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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
- identify the characteristics of a good research project.

1.1 INTRODUCTION

Whether you are merely at the stage where you are contemplating carrying out business research or you have already begun planning your study, you will find this chapter useful for clarifying your initial thoughts. We start by examining the nature and purpose of academic research that focuses on business issues and the different ways in which studies can be categorized. We also look at the general differences between undergraduate, postgraduate and doctoral research projects before going on to discuss what makes a good project.

1.2 NATURE AND PURPOSE OF BUSINESS RESEARCH

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 enquiry and investigation
- systematic and methodical, and
- increases knowledge.

Looking at the *nature* of research, this tells us that researchers need to use appropriate methods for collecting and analysing research data, and to apply them rigorously. It tells us that the *purpose* of research is to investigate a research question with a view to generating knowledge. The research question you investigate will relate to a particular problem or issue that you identify from studying a particular topic. Research is much more than mere speculation or assumptions about business events, transactions and activities. You will need to study your chosen topic and the choice of research methods. Students need to meet the criteria that relate to their degree programme, and all researchers will need to meet the standards expected by their institutions and/or funding body.

KEY DEFINITIONS

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

A research project offers both undergraduate and postgraduate students 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 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. Thus, the typical objectives of research can be summarized as follows:

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

Our summary illustrates that research is purposeful, as it is conducted with a view to achieving an outcome. The nature of that outcome will depend on the type of research you are conducting and the level at which you are operating. The outcome may be presented in the form of a *dissertation* for an undergraduate or taught Master's degree

or for a Master of Philosophy (MPhil). Alternatively, it is likely to take the form of a *thesis* for a doctoral degree such as Doctor of Business Administration (DBA) or Doctor of Philosophy (PhD). 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 and those pursuing academic careers.

KEY DEFINITIONS

A **discourse** is 'a lengthy treatment of a theme'.

A **dissertation** is a 'detailed discourse, esp. as submitted for academic degree'.

A **thesis** is a 'dissertation, esp. by candidate for a higher degree'.

(*Oxford Compact Dictionary & Thesaurus*, 1997, pp. 211, 216 and 801 respectively)

Types of enterprise to research include small and medium-sized enterprises (SMEs), businesses with limited liability (such as companies), and organizations in the not-for-profit or public sectors. The focus in the media is mainly on big business, yet 99% of businesses are small or medium-sized enterprises (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.

1.3 CLASSIFYING RESEARCH

As there are many ways of *classifying research*, it can be bewildering at first. However, studying the various characteristics of the different types of research helps us to identify and 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 main types of research

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

1.3.1 EXPLORATORY, DESCRIPTIVE, ANALYTICAL AND PREDICTIVE RESEARCH

If we are classifying research according to its *purpose*, we can describe it as being exploratory, descriptive, analytical or predictive. At the undergraduate level, research is usually exploratory and/or descriptive. At postgraduate or doctoral level it is always analytical 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 clerical staff in a particular office, department, company, group of companies, industry, region and so on, to find out what motivates them to increase their productivity (that is, to see if 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.
Analytical	An analysis of any 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 a change in the productivity levels of clerical staff.

Exploratory research is conducted into a research problem or issue when there are very few or no earlier studies to which we can refer for information about the issue or problem. The aim of this type of study is to look for patterns, ideas or hypotheses, rather than testing or confirming a hypothesis. A *hypothesis* is a proposition that can be tested for association or causality against empirical evidence. *Empirical evidence* is data based on observation or experience, and *data** are known facts or things used as a basis for inference or reckoning. In exploratory research, the focus is on gaining insights and familiarity with the subject area for more rigorous investigation at a later stage.

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 describe phenomena as they exist. It is used to identify and obtain information on the characteristics of a particular problem or issue. Descriptive research goes further in examining a problem than exploratory research, as it is undertaken to ascertain and describe the characteristics of the pertinent issues. The following are examples of research questions in a descriptive research study:

- What is the absentee rate in particular offices?
- 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?

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

- 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 type of students (for example age, sex and nationality) and what is studied (for example level/stage in the course, main subjects covered and 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 later chapters.

