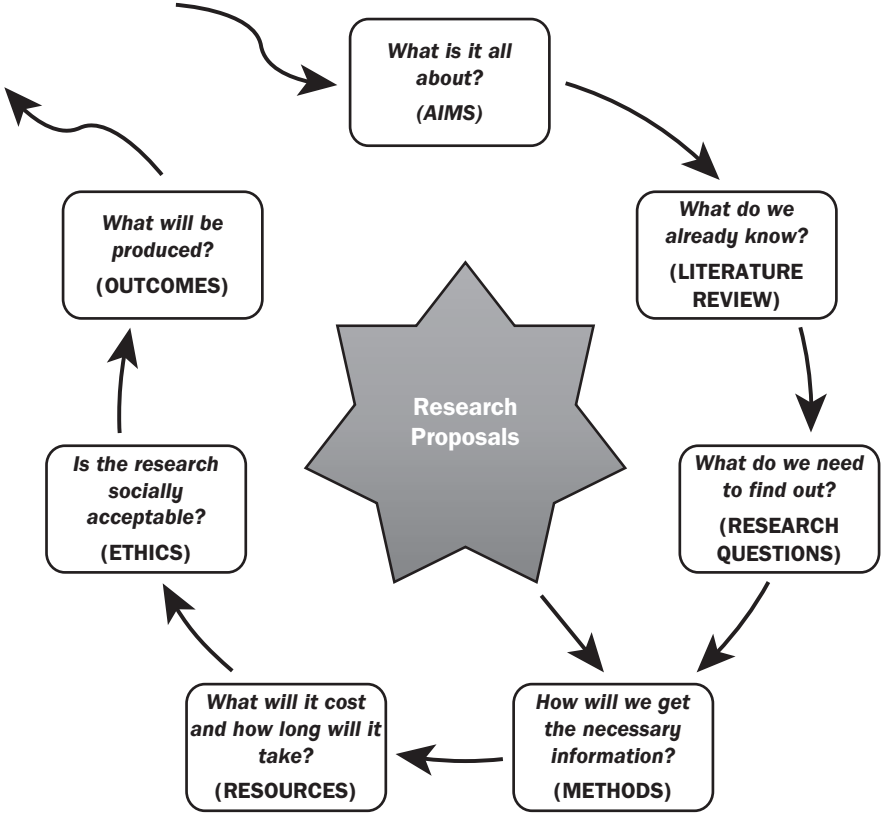
- *relevant*: derived from a review of the existing research evidence and linked clearly to the aims of the research;
- *specific*: narrowly focused and pinpointing the things that will be 'looked at' by the research;
- *concrete* rather than abstract: in the case of quantitative data, this is something that is observable or measurable; in the case of qualitative research, it is something that can be described or interpreted.

Research questions, in the form of questions, hypotheses, or propositions, also share features linked to their presence within a research proposal, and this chapter has noted that they all need to be:

- suitably located and easily distinguished as a feature within the research proposal;
- presented in a logical sequence;
- self-contained – each question/proposition/hypothesis deals with a distinct issue or idea; and
- open and not assume an outcome – questions need to avoid foregone conclusions.

Chapter **7**

Methods: *How will we get the necessary information?*



Description of the methods

Justification of the choice of methods

Risk assessment

Limitations

By the time readers reach this section of the proposal, they should have a clear idea of what the research will attempt to do and they will hopefully be persuaded that this is a worthwhile venture. They will now want to know more about how the research is to be conducted and their attention will shift from *what* is to be studied to *how* it will be investigated.

There will be a number of questions in their minds but these essentially boil down to three basic issues. First, *what methods will be used?* In a typical social science research proposal, readers will want to know 'in a nutshell':

- What research strategy will be used?
- What kind of data will be collected, and how much?
- How will the data be collected?
- Who, or what, will be included?
- How will the data be analysed?

Once they are clear on these things, the readers can then turn their attention to the second issue: *why the methods have been chosen* and *why the research will be done in the way that has been outlined*. They will want to know:

- Are the proposed methods suitable and likely to address the research question or aims?
- Are the proposed methods likely to produce worthwhile data?

The third and final issue readers will be concerned with is *whether the proposed methods can be implemented*. They will want to be assured at a practical level that the proposed methods can be carried out successfully and will ask:

- Will the methods work in practice?

Reflecting these concerns, the *Methods* section of a research proposal tends to break down into two parts. The first part sets out to provide the reader with the facts about what will be done. The second part attempts to demonstrate that the actions and choices outlined in the first part will be appropriate and are justifiable – that they are 'good' in terms of the overall aims of the research and that they are practical.

Description of the methods

In the context of a research proposal, there should be no chance of any confusion about what is on offer and an outline of the methods 'up front' serves to eliminate the prospect of any uncertainty or ambiguity from the reader's point of view about what the methods will involve. At the beginning of the *Methods* section, then, there should be a straightforward description of the methods and the data that will be collected. This should be a matter of fact assertion about what will be done. At this point, there should be no attempt to justify the methods – the point is simply to inform the readers so that they can better understand the situation. Justifications come later.

The statement should be *brief*. There is little scope for wasted words or the inclusion of irrelevant items. The information that is given to the readers needs to be enough for them to understand the proposed methods but nothing more. Remember, *a research proposal is not an essay*; it is an outline plan of action that provides the reader with the information they require – no more, no less.

Top tip

A good, crisp outline of the methods is important not just because of the information it provides, but also of the impression it conveys. It says to the reader: 'I know exactly what I am doing in this research project', and this is likely to make the reader feel confident about the quality of the research design that is about to be unfolded in the subsequent parts of the *Methods* section of the proposal.

What research strategy will be used?

The description of the methods should start with a clear statement about the approach that is to be adopted. It is good practice to specify which *research strategy* will be used – whether the research will be based on a survey or a case study, whether it will use experiments or do ethnography, whether it will use grounded theory or involve mixed methods, and so on. This can be dealt with by statements such as: 'This research will use a case study approach to delve deeply into . . . (the research questions)' or 'This research will adopt a mixed methods strategy that combines a survey approach and case study approach to explore . . . (the research questions).'

What methods of data collection will be used?

Attention should then be placed on the tools used to collect the data. Some commonplace options from which to choose include:

- *Interview*: will the research use unstructured, semi-structured, or structured types of interview?

- *Questionnaire*: will the questionnaire use open-ended or closed-ended questions? Or will it include both?
- *Observation*: will the research involve systematic observation or participant observation? What items will be observed?
- *Documents*: will the research focus on documents – diaries, websites, minutes of meetings, official records, and so on?

What kind of data will be collected?

The next thing that is required is a description of exactly what kind of data will be collected. It is useful, therefore, to be explicit about whether the research will use *quantitative* or *qualitative data* – will the research rely on one or the other, or will it adopt a mixed-methods approach?

How much data will be collected?

The amount of data to be collected should be specified in a positive and confident manner. It should be based on anticipated numbers and should avoid any sense of uncertainty or vagueness in the way the details are presented. There are two reasons for this. First, the readers need to get a reasonably clear picture in their minds about the scale and scope of the investigation. They can do this on the basis of numbers that are given but will struggle to do so if they are given only vague and woolly descriptions of amounts such as 'a large number of', 'many', 'few', 'some', and so on. Second, tentative statements that say that the research 'hopes' to collect a certain volume of data or that 'might' manage to obtain a stated amount of data send the wrong message. They suggest a lack of confidence about what is being proposed. They convey a sense of doubt – which is definitely the wrong message in terms of being able to persuade the readers that the research methods are workable and effective.

Link-up with Precision: p. 22

What are needed, instead, are bold statements that quantify the amount of data, statements such as:

> 'Questionnaires will be distributed to 430 employees of the Broadbread Ltd bakery company. With an anticipated response rate of 30 per cent, this will provide 129 completed questionnaires available for analysis.'
>
> 'The research will commence with five lone-parents who have direct experience of raising children who suffer from eating disorders. Using snowball sampling, it is anticipated that the total number of parents interviewed will be 30.'

However, being so precise about the numbers will worry some people, who might ask: 'How can I know exactly how many responses I will get to my survey?', 'How do I know in advance how many people I will need to interview as part of

my qualitative research?', or 'What happens if in practice I don't manage to get the amount of data I said I would?' These are reasonable questions to pose and should not be dismissed lightly. After all, researchers need to be honest when they produce a proposal and they need to be aware that proposals can involve a sense of contractual obligation in which there is a 'promise' to deliver what is being offered. It is important to recognise these points and uphold the principle of honesty in a proposal. However, the figures that are provided about the amount of data to be collected and analysed can be regarded more as *targets* than as promises. No one will be too worried if a proposal says that it will conduct 50 interviews and ends up actually only doing 45. This is no major sin. On the other hand, if the proposal indicated that it would collect 1,000 questionnaire responses but, in the event, collected just 100, then this is a serious deviation from what was 'offered' and it would bring into question the integrity of the researcher and the proposal.

Top tip

Indicate target figures that you believe you can obtain.

Who (or what) will be included?

The people or things to be included in the research need to be identified with a good degree of precision. This is another key component of the information that readers will need in order to evaluate the overall value of the proposed research. First, it calls upon the researcher to be clear about the *research population*. The *Methods* section of the proposal should pinpoint exactly which people or things are the object of the research. The research population might be, for instance:

- an occupational group (such as 'supply teachers in secondary education' or 'air force recruits');
- a demographic group (such as 'teenagers' or 'pensioners');
- an organisation (such as 'dental practices' or 'high street banks');
- a kind of event (such as 'redundancies' or 'visits'); or
- a type of item (such as 'collectables' or 'computers').

In all likelihood, the research population will involve a combination of two or more of such categories. So, drawing from the previous list, the research population might be 'pensioners who visit high street banks' or 'supply teachers in secondary education facing redundancy'.

Second, researchers need to be explicit about their *selection of items* (people or things) to be included in the research. Where the research population is fairly small, the researcher might choose to include *all* of the people or things in the study. This needs to be stated. However, for most research – even small-scale

research – the selection of participants tends to be based on some form of *sampling*. This, likewise, needs to be stated: how will the researcher choose from among the overall research population who to include in the study and who to leave out?

A simple statement about the selection of participants will refer to the size of the sample. This would be along the lines of, 'The research will be based on a 10 per cent sample of all air force recruits joining the force during a 12-month period.' This is okay as far as it goes, but any statement about the selection of participants needs to include information about *how* the selection will be undertaken as well. If there is to be a 10 per cent sample, then how will that 10 per cent be chosen? Readers need to know. They need to be supplied with information not just about the sample size but also about the *sampling technique*. It should be clear whether the selection is to be done on the basis of random sampling, quota sampling, or purposive sampling. If it is random sampling, for example, then there needs to be more information telling the reader whether it will be systematic random sampling, cluster sampling, stratified sampling, or whatever. The important point to bear in mind is that a word or two specifying the exact sampling technique that will be used can have a huge impact on the credibility of the proposal.

Top tip

Where sampling is being used in the research, clearly state which sampling technique will be used.

How will the data be collected?

The practicalities of collecting the data are important. They are not a mundane backdrop to the proposal but a core feature of the *Methods* section, and the information supplied about how the data will be collected can make the difference between whether a project is deemed feasible by those evaluating it.

When describing how the data will be collected, the first thing to bear in mind is that simply stating which method(s) will be used does not really go far enough in terms of giving the reader the necessary insight about the practicalities. Stating which method(s) will be used is vital, of course, but as was noted in connection with sampling, it is not really sufficient to leave things at that. The same method can require different means of data acquisition, and this has a direct bearing on issues relating to whether the data collection will be feasible. So, with:

- *interviews* – will they be face-to-face, one-to-one, via telephone, or via a focus group? Will interviews be recorded?
- *questionnaires* – will they be administered to groups or individuals? Will they be paper/optical mark recognition questionnaires or will they be online versions? Will they use open- or closed-ended questions?

- *observations* – will the data be based on laboratory experiments, field notes, or an observation schedule?
- *documents* – will they be official documents or informal records? Will they consist of text or images? Will they be online documents like websites or paper-based archive material?

An account of how the data will be collected should also include some indication of the schedule for the research. Simple and straightforward information can be very effective in this respect. In just a few words, this part of the proposal can tell the reader:

- when the data will be collected (month and year);
- how long data collection will continue (duration of research); and
- where the data will be collected (location and situation).

Top tip

Provide details of how and when the methods will be put into practice. A good proposal does not rely on a simple statement of which method(s) will be used. It complements this with additional information about the particular variant of the method and how the method will be used.

Access and authorisation

In many respects, this is an integral part of the issue about how the data will be collected. It is so important, though, that it warrants consideration under a separate heading. What any reader of a research proposal will know is that unless you can get access to the necessary sources of data, a research project will be doomed. In fact, it will not take place. Access to the necessary sources of data is essential for any project.

Experienced researchers realise that access to the data is not something that can be taken for granted. It takes a lot of forethought. It can depend on personal contacts and networks and it can cost money. So, the kind of questions in the back of the minds of the people who evaluate the proposal will include:

- Will the research need specialist equipment for this research? Will the funds be available to pay for the use of this equipment, and has the researcher been trained in its use?
- Has the researcher got the appropriate personal credentials and skills to allow them to conduct the investigation?
- Who needs to authorise access to the settings, organisations, and people? And how likely is it that such authorisation will be granted?
- Can access to the data be achieved through legitimate and legal means?

Readers will be looking for the kinds of statements that will persuade them that access to the data will *not* pose a practical problem when it comes to undertaking the research. Table 7.1 gives some examples of the kind of statements that work well.

Table 7.1 Research methods: Example statements

Access to people and organisations	• Head teachers at the 12 schools have been contacted and eight have so far agreed to allow their schools to be used in the research, subject to the consent of participating teachers and students. • Company directors at the firm have agreed in principle to the research and have authorised the use of the employees' email addresses for making contact to arrange interviews.
Access to events and settings	• The researcher is a qualified nurse working within the hospital and will be able to observe and record the activities within the ward as part of his routine duties.
Access to equipment	• The specialised equipment for data collection is available within the laboratory. A training course will be attended and the equipment will be booked for use during the period of research.
Access to documents and records	• The research will use archive data that is freely available in the public domain.

Top tip

Explain how you will gain access to key sources of data. The onus is on the researcher to persuade the readers of the proposal that access will not be a problem, and a few well-chosen words in this respect can greatly benefit the proposal's prospects of success.

How will the data be analysed?

The proposal should say how the data will be analysed. There needs to be a brief description of how the researcher proposes to make sense of the data that will be collected, the processes or techniques involved, and, where appropriate, some reference to the software program that will be used. This applies as much to the analysis of qualitative data as it does to quantitative data. The information allows the reader to decide whether the techniques of analysis are appropriate and this will have a strong bearing on the overall evaluation of the proposal.

In the case of quantitative data, the proposal needs to state whether the analysis will be based on frequency counts (using, for example, contingency tables and bar charts) or whether some statistical analysis of the data will take place. It might well involve both. If statistical analysis is to be involved, the technique should be named (e.g. chi-square test, Pearson correlation, or linear regression). Experienced readers of proposals will be looking to see that treatment of the data is suitable, bearing in mind the nature of the quantitative data that will be collected (e.g. nominal, ordinal, or interval data). The software program that will be used to conduct the statistical analysis can then be named. This is not vital, but it is common to find reference to the use of Stata, SPSS, Excel, or similar software.

