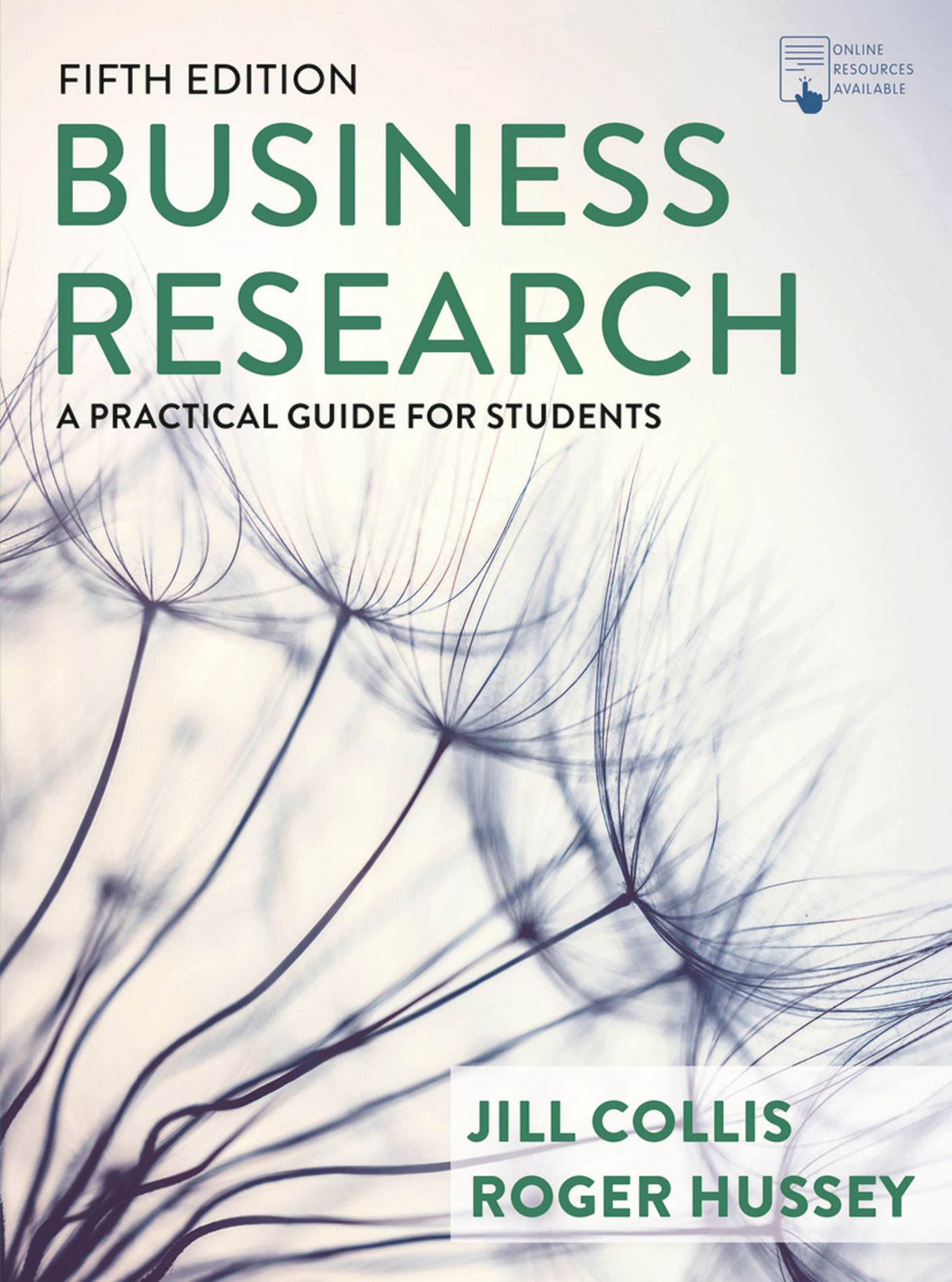
FIFTH EDITION

ONLINE RESOURCES AVAILABLE

BUSINESS RESEARCH

A PRACTICAL GUIDE FOR STUDENTS



JILL COLLIS
ROGER HUSSEY

'This is an excellent research textbook for undergraduate and postgraduate students. It is well structured, concise and easy to follow, providing practical guidance to help students understand the complexities of Business research. The inclusion of a new chapter on publishing research is an extremely valuable addition to this fifth edition.'

Robert Bowen, *Swansea University, UK*

'Conducting research is not an easy activity in the world of business and writing about this process is even more difficult – it is worth reading and buying *Business Research*. For Masters students, it offers a good overview of what should be part of a research proposal and how this can be used to set up a good line of reasoning for doing a research project. For PhD students it gives enough in-depth insights to be useful when doing research; the relationships with different aspects of the philosophy of science are also well introduced. For MBA students, there is also enough in the book to pay attention to and the authors have done a good job of making the book valuable for users who have a more practical focus on the necessary steps to be taken for writing a good research report.'

Bartjan Pennink, *University of Groningen, Netherlands*

'*Business Research* by Collis and Hussey is an excellent resource for both students and teachers of research methods. Compelling yet straightforward, this fifth edition further comprehensively outlines the significance of research methods, while the publication strategy section is a valuable addition. The book covers vital features of conducting scientific research in a step-by-step process, and with examples, tables, and text boxes in chapters, it is straightforward to follow. The book is highly recommended and equally valuable for the undergraduate, as well as advanced level research methods students in social sciences. The authors have done a fabulous job in taking their readers along the course of discovering the fascinating science of conducting research.'

Naveed Akhter, *Jönköping University, Sweden*

'One of the best business research books available. I am impressed by how Collis and Hussey lead us through the research maze in an uncomplicated manner. The clearly written text follows the typical pattern of the research process and provides practical guidance to undergraduate and postgraduate students as they develop their research knowledge in an easily structured way. Particularly useful in this edition is the new chapter on how to publish research. A fantastic revision, well worth its value for money!'

Lynette Louw, *Rhodes University, South Africa*

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BUSINESS RESEARCH

a practical guide for students

Jill Collis & Roger Hussey

fifth edition

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about the authors

Jill Collis, BA (Hons), PhD, has a business background. Her subsequent experience as a mature student gave her considerable insight into the needs of students and those who teach them, which is reflected in her writing. She started her academic career as a research associate in the Small Business Centre at Kingston University, London in 1998 and worked her way up. From 2010 to 2019 she was Reader (Associate Professor) in Accounting at Brunel University London, where she was the founding director of the Accounting and Auditing Research Centre. Jill's research has contributed to the 'think small first' approach in UK company law and policy on better regulation to reduce burdens on smaller entities. Internationally, she is recognised as a leading scholar on the financial reporting and auditing needs of small and micro-companies. In 2015, she received the Best Supervisor Award from the Union of Brunel Students and an award from Brunel's College of Business, Arts and Social Sciences in recognition of her outstanding contribution to the student experience.