Analytical or explanatory research is a continuation of descriptive research. The researcher goes beyond merely describing the characteristics, to analysing and explaining why or how the phenomenon being studied is happening. Thus, analytical research aims to understand phenomena by discovering and measuring causal relations among them. For example, information may be collected on the size of companies and the

KEY DEFINITIONS

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

Empirical evidence is data based on observation or experience.

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.

levels of labour turnover. A statistical analysis of the data may show that the larger the company the higher the level of turnover, although as we will see later, research is rarely that simple. An important element of explanatory research is identifying and, possibly, controlling the *variables* in the research activities, as this permits the critical variables or the causal links between the characteristics to be better explained. A variable is a characteristic of a phenomenon that can be observed or measured.

Predictive research goes even further than explanatory research. The latter establishes an explanation for what is happening in a particular situation, whereas the former forecasts the likelihood of a similar situation occurring elsewhere. Predictive research aims to generalize from the analysis by predicting certain phenomena on the basis of hypothesized, 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 also to similar events in the future. 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?

1.3.2 QUANTITATIVE AND QUALITATIVE RESEARCH

Looking at the approach adopted by the researcher can also differentiate research. Some people prefer to take a *quantitative* approach to addressing their research question(s) and design a study that involves collecting quantitative data (and/or qualitative data that can be quantified) and analysing them using statistical methods. Others prefer to take a *qualitative* approach to addressing their research question(s) and design a study that involves collecting qualitative data and analysing them using interpretative methods. As you will see in later chapters, a large study might incorporate elements of both as their merits are often considered to be complementary in gaining an understanding in the social sciences.

Referring to a research approach as quantitative or qualitative can be misleading, as a researcher can design a study with a view to collecting qualitative data (for example published text or transcripts of interviews) and then quantifying them by counting the frequency of occurrence of particular key words or themes. This allows researchers to analyse their data using statistical methods. On the other hand, a researcher can collect qualitative data with the intention of analysing them using non-numerical methods, or collect data that are already in numerical form and use statistical methods to analyse them. 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 on 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 these 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 may 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.

KEY DEFINITIONS

Applied research

describes a study that is designed to apply its findings to solving a specific, existing problem.

Basic (or pure) research

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

1.3.3 APPLIED AND BASIC RESEARCH

A standard classification of research divides projects into *applied research* and *basic research*. Applied research is a study that has been designed to apply its findings to solving a specific, existing problem. It is the application of existing knowledge to improve management practices and policies. The research project is likely to be short term (often less than 6 months) and the immediacy of the problem will be more important than academic theorizing. For example, you might be investigating the reorganization of an office layout, the improvement of safety in the workplace or the reduction of wastage of raw materials or energy in a factory process. The output from this type of research is likely to be a consultant's report, articles in professional or trade magazines and presentations to practitioners.

When the research problem is of a less specific nature and the research is being conducted primarily to improve our understanding of general issues without emphasis on its immediate application, it is classified as basic or pure research. For example, you might be interested in whether personal characteristics influence people's career choices. Basic research is regarded as the most academic form of research, as the principal aim is to make a contribution to knowledge, usually for the general good, rather than to solve a specific problem for one organization.

Another example of applied research that is conducted in academic institutions often goes under the general title of *educational scholarship* (or *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.

Basic research may focus on problem solving, but the problem is likely to be theoretical rather than practical. The typical outcome of this type of research is knowledge. Basic research may not resolve an immediate problem, but will contribute to our knowledge in a way that may assist in the solution of 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.

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 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, 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 recognize that one particular project may be described in a number of ways, as it will have purpose, process, logic and outcome. For example, you may conduct an applied, analytical 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 analytical 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.

KEY DEFINITIONS

Deductive research describes a study in which a conceptual and theoretical structure is developed which is then tested by empirical observation; thus particular instances are deduced from general inferences.