With qualitative data there is as much need to be specific about the process of analysis as there is with quantitative data. Where the analysis involves interpretation, which is the kind of analysis that tends to be more commonly associated with qualitative data, then readers need to be told about *how* the data will be interpreted – about the process and techniques used in the development of codes, categories, and concepts (e.g. open coding or axial coding). They need to be informed about the use of memos and research diaries as aids to the interpretation of the data. They should get information about how relationships between codes will be established, and about how the emerging themes will be checked back against the data (e.g. constant comparative method, respondent validation). Computer software is increasingly being seen as an essential tool in the analysis of qualitative data and, for this reason, it is quite important to identify the software package to be used (e.g. NVivo, MAXQDA, or Atlas.ti).

Top tip

Indicate how you plan to analyse the data. This applies to qualitative as much as it does to quantitative research.

Examples

Writing the first part of the *Methods* section can be challenging because the necessary information needs to be covered within a limited number of words. The three examples here provide some guidance in this respect, giving an indication of the kind of style and approach that might be expected for this section of the proposal.

Example 1: Survey

'A survey approach will be used for this research. The research population will be all students enrolled in Years 10 and 11 of schools in the county of East Hampshire. A cluster sampling technique will be used that will include all Year 10 and 11 students attending four schools in the county (n = 800).

A questionnaire will be piloted and then distributed during routine lesson time to all students in the sample. The survey will include questions on the ten factors identified through the literature review as likely to have an impact on smoking behaviour. Regression analysis will be used on the quantitative data from the survey (using the Stata software program). The research has been approved in principle by the local authority and the head teachers of the schools. It will be conducted during the months of May and June 20xx.'

Example 2: Case study
'The research will use a case study approach. This will enable exploratory research into the meaning of loyalty for employees faced with reduced hours and short-term lay-offs during a period of economic recession. The case study organisation, Company A, is typical of large-scale manufacturing companies hit by a downturn in demand for car components. The human resources department is supporting the research and providing access to staff names and work-based email addresses. A mixed-methods approach will be adopted combining qualitative data from interviews with quantitative data from an online questionnaire survey of company employees. Systematic random sampling will be used to select 30 employees for the interviews and 400 employees for the questionnaire. A response rate of 25 per cent will provide 100 completed questionnaires. Research will be conducted on site over a six-month period. Interviews will be transcribed and used as the basis for a narrative analysis. Data from the questionnaires will be analysed on the basis of themes emerging from the interviews (using *t*-test and chi-square). NVivo and SPSS software will be used. Research will commence in September 20xx and data collection will take place over a three-month period.'

Example 3: Experiment
'The research will use a quasi-experimental approach to evaluate the impact of an intervention aimed at improving physical fitness among nurses. Research will be conducted with male and female nurses at one hospital in the Northwest region of the country. A representative sample of 100 nurses will be sought based on sex, age, and body mass index. Quantitative measures of their physical fitness will be taken before and after the intervention. Participants will be randomly allocated to an experimental group and a control group: equal numbers in each. The experimental group will engage in a four-month intervention programme involving 20 minutes a day spent doing a treadmill exercise. Comparison of findings between the experimental group and the control group will take place after four months. Logistic regression will be used to adjust for other relevant factors such as the nurses' marital status, working hours, and involvement in sports or other regular exercise. Preliminary approval for the research has been obtained in writing from the director of nursing at the hospital.

Checklist for the description of the methods

Has brief information been included about:

- approach/strategy?
- kind of data (qualitative/quantitative/mixed-methods, choice of method)?
- how much data?
- who (or what) will be included, and how have they (has it) been selected?
- how will the data be collected (when, where, practicalities)?
- access to data and authorisation?
- data analysis (process and techniques)?

Justification of the choice of methods

The second component to the *Methods* section explains *why* the proposed methods have been chosen. Its purpose is to justify the choices that have been made and to persuade the reader that the proposed methods will not only work, but work well. It is normally longer than the previous section, describing which methods will be used, and it provides an opportunity for the researcher to go into a bit more depth. References to relevant methodological sources should be included in this section because these can be powerful allies in the effort to address the kind of questions that those who evaluate the proposal will have in their mind. Such questions include:

- Will the methods produce data that is relevant for addressing the research questions?
- Are the methods the best available under the circumstances?
- Will the methods work? Will they do the job?

More detail

There are a number of crucial decisions about the approach to a piece of research that are not automatically communicated by broad umbrella terms such as 'survey' or 'experiment' or other such names of general research strategies. Often, they leave questions about the approach unanswered, including:

- *Cross-sectional or longitudinal time frame*: Will the data come from a snapshot of things on one occasion, or will they follow the development of things over time? Or will the research combine the two?
- *Present, past, or comparative data*: Will the data be based on the present day, will the research use historical data, or will it compare instances across societies or over time?
- *Large numbers or small numbers*: Will the data involve large numbers or will the data stem from focused study on a small number of instances?

- *Controlled environment or natural event*: Will the data be produced in a controlled environment such as a laboratory, or will the data be gathered 'in the field' in naturally occurring situations? Or will the research combine the two?
- *Exploratory or explanatory research*: Will the research look at new and fairly under-researched topics to describe matters and discover new things, or will it build on a well-developed body of knowledge to explain why things happen and what their underlying causes are?

This list gives an indication of the kind of further information that can be included in the justifications section. It is not an exhaustive list, and it shouldn't be treated as a checklist because it might not be necessary to incorporate each and every dimension into the discussion.

Alternative possibilities

When writing a research proposal, the researcher needs to be conscious that there are likely to be alternative ways of doing things, each with its own strengths and weaknesses, and thus the success of the research proposal will owe a great deal to how well the researcher *justifies* his or her choice of methods. The point is that writing a successful proposal depends not just on selecting a suitable method but also on arguing that this has advantages compared with other possibilities when it comes to producing data that is useful for addressing the aims of the research.

> **Top tip**
>
> Show how the chosen method is preferable to potential alternatives. Discuss their respective merits and failings.

Methods as 'fit for purpose'?

How, then, can the choice of methods be justified? Well, one fairly straightforward way to tackle this is to use the *Checklist for the Description of the Methods* (page 86) and consider the merits of the various components in terms of:

- their suitability for the research questions; and
- their implications for the quality of the data.

Within the confines of a research proposal, it is not possible to write a full essay providing a justification of the methods. Space constraints force the researcher to be selective about where to place the emphasis. But, by way of guidance, the discussion could focus on issues such as:

- The use of *qualitative or quantitative data*: What are their respective strengths? Which is better suited to the needs of this particular research? Is a mixed-methods approach preferable?

- *Depth or breadth* of data: Will a case study be better than a survey, or vice versa, in terms of the research questions being looked at? Is there a need for depth of focus or is there a need for data drawn from widespread sources?
- The *validity* of the data produced: Will the data be accurate? Will they focus on the right issues? Is the chosen method better than alternatives in terms of getting honest responses from participants?
- The *reliability* of the method(s): Will the method(s) produce the same data if the same research is repeated?
- The possibility of *generalising* from the findings: Can the findings be extrapolated to other situations/examples? Is this possible and is it important? Is this crucial for the research?
- The extent to which the data are *representative*: Is it better to include all (or a sample) of a population or will research along the lines of a case study be more suitable? Are data based on extreme examples or special instances more *valuable*?
- The extent to which the methods are *objective*: Is this possible bearing in mind the research questions being addressed? How much does it matter?

Risk assessment

It is good practice to undertake some form of risk assessment in connection with the proposed research. Occasionally, this might need to be a fairly formal procedure involving scrutiny of the proposed research by a designated person or committee. This is more likely when the research is large-scale in nature or when it involves research in the areas of health (e.g. medicine and nursing) or biotechnology. In the case of proposals linked with small-scale research for bachelor's degree projects, master's degree dissertations, or PhD degree applications, a risk assessment is more likely to be something conducted 'internally' by the researcher who will reflect on the relevant risks as a part of his or her work towards writing the proposal.

Top tip

It needs to be evident to the readers that some form of risk assessment has been carried out.

In the context of the *Methods* section of a research proposal, the key purpose of a risk assessment is to identify factors that might have a negative impact on the prospects of completing the project. Having identified such factors, it then becomes easier to think ahead and to plan ways of preventing them from occurring or, at least, ameliorating their effects. This will enhance the prospects of the research being successfully completed.

Among the range of risks to be considered, one of the most significant is the risk posed by *unexpected events*. A well-planned piece of research should aim to minimise the prospects of unexpected events arising that can threaten the completion of the project. In practice, however, it is not always possible to eliminate the occurrence of unexpected and unwanted events. Things sometimes happen that have the potential to knock the project off course, to cause delays or, worst of all, to lead to the failure of the project to meet its objectives. The question 'What if . . .?' comes into play a lot in this connection:

- What if new policies come into force that change the situation?
- What if the funding for use of equipment dries up before I have completed the research?
- What if the company appoints a new chief executive who puts a halt to data collection at the firm?

The people who evaluate research proposals will want to see that some consideration has been given to the kind of events that could pose a threat to the survival of the project. They will be looking for evidence that, on the basis of a risk assessment, the design of the research:

- goes some way to eliminating the most obvious risks;
- has contingency plans for those risks that cannot be eliminated; and
- involves enough flexibility to survive if problems arise.

Top tip

Think about the things that might go wrong – and how to avoid them.

Limitations

The *Limitations* section of a research proposal is concerned with what can, and what cannot, be concluded on the basis of the proposed research. It incorporates caveats about the findings from the research and how they can be used, and it guides readers towards an appropriate understanding of the limits of the research. The *Limitations* section can appear as a stand-alone section of the proposal, or as a sub-section of the *Methods* section.

When researchers identify the limitations to their research, they are not simply being modest about the potential achievements of the project. Neither are they setting out to 'rubbish' their own work by highlighting all the weaknesses and flaws they can think of relating to the proposal. This, after all, might persuade the reader that the research is not going to be worthwhile! No – what the researchers are actually trying to do is to *provide a measured, balanced*

appraisal of what the research can do bearing in mind its particular design, methods, and scope.

Being open and honest about such limitations sends the right signals to those who evaluate proposals. No research is perfect and any research that does not recognise its own weaknesses (as well as its strengths) will be deluded. It is worrying to readers if they do not see the researcher clearly acknowledging the limitations of the research, because it could be inferred that the researcher is rather naive or even ignorant about the implications of the research that is being proposed.

Top tip

Be open about the limitations of the proposed research. All research has limitations.

What kind of things should be included in the *Limitations* section? In general, the things that warrant attention are:

- limitations associated with the methods; and
- limitations caused by circumstances beyond the control of the researcher.

Approaches and methods each have their respective strengths and weaknesses and the *Limitations* section of the proposal provides a setting for acknowledging any relevant limitations associated with the particular methods that have been chosen for the research. So, for example, if a case study approach has been chosen, this part of the proposal gives an opportunity to pre-empt likely qualms some readers might have about how far it is possible to generalise from the research findings. If a questionnaire survey is to be used, the *Limitations* section might be the time to acknowledge that questionnaires do not provide the kind of depth of data that an interview method would deliver. The point is not to write an essay on the respective pros and cons of alternative methods but to briefly point out any aspects of the research design that have limitations with respect to the purpose of the specific piece of research that is being proposed. This might include such things as:

- limits to how far the findings lend themselves to being generalised to other situations/examples;
- limits to the possibility of checking the accuracy of findings;
- limits to the ability to confirm that data come from a representative sample of the research population; and
- limits to objectivity resulting from the role of the researcher in data collection and analysis.

There are also limitations that stem from circumstances beyond the control of the researcher and these, too, require consideration within the proposal. Such limitations reflect the fact that research does not take place in an ideal world where researchers are able to decide for themselves exactly what data they need and how they will be collected. In the real world of doing research, there are practical factors that need to be taken into account that inevitably shape the way that the research can be conducted. Things that are routinely referred to in this respect are:

- restricted access to significant sources of data;
- restrictions arising from the resources available (time and money); and
- limits to the sample size.

Note how these things are different from *delimitations*, where the restrictions stem from decisions and choices taken deliberately by the researcher. Delimitations concern choices under the control of the researcher, whereas limitations relate to 'external' factors over which the researcher has no control.

Link-up with Delimitations: p. 57

The point of airing these concerns is to acknowledge the ways in which information produced by the research will need to be interpreted cautiously. Its purpose, in a sense, is to warn readers of the dangers of jumping to unwarranted conclusions on the basis of the evidence that is presented to them.

Top tip

Acknowledge the limitations of the proposed research, not in order to destroy its credibility but to demonstrate your awareness of the bounds to what can, and what cannot, be legitimately concluded from the findings.

Further reading

Dawson, C. (2019) *Introduction to Research Methods: A Practical Guide for Anyone Undertaking a Research Project* (5th edition). Oxford: How To Books (Chapters 2 and 3).

Krathwohl, D.R. and Smith, N.L. (2005) How to Prepare a Dissertation Proposal: Suggestions for Students in Education and the Social and Behavioral Sciences. Syracuse, NY: Syracuse University Press (Chapters 5, 7, and 9).

Marshall, C. and Rossman, G. (2016) *Designing Qualitative Research* (6th edition). Thousand Oaks, CA: Sage (Chapters 5 and 6).

Punch, K. (2016) *Developing Effective Research Proposals* (3rd edition). Thousand Oaks, CA: Sage (Chapter 6).

Walliman, N. (2011) Your Research Project: Designing and Planning Your Work (3rd edition). London: Sage (Chapter 5).

Summary of key points

The *Methods* section of a research proposal provides the reader with crucial information about the data that will be used in the project, and this chapter has outlined the sort of information that ought to be included. To help with the writing of research proposals, examples have been included to show how the information should be presented. The chapter has also explained why that information is necessary, bearing in mind that proposals are generally subject to evaluation by readers who will be looking for assurances about the quality of the proposed research.

The assurances that readers will be looking for relate to three aspects of the methodology. First, the readers will want to know that the type of data being collected are appropriate in relation to the aims of the research. Second, they will want to feel that the approach to collecting and analysing that data is suitable. Third, they will want to be confident that the proposed methods of data collection will work at a practical level. Access to data sources was noted as particularly important in this regard. Each of these things has been explored in this chapter, with guidance offered on how to construct a persuasive argument in support of the chosen methods.

To recap on this guidance, the initial part of the *Methods* section should provide a brief, factual description of *what*, *when*, and *where* the data are to be collected and subsequently analysed. This should include:

- the research *strategy* to be used;
- the *kind of data* to be collected;
- the *selection procedure* for the people or items to be included;
- the specific data collection *methods* that will be used;
- the practicalities of *data collection* (including access to data sources); and
- the processes and techniques for *data analysis*.

