



# Research Methods I

An Introduction

**Abigail Marks**

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# Research Methods I: An Introduction

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## Welcome to your Doctorate

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### 1.1 Introduction

Welcome to your doctorate! These may be the most challenging few years of your life. If I were to offer you just one piece of advice it would be to be careful about the advice you take. There are many blogs and much online advice from renowned newspapers and academic guides – be careful what you take from these sources. Having said that, within this text advice and guidance will be offered. Most of this is technical advice and it involves examining the range of choices that are available to you about methods and methodologies.

This text is aimed at a wide range of students, full-time and part-time, both PhD students and those undertaking a professional doctorate. Although the amount of time that each of you will allocate to your thesis and the focus of the theses will vary, you will all spend a great deal of time researching and writing, but you are likely to do be doing much more than this. Exactly what you do depends on the nature of your research, but for those of you undertaking a full-time PhD it is likely to include teaching undergraduates and organising workshops and reading groups. For all students I would hope that it involves presenting your work to the academic and practitioner community through conference presentations, journal articles or perhaps blogs and other forms of social media. All these activities will contribute to the final thesis you present for examination and help prepare you for your future career beyond your doctorate. The purpose of this book is therefore not only to provide an initial overview of methods and methodology for your doctoral work but to also help you to prepare for all the other activities that relate to your development as a researcher.

### 1.2 What is the Main Purpose of this Book?

Broadly speaking, research methods are the tools and techniques for undertaking research. ‘Research methods’ is, however, a rather expansive term that includes the full range of tools and techniques required for undertaking research and encompasses any

tool that can be used to investigate interesting or new facts. Indeed, this will include your literature search and any process of dissemination of your findings, as insights can come from a whole range of sources. As with all activities, the rigour with which you undertake your research is clearly reflected in the quality of the outcome – your doctorate! It is therefore the aim of this text to help you to ensure that your doctorate is undertaken in a rigorous and thorough way, and not only to provide you with an overview of research methods for your doctoral thesis but also to help you understand how a doctorate fits in with the broader academic labour process. As with all aspects of life, it is important to know what the best tools are for performing a job and how to exploit them for the optimal outcome. So this text will provide you with information on how to use the tools to best effect, as well as providing examples from doctoral work to demonstrate how these concepts can be applied.

This book presents the first step in a basic review of the nature of research and methods for doctoral students, as well as a guide as to the content required in a thesis, the nature of examination for a doctoral degree, and how to write in an appropriate ‘academic’ style (see Chapter 3). The following texts in this series will focus more clearly on specific methods; the second text will be concerned with the collection and analysis of **qualitative** data; the final text will focus on **quantitative** research. However, none of these texts are ‘complete’ guides to advanced-level research. They will guide you concerning the main methodological choices available, but for doctoral-level research you will need to take this further, and this will be down to you.

### 1.3 Why Do a Doctoral Degree?

There are many reasons to undertake a doctoral degree and an equal number of reasons not to! The decision to undertake a doctoral degree should not be taken lightly. Within the UK context a full-time PhD or DBA typically takes three years, although there are also a number of four-year schemes which start with a year of research methods training, to help students decide the specific area that they would like to study and get a clear understanding of methods. For part-time students it can take up to seven or eight years to complete the degree. If you are going to commit this amount of time to a project, you need to be passionate about the subject.

Most doctoral degrees require at least a 2:1 undergraduate degree in a relevant subject. However, there are other routes that can lead to a doctorate, and for DBA students, while value is still placed on academic qualifications, there is greater value placed on work experience.

Completing a doctorate does not necessarily lead to a career in the same field or even an academic career, but it does provide you with research skills and a high level of critical thinking. Doctoral-level training provides students with the opportunity to develop a range of skills including planning and critical writing. However, a doctorate isn’t for everyone. Leaving a doctorate after you have undertaken some initial courses is OK. It is a brave decision to leave and it is no reflection on your intellectual ability – the isolation and extreme critical thinking required of a PhD is not for everyone. I know for a fact I would have never made it as a physicist or as a dentist. I don’t see it as a failing!

## 1.4 What Is Research?

Generally speaking, research is a mechanism for searching for knowledge. Academic research, however, can be more precisely defined as the investigation of a problem based on a process of scientific inquiry. How you undertake this investigation often depends on your worldview and personal philosophy and how you define 'scientific'. So it is key to your development as a doctoral-level researcher to understand what your philosophy is and the options available to you for social science research (see Chapter 4).

