Issues and processes in management research

Part I

Introduction

1

Learning outcomes At the end of this chapter the reader should be able to:

- **appreciate the complexity of management research and some of the controversies and developments that are encouraging methodological diversity;**
- **begin to understand the impact of the researcher's philosophical commitments upon the choice of methodological approach;**
- **understand the difference between deduction and induction in research methodology;**
- **appreciate the relationship between management research and management development;**
- **understand the aims, structure and content of this book.**

In this chapter preliminary consideration is given to the complexities of management as a field of study and its increasing methodological diversity. Within this context, management research is clarified as a process by comparing and contrasting it with management development. The chapter also introduces the two main, yet often competing, approaches to management research that articulate competing philosophies – induction and deduction. The philosophical rationales underpinning these alternatives are further explored throughout the book, especially so in Chapter 3 and their varying methodological expressions give a framework for our examination of different research methods throughout subsequent chapters. Chapter 1 concludes by providing an outline of the structure of the rest of the book and the content of those chapters.

Innovation and diversity in management research

Management research is a complex and changing field which demonstrates several interrelated tendencies. In order to understand these developments it is initially helpful to place management research in some historical context. Some 25 years ago, in a

discussion of the historical development of management studies, Whitley (1984a, b) described it as being in a fragmented state; as a field characterized by a high degree of task uncertainty and a low degree of co-ordination of research procedures and strategies between researchers who undertake research in an ad hoc and opportunistic manner. This apparent situation led Pfeffer (1993, 1995) to argue, by using economics as an exemplar to be copied, that management research must develop consensus through the enforcement of theoretical and methodological conformity. As he argued, such a paradigmatic convergence may increase the social standing of the discipline and thus should assure more access to scarce resources, whilst easing its methodological development. However, in a reply to Pfeffer, Van Maanen (1995a) argued that if management research followed Pfeffer's recommendations the resultant enforced conformity would create what amounted to a 'technocratic unimaginativeness' which could drive out tolerance of the unorthodox and significantly reduce our learning from one another. During the intervening years, management students have been confronted by much controversy about the most appropriate approaches to the study of management as an academic discipline. Of course it is debatable how far these controversies have actually reconfigured management research practice as it may be argued that there is a dominant orthodoxy within management research which is maintained by very powerful institutional pressures. Nevertheless the dominance of this mainstream in management research is being resisted by numerous management researchers and indeed has been under attack on a number of fronts (see Symon et al., 2008). To some extent the development of these controversies has been due not only to the emergence of different schools of management thought but also to the development of different approaches to research **methodology**, especially so in the social sciences. Indeed, since the first edition of this book in 1991, there seems to have been an increasing methodological diversity amongst those who undertake what can be broadly classified as management research – although it is important to note that quantitative methods still dominate much of what is published in prestigious academic journals.

Whilst it remains accurate to say that the diversity in management research has been exacerbated because of its multi-disciplinary (Brown, 1997) and inter-disciplinary (Watson, 1997) nature because of its position at the confluence of numerous social science disciplines (e.g. sociology, psychology, economics, politics, accounting, finance and so on), other forces are clearly at play which have promoted methodological innovation and change. For instance, this increasing diversity might also be explained by the 'coming of age' of qualitative and interpretive methods (see Prasad and Prasad, 2002) which may be seen as arising in response to certain perceived limitations in conventional management research and thereby presents a significant challenge to, and critique of, the quantitative mainstream of management research. However, qualitative management research is itself characterized by an expanding array of methodologies which articulate different, competing, philosophical assumptions which have significant implications for how management research should be (Johnson et al., 2006), and is (Johnson et al., 2007), evaluated by interested parties. Simultaneously there has been the development of an array of critical approaches to the study of management usually going under the umbrella term 'critical management studies'. This influential development, in part, arises out of a philosophical and methodological critique of the assumed objectivity and neutrality of the quantitative mainstream but also aims to generate what are presented as emancipatory forms of research that challenge the status quo in contemporary organizations by exposing and undermining dominant managerial discourses whose content is often just taken-for-granted by organizational members and thereby assumed to be

natural and unchallengeable (see Fournier and Grey, 2000; Grey and Willmott, 2005; Kelemen and Rumens, 2008). Of course such developments open questions about who is the intended audience for management research. For instance is management research about:

1. addressing the presumed pragmatic concerns and presumed business needs of practising managers, or,
2. is it about investigating and understanding the structures and processes of oppression and injustice, that are taken to be part of organizing in a capitalist society, whose main beneficiaries and victims are often these social actors labelled managers?