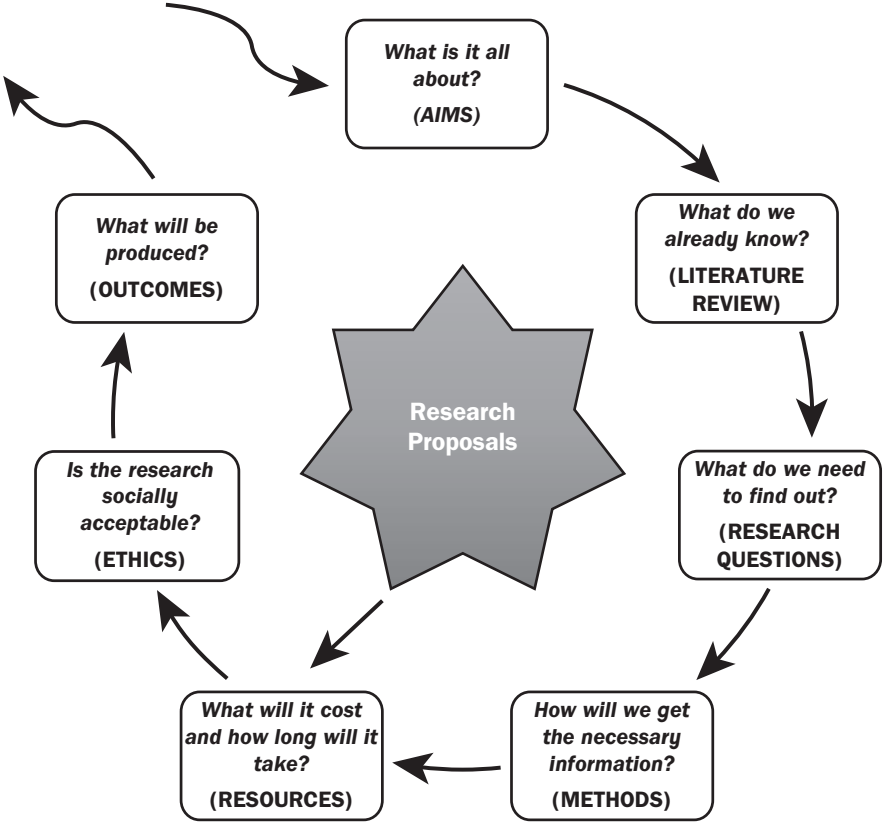
The second part of the *Methods* section tends to be longer, providing an opportunity to explain why the methods are appropriate and to develop an argument that justifies the choice of methods and data analysis on the grounds that they are 'fit for purpose'. This section needs to:

- evaluate the chosen method(s) and compare this with alternative possibilities; and
- cite sources in the methodology literature to support the approach to data collection and analysis that is being proposed.

Finally, to avoid unrealistic claims about the nature of the findings that will be produced by the research, this second part of the *Methods* section should also include an acknowledgement of the limitations of the research.

Chapter **8**

Resources: *What will it cost and how long will it take?*



Planning the time

The scale of the project

Accounting for the costs

Researcher skills

Research is never free. It always consumes resources. It always takes time and it always costs money. Those who evaluate research proposals will be fully aware of this point and will want to be persuaded that the research can be completed on time with the resources available. They will want to feel assured about the feasibility of the research proposal and will ask themselves:

- Is the research project viable bearing in mind the amount of time, money, and other resources needed for its completion?
- Can the overall project be completed within the time available? Will it meet the deadline?

To provide the readers with satisfactory answers to such questions, good research proposals should include relevant information about the planning and resourcing of the project.

Planning the time

Hours per week

There are only so many hours in a week that any researcher can devote to a piece of research and one thing readers will look for in a proposal, therefore, is some indication of the number of working hours that will be regularly spent on the research. Statements such as the following will provide the kind of information that will prove helpful in trying to judge whether the task is doable within the amount of time available:

> 'Research will be conducted on a full-time basis with a minimum of 40 hours a week spent on the project.' (e.g. a full-time PhD student)
>
> 'During the first two months of the research, an average of 6 hours a week will be spent on the research, rising to an average of 30 hours a week in the last two months.' (e.g. a full-time master's student doing a dissertation)
>
> 'An average of 8 hours a week will be allocated to the research.' (e.g. a part-time student doing a bachelor's degree project)

Evaluators will appreciate such statements not just for the factual information they contain but because they send the right signals: they indicate that the

researcher has thought about the level of commitment that will be necessary and built this into their planning for the research.

Time span for the research

Research projects generally work to a deadline. This limits the time span within which the research must be completed and imposes an explicit time constraint on the research. The time frame for undertaking the project, therefore, should be stated clearly within the research proposal. Information should be provided about when the research is due to commence and when the project will be completed.

Readers will also appreciate a planned schedule for the research that gives some idea of the main research activities that will be carried out and the sequence in which they are planned. This often takes the form of a Gantt chart (see Figure 8.1), which provides a picture of which activities will be undertaken at which stage.

Top tip

Research should be finished on time. If the research is delivered late, it can lose its value or even become worthless.

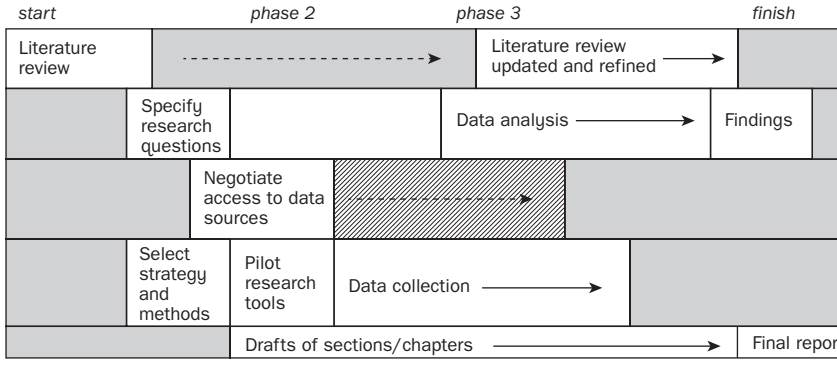


Figure 8.1 Gantt chart for planning and scheduling a research project: An example

Note: This scheduling does not depict the *volume* of work associated with the research; it deals with the *sequencing* of the work.

Source: Denscombe, M. (2009) *Ground Rules for Social Research*. Maidenhead: Open University Press.

The scale of the project

Whether the task is doable within the time that is available will depend on the size of the task and this, in turn, will depend on the amount of data that needs to be collected and the ease of gathering this data. Bearing this in mind, the scale

of the project should be tailored to meet the resource constraints that exist. This point is often overlooked by newcomers to research who believe that their proposal will be deemed worthless unless they set their sights high and promise to deliver something that is very impressive – something like a new theory of economic behaviour, perhaps, or the solution to some major problem such as how to prevent drug addiction. Such aims might be laudable, but achieving them would be more likely to lead to a Nobel Prize than a degree. In the context of a normal research proposal, such things are simply not realistic. The resources will not be available and, in any case, if the best brains in the world have not yet managed to achieve these things, then why would it be reasonable to presume that a relative newcomer to the field could achieve this as part of a bachelor's project, master's dissertation, or PhD thesis?

Link up with
Available resources: p. 17

Top tip

Be realistic about what you can achieve with your research.

In practice, research involves a *compromise* between the information that it would be desirable to have and the resources that are available to the researcher. The fact is that research does not take place in an ideal world where time and money are unlimited. In the real world, the chances are that research will need to be curtailed simply because there is neither the time nor money to carry on beyond a certain point. To illustrate this point, consider the following example:

> My car won't start. Its battery is dead. I wish to conduct some research to find the best replacement battery at the cheapest price. I could use an internet search engine to trawl for information on quality and pricing. Now the quest for the 'best deal' could go on and on but all the time the research is continuing, the car is out of action – it's not working. If I need to get the car going again, then I'll need to stop my research at some point. The more urgently I need the car, the less thorough my research must be. I might need to abandon any idea of finding out which is 'the best deal' available and settle for 'a reasonable deal' based on a quick search – one that will allow me to buy a battery that is 'good enough' and get my car going again. In this case, my research is constrained by a deadline for the findings – I need to buy a battery today, not next week.

In this example, the limits imposed by the deadline for delivery of findings mean that the scale of the research needs to be limited to what can be done within one day and the scope of the research needs to be limited to finding a 'good enough deal' rather than the 'best deal'.

Top tip

Rather than propose some perfect research project, the aim should be to propose research that is worthwhile and achievable within the available resources.

Link-up with
Scope and Scale of Research Aims: p. 17

Accounting for the costs

The extent to which a proposal is expected to include details about resources varies according to the purpose of the proposal and the scale of the project involved. As a broad rule of thumb, the larger the project, the more detail is required about the costs. Where proposals are linked with small-scale projects, and in particular when they are produced in connection with academic degrees, there is generally less need for detailed costings. The reason for this is that larger projects tend to involve substantial sums of money and they often include the work of a number of researchers, factors that inevitably call for the careful monitoring of expenditure and the use of formal accounting procedures. Small-scale projects, on the other hand, tend to use relatively few resources and are more likely to rely on informal, hidden sources of funding for support.

Funding bids

Research proposals that involve bids for large sums of money will need to provide a full and formal breakdown of the costs involved. The proposal will need to list the various items of expenditure, estimate what each will cost, and justify why each is necessary for completion of the project. The purchase of major items will need to have been approved in advance by relevant finance departments. A figure for the costs of 'overheads' to cover the costs of general items such as office accommodation, facilities, support services, materials, and so on will need to have been calculated and agreed on the basis of some formula – for instance, a percentage of the total staffing budget for the project.

Where teams of researchers are involved, there needs to be information about the *division of labour* within the team and the proportion of hours that each team member will contribute to the project. Research teams will be led by a 'principal investigator' – often referred to just as the 'PI' – and the proposal will need to provide details about:

- the responsibilities of each member (what duties they will have and what expertise they will bring to the project);
- the amount of time each member will devote to the project (e.g. hours per week); and
- the costs of 'employing' the team members.

The term 'employing' is in inverted commas because membership of a research team does not always involve the need to create a brand-new contract of employment. The team members, along with the PI, might well be employed by a university or research institute and the costs incurred by having these people work as part of the team will be the cost of buying out their time from their existing work contract. Things can get pretty complicated here. There are rules that funding bodies and employing institutions use, and there are accounting practices that all need to be taken into consideration. The underlying point, though, is that researchers' time costs money and the bid for funding will need a calculation of exactly what that cost will be.

Projects, dissertations, and theses

When research is undertaken as part of a degree programme at bachelor's, master's, or doctoral level, the proposal does not normally include much reference to the cost factor. One reason for this is that such research makes use of *institutional resources*. When researchers conduct a piece of research while studying at a university or working within an organisation, they generally rely on a number of resources that can slip under the radar when it comes to thinking about the costs of research. These 'overheads' are not normally brought into the equation but . . . what about the use of an office and the furniture within it; the use of a computer and the software needed for the research; the paper clips; the stapler; the sticky notes; and all those other minor incidental things that are used routinely while doing the research – things without which it would be impossible to function effectively? Even in the case of proposals in the disciplines of science, technology, engineering, and medicine, which often involve the use of expensive equipment and valuable laboratory time, these vital resources tend to be supplied without needing to be applied for, and approved, as part of the student's research proposal. It is generally assumed that the cost of such facilities, services, and equipment is borne by the university (or covered by student fees).

Another reason that the cost factor does not feature very prominently in these kind of proposals is that individual researchers tend to *absorb costs* and do not factor in the real costs to themselves when carrying out the research. In small-scale research, such as that done as part of a degree, there is an implicit assumption that the project will be carried out on an individual basis and that the research work does not involve delegating work to other people or employing other people or agencies to do the work. A consequence of this is that the researcher will often make use of 'personal' resources to subsidise the research. For example, phone calls might be made from home or text messages sent from a mobile. The home computer might well be used for sending emails and conducting literature searches online. During the evenings and weekends, work on the project is likely to enjoy the comforts of heating and lighting provided at home. The journey to a local research site that only takes half an hour will not drain the petrol tank, and will not be given a second thought. These are just some of the typical ways in which research appears to get done for nothing when, in fact, it relies on a range of vital resources that are not counted.

Perhaps the most significant cost that is absorbed by individual researchers working on small-scale projects is their own time. Research takes time and effort on the part of the researcher and the notion of *opportunity cost* draws attention to the question of what the researcher would have been doing if not spending time on the project. What activities, what pleasures, what rewards does the researcher need to forfeit to undertake the project? Sometimes the opportunity costs 'come with the territory' and are something over which the researcher has little choice. In the context of projects, dissertations, and theses produced for academic degrees, the hours of labour devoted to the research are treated as something that is built into the degree programme; something to be expected as part and parcel of the study that students commit to doing when they enrol on a degree course. For people who conduct research that is not part of a degree programme, however, the opportunity costs might be more visibly a matter of choice. For them, taking the time to conduct the research needs to be seen as a choice that is 'worthwhile', something that is rewarding enough to compensate for the sacrifices that need to be made. The research takes place *instead* of alternative activities – things such as work-related tasks or possibly the leisure activities, family time, and 'me' time that will not happen because the time will be devoted, instead, to the research project.

There are, however, some costs linked with projects, dissertations, and theses that might not be covered by the institution or that cannot be absorbed by the researcher. These warrant consideration in advance when thinking about the resources for research. It is definitely a bad idea to start research on a topic only later to realise that there are substantial items of expenditure needed to complete the work. Things to consider include:

- travel costs related to data collection;
- purchase costs for information (e.g. market research reports);
- survey costs (for postal questionnaires);
- specialist computer software for data analysis;
- conference fees (along with travel and accommodation);
- transcription or translation services; and
- printing costs for producing the final report.

Top tip

Think about the likely costs involved in the research. Match the scale and scope of the research to the resources that will be available.

Travel, in particular, can prove to be a very expensive item. When planning the research, it is worth calculating the likely costs of travel and then considering whether there are ways in which the design of the research might be adapted

so that travel costs can be reduced. Rather than the topic being pitched at a national level, would a regional or even local level prove to be more manageable in terms of the travel costs and better suited to the resource envelope within which the research is to be conducted? Will topics that involve international comparisons require travel to other countries and, if so, can this be afforded? Are there alternative ways of getting data from other countries that do not require travel (e.g. use of phone, email, or Skype)?

Suppose, for example, that the proposed research is to involve a comparison of team leadership in two organisations, one in the UK and one in India. Initially, the feasibility of conducting such research might seem to depend on the availability of resources to travel between the two research sites. Where will the money come from? The proposal should include some words to allay fears on this matter that readers might have. The following statements, in differing ways, would both serve that purpose:

> 'The researcher will visit India for personal reasons and will include the fieldwork as part of a family visit planned to coincide with the research project. The travel costs will not, therefore, require special funding.'

> 'Research will be based on interviews with team leaders at the two sites. These interviews will be conducted using Skype and there are no specific resource implications involved with this form of data collection.'

Top tip

Be sure to explain in the proposal how any significant items of expenditure will be resourced.

Researcher skills

The skills of the researcher are a resource, just like time and money. Different research projects require different skills and when considering the feasibility of conducting a piece of research, it is important to bear this in mind. At the point of choosing a topic, it is important that the researcher asks: do I have the necessary skills to conduct such a piece of research?

Of course, there is absolutely nothing wrong with wanting to develop new and different skills to undertake a piece of research, but this does provide an additional challenge. For one thing, it takes time, and this is a commodity that can be in short supply when it comes to deadlines for completion of a project. Also, it might take a researcher out of his or her comfort zone.

A variety of skills are required for research. Individuals each have their own personal qualities and skills and they bring these with them when it comes to the research. There is also good sense in 'playing to your strengths'. Perhaps the most obvious example would be skills in data analysis. Those who through

their previous training are comfortable with quantitative approaches might be more comfortable with a topic that lends itself to this kind of data analysis. And those whose strengths lie with interpretive skills and who are good with interpersonal communication might be advised to conduct research in an area that lends itself to the use of qualitative data.

In a slightly different sense, the necessary skills can also take the form of qualifications and professional skills that can be essential for undertaking the research. These credentials can be vital for gaining access to particular settings and people and for having the kind of insight about the situation that is crucial for the success of the project. So, for example, in order to undertake research on 'energy conservation in new public buildings', the researcher might be expected to have a background in building technology and environmental issues.

Top tip

Make the most of your personal resources – your skills, identity, and networks.

Link-up with
Appendix 4: Choosing a Research Topic

Further reading

Denicolo, P. and Becker, L. (2012) *Developing Research Proposals (Success in Research)*. London: Sage (Chapters 7 and 8).

Denscombe, M. (2010) *Ground Rules for Social Research* (2nd edition). Maidenhead: Open University Press (Chapter 3).