Roger Hussey is a Fellow of the Association of Chartered Certified Accountants and holds an MSc in Industrial Relations and a PhD in Accounting from the University of Bath. He has published many books and articles on accounting and management subjects. After several years in industry he was appointed Director of Research into Employee Communications at the Industrial Relations Unit, St Edmund Hall, University of Oxford. After six years at Oxford, he moved to the University of the West of England, Bristol. In 2000, Roger became the Dean of the Odette School of Business at the University of Windsor, Canada. He is now Emeritus Professor at the University of the West of England and the University of Windsor.

preface to the fifth edition

Business Research offers a succinct and accessible guide to business and management research, which makes it an ideal core text. The international success of the previous editions of *Business Research* has led to the development of this updated and expanded fifth edition. What sets it apart from many other research books is that it provides practical guidance to undergraduate, Master's and doctoral students. Despite its development over the years, we are delighted to say that students will still find it small enough to carry around as a constant source of reference!

The key features of the book are:

- The chapters follow the typical pattern of the research process, from the design of the project to the writing-up stage and dissemination of the research.
- Each chapter helps students develop knowledge in a structured manner. Knowledge is built up incrementally, and there are clear links between the chapters. Topics that are not relevant to the level of the student can be omitted.
- As many first-time researchers find the language of research off-putting, we introduce terms gradually. Key definitions are provided in the margin and, for ease of reference, there is a glossary at the end of the book.
- The clear and accessible writing style aids understanding. The text is supported by boxes, figures, tables (and screen shots where appropriate), which illustrate or summarise particular aspects.
- The main problem for all students is how to find the most efficient and effective way of collecting, analysing, and presenting their data while maintaining academic rigour. Therefore, we refer to a range of studies that illustrate the methods covered in this book. These are chosen for their richness, clarity and variety of approach.
- Examples of students' work and 'vox pops' are used to integrate the student's perspective.
- At any time, students can refer to the 'Trouble shooting' chapter for advice.
- Higher level students can follow up the suggestions for further reading associated with each chapter.
- There are a number of activities at the end of each chapter which are designed to encourage discussion and reflection. They can be used by students for independent study or by lecturers/professors as the basis for group work in class. In addition, online progress tests are available on the companion website.
- The companion website also contains detailed *PowerPoint* slides and other teaching and learning material.

Changes in the fifth edition

Existing users will find the fifth edition retains the familiarity of the previous edition. The main difference they will notice is that we have added a new chapter, which will be of particular interest to students conducting high level research and those planning an academic career after their studies. The new chapter covers how to plan a publication strategy, and which conferences and journals to target. It also gives advice on writing conference papers, as well as how to design and present a poster or *PowerPoint* slides at a conference. In addition, the chapter leads the reader through the process of writing and submitting an article to an academic journal, the challenge of responding to reviewers' comments, and gives advice on what to do if the article is rejected. Building a list of publications is essential for graduates seeking an academic career and is often a

prerequisite to securing that all-important first job. However, there is little guidance on this in the public domain. Therefore, this chapter will help support higher-level students and early-career researchers in achieving their goals.

The success of the book in different countries has led to a more international perspective. Every chapter has been carefully reviewed, refreshed and updated where necessary. The successful format of the earlier editions has been retained, but the design has been improved to better meet the needs of students and their lecturers/professors.

Suggested lecture programmes

Undergraduate and postgraduate students on taught programmes often need to complete their research within a relatively short period of time. Consequently, they have to balance the conceptual demands of the subject with pressing practical considerations. In contrast, doctoral students generally have more time, but need to develop greater knowledge of the conceptual aspects of research. The following examples illustrate which chapters might be included for students at these different levels.

Undergraduate students

Week no.	Suggested chapter(s)	Notes
1	1. Understanding research	
2	2. Dealing with practical issues	
3	3. Identifying your paradigm (overview) and 4. Designing the research	
4	5. Searching and reviewing the literature	Supported by training on using e-resources and software for managing references
5	6. Writing your research proposal	
6	7. Collecting qualitative data	
7	8. Analysing qualitative data	
8	10. Collecting data for statistical analysis	
9	11. Analysing data using descriptive statistics	Supported by training on statistical software
10	13. Writing up the research	

Postgraduate students

Week no.	Suggested chapter(s)	Notes
1	1. Understanding research	
2	2. Dealing with practical issues	
3	3. Identifying your paradigm	
4	4. Designing the research	

Week no.	Suggested chapter(s)	Notes
5	5. Searching and reviewing the literature	Supported by training on using e-resources and software for managing references
6	6. Writing your research proposal	
7	7. Collecting qualitative data	
8	8. Analysing qualitative data	
9	10. Collecting data for statistical analysis	
10	11. Analysing data using descriptive statistics	Supported by training on statistical software
11	12. Analysing data using inferential statistics	Supported by training on statistical software
12	13. Writing up the research	

Doctoral students

Week no.	Suggested chapter(s)	Notes
1	1. Understanding research	
2	2. Dealing with practical issues	
3	3. Identifying your paradigm	
4	4. Designing the research	
5	5. Searching and reviewing the literature	Supported by training on using e-resources and software for managing references
6	6. Writing your research proposal	
7	7. Collecting qualitative data	
8	8. Analysing qualitative data	
9	9. Integrated collection and analysis methods	
10	10. Collecting data for statistical analysis	
11	11. Analysing data using descriptive statistics	Supported by training on statistical software
12	12. Analysing data using inferential statistics	Supported by training on statistical software
13	13. Writing up the research	
14	14. Publishing your research	

acknowledgements

We are grateful to our colleagues around the world and the many cohorts of students who have kindly commented on previous editions of this book.

We are indebted to our editorial and publishing team: Isabelle Cheng, Christian Ritter, Liz Holmes and Pavitra Arulmurugan for their forbearance and support. Finally, we are deeply indebted to Sir Timothy John Berners-Lee for the gift of the World Wide Web, which allows this transatlantic duo to continue writing together and communicate with their publishers without leaving their desks!