For you to succeed as a doctoral researcher you need to make an original contribution to the existing body of knowledge in your chosen field of study by using a well-established and rigorous research method. However, there is a huge variety of research methods, and no single accepted research method is appropriate for all research problems. Each research method has its own relative weakness and strength, and many of these will be addressed in this book and in the subsequent texts in this series. No single research methodology is perfect and your choice of both method (your research tool) and methodology (the justification for your research methods and research programme) inevitably involves omission as well as inclusion. Your choice is generally dependent on your choice of philosophical paradigm based on your beliefs about the nature of reality and humanity (ontology), the theory of knowledge that informs the research (epistemology), and how to collect that knowledge (methodology). While this may all sound hugely complex at the moment, it will start to make sense as you continue both reading this text and undertaking research methods courses available at your institution.

## 1.5 What Makes a Good Piece of Academic Research?

There are many factors that contribute to the quality of a piece of academic research; however, all good research projects should commence with a detailed search and review of the relevant body of literature (see Chapter 3). Moreover, there should be a clear structure as well as a clear argument that flows and develops from one section or chapter to the next. Obviously, clear English should be used throughout and jargon should be avoided. A strong literature review within a doctoral thesis will form a discussion of the general literature around the topic under investigation and a discussion of the context of the work, and move through different stages to arrive at a clear statement of the problem being investigated and a description of the research question(s) and hypothesis.

Once you have established the central research problem from a review of the literature, a key focus of your research project will be to look at the methodology you will be using to collect your data, and so it is essential to consider the empirical and analytic dimensions of your research. Following this you will discuss your findings in relation to the relevant literature that you identified at the start of your doctoral project and draw some conclusions. Generally your doctoral thesis will develop theory, test theory or relate theory to a new field of practice. A thesis that fails to do any of these things will also fail to achieve a doctoral award.

Every thesis should provide a clear statement at the start of the written project about the problem that the thesis seeks to resolve. Doctoral-level research should also specify the concepts that are under investigation. These concepts should be embedded in a body of theoretical work and, for DBA theses (and some PhD theses), also have a practical contribution. It is essential for a robust thesis to explain how the reported work builds upon previous work. There should be explicit connections to an existing body of knowledge or body of theory. It is often useful to involve theoretical resources that are outside business and management (as business and management is not an academic discipline in its own right and leans on many other areas – sociology, psychology, economics, politics, to name the key influences). While there are some strands of theory that are predominantly located in business and management (for example, Scientific Management, Bureaucracy, Human Relations Theory), most research in the field exploits theoretical models developed elsewhere in the social sciences (for example, the work of Marx, Foucault and Bourdieu). The disciplinary origins of these theories must be identified in order to clarify how the work fits with your particular research problem. This ensures that the connections you are making embed your work within established theoretical resources in the social sciences.

Theses are generally held together by a theoretical framework which must be clearly articulated. The extent to which a particular approach can be deemed to be appropriately authoritative is often judged in terms of its origins. Thus it is important to connect the description of a theoretical framework with your literature (all this is explained in more detail in Chapter 3). It is essential that this is approached in a rigorous manner which will establish the credibility of your thesis. An appropriate delivery of your theoretical framework will help your examiner assess the value of your research question(s). Your research question and aims and objectives may be followed by hypotheses. However, the adoption of a hypothesis depends on the philosophical and methodological position that you take as a researcher (all this will be explained in more detail later on in this text).

The question of whether there should be hypotheses is still much debated, however. They are certainly not a prerequisite for a good research paper and their relevance depends on the philosophical position that you as a researcher hold (see Chapter 5). However, if your thesis does adopt hypotheses, they should be clearly stated and the relationships between the main variables should be explicit and justifiable. If the research is not built on hypotheses, the significance of the contribution of your thesis may be explained through a series of research questions, but again this depends on your methodological and philosophical standpoint.

The decision whether to use hypotheses or not also depends on your choice of methods, and partly determines your choice of methods. In order to answer a specific research question there can be a number of possible and available methods, but you need to be able to justify your choice of methods. Your methods and research strategy (Chapter 6) must be appropriate for your philosophical position, and some methods may be more powerful than others for addressing your particular problem. A good thesis will justify the methods, strategy and overall research design with reference to previous, similar studies.

So, where are you going to collect your data and what are the parameters for your data collection? Your research must be centred on a suitable unit of analysis and you must present a clear rationale and description of your unit of analysis. For example, your unit of analysis could be an organisation, a profession, a team, etc. – how many do you need for your study? Again, this all depends on your particular philosophical choice. The relevance and appropriateness of your findings are only possible to understand by taking into account the epistemological basis of the research, and this is why discussion of epistemology is an important facet of methodology.