Friedland, A.J., Folt, C.L. and Mercer, J.L. (2018) *Writing Successful Science Proposals* (3rd edition). New Haven, CT: Yale University Press (Chapters 10, 11, and 13).

Locke, L.F., Spirduso, W.W. and Silverman, S.J. (2014) *Proposals that Work: A Guide for Planning Dissertations and Grant Proposals* (6th edition). Thousand Oaks, CA: Sage (Chapters 9 and 10).

Summary of key points

The question that will always be asked by those who evaluate research proposals is, 'Can the research be done properly with the resources that are available?', and successful proposals are those that persuade the reader that the planned research stands a realistic chance of being achieved. Consequently, this chapter has outlined the key resources involved in any research project. First, there are the financial costs of undertaking research, which, as the chapter has shown, include a number of 'overheads' that are often hidden because they are provided by host organisations or integrated into other aspects of personal expenditure. Second, there is the element of time, including both the amount of labour that needs to be devoted to the project and the time period within which the project must be completed. Third, there are the special items of expenditure that are specifically needed in order to carry out the piece of research – things like travel costs. And fourth, there is the researcher's skill set, along with the opportunities or restrictions this imposes on the viability of the project.

To arrive at a judgement about the feasibility of the proposed research, readers will expect to find relevant information about the resourcing within the proposal. The amount of detail required will vary according to the nature of the proposed research and in the chapter it was explained that proposals for large-scale projects will require detailed estimations of the resources, including staffing costs and overheads, while proposals for small-scale projects normally require fewer details.

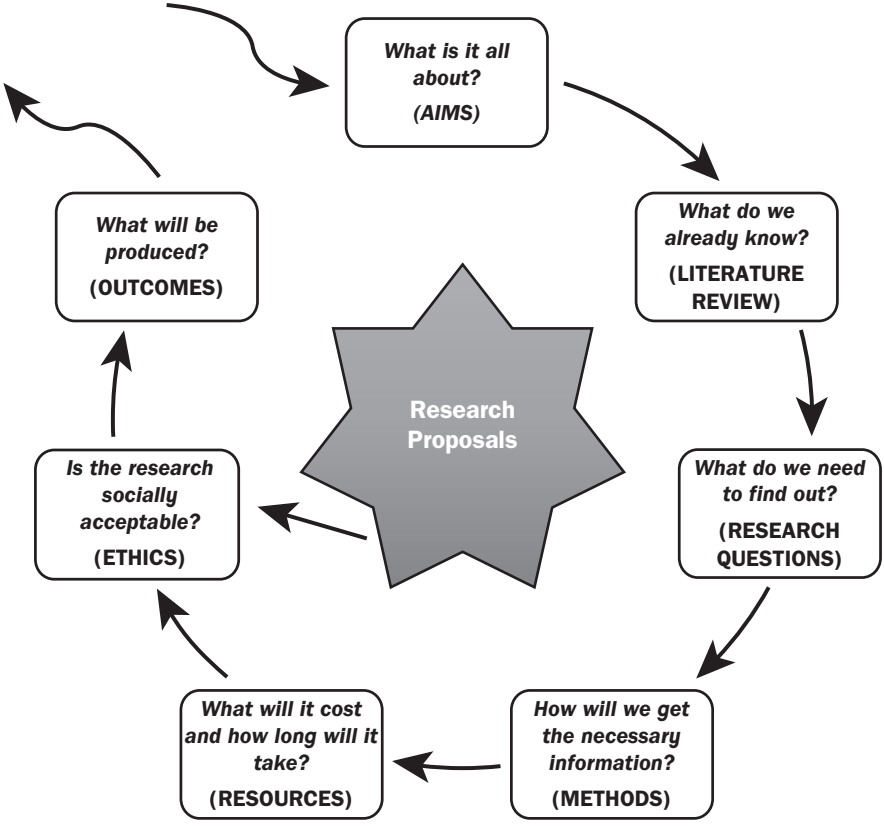
Within proposals for undergraduate projects, master's dissertations, and PhD theses, however, there is still a need to address certain aspects of resources. Although such proposals do not normally include things like 'overheads' and staffing costs, this chapter has shown the need to include information about:

- the *time frame* of the research and the *deadline*s for completion of the project;
- the *schedul*e for completion of the research in the form of a Gantt chart outlining the plan of work;
- the estimated number of *working hours* needed to complete the work, plus some assurance about the researcher's availability for carrying out the research;
- any *exceptional costs* (such as travel expenses and conference fees) and an explanation of how such special costs will be resourced; and
- *researcher skills* (involving things like technical skills, qualifications, or personal attributes) if these are significant for the successful completion of the project.

The overarching point about planning and resources outlined in the chapter is that proposals should not be over-ambitious in terms of their aims or the data they plan to collect. Readers will understand that research inevitably involves something of a compromise and what they will be looking for is a project the scale of which matches the resources that are available to carry it out.

Chapter 9

Ethics: *Is the research socially acceptable?*



Human participation

Do all research proposals need to cover research ethics?

What section of a proposal deals with research ethics?

Ethics approval

Principles of research ethics

Staying within the law

Codes of research ethics

Rules and responsibility

High-risk studies

What are the readers looking for in the proposal?

Research should always be conducted in an ethical manner, no matter what the topic might be or what kinds of data are to be collected. Research proposals need to reflect this point. They need to include relevant information about the ways in which ethical standards will be maintained, demonstrating to those who evaluate the proposal that the researcher is aware of the principles of research ethics and committed to implementing these principles at a practical level.

Human participation

The importance of research ethics is most obvious when the research involves people. People have feelings, people have rights, and people can be hurt as a consequence of research that is not conducted properly. Unlike inanimate objects that are neither aware of being studied nor bothered by the results of the research, people can be directly affected by their involvement in a piece of research. And that is why researchers must be especially careful when engaging in any research that entails:

- Primary data collection *from* human beings and organisations – where people are asked directly to provide research-related data, for example through interviews or questionnaires.
- Primary data collection *on* human beings and organisations – where people's behaviour is observed and measured, for example as part of an experiment or a survey.

- Research *about* humans where the individuals involved are *personally identifiable* – where data about people are collected, for example from documentary sources, databases, or archived data. Even if the research uses data on people who are no longer alive, there might still be ethical issues that need to be considered if they are personally identifiable.

Whenever research involves human participants, there is a duty of care to safeguard the interests of those involved. In essence, this means the proposal needs to establish that:

- Participants will not suffer unnecessary harm as a consequence of their involvement in the research;
- The research design and research activity are likely to lead to good quality findings; and
- The findings will contribute to the greater good, and are not used for selfish or malicious purposes.

If a proposal provides any indication that the research might not meet the required standards, it will certainly be rejected.

Do all research proposals need to cover research ethics?

Some kinds of research might seem fairly innocuous with little likelihood of causing harm to anyone. For example, collecting secondary source data from published documents that are already in the public domain or, perhaps, conducting a simple questionnaire survey or asking a few straightforward questions in an interview. In such instances, it could appear that research ethics are irrelevant as far as the proposal is concerned. However, there are two compelling reasons for including a section on research ethics in the proposal even if, at first glance, there seems to be no obvious need.

First, ethical considerations are not restricted to just one or two elements of a research project; they are concerned with the whole process of research. So, even if the kind of data used, or the manner in which these data are collected, would appear to have no ethical issues associated with them, this does not make the project as a whole exempt. Wider aspects of the research also need to be taken into consideration – like the subject matter of the research, the purpose of doing the research, and how the findings will be used. When the research project is looked at as a whole, it becomes very difficult, if not impossible, to suggest that there are no ethical issues worth considering.

Second, and linked with this, readers now *expect* to see research ethics receiving some consideration in the proposal. The absence of any explicit reference

to ethics within a proposal will be regarded as unusual and, potentially, worrying. It is important, therefore, that even if a researcher feels that there are no problematic ethical issues that need to be addressed, the reasoning behind this conclusion must be explained and strongly supported within the proposal. Readers will have greater confidence in the proposal if they see that the researcher is conversant with the nature of ethical issues in research and is operating from a position of knowledge, rather than ignorance, if the researcher claims that there are no ethical issues involved in the proposed piece of research.

Top tip

Every research proposal should include some consideration of research ethics.

What section of a proposal deals with research ethics?

Research proposals can consider ethical issues in the *Methods* section or, preferably, they can provide a separate *Ethics* section (see Table 1.1). The benefits of using a separate section are that, as it has just been noted, ethical issues can arise not only in relation to the methods of data collection but also in relation to the topic being studied and the dissemination of findings. A separate section also heightens the visibility of research ethics within the proposal.

Top tip

It is preferable that *Ethics* is a clearly visible section within the proposal.

Ethics approval

Research projects generally require ethics approval before they are allowed to proceed with data collection. This involves a process of review by a Research Ethics Committee or by delegated individuals with the necessary expertise. The review requires appropriate forms to be completed that cover the range of relevant ethical issues, many of which will also be touched on in the research proposal. It is important to recognise, however, that the process of ethics review runs in parallel to, but separately from, that for the approval of the research project, and that in most cases the brief coverage of ethics issues provided in the research proposal will not, of itself, provide a basis for ethics approval.

This does not mean that readers of the research proposal will be inclined to pay less attention to the research ethics section on the basis that the relevant

Research Ethics Committee will provide the necessary scrutiny. As a matter of principle, they will not wish to support a research proposal that has cause for concern on ethical grounds. And, in a practical sense, they will not wish to give the green light to a proposal if they have any doubts about whether the proposed research will be approved by the relevant Research Ethics Committee. The existence of a parallel ethics approval system, then, does not eliminate the need for research proposals to address the issue of research ethics. On the contrary, it reinforces the readers' sensitivity to ethical issues and underlines the need for research ethics to be dealt with as an integral part of any research proposal.

Principles of research ethics

As a prelude to guidance on specific items that need to be addressed within a research proposal, it is worth looking at the principles of research ethics that underlie them. There are three broad themes that are evident throughout the many statements and policies on research ethics that exist, and it is easy to see the legacy of the *Nuremberg Code* and the *Declaration of Helsinki* in all of them.

#1 No unnecessary harm

First and foremost, researchers are expected to take 'all reasonable precautions' to protect the interests of participants and to ensure that, as far as reasonably possible, no one is directly or unnecessarily harmed as a result of their participation in a research project. 'Harm', of course, is a pretty broad concept and, in the context of research ethics, it is something that invites the researcher to consider a wide range of negative effects that could possibly arise as a consequence of taking part in a piece of research. Physical or bodily harm is the most obvious form, but social research needs also to consider a range of other ways in which participation could adversely affect people. The types of harm to be considered include:

- physical or bodily (e.g. causing illness, infection, or disability);
- psychological (e.g. feelings of stress, loss of confidence, or experiencing trauma);
- social (e.g. having reputation ruined, losing face, or having relationships damaged);
- economic (e.g. losing sources of income or being denied a promotion at work);
- safety (e.g. becoming a victim of an attack or being put in dangerous circumstances);
- legal (e.g. being exposed in terms of benefits fraud or tax evasion);
- equality and justice (e.g. sense of unfairness or losing out relative to others).

#2 Voluntary consent

Participation should be completely voluntary and there should be no kind of force, coercion, moral blackmail, or any other means of pressuring someone to take part in research against their will. It is legitimate to offer minor inducements to reward people for giving up their time to take part in the research, but it is not acceptable for researchers to bribe people or to exert any undue pressure to encourage their participation.

Consent should be provided by participants, and this consent should be *informed*. There is an obligation on researchers to provide potential participants with a sufficient amount of information about the purposes of the research and the nature of their involvement for them to make a decision (about whether or not to participate) that is 'informed'. They need to know what they are getting themselves into. This is why the notion of 'informed consent' lies at the heart of ethical research.

Getting consent from participants is not the end of the story. There is a clear and explicit understanding in terms of research ethics that this *consent can be withdrawn at any time* – participants have the *right to withdraw* from the research at any stage. If they change their minds, they are at liberty to curtail their involvement even though they might have provided written consent at the start. And participants should be made aware of this right from the outset.

#3 Scientific integrity

Researchers are expected to approach their work in a way that upholds high professional standards. In the first instance, this means ensuring that the research will make use of suitable methods. The thinking on this point is that any research that employs methods that are not 'the most appropriate' will inevitably produce findings that are not of the highest quality. At best, this will waste the time of participants and any other stakeholders in the research. At worst, the use of inappropriate or poor methods might cause unnecessary harm to the participants. Linked with this, there is an expectation that the researcher is *competent* to conduct the investigation. He or she is expected to be proficient in the use of the methods and techniques involved in the research and to have the appropriate experience and qualifications to carry out the research. The demands of the specific research project, in other words, should not exceed the capabilities of the researcher.

Link up with Researcher Skills: p. 100

The notion of 'scientific integrity' also carries with it the idea that the researcher should be *open and honest* in all dealings with participants and colleagues connected with the research. This entails:

- being truthful in their dealing with participants – researchers should avoid any misrepresentation of their work and should not engage in any deception relating to the investigation;
- enabling participants to check the identity and bona fides of the researcher; and
- avoiding any plagiarism or similar misuse of other people's work.

Scientific integrity also conveys a notion of objectivity, and in this spirit there is an expectation that researchers should *avoid bias* in their work. To this end, they are expected to:

- declare any sponsorship or vested interests that might be linked to the research and its findings;
- be fair and honest in the treatment of the data; and
- operate with a sense of justice and fair play in terms of who gets selected to participate in the research and who gets to reap the benefits – a point stressed by the pivotal Belmont Report (1979).

Link-up with
The Need for an Open-minded Approach: p. 70

Staying within the law

There is another 'moral' obligation relating to the conduct of research that sits alongside the three core themes of research ethics. That is the requirement for *compliance with the law and technical regulations*. There are no exceptions for researchers with regard to the law. No matter how good the intention of the research might be, researchers must not engage in fraud to obtain their data or undertake any other illegal activity in pursuit of their data. If caught, they will get charged and prosecuted just like anybody else would. Bearing this in mind, special care needs to be taken to ensure that any proposed research project will be legal in relation to:

- *Methods*: Researchers need to be sure that their methods are above board and totally legal. This means taking care not to get involved with research that involves unauthorised access to material (particularly with internet research).
- *Topic*: Researchers, especially newcomers, would do well to steer clear of topics like terrorism, child pornography, and so on, for fear that their research activity could cross a fine line dividing legitimate data collection from illegal activity.
- *Ownership of the data and intellectual property*: Researchers need to be careful about establishing ownership rights when it comes to the collection of, and use of, data involving collaboration with other researchers and organisations.
- *Data security*: Researchers need to be aware of the relevant legislation and ensure that data from the research will be stored securely in line with data protection principles. They should also make sure that the data are not passed on to third parties who have no connection with the research. The data must only be used for the purposes for which they were originally collected.
- *Data retention*: Rules about the length of time that research data should be kept for future reference are most in evidence with large-scale, funded research projects. However, academic institutions are also likely to have policies linked to degree-related projects. The length of time varies depending on the nature of the research – it can vary from three to 10 years and, in the case of some medical research, a minimum of 20 years.

Codes of research ethics

Standards of acceptable behaviour in relation to researchers and their activity are formulated in *codes* of research ethics. These codes are written with specific disciplines and different kinds of practitioners in mind and there are a variety of codes produced by official bodies, research institutions, and professional associations, each written for their own specific community of researchers (see Table 9.1). They tend to have a lot in common, though, because they all reflect the principles of research ethics established in the *Nuremberg Code* and the *Declaration of Helsinki*.

To encourage awareness of the ethical principles, these codes are usually made freely available online at the relevant websites. Codes of research ethics, therefore, are easily accessible and it is to be expected that writers of a research proposal will be familiar with the relevant code(s) for their research area, discipline background, or professional association.