Jill Collis
Roger Hussey

tour of the book

Learning objectives

What you will learn. Helps organise your study and track your progress.

Learning objectives

When you have studied this chapter, you should be able

- determine the knowledge, skills and personal qualitie researchers need
- use techniques for generating research topics
- negotiate access to data and consider ethical issues

Key definitions

Key terms appear in bold and are defined in the page margin for quick reference. A full glossary, also featuring other useful terms (in green in the text), can be found at the back of the book and online.

Qualitative data are data in a non-numerical form.

Quantitative data are data in a numerical form.

Looking at the approach adopted by the rese choose to collect **quantitative data**, which is methods of analysis. They often describe such choose to collect **qualitative data** and analyse They might describe such studies as qualitati study might incorporate elements of both as gaining understanding of phenomena in the s

However, referring to a research approach ing. For example, you might want to design images, published text or transcripts of intervi

Vox pops

Students share their experiences. Bringing theory to life, they help you relate to key challenges that others have overcome.

Vox pop What has been the high point of your research so far?

Ambrose, first year PhD student investigating the role of corporate governance mechanisms in global financial integration

The amazing feeling that my research idea has the potential to contribute towards academic knowledge globally.

Tables, figures and boxes

Summarising important information, illustrating key concepts visually, and offering checklists.

Box 1.2 Attributes supervisors look

- Confidence, enthusiasm and a positive
- Ability to communicate clearly in verba
- Capacity for independent learning and
- Ability to think independently and reas
- Motivation and perseverance in achievi

Table 1.1 Classification of the main types of research

Type of research	Basis of classification
Exploratory, descriptive, explanatory and predictive research	Purpose of the research
Quantitative and qualitative research	Process of the research
Applied and basic research	Outcome of the research
Deductive and inductive research	Logic of the research

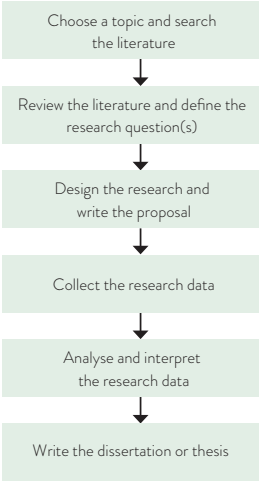
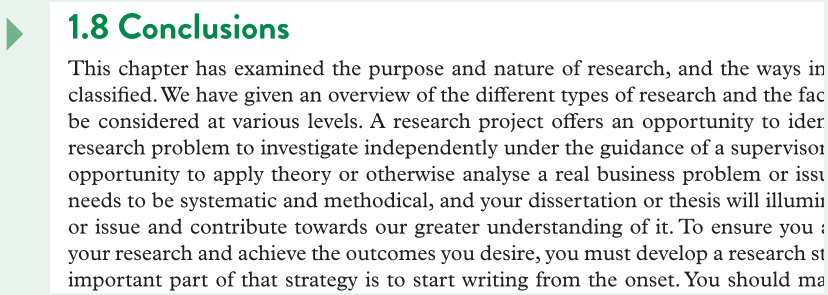


Figure 1.1 Overview of the research process

Conclusions

Check your understanding of the chapter material.



1.8 Conclusions

This chapter has examined the purpose and nature of research, and the ways in
classified. We have given an overview of the different types of research and the fac
be considered at various levels. A research project offers an opportunity to ider
research problem to investigate independently under the guidance of a supervisor
opportunity to apply theory or otherwise analyse a real business problem or issu
needs to be systematic and methodical, and your dissertation or thesis will illumi
or issue and contribute towards our greater understanding of it. To ensure you
your research and achieve the outcomes you desire, you must develop a research st
important part of that strategy is to start writing from the onset. You should ma

References

Full details are provided of important texts that are cited within the chapters. These references help identify key publications for further reading.

References for further

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Management Reviews, 20(1), pp. 99–119
Phillips, E. M. (1984) 'Learning to do resear
Phillips, E. M. and Pugh, D. S. (2010) *How t*
Tenzer, H., Terjesen, S., and Harzing, A.-W.

Activities

Consolidate your learning with these reflective and practical exercises.

Activities

1 Select two academic journals
library and construct a table
to whether the research is ex
explanatory or predictive.
2 Construct a second table tha
according to whether the res
qualitative.

Troubleshooting

Resolve problems quickly, by examining common challenges that can arise during the main stages of the research process. Guidance is offered on how to resolve these issues, with cross-references to specific chapters in the book for further information.

15.5 Making a preliminary plan

Problem You know the research topic
know how to plan the first stages of the

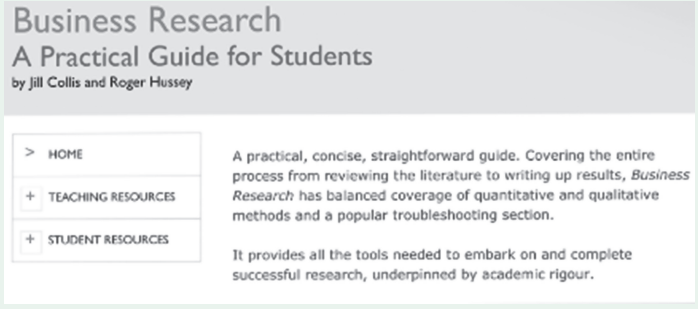
The research proposal is going to be your det
some preliminary investigations before you
should be as follows:

1. Carry out a literature search using keywords
important academic articles and other publ
2. Identify a research problem or issue to inves
key articles and other publications (see Cha

Companion website

https://www.bloomsbury onlineresources.com/ business-research

Visit the companion website for interactive progress tests, an online glossary, *Microsoft PowerPoint* slides for lecturers, and other useful resources to help support teaching and learning.



1

Understanding research

Learning objectives

When you have studied this chapter, you should be able to:

- explain the nature and purpose of research
- classify different types of research
- identify the main stages in the research process
- understand the role of supervision
- recognise the characteristics of good research.

1.1 Introduction

Whether you are an undergraduate student conducting your first research project or a postgraduate student conducting research at Master's or doctoral level, the explanations in this chapter will help you develop a firm understanding of what research is in an academic context. This is important because we use the term 'research' quite loosely in everyday language, but you will need to know what it means in the context of your dissertation or thesis.