When it comes to displaying your actual data, you will not be able to present all the data that you have collected. However, there must be sufficient information in your thesis for your examiners to be able to make an assessment of whether the data you have collected are suitable for your study. There are different methods of displaying your data, of selecting the depth of data that you present, and of demonstrating the relationship between your data and the relevant literature.

The section of the thesis that I think is the hardest to write is the conclusion. I think that students are often so relieved to have got to this point that they are happy to write anything! No new facts should be introduced in the conclusion. The conclusions of the study should be consistent with the results of the analysis and follow from the development of the argument in the thesis. You can develop your conclusions by looking at alternative interpretations of your data and by considering both theoretical and practical implications of the results. The limitations of your project should always be mentioned, particularly in relation to the bounds of the parameters of your research the relevance of your findings.

## 1.6 Overview of Text and Outline of Chapters

While the main function of this text is to provide an initial insight into research methods and methodology, it is also my aim to provide an overview of many of the areas that you need to be aware of, including the structure of a PhD, how to write your proposal, what happens in a viva and how you should prepare for it, and tips to start an academic career (if that is what you want!). This text will not only provide an insight into the various aspects of research theory and practice and help you to understand what is involved in carrying out a research project, it should also provide you with the tools to help you evaluate the claims made by academics and assist you in making a judgement on the quality of the evidence and arguments being made.

This book acts as an introduction to the basics of research methods, but you are likely to wish to undertake further research into methods and methodology when you progress with your thesis, so there are some suggestions about further reading at the end of most of the Chapters. This text can therefore be used as both an introduction to concepts and ideas related to methods and as a point of reference to investigate the characteristics of a specific method, methodology or philosophy.

The order in which the Chapters are organised generally reflects the order of activities for a doctoral journey but is also a logical order in terms of the knowledge you need to acquire for your doctorate.

Chapter 2 introduces you to your doctoral journey. It provides an overview of the structure of a doctoral thesis. This Chapter also describes the difference between a DBA and a PhD and describes the relationship between student and supervisor.

Chapter 3 provides guidance and advice on how to search and analyse the literature. The Chapter provides suggestions about the most appropriate and accessible places to locate literature and how you can assess the quality of the literature that you have found. Within this Chapter there is also a broad discussion on how to start your literature review and to write in an appropriate academic style. Chapter 3 provides guidance on appropriate referencing and thus how to avoid plagiarism.

Chapter 4 centres on understanding how the way you view the world leads you to make decisions about research philosophy. There is a discussion of the main philosophical choices available to you, how these are defined and constructed and how discussion of philosophy has varied over the years. This Chapter identifies three main philosophical positions – social constructionism, positivism and critical realism. However, these positions are used to demonstrate different approaches; they are not to be viewed as exclusive choices.

Chapter 5 is concerned with the techniques that you may use to identify your research question and problem statement. There is also discussion of when you may wish to use hypothesis and how you would construct some robust hypothesis and research questions.

Chapter 6 focuses on research strategy. Therefore within this Chapter there is a description and critique of the frameworks that can be used to connect your research philosophy with your methods. These frameworks include, for example, case studies, grounded theory and action research. This Chapter also provides a tabulated overview of varying strategies which link to philosophical paradigms and methods.

Chapter 7 introduces you to methods and methodology. There will be a detailed discussion of methods in the next two texts in this series, but this Chapter provides a brief overview of your choices in terms of methods and also provides guidance on how to structure your methodology chapter in your thesis. Chapter 7 also provides some direction on how to manage ethical compliance issues.

Chapter 8 looks at how you prepare your research proposal. This is discussed at this point in the text as you will require a basic knowledge of philosophy, methods, literature reviews, etc., before you can tackle your proposal. Broadly speaking, there are two forms of proposal: an outline proposal (required for applications to some universities) and a fuller proposal, which you will need to produce to demonstrate to your supervisor that you have a clear plan and good knowledge of relevant methods and literature.

Chapter 9 explores the end of your doctoral journey. There is a discussion of the requirements of a doctoral thesis, the typical viva experience (if there is ever a typical experience) and some of the questions that may be asked. This Chapter looks at why and how you may prepare papers for conferences and journals and the steps that you need to take to start on an academic career, if this is something that you wish to do.

Chapter 10 provides a brief summary of this text and also provides guidance on tackling some of the main problems that you are likely to confront during your doctoral studies.