Table 9.1 Codes of research ethics

Common discipline	Code or research ethics
Economics	• Economic and Social Research Council: *The Research Ethics Guidebook*
Education	• British Education Research Association: *Ethical Guidelines for Educational Research*
Marketing and Business	• Chartered Association of Business Schools: *Ethics Guide* • Market Research Society: *Code of Conduct*
Medicine, Nursing, and Health	• General Medical Council: *Good Practice in Research* • National Health Service: *UK Framework for Health and Social Care Research*
Psychology	• British Psychological Society: *Code of Human Research Ethics*
Sociology	• British Sociological Association: *Guidelines on Ethical Practice* • Social Research Association: *Ethical Guidelines*
General	• UK Government: *Ethical Assurance Guidance for Social Research in Government* • US Office for Human Research Protections: *Regulations on Protecting Human Subjects in Research*

Top tip

Adhere to a recognised code of research ethics. Identify the most appropriate one(s) for you, and in the proposal show how you have applied this code to your research.

Rules and responsibility

Codes of research ethics provide researchers with good guidance on the kinds of conduct that are acceptable and, by implication, the kinds that are unacceptable. They do not, however, constitute a set of hard and fast rules. One reason for this is that ethical issues are not always clear-cut and simple. Complex situations can occur in the real world of research where the rights and wrongs are not always straightforward. The benefits of research, for instance, might come with a risk attached and an element of judgement might need to be exercised when assessing whether the research will be ethically acceptable. A second reason they do not provide hard and fast rules is that there can be exceptions to the rules. Under certain circumstances, it is possible for research to go against one of the main principles without necessarily condemning the research as completely 'unethical'. This is explicitly recognised by the vast majority of codes. Although some principles will be sacrosanct, the codes acknowledge that in some instances a deviation from other principles might be acceptable – if it can be explained and defended as *necessary* and *reasonable*. For example, the principle might be that researchers should gain 'written consent' from participants; however, the circumstances of a particular piece of research might mean that consent cannot be obtained in a written form. It might not be possible to get full written consent when asking members of a theatre audience to complete a survey questionnaire, or when observing shopping behaviour in a supermarket. In such situations, the researcher will need to justify the decision not to obtain consent in writing. This will involve:

- explaining why it is considered necessary to deviate from the principle on this occasion; and
- making the case that the rights and interests of the participants will not be adversely affected in view of the specific nature of the research that is being proposed.

There is also a third reason that codes should not be treated as hard and fast rules of conduct: the various codes generally agree that responsibility for the ethical conduct of the research rests ultimately with the individual researcher. Codes should never be treated as a shield to hide behind. Researchers cannot say, 'I followed the rules' or 'I ticked the relevant box(es)' and thereby absolve themselves of personal responsibility for what goes on. Researchers always remain responsible for their own decisions and the situations that arise when conducting research.

Top tip

The ethical conduct of a piece of research is the researcher's personal responsibility.

High-risk studies

On the basis of the principles of research ethics outlined in this chapter, there are certain kinds of research that stand out as having more than a 'minimal' risk associated with them. These quickly come under the spotlight and receive special scrutiny because they need careful handling in order to maintain accordance with appropriate ethical standards. Such areas of special attention include projects on:

- *Vulnerable groups*, such as children or anyone with a learning disability or who 'lacks capacity' in a legal sense to make decisions on their own behalf.
- *Sensitive topics*, which can cause psychological discomfort, anxiety, or stress or that might cause severe embarrassment. For example, investigations into people's pasts or current experiences of abuse could prove painful, as could questions about sexual orientation, religious faith, or political beliefs if they are not dealt with carefully and sensitively.
- Studies that expose the participants to levels of *physical pain or discomfort* that are experienced as abnormal or unwelcome, or that could have lasting effects.
- *Illegal activities* where the collection of primary data might cause the researcher, consciously or inadvertently, to become engaged in illegal activity in the course of conducting the research. Topics like terrorism and child pornography stand out as obvious examples, especially when combined with internet research techniques.
- Studies that pose a foreseeable risk to the *safety* of the participants or the researchers involved: research in dangerous locations, for instance, or with criminal groups.

What are the readers looking for in the proposal?

There are four key criteria that the readers will have in mind when assessing whether a piece of research is likely to meet the required ethical standard.

First, the readers will want to see confirmation that the proposed research has been, or will be, processed through the relevant formal channels for research ethics approval. All that is required on this point is a simple statement – just one or two sentences – that specifies

a) the committee or other authority to which the application has been made, and
b) whether the project is still awaiting approval or approval has already been obtained.

Obviously, it is preferable if ethics approval has already been obtained.

Second, there should be a simple statement about which code of research ethics will be adhered to during the project. All that is needed is a few words that name the code, give its web address, and state that the researcher is committed to undertaking the research in accord with the principles contained in that code. The code, of course, needs to be the most relevant bearing in mind the qualifications of the researcher and the topic of the research.

Third, some brief demonstration that the researcher is aware of the *core principles* of research ethics can be valuable. Simply citing a code of research ethics will not be enough, on its own, to convince the reader that the researcher is aware of the principles and issues that need to be addressed. A brief comment that reveals some knowledge about the core principles and key issues can therefore prove useful. This should *not* entail a list of the principles. It should simply consist of a couple of sentences that identify the three core principles and acknowledge the fundamental need of all research to respect these principles. The statement could take the following form:

> 'The research will abide by the principles contained in the [named] code of research ethics. The research will ensure (as far as is possible) that no harm is done to participants, that participation is voluntary, and that the research will be conducted with appropriate standards of scientific/professional integrity.'

Fourth, having made a commitment to the core principles of research ethics, the research proposal should then proceed to spell out exactly how those principles will be put into action – how they will be applied. Readers will want to know how the interests of participants will be protected and how the matter of research integrity will be addressed. On the matter of *potential unnecessary harm to participants*, they will want to see answers to questions such as:

- What kinds of harm are reasonably foreseeable? What precautions will be taken to prevent these from occurring? Are there any safety issues? How will these be overcome?
- If the research involves young people or vulnerable groups, what special measures will be implemented?
- Has authorisation been obtained for access to the potential participants? Is a criminal records check required (e.g. DBS check)? And, if so, has it been obtained?
- What measures will be taken to guarantee the anonymity of the participants? Will anonymity be guaranteed in terms of any reported findings from the research?
- What assurances about confidentiality will be given? How will data security be safeguarded? Who will have access to the data files? What assurances can be given about non-disclosure of information to third parties?
- Will the research avoid undue intrusion into personal lives? Will it respect participants' rights to privacy?

- Are there any aspects of the proposed research that might entail a threat to the interests of the participants? Have these been described and have they been defended bearing in mind the extent of the potential harm involved?

On the matter of *voluntary participation and informed consent*, the readers will want answers to things such as:

- What kind of consent will be required? Will the research require *written* consent? Will consent be obtained in some other form?
- How will consent be obtained? Will a consent form be used? How will this be administered?
- When and where will the potential participants be provided with a 'participant's information document'?
- Will the potential participants be formally notified of their right to withdraw?
- Are there any considerations around equality, fairness, and justice that arise in connection with the selection of the participants for the research?
- Does the research rely on any form of deception? Has this deception been justified (for instance, as being essential for the viability of the research)?

On the matter of *scientific integrity*, the readers will want answers to questions such as:

- What research experience and technical skill does the researcher have? And is this suitable for the nature of the research envisaged in the proposal?
- What measures will be in place to support impartiality? Is there a statement from the researcher about any vested interests in the findings or any other conflict of interest?
- How will open dealings with the participants and colleagues be encouraged? What avenues of communication will be open between the researcher and the participants? How will the participants be able to check the credentials of the researcher?
- Are there any matters relating to intellectual property or ownership of the data that are likely to arise? And, if so, how will these be dealt with?
- Are there any aspects of the research that involve potential bias? Has the source of this bias been explained and its repercussions been openly discussed in the proposal?

And, finally, on the matter of *abiding by the law*, the readers will want to feel assured that there are no aspects of the research that will cross the boundaries of what is legal. To this end, they might ask:

- Does the topic of the research involve illegal activities, and do these endanger the researcher or the participants? How will the researcher and the participants be protected from inadvertently breaking the law?

- Will the data collection process avoid any illegal methods? Will data be accessed through legal means? Will data collected online or through social media meet legal requirements?
- Will due care be taken in relation to copyright issues?

Top tip

Use these lists of questions as a checklist when writing the *Ethics* section of your research proposal.

Further reading

Belmont Report (1979) *Ethical Principles and Guidelines for the Protection of Human Subjects of Research: Report of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research*. Washington, DC: Department of Health, Education, and Welfare. Available at: https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/index.html (accessed 15 March 2019).

Declaration of Helsinki (1964) *Ethical Principles for Medical Research Involving Human Subjects*. Ferney-Voltaire: World Medical Association. Available at: https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/ (accessed 15 March 2019).

Economic and Social Research Council (undated) *The Research Ethics Guidebook: A Resource for Social Scientists*. Available at: http://www.ethicsguidebook.ac.uk (accessed 15 March 2019).

Israel, M. (2015) *Research Ethics and Integrity for Social Scientists* (2nd edition). London: Sage (Chapters 3, 5–8).

Kara, H. (2018) *Research Ethics in the Real World*. Bristol: Policy Press (Chapters 3, 4, and 8).

Nuremberg Code (1947) *Research Ethics Principles for Human Experimentation*. Available at: https://history.nih.gov/research/downloads/nuremberg.pdf (accessed 15 March 2019).

Oliver, P. (2010) *The Student's Guide to Research Ethics* (2nd edition). Maidenhead: Open University Press (Chapters 1, 2, and 9).

Remenyi, D., Swan, N. and Van Den Assem, B. (2011) *Ethics Protocols and Research Ethics Committees: Successfully Obtaining Approval for your Academic Research*. Reading: Academic Publishing International (Chapters 1, 4, and 8).

Summary of key points

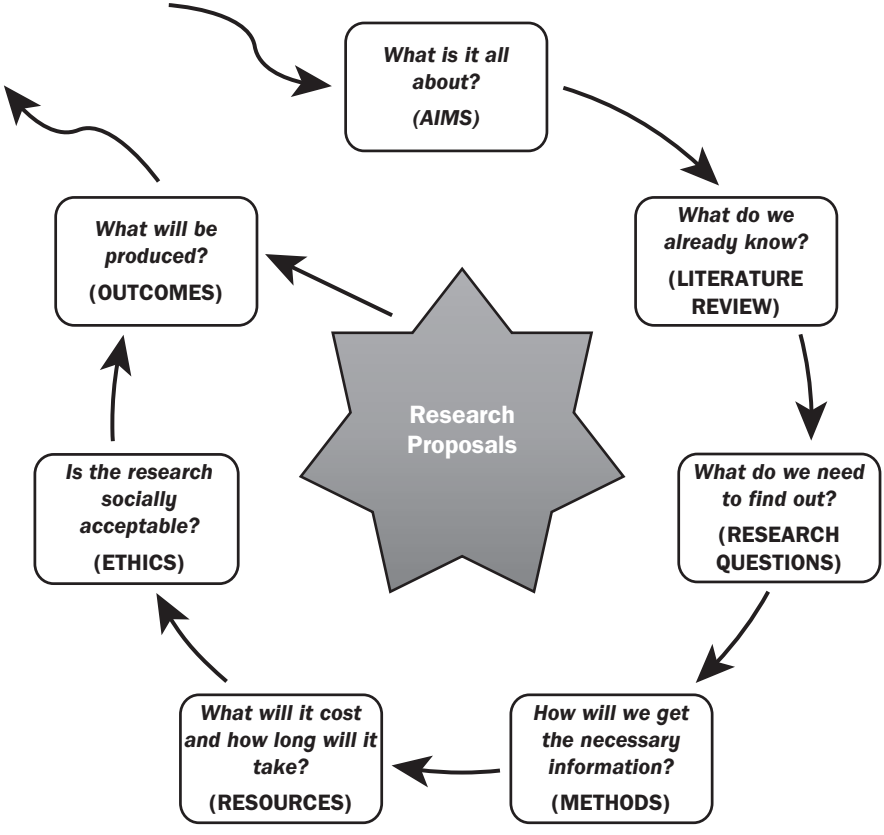
This chapter has emphasised the importance of research ethics, both in relation to conducting research and as a vital component of any research proposal. It has outlined the main principles of research ethics, drawing attention to the core principles of 'no unnecessary harm', 'voluntary consent', and 'scientific integrity'. It has also noted the need for research projects to remain within the realms of the law. Principles of research ethics are embedded in the codes that have been written for various professional bodies and practitioner groups, and it has been suggested that researchers should operate within the code(s) closest to their area of research.

The chapter has also provided specific guidance on how to write the research ethics component of a research proposal. This component needs to provide readers with assurances that the project will be conducted in accordance with appropriate standards and it needs to address a number of questions that the readers are likely to have in their minds. The chapter has suggested that a good starting point for this is to adopt a suitable code of research ethics and to identify this clearly within the proposal. Within the restricted confines of the *Ethics* section, the proposal needs to explain how the research will deal with the specific ethical issues linked to:

- any potential harm to participants;
- matters of voluntary participation and informed consent;
- objectivity and scientific integrity; and
- operating within the law at all times.

Chapter 10

Outcomes: *What will be produced?*



Value for money

Outcomes and findings

Types of outcomes

Dissemination of findings

Impact

Good research is undertaken for a purpose. It is not done out of idle curiosity or for self-amusement. It is undertaken for a good reason with something beneficial resulting from the time and effort that will go into the project. That is why those who evaluate research proposals will look for information about the *outcomes* from the research. They will want to know about the 'deliverables' that will be produced by the research.

Value for money

All research takes time and effort on the part of the researcher, many projects require the cooperation of participants, and some projects incur significant costs in terms of things like travel and equipment. Research never comes 'for free'. Bearing this in mind, those who evaluate proposals will want to be persuaded that the research will be worthwhile when they weigh up the resources put into the investigation against the eventual benefits that might emerge from the project. They will ask, 'Is it worth it?'

This line of thinking will be most explicit where proposals are produced to compete for research funding. On these occasions, there will be a literal sense in which the readers will judge the proposals in terms of what they can deliver relative to the price that needs to be paid. With the number of applications and the resources they require exceeding the available money, the question will inevitably arise about which among the proposals offers the best value for money.

The same mindset, however, will operate with other kinds of research proposals. The evaluators of the proposal will want to know what the benefits of the work will be and they will look to the *Outcomes* section to help them decide if the research *really* represents 'good value for money'.

Top tip

Imagine that someone who has read your proposal turns to you and asks, 'So what?' The *Outcomes* section should contain your retort. It should identify the kinds of things that will be produced by the research – things that will be of evident value.

Outcomes and findings

A vital distinction needs to be made between 'outcomes' and 'findings'. A proposal must never suggest that the research will result in particular *findings*. To do so, the researcher would have to know the results of the investigation in advance of carrying out the research and there are only two ways they could do this: (1) fabricate the results or (2) conduct the research in a way that is not open to findings that contradict the researcher's prior assumptions. Neither option is permissible if the research is to have any scientific integrity or meet the ethical standards for research. Researchers can have hunches about what the findings might be. They can produce hypotheses that state what findings might be expected. But the point of any research is to test these and to approach things with an open mind, thus entertaining the possibility of being proved wrong. For these reasons, findings cannot be stated with certainty before the research begins.

Outcomes, however, are a different thing. Outcomes are concerned with the *use* to which these findings are put. Outcomes are about how the findings will be applied and how they will be made available. And this is something that *can* be included at the planning stage before the research begins.