We start this chapter by examining a definition of research and unravelling the meaning behind the terms used in the definition. This paves the way for a discussion on the purpose of research and the typical objectives of academic research. We then go on to examine the main ways in which research studies are classified. These classifications help us understand the reasons why the research was conducted, the way in which the research data were collected and analysed, the logic of the research, and whether the outcome of the research is likely to be a solution to a particular problem or a more general contribution to knowledge. This is followed by a preliminary look at the main stages in the research process and the important role your supervisor will play. To give you an idea of what you should be aiming for, the final topic in this chapter compares the characteristics of good and poor research.

1.2 Nature and purpose of business research

Research is a systematic and methodical process of enquiry and investigation with a view to increasing knowledge.

Data are known facts or things used as a basis for inference or reckoning.

A **research question** is the specific question relating to the research problem that is addressed by the research.

A **research problem** is the particular problem or issue that is the focus of the research.

A **research topic** is the general area of research interest.

Although **research** is central to both business and academic activities, there is no consensus in the literature on how it should be defined. One reason for this is that research means different things to different people. However, from the many definitions offered, there is general agreement that research is:

- a process of inquiry and investigation
- systematic and methodical, and
- increases knowledge.

As far as the nature of research is concerned, the above definition tells us that researchers need to use appropriate methods for collecting and analysing research **data**[1] and that they need to apply them rigorously. The general purpose of academic research is to investigate a **research question** with a view to generating knowledge. A research question is the specific question that the research is designed to investigate. It provides a focus for your research. Do not confuse it with the questions that you might ask participants in the research, which are detailed questions designed to collect research data. Your research question will relate to a particular **research problem** or issue you have identified within your **research topic** (the general subject area of interest). We will look at this in more detail later on in this chapter.

Whether you are an undergraduate, a Master's or doctoral student, a research project offers you an opportunity to identify and select a research problem and investigate it independently under the guidance of a supervisor. It allows you to apply theory to or otherwise analyse a real business problem, or to explore and analyse more general issues. It also enables you to apply techniques and procedures to illuminate the problem and contribute to our greater understanding of it or to generate solutions. In the process of doing your research, you will develop skills that will enhance your employability. The typical objectives of research can be summarised as follows:

- to review and synthesise existing knowledge
- to investigate some existing situation or problem
- to provide solutions to a problem
- to explore and analyse more general issues
- to construct or create a new procedure or system

1. This term is a Latin plural noun, the singular of which is 'datum'.

- to explain a new phenomenon
- to generate new knowledge
- a combination of any of the above.

From this you can see that research is purposeful and is conducted with a view to achieving an outcome. The research report is usually called a **dissertation** or **thesis**. A dissertation or thesis is a lengthy, detailed discourse that is written as part of an academic degree (a discourse is a formal discussion of a topic). Academic research can also be conducted for the purpose of publishing the study as a book or an article in an academic journal, or for consultancy purposes. This book focuses primarily on the needs of students carrying out some form of business research for a qualification.

A **dissertation** or **thesis** is a lengthy, detailed discourse that is written as part of an academic degree.

1.2.1 Types of enterprise to study and users of business research

Types of enterprise to research include small and medium-sized enterprises (SMEs), businesses with limited liability (such as companies), and organisations in the not-for-profit or public sectors. The focus in the media is mainly on big business, yet 99% of businesses are SMEs and you may find yourself employed by one or even starting one. Whatever type of entity you choose as the focus of your research, you will find a wide range of issues to investigate.

The typical users of business research are:

- the government – for developing/monitoring policies, regulations, and so on
- owners, managers and business advisers – for keeping up to date with new ideas and specific developments in business
- management – for developing internal policies and strategies (for example, comparing research results relating to their own business with those with previous periods, their competitors, and/or industry benchmarks)
- academics – for further research and educational purposes.

1.2.2 International research

Increasingly research has reflected an international dimension. International research has considerable benefits as it can provide fresh knowledge about other countries and permit comparisons. However, the quality of such research raises questions if the researcher does not fully understand practices in other countries. The main problems with international research arise when:

- the student is conducting research in a country other than their home country
- the supervisor is from another country or does not recognise the cultural differences that might be present
- the research is being conducted in another country and neither the supervisor nor the student appreciates the differences
- the assessors of the research and those responsible for the application of its findings have insufficient understanding of the cultural differences.

The likelihood of such problems arising depends on whether those involved in the research process have cultural intelligence. This has been defined as 'an individual's capability to function and manage effectively in culturally diverse situations and settings' (Ott and Michailova, 2018, p. 99). Training courses, educational interventions and the research experience may help improve cultural understanding.

International research offers significant benefits which go beyond those gained by researchers involved and their institutions. Disciplines such as international marketing and international accounting have made a substantial contribution worldwide. Barth (2018) identifies a number of benefits of international studies that apply specifically to the regulation of

accounting. However, some of her arguments in favour of international accounting research can be applied to other disciplines. For example:

- A study examining a specific institutional feature in one particular country can give insights that are relevant to other countries with a similar institutional feature.
- A study examining the diverse institutional settings that exist in different countries can give insights that research based on only one country cannot provide.

There is a considerable amount of literature that offers suggestions for future research in disciplines and countries other than the ones we have mentioned. One example suggested by Hamidi (2018) is a study on human resource development, which would not be unusual except that the focus could be on SMEs in developing countries. A more extensive article summarised systematically reviews 264 articles on language in international business and suggests a future research agenda (Tenzer, Terjesen and Harzing, 2017).

A study that has international elements, including the nationalities and experiences of those involved in the study, has the potential to offer valuable findings. We have identified the main difficulties that can arise, but if action is taken to resolve them international research, however it is defined, can result in useful findings that may be publishable.

Vox pop What has been the high point of your research so far?

Ambrose, first year PhD student investigating the role of corporate governance mechanisms in global financial integration

The amazing feeling that my research idea has the potential to contribute towards academic knowledge globally.

1.3 Classifying research

Studying the characteristics of the different types of research helps us to examine the similarities and differences. Research can be classified according to the:

- purpose of the research – the reason why it was conducted
- process of the research – the way in which the data were collected and analysed
- logic of the research – whether the research logic moves from the general to the specific or vice versa
- outcome of the research – whether the expected outcome is the solution to a particular problem or a more general contribution to knowledge.

For example, the aim of your research project might be to describe a particular business activity (purpose) by collecting qualitative data that are quantified and analysed statistically (process), which will be used to solve a business problem (outcome). Table 1.1 shows the classification of the main types of research according to the above criteria.