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

1.4 ACADEMIC LEVELS OF RESEARCH

The *academic level* of your research in terms of the sophistication of the research design and duration of the project will depend on your reasons for undertaking it. The requirements for undergraduates are very different from those for postgraduate students and doctoral students. However, the basic principles, issues and practicalities are the same.

1.4.1 UNDERGRADUATE LEVEL

If you are an undergraduate student, you may be required to undertake a research project as part of a course or it may even be a complete course. You are normally 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 courses you will be 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 will be required not only to design a project and write a proposal, but also to do some actual research. This would entail writing a review of the literature and also collecting and analysing existing data or new data (for example from interviews or a questionnaire survey). In some cases, 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. In all cases, you will be required to write a research report, which may be called a dissertation or thesis.

1.4.2 POSTGRADUATE AND DOCTORAL STUDENTS

If you are on an MBA programme or a specialized Master's programme, you will normally be expected to design a research project, write a proposal, conduct the study and write a report (which may be called a dissertation or thesis). In some cases, you may find that you are allowed to conduct a critical literature review only, where you will be expected to analyse and synthesize the literature on a chosen topic and draw conclusions. The processes are very similar to undergraduate research, but a more comprehensive approach is needed and higher quality of work will be required.

If you are doing a Master's degree by research or a doctorate, the intensity of the research will be much greater and you will need to read this book thoroughly and the recommended reading that is relevant to your subject. It is important to remember that, at this level, the country in which you are studying and the expectations of your institution will have a significant influence on the process and outcome of your research.

1.4.3 ACADEMIC RESEARCHERS

If you are seeking an academic post, looking for promotion or engaged in research as part of your job, this book will reinforce your knowledge or give you a new perspective on a particular issue you have not considered previously, and 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 a traditional and highly structured view of the research process.

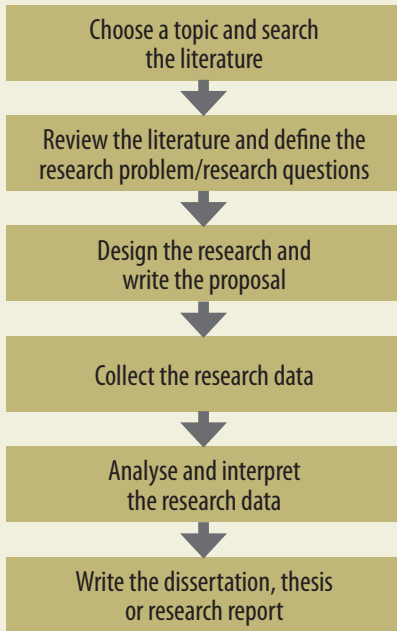


FIGURE 1.1 Overview of the research process

minority groups in society, the difficulties of funding small businesses, what makes managers successful, or the commercial sponsorship of sport.

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 a full project.

We will look briefly at each stage in the research process now to give you an overview of the nature of research, but greater detail is provided in the 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 your discipline if you are an academic. You may find a research topic suggests itself as a result of your coursework, job, interests or general experience. For example, you may be interested in the employment problems of

KEY DEFINITIONS

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

1.5.2 THE LITERATURE

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 should be able to see how your topic is divided into a number of different areas that will help you focus your ideas on a particular research problem.

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 *research 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)*. The classic way in academic research 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 may lead you to your Master's or doctoral research questions. If you are an academic, you may also 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.

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, based on people's philosophies and assumptions about the world and the nature of knowledge. Your overall approach to the entire process of the research study 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.

KEY DEFINITIONS

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

A **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.

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* later in Chapters 8 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 emphasize 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 be looking at this in more detail in Chapters 9, 11 and 12. It is important to realize, 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, usually because they have left it until the very last minute! It is important to start writing up your research in draft as soon as you start the early stages of the project, and continue to do

so until it is completed. To a large extent, the stages outlined above will be captured in the structure of your dissertation or thesis. It is valuable at the outset to consider a possible structure, as it will give you an idea of what you are aiming for and Table 1.3 shows a typical structure. The title should be descriptive but not lengthy. Remember that any planned structure will have the disadvantage of making the research process look much more orderly than it really is. Although all research reports differ in structure according to the problem being investigated and the methodology employed, there are some common features.