Any cursory inspection of management research would suggest that a great deal of it published in prestigious academic journals adopts, often by default, the first orientation noted above. Unlike our second orientation above it adopts the view that management research must be relevant in the sense that it helps managers to manage more efficiently and effectively by enhancing their ability to cope with the problems that assail contemporary organizations by improving the technical content of managerial practice based upon rigorous **analysis** using social scientific **theory** rather than common sense. However many commentators (e.g. Tranfield and Starkey, 1998; Keleman and Bansal, 2002) have noted some irony here in the sense that the channels by which this research is disseminated, and often the language used, all tend to reflect the institutional incentives, intellectual requirements, interests, and concerns of academia rather than the needs of management practitioners, whoever they might be. Nevertheless, many management researchers (e.g. Heckscher, 1994; Osbourne and Plastrik, 1998; Kalleberg, 2001; Johnson et al., 2009) have pointed to how the nature of managerial work, and the roles available to managers, may indeed be fundamentally changing under the impact of the organizational changes driven by a possible shift from bureaucratic forms of command and control to post-bureaucratic forms of organizational governance. The latter are usually characterized as flatter, less hierarchical, more networked and flexible organizations wherein employees are necessarily empowered to use their discretion to cope with a more volatile and uncertain workplace and requires managers capable of facilitating the participation of self-directed employees in decision-making (Tucker, 1999): something which further requires the evolution and deployment of managers' research skills at work (Hendry, 2006).

Of course the second orientation noted above is much more associated with critical management studies which often overtly rejects a managerially orientated approach partially on the basis of a desire to enhance the democratic rights and responsibilities of the relatively disempowered majorities of members of work organizations: an approach which has significant methodological implications but which also is an outcome of a philosophical challenge to mainstream management research (which we shall consider later in this book) which seems to reflect Whitley's (1984b: 387) criticism that management research had adopted 'a naïve and unreflecting **empiricism**'. For Whitley, the solution to this problem required freeing researchers from lay **concepts** and problem formulations and by providing them with a more sophisticated understanding of the epistemological and sociological sciences.

In sum, there are a range of forces at play which have created a trajectory in management research that seems to be one of increasing methodological diversity and innovation, much of which uses varying philosophical critiques of the quantitative

mainstream as a starting point to legitimate the methodological changes that are deemed to be necessary.

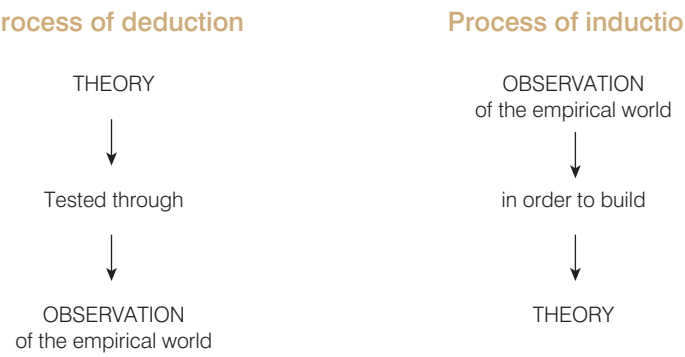
One of the major themes of this book is that there is no one best methodological approach but rather that the approach most appropriate for the investigation of a given research question depends on a large number of variables, not least the nature of the research question itself and how the researcher constitutes and interprets that question. Research methodology is always a compromise between options in the light of tacit philosophical assumptions, and choices are frequently also influenced by practical issues such as the availability of resources and the ability to get access to organizations and their memberships in order to undertake research.