Table 1.1 Classification of the main types of research

Type of research	Basis of classification
Exploratory, descriptive, explanatory and predictive research	Purpose of the research
Quantitative and qualitative research	Process of the research
Applied and basic research	Outcome of the research
Deductive and inductive research	Logic of the research

1.3.1 Exploratory, descriptive, explanatory, and predictive research

If we are classifying a study according to its purpose, we can describe it as being exploratory, descriptive, explanatory, or predictive research.

Exploratory research is conducted to provide better general understanding of **phenomena**[2] when there are very few or no previous studies. It can also be used to examine the feasibility of a more rigorous, larger study later. The aim of this type of research is to look for patterns and develop ideas rather than test propositions. The research questions in exploratory research focus on 'how', 'what' and 'where' as the aim is to gain insights and familiarity with the phenomenon under study.

Typical techniques used in exploratory research include case studies, observation and historical analysis, which can provide both quantitative and qualitative data. Such techniques are very flexible as there are few constraints on the nature of activities employed or on the type of data collected. The research will assess which existing theories and concepts can be applied to the problem or whether new ones should be developed. The approach to the research is usually very open and concentrates on gathering a wide range of data and impressions. As such, exploratory research rarely provides conclusive answers to problems or issues, but gives guidance on what future research, if any, should be conducted.

Descriptive research is conducted to identify and describe the detailed characteristics of phenomena. Descriptive research goes further than exploratory research when examining a phenomenon as the aim of the study is to provide a basis for arguments founded on empirical evidence. The following are examples of research questions in a descriptive research study:

- What is the absentee rate in a particular department?
- What are the feelings of workers faced with redundancy?
- What are the qualifications of different groups of employees?
- What type of packaging for a box of chocolates do consumers prefer?
- What information do consumers want shown on food labels?
- Which car advertisements on television do men and women of different ages prefer?
- How many students study accounting in China compared with students in Australia?
- How do commuters travel to work in capital cities?

You will notice that many of these questions start with 'what' or 'how' because the aim is to describe something. However, further clarification would be required before the study could begin. For example, we cannot ask everyone in the world about which car advertisements or chocolate box packaging they prefer. Even a study that compared the number of students studying accounting in China and Australia requires clarification of the types of students (for example, age, sex, and nationality) and what is studied (for example, main subjects, level/stage in the programme, and the name of the qualification). Therefore, even in a descriptive study, you must spend time refining your research questions and being specific about the phenomena you are studying. We will explain how this can be achieved in subsequent chapters.

Explanatory research is a continuation of descriptive research. The researcher goes beyond merely describing the characteristics of phenomena to explaining the cause and effect of the phenomenon under study. The aim is to understand phenomena by testing **hypotheses** and discovering causal relationships between **variables**. A hypothesis is a proposition that can be tested for association or causality against **empirical evidence**, which is data collected about each variable based on observation or experience. A variable is a characteristic of a phenomenon that can be observed or measured. The research questions in explanatory research focus on 'why' and uncover universally applicable laws. For example, information could be collected on the size of companies and the level of labour turnover. A statistical analysis of the data might show that the larger the company, the higher the level of turnover, although as we will see later, research is rarely that simple.

Exploratory research is a study where the aim is to provide a better general understanding of phenomena when there are few or no previous studies. It can also be used to examine the feasibility of a larger, more rigorous study later.

A **phenomenon** is an observed or apparent object, fact or occurrence, especially one where the cause is uncertain.

Descriptive research is a study where the aim is to identify and describe the detailed characteristics of phenomena to provide a basis for arguments founded on empirical evidence.

Explanatory research is a study where the aim is to understand phenomena by discovering and measuring causal relationships between variables.

A **hypothesis** is a proposition that can be tested for association or causality against empirical evidence.

A **variable** is a characteristic of a phenomenon that can be observed or measured.

Empirical evidence is data based on observation or experience.

2. This term is derived from a Greek noun, the singular of which is 'phenomenon'.

Predictive research is a study where the aim is to generalise from an analysis of phenomena by making predictions based on hypothesised general relationships.

Predictive research goes even further than explanatory research. The aim of explanatory research is to generalise from an analysis of phenomena by making predictions based on hypothesised general relationships. Thus, the solution to a problem in a particular study will be applicable to similar problems elsewhere, if the predictive research can provide a valid, robust solution based on a clear understanding of the relevant causes. Predictive research provides 'how', 'why' and 'where' answers to current events and similar future events. It is also helpful in situations where 'what if' questions are being asked. The following are examples of research questions in a predictive research study:

- In which city would it be most profitable to open a new retail outlet?
- Will the introduction of an employee bonus scheme lead to higher levels of productivity?
- What type of packaging will improve the sales of our products?
- How would an increase in interest rates affect our profit margins?
- Which stock market investments will be the most profitable over the next three months?
- What will happen to sales of our products if there is an economic downturn?

At the undergraduate level, research is usually exploratory and/or descriptive. At post-graduate and doctoral levels, it is usually explanatory or predictive. Table 1.2 shows this classification in increasing order of sophistication and gives examples. One drawback of increasing the level of sophistication in research is that the level of complexity and detail also increases.

Table 1.2 Examples of research classified by purpose

Type of research	Example
Exploratory	An interview survey among a clerical staff in a particular department or company to find out what motivates them to increase their productivity and see whether a research problem can be formulated.
Descriptive	A description of how the selected clerical staff are rewarded and what measures are used to record their productivity levels.
Explanatory	An investigation of causal relationships between the rewards given to the clerical staff and their productivity levels.
Predictive	A forecast of which variable(s) should be changed in order to bring about an improvement in the productivity levels of staff providing customer service in a call centre.

1.3.2 Quantitative and qualitative research

Qualitative data are data in a non-numerical form.

Quantitative data are data in a numerical form.

Looking at the approach adopted by the researcher can also differentiate research. Some people choose to collect **quantitative data**, which is data in a numerical form, and then use statistical methods of analysis. They often describe such studies as quantitative research. Other researchers choose to collect **qualitative data** and analyse the data using non-numerical methods of analysis. They might describe such studies as qualitative research. As you will see in later chapters, a large study might incorporate elements of both as their merits are often considered complementary to gaining understanding of phenomena in the social sciences.

However, referring to a research approach as simply quantitative or qualitative can be misleading. For example, you might want to design a study where you collect qualitative data (such as images, published text or transcripts of interviews), quantify the data by counting the frequency of occurrence of particular key words or themes, and then analyse the data using statistical methods. In this chapter, we will continue to refer to quantitative and qualitative approaches, but we will discuss alternative terms you may wish to use later in the book.