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 (<i>doctoral students will need to discuss</i>)	
– Justification for choice of methodology and methods	
– Limitations of the research design	20
4. Findings/Results (<i>more than one chapter if appropriate</i>)	
– Presentation and discussion of the analysis of your research data/statistical tests and their results	30
5. Conclusions	
– Summary of what you found out in relation to each research question you investigated	
– Your contribution to knowledge	
– Limitations of your research and suggestions for future research	
– Implications of your research for practice or policy (if appropriate)	10
	100
References (<i>do not number this section</i>)	
– A detailed, alphabetical (numerical, if appropriate) list of all the sources cited in the text	
Appendices	
– Detailed data referred to in the text, but not shown elsewhere	

1.6 DEVELOPING A RESEARCH STRATEGY

Research is a time-consuming and expensive activity and therefore you will need to develop a *research strategy* to ensure you meet your objectives. A humorous view of the

challenges facing researchers is shown in Figure 1.2. However, this map was drawn in 1969 and in the intervening years many techniques and methods have been developed that help researchers overcome the difficulties depicted in this cartoon.

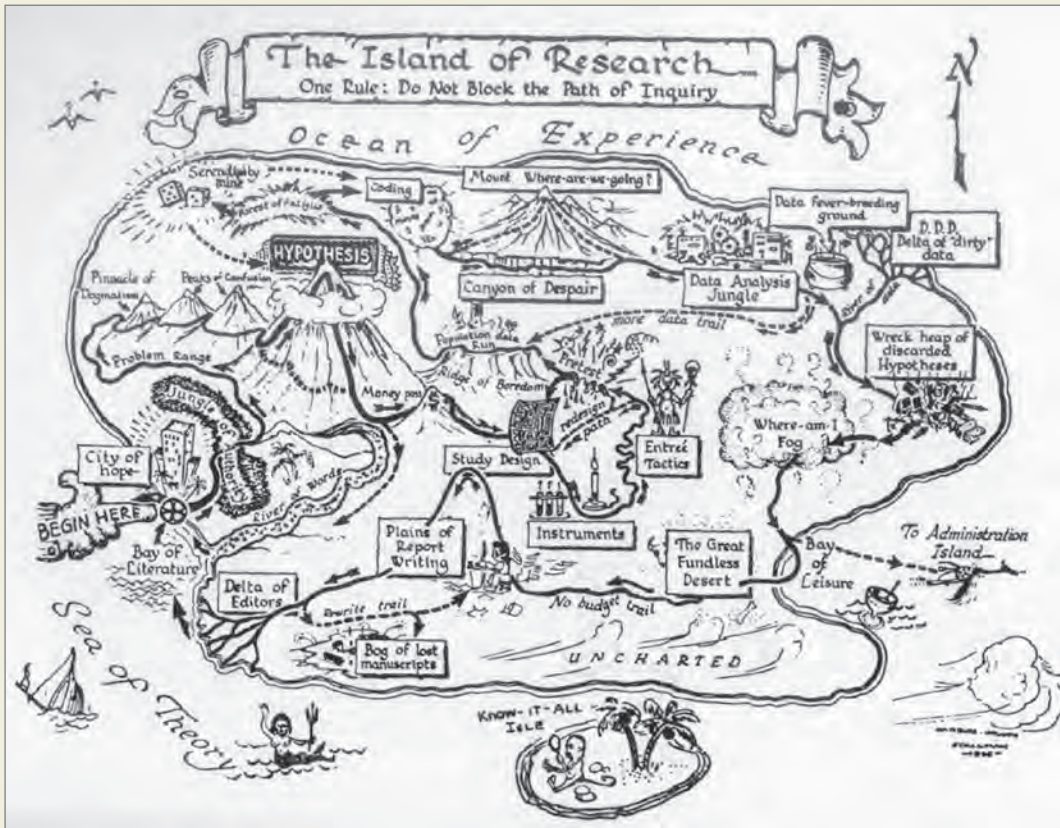


FIGURE 1.2 **Island of research**
Source: Agnew and Pyke (1969, frontispiece).