Making methodological choices

In this book we will advance criteria for choice of methodology by reviewing the major approaches to management research and, through examples, their appropriateness to finding answers to particular research questions. Therefore, one key aim of this work is to illustrate the different means by which business and management research is undertaken by presenting some of the variety of methodologies that are potentially available to any researcher. In attempting to meet our key aim we are also concerned to illustrate that the research methods available to the management researcher are not merely neutral devices, or techniques, which we can just 'take off shelf' to undertake a particular task for which they are most suited. Such a perspective implies that it is the nature of the research question, and what phenomenon is under investigation, which should pragmatically dictate the correct research method to use since different kinds of information about management are most comprehensively and economically gathered in different ways. Whilst at first sight this stance seems to have much to offer, and of course the nature of the research question being investigated is methodologically important, it can simultaneously deflect our attention from what we see to be a key issue: that the different research methods available to the management researcher also bring with them a great deal of philosophical baggage which can remain unnoticed when they are classified as constituting merely different data collection tools that can be chosen to do different jobs. Therefore, management researchers need to be aware of the philosophical commitments they make through their methodological choices since that baggage has a significant impact not only upon what they do, but also upon how they understand whatever it is that they think they are investigating in the first place.

For example (see Figure 1.1), the decision to use deductive research methods (for example, experiments, analytical surveys, etc.) that are designed to test, and indeed falsify, previously formulated theory through confronting its causal predictions about human behaviour with empirical data gathered through the neutral observation of social reality, tacitly draws upon an array of philosophical assumptions and commitments that are contestable yet so often remain taken-for-granted. Even a cursory inspection of the management field would show that such methodological choices are common place yet, by default, also involve the decision not to engage through alternative means: alternatives that in themselves articulate different philosophical commitments, e.g. to build theory inductively out of observation of the empirical world that focuses upon the operation actors' everyday culturally derived subjective interpretations of their situations in order to explain their behaviour theoretically. As we will see in Chapter 3 there are significant philosophical differences between these

Figure 1.1 | Deduction vs induction



two approaches, to a degree initially centred upon what each assumes to be the key influences upon human behaviour and the forms that it takes as well as how those influences are best investigated by researchers.

The point is that whilst we cannot avoid making philosophical commitments in undertaking any research, a problem lies in the issue that any philosophical commitment can be simultaneously contested because they are merely assumptions that we have to make. This is because the philosophical commitments which are inevitably made in undertaking research always entail commitment to various knowledge-constituting assumptions about the nature of truth, human behaviour, representation and the accessibility of social reality. In other words there are always tacit answers to questions encoded into what is called the researcher's pre-understanding. These answers are:

- about ontology (what are we studying?)
- about epistemology (how can we have warranted knowledge about our chosen domains?)
- and about axiology (why study them?)

Those answers always have a formative impact upon any methodological engagement. Quite simply we cannot engage with our areas of interest without having answers already to those questions. The philosophical assumptions we make in dealing with these questions implicitly present different normative specifications, justified by particular rationales, for management research regarding what it is and how it should be done. But significantly these assumptions also impinge upon a further crucial area – how should we judge, or evaluate, the findings and quality of any management research? Here there is the persistent danger that particular evaluative criteria, deriving from particular philosophical traditions within management research, are inadvertently applied to all management research regardless of its particular philosophical stance. This is a particularly important issue as it could mean that the outcomes of some management research may be inappropriately and unfairly evaluated: an issue we shall explore in the later chapters of this book.

The notion that methodological choices regarding how to do research always involve philosophical choices that need to be excavated is supported by some recent developments in management research. For instance, since the early 1990s, there has been much discussion of the notion that in order to understand ourselves as

social science researchers we must reflexively engage (see Holland, 1999; Newton, 1999; Weick, 1999; Alvesson and Deetz, 2000; Johnson and Duberley, 2003) with ourselves through thinking about our own thinking and how those beliefs have repercussions for our engagements with our areas of interest. According to Chia and Morgan such vigilance must also embrace management education through the inculcation of 'an intimate understanding of the way . . . management knowledge . . . is organized, produced and legitimized' (1996: 58) – an agenda which has become all the more important with the increasing 'managerialization of the world' (Alvesson and Deetz, 2000: 209). Although this 'new sensibility' (Willmott, 1998) has many implications for management research, several commentators have emphasized how it entails noticing, and being suspicious of, the relationship between the researcher and the substantive focus of his/her research. This involves reflecting upon how those often tacit, unacknowledged, pre-understandings impact upon:

- how those 'objects' of research are conceptually negotiated and constituted by the researcher;
- what kinds of research question are then asked by the researcher;
- how the results of research are methodologically arrived at, justified and presented to audiences for consumption;
- how those results are then, or should be, evaluated by interested parties.

Such increased awareness regarding the philosophical choices made by management researchers, either consciously or by default, might serve to broaden the philosophical repertoire available to both management researchers and practitioners so that alternatives to the current mainstream are also understood and appreciated rather than being just discounted as outlandish eccentricities not worthy of serious contemplation never mind use. The choices we then always have to make in doing research can then be based upon a fuller consideration of the ever present alternatives rather than inadvertently limiting the focus of these decisions, by default, to that which is conventionally seem as 'normal' and thus incontrovertible. Mutual understanding is paramount here.

This book attempts to support this 'new sensibility' and, simultaneously, to bridge the gap between academic and managerial views of what constitutes appropriate research by offering challenges to both the academic community and the practising manager.

The management research process and management development

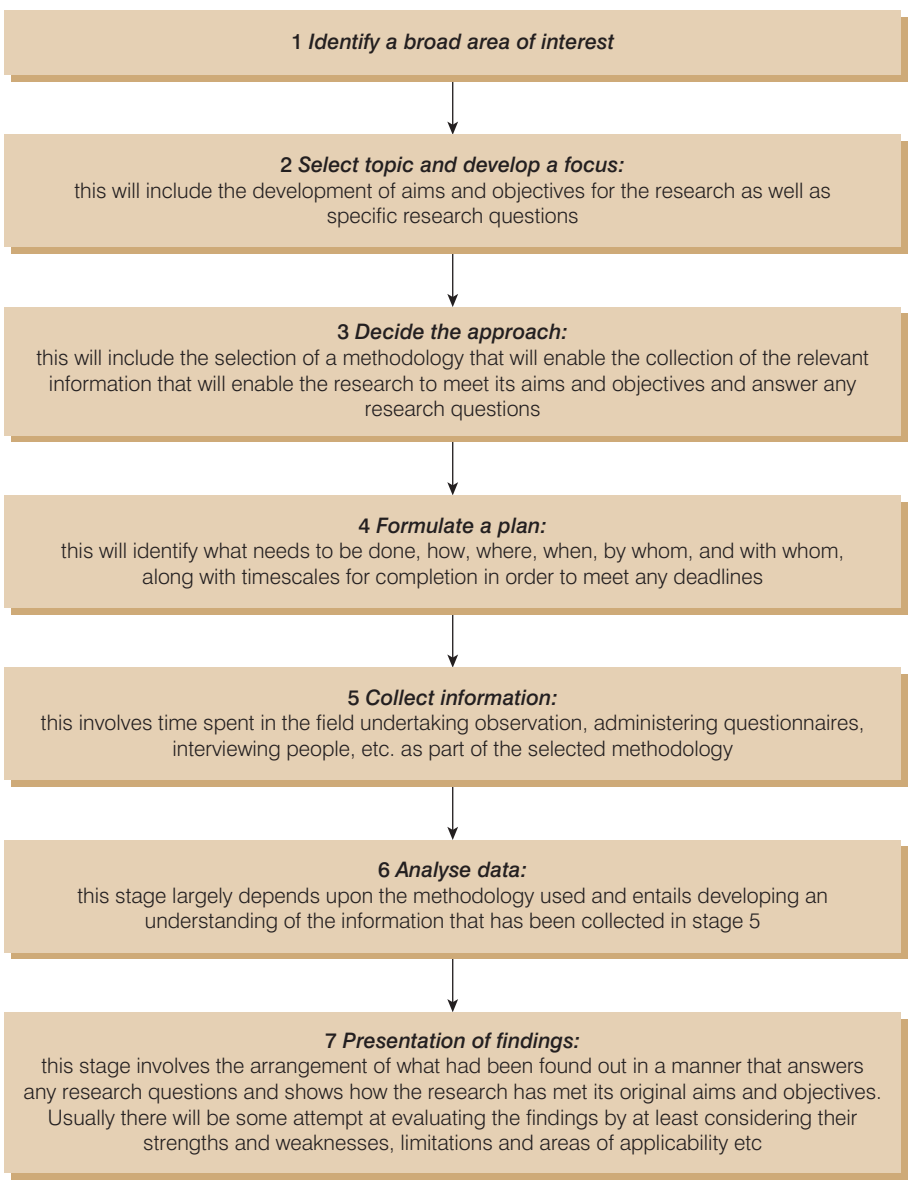
Harvey-Jones (1989: 240), in his bestselling book *Making it Happen*, advised managers when setting about tasks to distinguish content from process. What he meant by this is that it is helpful conceptually to separate the content of the task from the way the task is accomplished; that is, to separate the content (what) from the process (how). Research methods on this analysis are then primarily concerned with how (process) to tackle tasks (content).