Some students avoid taking a quantitative approach because they are not confident with statistics and think a qualitative approach will be easier. Many students find that it is harder to start and decide an overall design for a quantitative study, but it is easier to conduct the analysis and write up the research because it is highly structured. Qualitative research is normally easier to start, but students often find it more difficult to analyse the data and write up their final report. For example, if you were conducting a study into stress caused by working night shifts, you might want to collect quantitative data such as absenteeism rates or productivity levels, and analyse the data statistically. Alternatively, you might want to investigate the same question by collecting qualitative data about how stress is experienced by night workers in terms of their perceptions, health, social problems, and so on.

There are many arguments in the literature regarding the merits of qualitative versus quantitative approaches, which we will examine later on in the book. At this stage, you simply need to be aware that your choice will be influenced by the nature of your research project, as well as your own philosophical preferences. Moreover, you might find that the access you have been able to negotiate, the type of data available and the research problem persuade you to put your philosophical preferences to one side.

1.3.3 Applied and basic research

Applied research is a study that has been designed to apply its findings to solving a specific, practical problem. It is the application of existing knowledge to improve management practices and policies, rather than to acquire knowledge for knowledge's sake. For example, you might be investigating the reorganisation of an office layout, the improvement of health and safety in the workplace, or the reduction of wastage of raw materials or energy in a factory process. Research questions are likely to focus on 'how' and 'when'. The output from this type of research is likely to be a research report containing recommendations, articles in professional or trade magazines, and presentations to practitioners. Another example of applied research that is conducted in academic institutions often goes under the general title of educational scholarship, instructional research, or pedagogic research. This type of study is concerned with improving the educational activities within the institution and the output is likely to be case studies, instructional software, or textbooks.

Applied research is a study designed to apply its findings to solving a specific, existing problem.

Basic research is a study designed to make a contribution to general knowledge and theoretical understanding, rather than solve a specific problem.

When the research is being conducted primarily to improve our understanding of general issues without emphasis on its immediate application, it is classified as **basic research**. It is conducted without a specific goal in mind and is more exploratory in nature. The aim is to make a contribution to theory or knowledge through the understanding of relationships between variables (see Chapter 10, section 10.3). Basic research is usually conducted for the general good rather than to solve a specific problem. Research questions tend to focus on 'what' and 'why'; for example, 'What is service?' or 'What is quality?' or 'What is sustainability?'. It is called basic research because by generating theory it provides the foundation for further (often applied) research. Basic research may not resolve an immediate problem, but it contributes to our knowledge in a way that could assist in finding solutions to future problems. The emphasis, therefore, is on academic rigour and the strength of the research design. The output from basic research is likely to be papers presented at academic conferences and the articles published in academic journals. However, since there is no guarantee of any short-term practical gain, it can be difficult to obtain funding for basic research.

There are many instances when the distinction between applied and basic research is not clear. It can be argued that the difference between basic and applied research lies in the time span between the research and reasonably foreseeable practical applications. Research in the field of genetics is a good example. Increasing our understanding of the chromosomes that carry genetic information for the sake of knowledge alone would be basic research, but subsequently using that knowledge to develop genetically modified crops or develop gene therapy would be classified as applied research.

1.3.4 Deductive and inductive research

Deductive research is a study in which a conceptual and theoretical structure is developed and then tested by empirical observation. Thus, particular instances are deduced from general inferences. For this reason, the deductive method is referred to as moving from the general to

Deductive research is a study in which a conceptual and theoretical structure is developed which is then tested by empirical observation. Thus, particular instances are deducted from general inferences

the particular. For example, you may have read about theories of motivation and wish to test them in your own workplace. This will involve collecting specific data of the variables that the theories have identified as being important.

Inductive research is a study in which theory is developed from the observation of empirical reality. Thus, general inferences are induced from particular instances.

Inductive research is a study in which theory is developed from the observation of empirical reality. Thus, general inferences are induced from particular instances, which is the reverse of the deductive method. Since it involves moving from individual observation to statements of general patterns or laws, it is referred to as moving from the specific to the general. For example, you may have observed from factory records in your company that production levels go down after two hours of the shift and you conclude that production levels vary with length of time worked.

All the different types of research we have discussed can be helpful in allowing you to understand your research and the best way to conduct it, but do not feel too constrained. It is important to recognise that one particular project can be described in a number of ways, as it will have purpose, process, logic and outcome. For example, you may conduct an applied, explanatory study using a quantitative approach. In a long-term project, you may wish to use qualitative and quantitative approaches, deductive and inductive methods, and you will move from exploratory and descriptive research to explanatory and predictive research. The key classifications we have examined can be applied to previous studies that you will review as part of your research and you can use these typologies to describe your own study in your proposal and later on in your dissertation or thesis.

1.4 Academic levels of research

Academic levels, in terms of the sophistication of the research design and duration of the project, depend on your reasons for conducting the study. The requirements for undergraduates are very different from those for postgraduate and doctoral students. However, the basic principles, issues and practicalities are the same.

1.4.1 Undergraduate and taught Master's students

If you are on an undergraduate or taught Master's programme, you may be required to undertake a research project. If so, you will be expected to be familiar with the main concepts and terms as explained in this book and undertake one or more of the following activities:

- Design a research project – On some programmes you are expected to design a research project and then write a report that explains the rationale for your chosen design and describes its strengths and weaknesses.
- Write a research proposal – A research proposal requires you to design a project as above, but also to include a preliminary review of the literature.
- Conduct a research project – In many cases you are not only required to design a research project and write a proposal but also to conduct some research. This involves writing a review of the literature and collecting and analysing existing data or new data (for example, from interviews or from a questionnaire survey). On some taught Master's programmes, you may be allowed to base your entire project on a critical literature review, where you will analyse the literature on a chosen topic and draw conclusions.

If you are required to design and conduct a study, your research report is likely to be called a dissertation, but you should check what term is used in your university or college. The typical length of a dissertation is 10,000 words for an undergraduate student and 15,000 words for a student on a taught Master's programme. At Master's level, a more comprehensive approach is needed, and a higher quality of work is required.