Top tip

Outcomes are not the same as findings. Be careful not to confuse the two.

Types of outcomes

Outcomes can take a variety of forms and the type of outcome envisaged in a proposal will reflect to a large extent the particular kind of research involved. Some research will lead to outcomes that are of relevance to developments in theory, whereas others, like applied research, will be more likely to produce practical outcomes. There are, however, some fairly common types of outcomes, any of which can be used when writing a research proposal to persuade the readers that the research will 'make a difference', will be 'worthwhile', will 'make some contribution', and will warrant the time and effort.

Supply new information

A straightforward outcome of the research might be to fill a gap in what is known on a particular topic. Even at the early stage of planning the research and writing the proposal, it should be possible to state what kind of information will be acquired through the research. Exactly what that information will be can only be discovered through the process of research itself. What can be said at the proposal stage, however, is that a particular gap exists and that the anticipated outcome of the project is to supply the information that will fill that gap.

Make recommendations relating to a problem

For research geared to practical problems, one of the main outcomes from the project might be a series of recommendations aimed at solving the problem or preventing its occurrence in the future. Before the research starts, it may not be possible to say exactly what those recommendations will be, but it is still quite reasonable to see the production of a set of recommendations as a 'tangible' end product – something hopefully of value, and something that will make a difference.

Produce guidelines for good practice

Rather than focus on resolutions to specific problems, as recommendations might do, the research might seek to produce more general guidelines that can be applied across a broader range of situations. The design of the research would need to enable these more generalised suggestions for new practices to emerge from the research but, provided this is the case, guidelines for good practice constitute a solid, concrete output from the project that can be stated in the proposal.

Write a report or make a presentation

Research can culminate in the writing of a report or the delivery of the findings verbally in a formal presentation to the 'client group' for the research. The term 'client' in this context can be used loosely and does not necessarily mean that they have literally sponsored or paid for the research. This might be the case, but the presentation could equally be provided for any of the stakeholders in the research process. So, for example, research conducted on the use of mobile phones in school could have 'a presentation of findings to staff in the school' as an outcome. A brief report summarising the findings would serve a similar purpose. Either way, it offers a 'deliverable' outcome from the research.

Provide an insight that helps to clarify a current debate or controversy

Research that engages with debates or controversies in a field of study can treat the new insight as a distinct outcome from the research. Here, the point of the research is to delve into the issues and use the research project to produce new angles and ideas that can enhance the quality of the debate and help to move things forward. The impact of any such outcome will be enhanced when it is made widely available, and *publishing* the contribution to the debate, in whatever format, makes the outcome far more 'tangible'. If publication is a realistic possibility, it is wise to make it an integral part of the outcome. How far this is possible will depend on the nature of the proposal and whether it is part of a bachelor's project, master's dissertation, PhD application, or bid for research funding.

Make a contribution to the development of a theory or concept

A research project can be designed to make a contribution to a theory or concept or it can work towards refining a definition of some phenomenon. The

contribution will operate at a relatively abstract level, dealing with analyses, conceptualisations, ideas, and ways of thinking about particular things. In a similar vein to insights into a debate or controversy, this can provide enormous benefit as an outcome if the researcher is able to commit to putting the contributions into a published format, although the same caveat operates with regard to the level of the work and the fact that proposals such as those for bachelor's projects or master's dissertations might not be expected to produce such outcomes in published form, bearing in mind the researcher's limited experience and the time constraints involved.

Top tip

Make outcomes 'tangible' where possible. State how they will be delivered – in what format and for what purpose (e.g. a project report, a dissertation or thesis, a published paper, or a seminar presentation).

Dissemination of findings

There are benefits to communicating the end product of the research project to a wide audience. This is the thinking that has taken increasing prominence in recent years in relation to PhD and funded research. In these cases, a growing emphasis is being placed on the need not only to obtain good and worthwhile findings but also to ensure that those findings reach as wide an audience as possible. What use and what value have findings if no one or only a few people get to hear about them?

Plans for publicising the findings and for the dissemination of results are, therefore, important for the research in general and the outcomes from the research in particular. Evaluators of the proposal will look to see what strategy there is for the dissemination of findings and publicising the results. The use of websites is extremely valuable in this respect (Denscombe 2005). A *research website* can be used to disseminate findings to all those who have an interest in the project in a way that is easily accessed, quickly updated, and relatively inexpensive to maintain.

In the case of funded research, the expectations are likely to be higher. At this level, the outcomes from research can involve the delivery of papers at academic conferences, the publication of findings in peer-reviewed journals, and exposure of the findings in the media through interviews on TV or the radio or through coverage of the project in the National Press. These are not expectations that are held for research conducted for academic awards at bachelor's, master's, or PhD level, but they do illustrate the importance of communication for successful research.

Top tip

When disseminating findings, take care to maintain the confidentiality of the data and protect the anonymity of participants.

Impact

Readers of research projects or papers tend to regard 'impact' as a key criterion of good research. Increasingly, they gauge the worthiness of a research project by taking into account the likely impact it will have on thinking, action, and policies. They want to know how the project might cause changes 'out there' in 'the real world'.

Impact is something that can only be measured after the research has been completed and so, at first glance, it might not seem possible to comment on it at the stage of a research proposal. It is also true that, as a criterion for judging research, it is something that applies to funded, large-scale research more than bachelor's projects, master's dissertations, and PhD theses. However, despite these caveats, it is still a factor worth bearing in mind when writing the *Outcomes* section of the research proposal, simply because it forms part of the current mindset for evaluating research, and anything in the *Outcomes* section of the proposal that indicates how the research might have an impact can only be beneficial for the prospects of the proposal.

One possibility in this respect, something that is available even to small-scale projects, is to identify key target groups for whom the findings of the research will have practical utility. This is where terms like 'user group involvement', 'community participation', and 'stakeholder engagement' come into play. These notions, each in their own way, suggest a potential route by which outcomes from research can have an influence that goes beyond scholarly circles and academic debate to touch the lives of those who are affected by, or have an interest in, the research and its findings. When writing the *Outcomes* section of the proposal, then, it is valuable when possible to indicate:

- which groups will be affected by the research;
- how they will become engaged with the project; and
- what the benefits for them are likely to be.

Further reading

Bastow, S., Dunleavy, P. and Tinkler, J. (2014) *The Impact of the Social Sciences: How Academics and Their Research Make a Difference*. London: Sage (Chapter 2).

Denicolo, P. (ed.) (2014) *Achieving Impact in Research*. London: Sage (Chapter 6).

Gerrish, K. and Lacey, A. (2015) *The Research Process in Nursing* (7th edition). Chichester: Wiley-Blackwell (Chapter 37).

Hughes, C. (ed.) (2003) *Disseminating Qualitative Research in Educational Settings: A Critical Introduction*. Maidenhead: Open University Press (Chapters 1 and 2).

Summary of key points

Research proposals need to state clearly what outcomes are envisaged from the research. This is because those who evaluate proposals look to the anticipated outcomes as a crucial factor when deciding whether the proposed research is going to deliver anything of value. This chapter has provided guidance on the main types of outcome that are likely to be produced and the ways these can be identified in the *Outcomes* section of a research proposal.

A point emphasised in the chapter is that outcomes should not be confused with findings. 'Outcomes' refer to what will be *done* with the 'findings' from research and this, unlike the findings, is something that it is possible to predict in advance of doing the research. Good research proposals, therefore, are expected to contain some details about the end products they envisage from the project and whether these will take the form of practical guidelines and recommendations or whether they will take the form of theoretical contributions to debates and concepts.

In either case, the outcomes are likely to have more impact when the findings are disseminated through some form of publication or event and this chapter has noted the value of disseminating findings widely, for example by using a research website.

In terms of potential impact, the chapter has also noted that the proposal should provide information on the usefulness of the outcomes from the research and which groups might benefit from the research.

Appendix 1: Checklist for the submission of a research proposal

Prior considerations		**You should be able to answer 'yes' to these questions**
1.	Are you sending the proposal to the *right place?* Have you targeted the right organisation or individual? Does it meet the requirements of the organisation or people who will assess it?	
2.	Can you *meet the deadline* for submitting the proposal?	
3.	Have you the *competence and skills* to tackle the topic? Do you have the necessary qualifications or experience?	
4.	Will you be able to get *access to the data*? Have you sought permission from relevant people or organisations to authorise the research? Are there significant costs for access to vital information?	
5.	**Have you done a *risk assessment* in relation to factors that might hinder the completion of the project?**	

The proposal itself		**You should be able to answer 'yes' to these questions**
1.	Does the proposal • describe *what* will be done? • justify *why* it will be done? • indicate *how* it will be done?	
2.	Have the potential *benefits* of the proposed investigation been highlighted (e.g. its value, outcomes, or contribution)?	
3.	Has emphasis been placed on what is *new* or original about the proposed research?	

4.	Has the topic been linked to *relevant research findings*, theoretical issues, conceptual developments, and practical concerns in the field of study (i.e. in the review of literature, sources cited, up-to-date material)?	
5.	Have clear and specific *research questions* been identified?	
6.	Does the proposal show how the data and the analysis suit the purpose of the particular investigation?	
7.	Does the proposal acknowledge any *limitations* relating to the kind of conclusions that can be drawn from the research project's findings?	
8.	Has a plan been presented showing how the research can be completed within the allotted *time frame*?	
9.	Have the *costs* of investigation (e.g. travel, materials, or data collection methods) been estimated and do these accord with the amount of resources available for the research?	
10.	Does the proposal reassure readers that the research is *feasible* (i.e. in terms of access to data, time, costs)?	
11.	Within the proposal, is there an explicit consideration of potential *ethical and legal issues* arising from the research?	
12.	Will the proposal convince the reader that you have the requisite *ability and experience* to undertake the research successfully?	
13.	Is it evident in the proposal that a *risk assessment* has taken place?	

Appendix 2: Specimen research proposal

Research Proposal

Title:	**Smoking Cessation among Young People:** A study of the attitudes and experiences of 15–16-year-olds in relation to the decision to quit smoking
Name:	Alex Baker
Submitted to:	Department of Social Sciences, Redforest University
Date:	June 20xx
Word count:	2095

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1. Title

Smoking Cessation among Young People:
A study of the attitudes and experiences of 15–16-year-olds in relation to the decision to quit smoking.

2. Keywords
Smoking cessation; young people; health-related behaviour; tobacco use; cigarettes.

3. Aims
To help reduce the prevalence of tobacco smoking, especially among young people.

To provide knowledge that will improve health education and health promotion targeted at young smokers.

To contribute to existing evidence on the extent to which young smokers attempt to quit smoking by the age of 15–16 years.

To understand the attitudes and experiences of young people who engage in efforts to quit smoking.

To identify the factors perceived by young people to be significant for the success or failure of their attempts to quit smoking.

Comment: The aims start wide and become progressively more specific.

4. Background
Cigarette smoking is the single most preventable cause of premature death in the developed world (WHO 2018). Throughout the world it is estimated that six million people die each year as a direct result of smoking tobacco and that, on the basis of current trends, this figure is set to rise to 10 million a year by 2030 (WHO 2018).

Comment: Instantly captures the attention of the reader and indicates that the research will tackle an important and worthwhile matter.

Health education campaigns and health promotion measures have helped to reduce the prevalence of cigarette smoking. In England, for instance, there has been a substantial fall in the proportion of adults (aged 18+) who smoke cigarettes, down from 39% in 1980 to 15% in 2018. However, worrying levels of smoking persist – especially among young people (ASH 2018). Although there has been a decline in the number of young people who smoke cigarettes, there remains a significant minority who are regular smokers. Official figures for England indicate that 7% of 15-year-olds smoke at least once a week (Department of Health 2017). This is of particular concern because young people are the smokers of the future. As Denscombe (2010: 426) points out, 'they are the most significant group of potential recruits to the ranks of smokers and, as early starters, they are likely to suffer the accumulated effects of smoking over a longer period of their lifetime'.

Comment: Narrows the focus from a global issue to something which is more specific and which can be tackled by the research. Also spells out the need for the research.

5. Literature review

The vast majority of initiatives to tackle the problem of smoking among 'under-age' smokers are based on efforts to deter young people from experimenting with tobacco use and reducing the likelihood of them starting to smoke in the first place (Fanshawe et al. 2017). Very little attention has been paid to the circumstances surrounding the self-initiated cessation of smoking by young people.

Comment: Establishes the need for the specific research that is being proposed.

There is, however, some past evidence that many of those who start smoking at a young age would, by the time they reach 15–16 years, wish to quit smoking. In many cases they have tried to do so, albeit unsuccessfully (Dozois et al. 1995; Stanton et al. 1996b). But there is also evidence that some successfully quit smoking by the time they reach the age of 15–16 years (Centers for Disease Control and Prevention 2009). Denscombe and Drucquer (1999) found that one in eight young people reported having given up a smoking habit by the age of 15–16 years and Stanton et al. (1996a) found a similar proportion in their survey of 15-year-olds.

Comment: Previous findings support the idea behind the proposed research.

In view of the importance for future health of reducing the prevalence of smoking among school-aged children, there is a need for more knowledge and insight about the young people who try to quit smoking and, in particular, those who actually manage to quit smoking of their own volition. The investigation will develop and apply existing research evidence based on *adult* smokers which indicates that smoking cessation tends to be a process involving multiple efforts and many failed attempts (Chaiton et al. 2016).

Comment: Identifies the theoretical position underlying the approach to the research.

The proposed research will first seek to check the small number of previous research findings that indicate that a small proportion of 'under-age' smokers want to quit smoking and, in some cases, have become ex-smokers by the age of 15–16 years. It will then try to establish why young people under the age of 16 might want to give up smoking. Focusing on those young people who have tried to quit smoking already, the research will look at their feelings and experiences during the process of trying to quit.

Comment: Links the literature review to the research questions that follow,

Understanding the motives and experiences of those young people seeking to quit smoking can provide valuable new knowledge that draws on real-world experiences of those who have tried and those who have been successful in their efforts.

Comment: Here is the USP – something that this research offers that has not been done before. Potentially, there will be new knowledge and practical outcomes from the research, reinforcing the case that the research will be worthwhile.

Such young people provide a potentially rich source of data in relation to theories about the social and psychological circumstances surrounding decisions to quit smoking. On the basis of the findings it will be possible to produce recommendations and guidelines for the production of health education materials and health promotion campaigns targeted at smoking cessation among young smokers.

6. Research questions

- What proportion of young people perceive themselves as having given up smoking by the age of 16 years?
- What proportion of young smokers would like to quit smoking if they could, and what proportion have attempted to do so?
- How persistent are young people who smoke in their efforts to quit smoking?
- What do young people regard as powerful motives for giving up smoking?
- What are the experiences and feelings that accompany young people's attempts to quit smoking?
- In what ways do family, friends, and health services support or inhibit young people's efforts to quit smoking?

Comment: The six research questions involve specific things that will be looked at in order to address the aims of the research.

7. Methods

Data collection

The research will use a mixed-methods strategy. It will combine quantitative data from a questionnaire survey with qualitative data gathered from focus groups and a photographic diary. Initially, the research will use a questionnaire survey of young people aged 15–16 years (n = 1800). The survey will use a cluster sampling technique based on 12 schools in a central region of England. On known attributes of the local population and education authorities, these schools will be selected to be representative in terms of their pupil composition (i.e. social class, ethnic composition, and urban/suburban/rural location). A web-based questionnaire will be used, with pupils completing the questionnaire during school time. The questionnaire survey will provide baseline data on the prevalence of 'quitting', on the social background of those involved, and on relevant dispositional indicators related to smoking and health-risking behaviour.