Despite the variety of approaches to management research they all in essence share a problem-solving sequence that may serve as a systematic check for anyone undertaking research at whatever level. At this point we introduce a cautionary note in qualification. An idealized representation of the research sequence will help the naïve researcher at this stage to review the research process as a whole and make a start;

however it rarely accords with actuality. It should be borne in mind that 'the research process is not a clear-cut sequence of procedures following a neat pattern but a messy interaction between the conceptual and empirical world, deduction and induction occurring at the same time' (Bechhofer, 1974: 73).

Nevertheless, the seven-step sequence proposed by Howard and Sharp (1983) which builds on earlier work by Rummel and Ballaine (1963), may be found particularly useful (see Figure 1.2), and is referred to again in the next chapter.

Figure 1.2 | The research sequence (adapted from Howard and Sharp, 1983)



These seven steps should be useful to all students at whatever level they are undertaking project work, from diploma to doctorate. It is recommended that each step in the sequence be given equal attention if time is to be saved in the longer term. For example, it is commonplace for people to be able to identify a broad area of interest but find it difficult to select a topic within that area that is researchable and often give insufficient attention to defining clearly the focus of research. Unless it is dealt with early in the development of the research, this issue can completely hamstring further progress down the seven-step sequence. However sometimes a lack of clarity may only become apparent at later stages of the process, either when planning the project or deciding on methods of collecting data. As a consequence time may be lost recycling to earlier stages of the sequence or the work may fail to meet its objectives. Nevertheless, there will inevitably be some iteration between the seven stages – particularly between 2, 3, and 4 – as ideas and how to pursue them are explored and the practicality and viability of the intended research becomes clearer. These issues will also be explored in more detail in the following chapter, concerned with starting research projects.

It should of course be clear that in essence many managerial activities and the research process outlined in Figure 1.2 are similar. Notwithstanding the point made earlier about the need for **reflexivity** when it comes to conceptualizing 'problems' in the first place, managers need to be competent in investigative approaches to decision-making and problem-solving and this has been recognized in practically all management development programmes and business education by the inclusion of project work involving problem-solving as part of taught courses. The research process, while being the means of developing knowledge and understanding, also serves as a disciplined and systematic procedure of help in solving any managerial problem.

Both management and research activities require a decision as to what to do; this is followed by a planning stage concerned with making judgements about ways of collecting valid information to tackle the issue. Finally the information gathered will need to be analysed and assessed, and action taken. Both managerial and research processes are uncertain and risky, and necessarily entail considerable self-initiated endeavour involving co-operation with others and skill in managing all the factors inherent in finding and implementing solutions to complex problems. Not only are the findings of the research important, then, but it is suggested that the processes of systematic discovery have clear benefits to the manager's self-development as a manager or problem-solver.