1.4.2 Master's by research and doctoral students

For students doing research for a Master's by research (MPhil) the research report is usually referred to as a thesis. However, this is not consistent across countries, so you will need to check. The typical length of a thesis for an MPhil is 40,000 words, 50,000 words for a taught

doctorate (DBA) and 80,000 words for a doctorate by research (DPhil or PhD). At this level, the intensity of the research is much greater, and you will be expected to make a contribution to knowledge. There is no consensus in the literature on how this should be defined, but general agreement that the contribution should be both original and significant. It can be achieved by identifying gaps in the literature, making new interpretations or novel applications of old ideas, testing existing knowledge using new methods, and so on. You will need to study this book carefully and the recommended reading that is relevant to your subject. It is important to remember that the expectations of your institution will have a significant influence on the process and outcome of your research.

1.4.3 Post-doctoral research

If you already hold a DBA or PhD and are looking for an academic post, or you are already in an academic position and seeking promotion, this book will reinforce your knowledge or give you a new perspective on a particular issue you have not considered previously. It might also help you to write conference papers and journal articles.

1.5 Overview of the research process

Whatever type of research or approach is adopted, there are several fundamental stages in the research process that are common to all scientifically based investigations. The simplified diagram shown in Figure 1.1 illustrates an overview of the research process. This model presents research as a neat, orderly process, with one stage leading logically on to the next stage. However, in practice, research is rarely like that. For example, failure at one stage means returning to an earlier stage and many stages overlap. Thus, if you were unable to collect the research data, it may be necessary to revise your definition of the research problem or amend the way you conduct the research. This is often a good reason for conducting some exploratory research before commencing the main study.

Vox pop What has been the biggest challenge in your research so far?

Lee, first year PhD student investigating foreign direct investment in international business

Not knowing where to start with my PhD. It's not like being on a Master's degree where there's a structured environment. There doesn't seem to be a single 'right' way. I tried talking to other students, but their advice wasn't always relevant. It seems you've got to find your own path and, like Lewis Carol said in Alice in Wonderland, 'begin at the beginning and go on till you come to the end; then stop.'

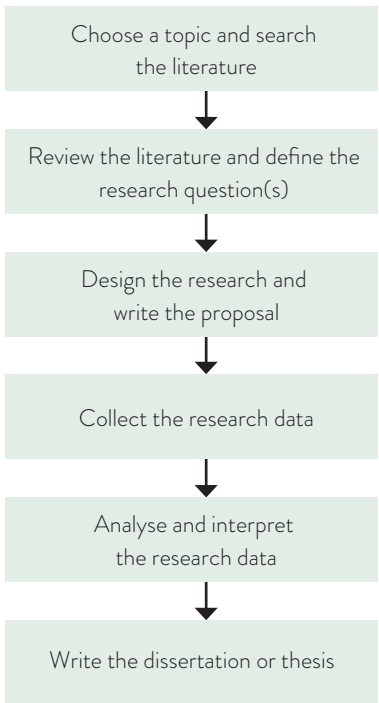


Figure 1.1 Overview of the research process

To give you an overview of the nature of research, we will now look briefly at each stage in the research process. You will find greater detail in subsequent chapters.

1.5.1 The research topic

The starting point is to choose a **research topic**, which is a general subject area that is related to your degree if you are a student, or to your discipline if you are an academic. You could find that a research topic suggests itself as a result of your coursework, job, interests or general experience. For example, you might be interested in the employment problems of minority groups in society, the difficulties of funding small businesses, what makes managers successful, or the commercial sponsorship of sport.

1.5.2 The literature

The **literature** is all sources of published data on a particular topic.

A **literature review** is a critical evaluation of the existing body of knowledge on a topic, which guides the research and demonstrates that the relevant literature has been located and analysed.

Once you have chosen a general topic, you need to search the **literature** for previous studies and other relevant information on that subject and read it. By exploring the existing body of knowledge, you will learn more about the subject and this will help you focus your ideas and find a particular research problem or issue to investigate. You will then write a critical review of the previous studies and other published material relating to your research problem. A **literature review** is a critical evaluation of the existing body of knowledge on a topic, which guides the research and demonstrates that the relevant literature has been located and analysed.

1.5.3 The research problem

All students experience some difficulty in narrowing down their general interest in a research topic to focus on a particular problem or issue that is small enough to be investigated. This is often referred to as defining the research problem and leads on to setting the research question(s). In academic research, the classic way to identify a research problem is to consider the literature and identify any gaps, as these indicate original areas to research. You will also find that many academic articles incorporate suggestions for further research in their conclusions. If you have conducted an undergraduate dissertation already, that subject area might lead you to your Master's or doctoral research questions. If you are an academic, you might have conducted previous academic or consultancy research that suggests research questions for your present study. You will need to focus your ideas, decide the scope of your research and set parameters. For example, perhaps your study will investigate a broad financial issue, but focus on a particular group of stakeholders, size of business, industry, geographical area, or period of time.

A **research paradigm** is a framework that guides how research should be conducted, based on people's philosophies and their assumptions about the world and the nature of knowledge.

A **methodology** is an approach to the process of the research encompassing a body of methods.

1.5.4 The research design

The starting point in research design is to determine your **research paradigm**. A research paradigm is a framework that guides how research should be conducted and it is based on people's philosophies and assumptions about the world and the nature of knowledge. Some researchers advocate the use of methods from more than one paradigm and we discuss the issues this raises in Chapter 3. We recommend that you find out at an early stage whether your supervisor favours a particular paradigm. Your overall approach to the entire process of the research is known as your **methodology**. Although, in part, this is determined by the research problem, the assumptions you use in your research and the way you define your research problem will influence the way you conduct the study. In other words, the way in which you choose to investigate your research question will be driven by your research paradigm.

1.5.5 Collecting research data

There are a variety of ways in which you can collect research data and we look at the main methods of data collection in Chapters 7, 9 and 10. Because of the many differences between quantitative and qualitative methods, these are explained in separate chapters. If you have a quantitative methodology, you will be attempting to measure variables or count occurrences of a phenomenon. On the other hand, if you have a qualitative methodology, you will emphasise the themes and patterns of meanings and experiences related to the phenomena.

1.5.6 Analysing and interpreting research data

A major part of your research project will be spent analysing and interpreting research data. The main methods of data analysis used will depend on your research paradigm and whether you have collected quantitative or qualitative data. We will look at this in more detail in Chapters 8, 9, 11 and 12. It is important to realise, however, that although data collection and data analysis are discussed separately in this book, the stages are sometimes simultaneous. You should not make decisions about your data collection methods without also deciding which analytical methods you will use.