Although a few lucky individuals are in a position to conduct studies purely out of interest, most require some definite outcomes. This may be a dissertation or thesis that gets you a good grade as a student, transferable skills that improve your employability or a journal publication that will help you further your academic career. The main steps are:

- Getting organized
- Identifying your desired outcome(s)
- Choosing a research topic
- Determining the research problem/question(s)
- Drawing up a detailed table of contents
- Establishing a timetable or schedule
- Being serious about writing.

These aspects will be discussed in depth throughout this book, but so that you can start developing your research strategy straightaway, we give some helpful pointers now.

1.6.1 GETTING ORGANIZED

You will not be successful in doing research if you are not organized. We can all think of exceptions of brilliant researchers who ignore this rule but, for most of us, success depends on being administratively competent. This entails having a good filing system, dating and recording all your research activities and committing everything to paper or computer. At this stage, you need to work out how much time you have, what financial resources you need and what physical resources you have in terms of computer hardware and software and any other technology. You will also need to draw up a list of contacts, groups and institutions that may be helpful. They may be able to help by offering advice and guidance, allowing you access to facilities such as a library or to collect data, or by assisting you in some way to achieve your desired outcomes.

1.6.2 IDENTIFYING THE OUTCOME(S)

You need to be specific when identifying the outcome(s) of your research. It is not sufficient to say that you want a high grade for your research project or to publish in one of the top academic journals. If you want to get the top grades for your dissertation or thesis, you need to understand the requirements you have to satisfy, and these are discussed in Chapter 2. If you want your work to be published, you need to read articles in the journal you have chosen and understand the editorial policy. We offer advice on this in Chapter 13.

1.6.3 CHOOSING A RESEARCH TOPIC

There is often a conflict between what you would like to do and what is feasible. The level of research and the outcome you desire will frequently determine the research you will conduct. You may be very interested in the history of sea bathing, but this may not be suitable if the particular aspect of sea bathing you choose is not relevant to your degree programme. If you are pursuing an academic career, you will need to think whether the topic you choose will provide you with a research niche upon which to build an impressive reputation. At the other end of the scale, the time constraints you face on a Bachelor's or Master's programme make it unlikely that you will be able to conduct a large survey of the opinions of directors of the world's top companies. Even a seasoned researcher with an enviable reputation would find such a project a challenge. Your research must be feasible and lead to your expected outcome(s).

1.6.4 DETERMINING THE RESEARCH PROBLEM/QUESTION(S)

Do not focus solely on the immediate outcome(s) of your research only, but think about how you might be able to develop your work. For example, if you are a student, you might want to examine an issue in a particular industry where you hope to find employment when you graduate. For those pursuing research to further their careers, there is a good argument for choosing an issue that will help you to build a reputation and become one of the experts in a particular field.

1.6.5 BEING SERIOUS ABOUT WRITING

You will be judged by your ability to communicate, particularly your written output; a poorly crafted dissertation, thesis, conference paper or article can destroy what may have been a well-designed and carefully executed study. We give considerable guidance on writing in the later chapters but the immediate advice is to start writing notes and drafts now and to continue to write, review and revise your work so that your final draft will represent the highest quality in terms of substance, structure, grammar and spelling.

1.7 CHARACTERISTICS OF GOOD RESEARCH

KEY DEFINITIONS

Methodological rigour refers to the appropriateness and intellectual soundness of the research design and the systematic application of the research methods.

Many of the characteristics of good research can be developed by adopting a methodical approach. *Methodological rigour* is very important and this term refers to the appropriateness and intellectual soundness of the research design and the systematic application of the methods used. Therefore, it requires a careful, detailed, exacting approach to conducting the research.

The characteristics of a good research project vary according to the philosophical assumptions that underpin your research. These assumptions are discussed later in Chapter 4 and are very important at all academic levels. A soundly based research design should allow a degree of flexibility to enable you to pursue new developments in the topic if they are relevant to the study and you have sufficient time. In subsequent chapters, we will explain how this can be achieved. At this stage, it is useful to have an overview of what makes a good research project. Therefore, Table 1.4 compares the main characteristics of good and poor projects.