Data from the survey will provide stimulus material for a series of *focus groups* that will be conducted with a purposive sample of the 15–16-year-olds (n = 48). Two focus groups will be conducted in a sub-sample of four of the collaborating schools. The first focus group will comprise six young people who have quit smoking. A second focus group will comprise six young smokers who have not quit, acting as a comparative control group.

Photo-elicitation techniques will be used as a means for probing the personal experiences of 15–16-year-olds who are actively trying to quit smoking. Two

such pupils from the sub-sample of the four schools will be invited to construct a *photographic diary* covering one week of their school, home, and social life. Using low-cost disposable cameras, they will be asked to focus on critical incidents related to their experience of smoking cessation. Subsequently, photographs from the photo diary will be discussed during *recorded interviews*.

Comment: The first three paragraphs spell out what data will be produced and how it will be collected.

Quantitative data from the questionnaire survey will be analysed using basic descriptive statistics looking at prevalence rates for smoking cessation and exploring their association with other relevant variables. Qualitative data from the focus group transcripts will be analysed using both content analysis and discourse analysis. Photographic diaries and the interviews will be interpreted using narrative analysis.

Comment: The data analysis techniques are outlined here.

The research will be conducted during a 12-month period starting October 20xx and the data collection phase of the research will take place during a six-month period starting in February 20xy. Authorisation for the research has been obtained from both the local education authorities in the region, and head teachers at all secondary schools in these local education authorities have been contacted seeking agreement in principle to participate in the study.

Comment: The duration of the research is specified, and the issue of access to the data sites is broached.

Rationale

The research will use a sequential QUAN–QUAL research design (Creswell and Creswell 2018). The use of a mixed-methods approach is appropriate in relation to the research questions, which require the measurement of factual information about the extent of smoking cessation within the specific age group as well as an understanding of the way people in this age group feel about smoking and its significance for their lives. As Bazeley (2018) stresses, it is important that a mixed-methods design brings the quantitative and the qualitative elements together so that they feed into each other and, in the proposed research, this is evident in the way the findings from the survey will be used to provide stimulus material for the subsequent focus groups.

Comment: Refers to key writers in relation to the chosen research strategy.

The mixed-methods approach allows the research to build on the strengths and compensate for the weaknesses inherent in the different strategies and methods that will be used. The questionnaire survey will provide a foundation of quantitative data derived from a representative sample of young people aged 15–16 years. In terms of external validity, the findings can be checked against indicators from national statistics for smoking among young people (e.g. Department of Health 2017). The findings will also be subject to member

validation in the sense that they will be reported to the focus groups, the members of which will be invited to comment on the face validity of the data. The qualitative research will provide the kind of depth and insight that cannot be obtained through a questionnaire survey, although, in their case, the depth of information they provide will be based on a relatively small, purposively selected sample.

Comment: Makes a case for why the strategy and methods are appropriate for the research.

The use of descriptive statistics and the analysis of text data using content, discourse, and narrative analysis is appropriate because the proposed research is exploratory in nature. Although theories of health-related behaviour exist, they do not yet provide the foundation to allow the use of an explanatory research design that could be used to investigate the causal relationship between specific variables.

Comment: Justifies the use of an exploratory approach to the topic.

Use of a web-based questionnaire has some distinct advantages over the use of paper-based questionnaires. There are no substantial differences in the completion rates or the quality of data obtained from the different modes of delivery (Denscombe 2006). Web-based questionnaires, however, are less expensive and are more efficient in terms of turnaround time and the data entry/checking process. The reliability of the data collection tool will be checked using a split-half technique (Cronbach's alpha). The administration of the questionnaire will be arranged with the cooperation of teachers at the collaborating schools. All pupils in Year 10 of the schools will be invited to complete the online questionnaire using the computer labs in the schools at pre-arranged sessions. The questionnaire will comprise 20 questions and take no more than 10 minutes to complete. Allowing for movement to and from the labs and for giving relevant instructions, each group of students will require approximately 30 minutes away from scheduled routine classes.

Comment: Acknowledges the role of the researcher and demonstrates a concern for objectivity.

The researcher is currently a member of teaching staff at one of the schools in the region in which the proposed research will be conducted. For the purposes of objectivity and impartiality, this school will not be included in the sample.

Comment: Justifies the use of an online questionnaire and provides some detail about how the data will be collected.

Limitations

The research will be exploratory and its findings should not be regarded as exhaustive or universally applicable. The purposive sampling and small numbers that will be used in relation to the focus groups and the photographic diaries will limit the extent to which the findings from the qualitative research can be generalised

Comment: Sets boundaries around expectations about what the research can produce. Limits to generalisations are acknowledged.

to the wider population of 15–16-year-olds. And it should be borne in mind that the quantitative survey data will be based on a sample of young people from one particular region of England, which could affect the applicability of findings nationally and internationally.

The cross-sectional research design will provide a snapshot of the situation as it is at this point in time but will not provide data that can track changes over time. Existing evidence suggests that smoking cessation is a process that often requires repeated attempts (DiClemente et al. 1991), and a follow-up study would be needed to check the longer-term success of those in the photographic diary part of the study in their efforts to quit smoking.

Comment: The inherent limitations of the chosen research design are noted.

Resource constraints mean that the research will take place over a relatively limited timescale with data collection affected by school holidays and school exams. This will restrict the amount of data that can be collected and will limit the overall scope of the project. Resource constraints will also prevent following up non-participants to gauge whether there are significant differences between participants and those who choose not to take part in the study.

Comment: Time and resources inevitably restrict what can be done.

8. Planning and resources

This small-scale project will be undertaken principally by one person. The researcher will draw on the voluntary cooperation of teachers in the schools to enable data collection. The researcher's qualified teacher status will help facilitate access to the schools and obtain the cooperation of colleagues teaching 15–16-year-old pupils in those schools. The research will be conducted on a part-time basis during the early months of the research (about 8 hours a week) with additional time becoming available during the data collection phase through agreed work release (allowing about 16 hours a week).

Comment: Not a team of researchers; no salary implications.

Comment: Addresses both the researcher skills issue and the matter of gaining access to data sources.

Comment: Information on the amount of time that will be dedicated to the research.

The main items of expenditure that will not be covered by institutional overheads total £400. These comprise:

Comment: Items are listed that are not subsumed elsewhere.

Travel: £250

- Two visits each to the 12 schools involved in the questionnaire survey: £150 (based on an average 30 miles return on each occasion).
- Four visits to each of the sub-sample of four schools involved in the focus groups and photographic diaries: £100 (based on an average 30 miles return on each occasion).

Questionnaire: £50 (based on two months' web-based questionnaire using education rate provided by SurveyMonkey or Zoomerang).
Equipment: £100 (eight low-cost disposable cameras. Recording equipment for interviews is already available. There will be no costs associated with hosting the focus group meetings).

The costs of specialist software for data analysis (SPSS and NVivo) will be covered by site licences available to the researcher through employment. Printing costs for producing the Final Report will be covered by the researcher's employer.

Comment: Acknowledges that many of the costs of research are covered by organisations such as the employer or the university.

The planned schedule for the research takes account of the increased number of hours dedicated to the data collection phase and also accommodates the timing of school holidays and end-of-year exams (see following chart).

Oct–Dec 20xx		***Jan–April 20xy***			***May-August 20xy***		
Literature review	Refine research questions					Update literature review	
		Design and pilot the questionnaire		Plan focus groups and photo diaries			
	Negotiate access to data sources		Questionnaire survey		Focus groups; Photo diaries & interviews		
				Analyse survey data		Analyse qualitative data	
					Drafts of sections/chapters		Write final report

9. Ethics

The research involves primary data collection from individuals and therefore an application for ethics approval has been

Comment: Ethics approval process has been started.

made to the Human Research Ethics Committee at Redforest University. Research activity will not start before this approval is obtained.

A preliminary risk assessment has been undertaken involving experienced researchers and teaching professionals, and reasonable efforts have been made in the design of the research to avoid foreseeable risks of harm to participants or others involved in the research. The research will be conducted in accordance with the Social Research Association's (2003) code of research ethics. A criminal record check (DBS) has been obtained for the researcher.

Comment: Some informal risk assessment has taken place.

Comment: The researcher commits to upholding good professional standards of conduct.

Participation in the research will be entirely voluntary. Pupils will be informed, both verbally and in writing, that they are under no obligation to take part in the research and that they have the right to withdraw from involvement in the project at any time. They will be supplied in advance with information about the purpose of the research and who is conducting it. They will also be given guarantees of anonymity and assured that any information they provide will be treated in the strictest confidence (subject to the proviso that the researcher has an overriding legal obligation in relation to the disclosure of certain kinds of information). No inducements will be offered to encourage participation.

Comment: Research involving young people needs the appropriate clearance.

Comment: Demonstrates an awareness of the key research ethics principles.

A written consent form explaining the nature of the research and their involvement in it will be given to all the relevant pupils: only those who sign this form will be included in the research. All parents of relevant pupils will also receive a copy of the consent form and will be asked to contact the school if they have any objections to their child's involvement in the research.

Comment: Shows how the principles will be applied – particularly with respect to written consent. Parental approval is sought, reflecting the age status of the 15–16-year-olds.

Data from the research will be kept secure and precautions taken to prevent the leaking of confidential information. Data files held on computer will be encrypted and protected by password access. Documents and other materials will be kept under lock and key. Data will be kept for five years following completion of the project.

Comment: Explains how confidentiality and data security will be assured.

A research website will be constructed that will allow transparency of dealings with participants. The findings will be disseminated initially through the research website. Participants will be encouraged to access these and to

provide feedback to the researcher via email. The research will be conducted under the auspices of Redforest University. The research is not funded by a sponsor, and there is no conflict of interest in relation to the objective and impartial treatment of the data.

Comment: Confirms transparency and fairness as features of the researcher's approach.

10. Outcomes

The findings of the research will be produced in a Final Report. This report will contain insights and information gleaned from the research about smoking cessation and young people. It will also include recommendations arising from the research in relation to health education and health promotion. A summary of the Final Report will be lodged with the local education authorities and the schools who took part in the research, who will be encouraged to implement the recommendations arising in relation to health education in schools. A summary of the Final Report will also be sent to smoking cessation support services in the region with a view to discussing the implications of the research for their service provision. The findings and recommendations will be open access and available online via the research website.

Comment: Identifies a 'deliverable' – a substantial end product to the research.

Comment: Indicates some clear, practical suggestions from the research.

Comment: Describes dissemination of the findings, together with efforts to allow the research to have some impact on policies and practice.

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Appendix 3: Headings and sections in a research proposal

The following list of contents comprises a generic format that can be used in relation to small-scale research projects in the social sciences. It provides a list of headings and sections that will be applicable for proposals in subject areas such as social studies, business studies, market research, education, health studies, politics, policy studies, psychology, and other similar research that includes primary data collection involving people.

Contents

Title

Keywords

1 Aims of the research/ Background
2 Literature review
3 Research questions
4 Methods
5 Resources
6 Ethics
7 Outcomes

List of references

Such a list of headings and sections will be familiar to most people who evaluate research proposals. However, as stressed in Chapter 1, there is no such thing as a definitive, universally accepted structure for all research proposals. Bearing this in mind, it is useful to look at some alternative structures that have been suggested elsewhere. It is easy to see the family resemblance between these but, equally, it is interesting to note the subtle variations in emphasis for different disciplines and styles of research. In the following examples, note how sometimes there is a difference in the order in which the sections are listed, and some differences too in the level of detail that is required, with some of the examples recommending the inclusion of appendices.

Social research proposals (from Dawson 2019)

1 Title
2 Background
3 Aims and objectives

4 Methodology/Methods
5 Timetable
6 Budget and resources
7 Dissemination

Social science research proposals (from Punch 2016)

1 Title and title page
2 Abstract
3 Introduction: area, topic, and statement of purpose
4 Research questions: (a) general, (b) specific
5 Conceptual framework, theory, hypotheses
6 The literature
7 Methods
   - Design: strategy and framework
   - Sample
   - Data collection: instruments and procedures
8 Data analysis
9 Significance
10 Limitations and delimitations
11 Ethical issues: consent, access, and participants' protection
12 References
13 Appendices

Qualitative research proposals (from Marshall and Rossman 2016)

1 Title and title page
   - Overview
   - Topic and purpose
   - Potential significance
   - Framework and general research questions
   - Limitations
2 Review
   - Theoretical traditions
   - Essays by informed experts
   - Related research

3 Design and methodology
   - Overall approach and rationale
   - Site or population selection
   - Data-gathering methods
   - Data analysis procedures
   - Trustworthiness
   - Personal biography
   - Ethical and political considerations
4 Appendices

Mixed methods research proposals (from Creswell and Creswell 2018)

1 Introduction
   - Statement of the problem
   - Purpose of the study (include both qualitative and quantitative statements and a rationale for mixing methods)
   - Research questions (include both qualitative and quantitative)
   - Review of the literature (separate section, if quantitative)
2 Procedures or methods
   - Characteristics of mixed-methods research
   - Type of mixed-methods design (include decisions involved in its choice)
   - Visual model and procedures of the design
   - Data collection procedures (types of data, sampling strategy)
   - Data analysis and validity procedures
   - Report presentation structure
3 Role of the researcher
4 Potential ethical issues
5 Significance of the study
6 Preliminary pilot findings
7 Expected outcomes
8 Appendices: instruments or protocols, outline for chapters, and proposed budget

Social science proposals (from Kumar 2014)

1 An introduction, including a brief literature review
2 Theoretical framework that underpins your study
3 Conceptual framework that constitutes the basis of your study

4 Objectives or research questions of your study
5 Hypotheses to be tested, if applicable
6 Study design that you are proposing to adopt
7 Setting for your study
8 Research instrument(s) you are planning to use
9 Sampling design and sample size
10 Ethical issues involved and how you propose to deal with them
11 Data processing procedures
12 Proposed chapters of the report
13 Problems and limitations of the study
14 Proposed timescale for the project

Proposals in behavioural sciences – including health, medical, and psychological research (from Krathwohl and Smith 2005)

1 Introductory material
   - Cover page
   - Title
   - Abstract
   - Table of contents
   - Acknowledgements

2 Problem statement
   - General problem
   - Study focus
   - Study purpose
   - Study importance
   - Inquiry framework
   - Inquiry statement
   - Study boundaries
   - Terms
   - Summary

3 Literature review
   - Overview
   - Selection process
   - Review process
   - Literature quality
   - Major works
   - Substantive findings

- Methodological findings
- Implications
- Contributions
- Summary

4 Method statement
- Research approach
- Study design
- Interventions/treatments
- Data collection
- Instrumentation
- Data analysis
- Work plan
- Resources
- Pilot studies
- Limitations

5 Appendix
- References
- Bibliography
- Dissertation outline
- Sample instruments
- Amplification of procedures
- Copies of key documents
- Institutional review board clearances (ethics)
- Letters
- Support requests
- Résumé: student curriculum vitae

Science proposals (from Friedland et al. 2018)

1 Project summary
2 Table of contents
3 Project description
4 Results from prior agency support
5 Statement of the problem and significance
6 Introduction and background
- Relevant literature review
- Preliminary data
- Conceptual or empirical model
- Justification of approach or novel methods

7 Research plan
   - Overview of research design
   - Objectives, hypotheses, and methods
   - Analysis and expected results
   - Timetable

8 References cited

Proposals for winning grant funding (from Zane 2016)

Introduction
Table of Contents
Context and Background
Existing Sources of Information
Methodology
   - Goals of the project
   - Tools and techniques to be used
   - Detailed methodological approach

Organization and staffing
   - Project management
   - Quality control
   - Project timeline
   - Project team

Annex A – CVs
Annex B – Project references

Proposals for winning grant funding (from Meador 1991)

1 Cover letter
2 Title page
3 Table of contents
4 Proposal summary or Abstract
5 Introduction
6 Statement of the research problem
7 Objectives and expected benefits of the project
8 Description of the project
9 Timetable for the project

10 Key project participants
11 Project budget
12 Administrative provisions and organizational chart
13 Alternative funding
14 Post-project planning
15 Appendices and support materials
16 Bibliography and references

Note: The headings relating to participants, administration, and budgeting come to prominence in proposals aimed at attracting funding.