1.5.7 Writing the dissertation or thesis

It is at the writing-up stage that many students experience problems, and this is usually because they have left it until the very last minute! The working title of your dissertation or thesis should be descriptive but not too long (we suggest a maximum of 12 words). It is important to start writing notes and draft chapters as soon as you start the research. To a large extent, the stages outlined above will be captured in the structure of your dissertation or thesis. Although all research reports differ in structure according to the problem being investigated and the methodology employed, there are some common features. We discuss this in detail in Chapter 13, but for the time being, it is useful to look at the typical structure of a dissertation or thesis shown in Table 1.3 as it gives you an idea of what you are aiming for. At the same time, remember that any planned structure makes it look as though the research process is more orderly than it is in reality.

Your dissertation or thesis is likely to be the largest project you have undertaken to date and, therefore, it presents quite a challenge. However, having a good understanding of the nature and purpose of research, the main stages in the research process, and the basic structure of the research report you will be writing will help you develop a sense of direction.

Table 1.3 Indicative structure of a dissertation or thesis

	% of report
1. Introduction – The research problem or issue and the purpose of the study – Background to the study and why it is important or of interest – Structure of the remainder of the report	10
2. Review of the literature – Evaluation of the existing body of knowledge on the topic – Theoretical framework (if applicable) – Where your research fits in and the research question(s) and propositions or hypotheses (if applicable)	30
3. Methodology – Identification of paradigm (doctoral students will need to discuss) – Justification for choice of methodology and methods – Limitations of the research design	20
4. Findings/results – Presentation of the analysis of your research data	15
5. Discussion (include in findings/results chapter if preferred) – Discussion of how your findings/results relate to the literature	15
6. Conclusions – Summary of what you found out in relation to each research question – Your contribution to knowledge – Limitations of your research and suggestions for future research – Implications of your findings (for practice, policy, etc.)	10
	100
References *(do not number this section)* – A detailed, alphabetical (numerical, if appropriate) list of all the sources cited in the text	
Appendices *(if required)* – Detailed data referred to in the text, but not shown elsewhere	

Vox pop What has been the biggest challenge in your research so far?

Pippa, final year PhD student investigating how a small town is affected by increased tourism

That initial transition to self-guided learning and the lack of direction provided in studying for a PhD, and then sustaining motivation and focus. A bit later my main concern was choosing a methodological approach that would best answer my research question.

1.6 Supervision

A **supervisor** is the person responsible for overseeing and guiding a student's research.

Supervision plays a vital role in undergraduate, Master's and doctoral studies, and it is a formal requirement. A **supervisor** is the person responsible for overseeing and guiding a student's research. In the UK, undergraduates and students on taught Master's programmes typically have one supervisor, whereas MPhil and doctoral students usually have two. In the latter cases, the supervisors will have specialist knowledge of the topic and at least one of them will have experience of successful supervision at that level. In some countries, there may be a supervision committee.

1.6.1 Choosing a supervisor

If you are an undergraduate or Master's student, you may find that you have no choice but are allocated a supervisor. You will find it useful to discuss with your supervisor how he or she wishes to supervise you. It is important that you understand what is expected of you and when. It is to your advantage to find out as much as you can about your supervisor to help you develop a good relationship, such as:

- what their teaching and research interests are
- what they have published (for example, books or articles in academic journals, magazines or newspapers)
- whether they favour a particular paradigm and/or methodology.

Some Master's students and most doctoral students are likely to have some influence over the appointment of their supervisor. We suggest that you obtain as much information as possible before choosing a supervisor by looking at the online profiles and publications of potential supervisors and visiting prospective universities or colleges. This will allow you to meet potential supervisors, assess the quality of facilities and resources, and evaluate the relative importance of research in that institution. When talking to potential supervisors, you need to bear in mind that most academic staff are involved in the following activities:

- teaching, designing and marking assessments, developing teaching materials
- leading subject fields, programmes
- managing departments and/or research centres
- writing academic books
- conducting research and writing conference papers, articles, research reports.

If possible, talk to current research students or those who have been supervised in the past by the academic you have in mind. Box 1.1 provides a checklist for choosing a supervisor.

Box 1.1 Checklist for choosing a supervisor

- Does the supervisor have knowledge and interest in your research topic?
- Is the supervisor sympathetic to your proposed methodology?
- Does the supervisor have a good publication record?
- Does the supervisor have a record of successful supervisions?
- Does the supervisor have enough time to take on your supervision as well as managing their other work?

Vox pop What has been the high point of your research so far?

Henvisha, first year PhD student investigating female-led SMEs and access to finance

I was very happy when I got accepted for a PhD, but I was even happier when I was told that my previous Master's dissertation supervisor had agreed to be my principal supervisor for my PhD thesis.

For me, the crucial thing is having a good guidance. It is like stepping into a huge natural park three hours before it closes. It will be easy to explore the park in such a short time if you have the guidance of someone who knows it well.

Refika, first year PhD student investigating pupils' perceptions of their cultural, national and global identities

You need to bear in mind that selection is a two-way process in which the potential supervisor will also be assessing you and your research proposal. A supervisor might decline to take you on if your research topic holds no interest for him or her; if your research proposal is considered to have serious flaws or you do not appear to have a number of other characteristics that are likely to contribute to the successful completion of your research. Box 1.2 shows the typical non-paper qualifications that supervisors look for in potential research students.

Box 1.2 Attributes supervisors look for in research students

- Confidence, enthusiasm and a positive attitude
- Ability to communicate clearly in verbal and written communications
- Capacity for independent learning and developing new skills
- Ability to think independently and reason analytically
- Motivation and perseverance in achieving objectives
- Ability to manage and sustain progress
- Punctuality and good organisational skills
- Probability of establishing good working relationship

If English is not your first language, you may want to take advantage of any academic English classes organised by your university or college. Typically, these will cover academic reading and writing; academic vocabulary and grammar. They might also include advice on writing conference papers and making research presentations as well as writing journal articles.

Vox pop What has been the biggest challenge of your research so far?

Refika, first year PhD student investigating pupils' perceptions of their cultural, national and global identities

Doing research in a new language rather than your own language is very challenging. You want to express yourself in the best way, but you might lack words and expressions as well as their cultural context and you can feel lost.

It is usually the responsibility of the programme director or other senior person in the department to exercise as much care as possible in matching students to supervisors. He or she will take into account such factors as the research topic, the number of students already being supervised by that member of staff, and the student's academic ability and personality. Although your supervisor will play a very important role in guiding your research, 'it is the responsibility of the researcher to identify a [research] question' (Creedy, 2001, p. 116).