TABLE 1.4 Characteristics of good and poor research projects

Criteria	Poor project	Good project
Research problem and scope	Unclear and unfocused	Sharply focused Related to academic debate
Literature review	A list of items Relevance unclear Little or no evaluation Research questions missing, impractical or unfocused	Critical evaluation of relevant, up-to-date literature Linked to focused, feasible research questions
Methodology	Little appreciation of research design No justification of choice Not linked to the literature	Cohesive design Excellent review of research design options Linked to the literature
Analysis and discussion	Unclear findings, unrelated to research questions Little or no attempt to discuss in relation to literature review	Clear findings discussed in an analytical manner that generates new knowledge and insight Linked to the literature
Conclusions	Some conclusions but not linked to research questions Implications and limitations of results not addressed	Conclusions clearly linked to research questions Attention given to implications and limitations
Referencing	Plagiarism through omission or inadequate referencing	All sources cited in the text and full bibliographic details listed at the end
Communication	Difficult to follow Many spelling and grammar mistakes	Clear flow of ideas Appropriate spelling and grammar

1.8 CONCLUSIONS

This chapter has examined the purpose and nature of research, and the ways in which it can be classified. We have given an overview of the different types of research and the factors that need to be considered at various levels. A research project offers an opportunity to identify and select a research problem to investigate independently under the guidance of a supervisor. It gives you the opportunity to apply theory or otherwise analyse a real business problem or issue. Your research needs to be systematic and methodical and your study will illuminate the problem or issue and contribute towards our greater understanding of it. To ensure you are satisfied with your research and achieve the outcomes you desire, you must develop a research strategy. The most important part of that strategy from the onset is to start writing. You should make sure that you keep careful records to ensure that other people's contribution to knowledge is not confused with yours.

ACTIVITIES

1. Select two academic journals from your discipline in the library and construct a table that classifies articles according to whether the research is exploratory, descriptive, analytical or predictive.
2. Construct a second table that classifies the same articles according to whether the research is quantitative or qualitative.
3. Now construct a third table that classifies the same articles according to whether the research is applied or basic.
4. Finally, construct a table that classifies the same articles according to whether the research is deductive and inductive.
5. Reflect on the results shown in your four tables and write notes on similarities and differences in these classifications. Summarize your notes in the form of a diagram.

PROGRESS TEST

Complete the following sentences:

1. Research is a process of enquiry and investigation that is conducted in a systematic and methodical way with a view to increasing _____.
2. A study in which theory is developed from the empirical evidence is known as _____ research.
3. A study in which theory is tested against empirical evidence is known as _____ research.
4. An idea or proposition that can be tested against empirical evidence is called a _____.
5. Empirical evidence is data based on experience or _____.

Are the following statements true or false?

6. A research paradigm is a lengthy treatment of a theme that is submitted for an academic degree.
7. Descriptive research can take a quantitative or qualitative approach.

8. A qualitative approach to research does not require IT skills.
9. An exploratory study is always used to test or confirm a hypothesis.
10. Research that has been designed to resolve a specific problem is known as applied research.

Multiple choice questions:

11. The result of building up information from other information is known as:
 - a) an analysis
 - b) a dialysis
 - c) a synopsis
 - d) a synthesis
12. The result of setting out a reasoned argument in steps is known as:
 - a) a comparison
 - b) a debate
 - c) an evaluation
 - d) an evasion
13. The classification of studies into exploratory, descriptive, analytical or predictive research is based on:
 - a) the logic of the research
 - b) the outcome of the research
 - c) the process of the research
 - d) the purpose of the research
14. The classification of studies into applied or basic research is based on:
 - a) the logic of the research
 - b) the outcome of the research
 - c) the process of the research
 - d) the purpose of the research
15. Inductive research seeks to:
 - a) classify theory
 - b) confirm theory
 - c) develop theory
 - d) test theory

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