Appendix 4: Choosing a research topic

The topic is central to any research proposal and it is effectively impossible to write a successful proposal if the topic is not carefully chosen. There are a number of factors that will affect the choice, some of which are under the control of the researcher and some of which are not. The bottom line, however, is that the topic to be investigated needs to fulfil three broad criteria. First, it needs to be something that can be seen to be worthwhile. Second, it needs to be realistic in terms of what is feasible with the available resources. And third, it needs to be socially acceptable in the sense that it can be investigated within current ethical and legal parameters. These criteria have been developed throughout the book as vital in the context of writing successful research proposals, and it should be no surprise to find them reflected in the choice of a suitable topic.

Starting points

When it comes to choosing a research topic, there are a variety of points from which people can start. Some people will approach the task without any firm ideas about the topic. This can happen, for example, among those who are required to undertake a small-scale piece of research, perhaps as part of a bachelor's or master's degree. Faced with the need to conduct a piece of research in a short time frame and knowing that their work will be formally assessed, choosing a suitable topic for research can pose a challenge.

Starting from scratch with no idea of what to research

Here are some questions that will help to start the ball rolling in the right direction.

- What are my main interests?
- Who am I and what principles do I stand for?
- What things in my personal and academic background have shaped my beliefs?
- Are there any assignments I have done that could be developed into a small-scale research project?

Others might start from a position where they have some rough idea of the kind of thing that they would like to research but are not sure exactly what they

want to research within that area. The challenge for them is to fine-tune their interest in a general area – to move it from something vague to something precise.

Fine-tuning a general area of interest

Here are two practical ways of moving from an interest in a broad area towards a focus on a specific aspect of that topic area:

- Use review articles and systematic literature reviews in academic journals to provide signposts about which topics are being discussed and which writers to refer to.
- Look at the titles of projects and dissertations that have been done by students on the programme in previous years. Do not copy any of these but do use them to get ideas about what kinds of topics would be suitable.

Then there are some people who approach research with a very clear and definite vision of the topic they wish to investigate. These include people who have a burning desire to investigate a particular topic that is of personal interest – something that ignites their concern or something that they just find fascinating. It also includes experienced researchers who are proposing a piece of research that builds on their previous work and who will have a clear project in mind. For example, applicants for a place on a PhD programme are likely to use their master's dissertation as the basis for selecting the subject matter for their research proposal. And practitioners working within an organisation might have a specific work-related problem in mind that they wish to tackle. They know in advance what they want to achieve and they are likely to have a pretty good idea of what it will involve.

Guidelines on how to develop suitable research topics will clearly prove more helpful to those who are starting from scratch and those who need to fine-tune their choice. However, the advice contained in this Appendix is still of relevance for experienced researchers with a clear project in mind because it can remind them of the fundamental issues and how these can be addressed. And, in addition to the 'basic principles' outlined here, experienced researchers and newcomers alike always need to bear in mind that their choice is one that needs to be justified to those who are to evaluate the proposal. Researchers should *never* assume that the readers will share their enthusiasm for the chosen topic. At all times they should be conscious of the need to persuade the readers that the topic is a good one and that it is not being investigated simply on the basis of the researcher's personal preferences. They need to bear in mind the points made in Chapters 2 and 3 – that it is the evaluator's or reader's opinion that ultimately counts.

A topic that meets the remit for the work

The first requirement of a good topic is that it should fit with any remit for the work that has been 'externally' imposed. The vast majority of people who need to choose a topic for research will find that they are not entirely free in their choice. In practice, their choice of topic will need to fit in with the expectations of those who are to evaluate the proposal – whether these are supervisors in university departments, representatives of funding bodies, or members of research ethics committees. Students will find that the range of topics from which they can choose will be restricted to those that fit in with the academic department within which they are studying, the programme on which they are enrolled, and possibly the course/module they are taking. Bachelor's degree projects and master's degree dissertations might allow some range of possibilities but they will include boundaries set by the academic discipline of the award for which the work is being produced. Similar restrictions apply in the case of PhD applications and funding applications where the topic that is chosen must fall within certain more or less explicit boundaries based on subject disciplines. So, for example, within a Business School, if a master's degree student proposed to conduct research on 'Styles of management and the success of Premier League sides', this might raise questions about how well it meets the remit for work within the discipline. There is, in effect, an ambiguity to this title. If it means that the research will look at the business side of running a club – finances, administration, organisational structure, human resources, and so on – then this is suitable. If, however, it is concerned with the coaching styles of football managers, then it will fall outside the boundaries of what is appropriate for a Business School, and is better suited to a Sports Science Faculty.

Top tip

Ensure that your choice of topic fits well within the requirements of the academic programme, the sponsors, or funding body for whom the proposal is being written.

A topic that can be researched

A topic for research should be something that lends itself to being researched using methods that are conventional within the field of study. Basically, there are certain things that it is not feasible to study using conventional research methods and evaluators will want to know from the start that the topic is of a kind that research can answer or help elucidate. In a social science research project, the questions need to be answerable in the sense that they rely on the collection and analysis of 'evidence' and on scientific debate and reason. In this field, the topic cannot be something that relies on judgements or sentiments based on things like religious faith, moral beliefs, political ideology, or artistic

Table A.1 Topics that can and cannot be researched

Not researchable	*Researchable*
Should the UK become a republic? *[This requires a political judgement]*	What would be the constitutional changes needed to make the UK a republic? Is public opinion in favour of retaining the monarchy?
What is the best rock band in the world? *[This is based on an aesthetic judgement and/or emotional feeling]*	What criteria do people use when choosing the best rock band? What is the most popular rock band in the world based on annual earnings from record sales and live performances?
Is euthanasia a good thing? *[This calls for a moral judgement]*	Under what circumstances would members of the public support the practice of euthanasia?

vision. Table A.1 provides an indication of the difference between those topics that lend themselves to being researched in a conventional sense and those that call for different modes of inquiry.

A topic that is legal and ethical

In a free society there should be no topic that, in itself, is illegal to investigate. However, the act of investigating certain topics can easily put the researcher on the wrong side of the law. Research into topics such as terrorism, drug smuggling, people trafficking, prostitution, and child pornography illustrate the point. It is not against the law to research such topics, and indeed such research is potentially valuable for what it might disclose. And it does not mean that research on such topics must *inevitably* require the researcher to break the law. However, there is a real risk that any empirical research in such areas might end up breaking the law – intentionally or otherwise. Through the activities of gaining access to data sources, in the act of collecting the data, and even in the act of analysing the data, there is the danger of straying outside the bounds of the law. So remember:

- researchers have no special exemption when it comes to compliance with the law and can be prosecuted if they break the law; and
- no university or funding body will accept a research proposal that looks as though it will involve breaking the law.

Evaluators of research proposals will be fully aware of these points and are highly unlikely to approve research involving any such topic. The best advice, then, is to play safe and steer away from these topics, especially at the early stages of a research career.

Top tip

When choosing a topic, think ahead and consider whether the investigation is likely to have legal or ethical implications in terms of the data collection or the consequences of the research for the participants.

Research activity not only needs to be legal, it also needs to be ethical. When choosing a topic, careful consideration should be given to whether it will be possible to adhere to a code of research ethics in the process of collecting and analysing the data and disseminating the research findings. Guidance on this is offered in Chapter 9. The implications of this are that the topic needs to be one that lends itself to being studied in an ethical manner, allowing relevant safeguards and protections for participants and others involved with the research. Again, this is something that will be high on the agenda for reviewers of any research proposal and, as with the matter of legality, any topic that looks as though it could not be investigated without engaging in unethical behaviour will not be approved.

A focused topic with specific aims

The research topic needs to be fairly *specific*. A broad topic might be a good starting point, but it remains too wide-ranging and vague to be a viable focus for a research project. It is vital to focus in on specific aspects, questions, and issues within the broader area of interest. If this is not done, then the readers of the proposal are likely to have doubts about

a) whether the ideas for research have been sufficiently developed, or
b) whether the researcher has grasped the scale of the enterprise that is being proposed.

Those who evaluate the proposal, as experienced researchers, will probably suspect that any effort to research such a broad area will prove to be unsuccessful because the researcher will inevitably bite off more than he or she can chew – a point expanded upon in Chapter 8.

The process of honing down broad areas of research into more focused areas has been outlined in Chapter 4 in connection with the aims of research and Chapter 6 on research questions, and the same processes can generally be

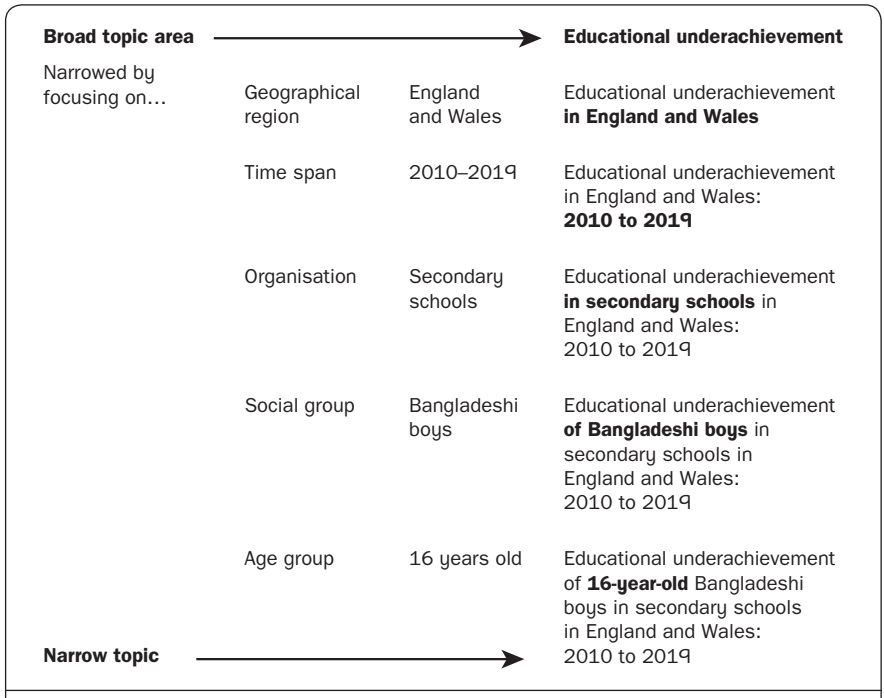

Figure A.1 Narrowing the topic: An example

applied to the choice of the topic as well. There is, however, another rather straightforward way of narrowing the focus that sometimes involves little more than bringing to the foreground some implicit assumptions about what the topic will be. The location of the research, for instance, is often left unstated when it has a significant bearing on the nature of the proposed research and the applicability of its findings. Specifying where the research will take place – which country/region or which organisation – immediately narrows the scope. The era under investigation, likewise, is easy to overlook when writing about the topic, even though it might be the intention of the researcher to focus on certain years as parameters for the research. In social research, the age, sex, ethnicity, and social class of the people being studied are common ways in which the broad topic area is made more specific in terms of the topic for the proposed piece of research. Figure A.1 provides an example of how such a narrowing of the focus might look in practice.

Personal agenda and self-identity

There is one factor that influences the choice of topic for research that is generally underplayed when it comes to writing research proposals. That is the

matter of the researcher's personal agenda and self-interest. In practice, this is a very significant factor because it has a bearing on the choice of topic in the large majority of cases.

Of interest to self – a means of personal development

In the first instance, people tend to choose topics that are of interest to themselves. This is reasonable when we consider the amount of time that will be spent on the research and the advantages of selecting a topic that can continue to motivate us during the hour upon hour of work that will go into the completion of the research.

Researcher's social identity – a reflection of personal background and experiences

Within the social sciences in particular, the choice of topic tends to reflect the personal identity and background of the researcher. The sex and ethnic background of the researcher, for instance, are attributes that are likely to have a bearing on the choice of topic. Most research on gender inequality is conducted by women, whereas most research on race prejudice is conducted by ethnic minority researchers. This is no accident, and nor is it necessarily a bad thing. It does not automatically mean that the researcher is taking the easy route by choosing a topic in which they already have some insight, experience, and personal interest. On the contrary, it can often be the case that the personal attributes of the researcher can be an advantage for the proposed research – qualities that rather than being shunned as subjective and unscientific in relation to the choice of topic should be appreciated as important ingredients for the success of a project.

Professional self-interest – a means of career advancement

Self-interest can play a role in the choice of topic such as when people select topics that they can see will have some personal benefit in terms of their employment. The choice of topic can be a *strategic* one. In the work setting, employees can choose a topic mindful of the fact that their research on the topic can provide a practical solution or some other kind of pay-off that can serve them well in their career. The research might, for example, be the basis of a report that will impress the boss.

Interest, involvement, and bias

Self-interest in a topic is not necessarily a bad thing, but it is important to recognise that there can also be times when self-interest can become an impediment to good research. This is most obviously the case when that self-interest starts to get in the way of producing an impartial, objective piece of work – when it

clouds the vision of the researcher and prevents an unbiased approach to the topic. The kind of questions researchers should ask themselves in this respect are things like:

- Will I be able to approach the topic with an open mind?
- Do I have a vested interest in the findings from the research?
- Could I incorporate ideas and views that I passionately disagree with and be willing and able to consider both sides of the argument?
- Am I too close to the subject or too involved?
- Will my personal values, beliefs, and background lead to biased findings?
- What chance is there that my research will provide a fair and balanced picture?

When researchers look honestly at their motives for choosing the topic, they need to be able to conclude that they can keep their beliefs, passion, and commitment in abeyance and approach the topic impartially. If this is not achievable, then they should avoid the topic for fear that they will be biased in the questions that they ask and their interpretation of the findings. It will be better to choose a topic a little less close to their heart.

Justifying the choice of topic

There is an important point to bear in mind when it comes to justifying the selection of a research topic. In the context of a research proposal, the personal and practical reasons for choosing a particular topic will *not*, of themselves, persuade the readers that the research is worthwhile. In most disciplines, the prevailing sentiment is that research topics should be justified in relation to theoretical developments in the field or practical problems that need a remedy. They are not justified on the basis that the researcher had a personal interest in the topic or that the topic was nice and convenient to study. Although in practice the personal interests of the researcher and the convenience of the topic might have a strong influence on the choice of topic, when justifying the choice of topic in the context of the research proposal the emphasis should be placed firmly on the potential benefits of the research for the likes of theory, knowledge, and practice in the subject area.

The proposal, then, needs to argue a case that there is a need for the particular investigation because, in ways described within the proposal, the research will do one or more of the following:

- fill a gap in what is already known about the topic, perhaps by adding some useful information or by applying current theories and methods in new contexts;
- examine some contradictions that currently exist within theories or data on the topic;

- contribute to a debate or controversy around the topic;
- provide a timely commentary on some significant contemporary issue;
- examine a practical problem, with a view to providing a remedy; or
- produce guidelines for good practice.

Top tip

When it comes to justifying a topic for research:

- the way that the topic fits with existing research knowledge can be used to persuade the readers that the topic is worthwhile; and
- the way that the topic fits with the researcher's personal identity and background can be used to persuade the readers of the feasibility of the project.

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