These parallels between the research and managerial processes as action sciences are implicitly and explicitly recognized both in project work and dissertations as a significant part of most taught programmes, and also in the merits of research training as a component of higher degree programmes in management.

At the undergraduate level in business and management a research project or dissertation usually forms a significant part of the final assessment demanding independent inquiry and judgement. Taught master's programmes in management vary widely in their dissertation requirements. Some relatively uncommon programmes are guided by an **action learning** philosophy pioneered by Revans (1971) and are taught solely around project work based in the student's own organization. More usually a wide variety of MBA, MSc and MA programmes exist where the requirement is generally for the dissertation to be completed, through independent research usually guided by a supervisor, in about six to eight months part time or around 4 months full-time as part of a largely taught programme of study. Nevertheless, in most cases the dissertation

forms a significant part of the assessment and is almost invariably preceded by a taught research methods component.

Typically a postgraduate master's level dissertation aims to allow the student to develop and demonstrate powers of rigorous analysis, critical inquiry, clear expression and independent judgement in relation to an area of business and management activity. Simultaneously there will always be an emphasis upon the student demonstrating methodological competence in the sense that the student can:

- systematically justify the choice of approach to collecting data deployed;
- competently undertake any data collection;
- be able to analyse that data and make sense of its implications for the dissertation's aims, objectives and research questions;
- demonstrate an understanding of the strengths and weaknesses of the approach used with reference to findings;
- demonstrate an appreciation of the applicability of any findings, often with particular reference to any managerial implications either within the organization studied or more generally – and very often both.

Many postgraduate dissertations are based on an in-depth investigation into a managerial problem within the student's own organization or a client organization where the student is not a direct employee. However the most usual requirement is for more than just problem-solving typical of management consultancy since it requires the student to stand back from the problem, conceptualize it and explore its wider implications for other managers outside the particular case.

Some taught master's programmes designed for specialists, such as operations researchers, HRM and organization development practitioners, may make even greater demands on students in terms of the dissertation requirement. The time devoted to the dissertation may be as much as one third of that spent on the taught programme accounting for as much as 60 out a total of 180 credits. Commonly such dissertations are concerned with the student's management of a consultancy project where the student is required not only to find a solution to a particular problem but also to reflect on the consulting approach and the problems of implementation with regard to any identified remedial changes to the organization. For instance, the philosophy supporting the research methods component of such a master's programme in organization development is outlined by a colleague who advocates respect for data, the appropriateness of the research strategy to the problem confronted and the use of a hermeneutic approach to encourage a more reflexive understanding of the theories and philosophies of management held by both managers themselves and by self-aware researchers in order to comprehend organizational change-management issues and cope with the consulting process more effectively (McAuley, 1985; see also Darwin et al., 2002).

On other types of postgraduate programme students may have the choice to undertake more issue-centred research. This is where an issue relevant to management practice is investigated in order to determine its incidence and/or its causes across a number of different social and organizational contexts in order to answer specific research questions determined from the relevant literature rather than resolve a particular client's organizational problems.

The requirements for master's degrees undertaken solely by research (e.g. M.Phil.) and doctoral projects are similar except that the doctorate is a much more demanding piece of work requiring an independent and original contribution to knowledge.

In both degrees, however, there is a heavier emphasis upon demonstrating methodological competence and most significantly a need to demonstrate an understanding of research methods appropriate to the chosen field and a requirement for students to defend their final theses by oral examination. At this final stage attention is given to the quality of the methodology; the thoroughness of the bibliographic search; the depth of the analysis and conclusions; and the standard of the presentation of the thesis. Finally, the extent of the contribution to knowledge is assessed: clearly, the contribution made by the master's thesis will be of some importance and will probably at least serve as a reference work. Work at master's level is, however, to be distinguished from the doctorate by the requirement placed on the latter to provide a distinct and original contribution to knowledge.

We now turn to the broad approaches or strategies to management research covered in this book. It is clear that methodological choices are determined not only by the nature of the topic being investigated and the resources available but also by the particular training and socialization processes to which the researcher has been exposed which have a significant formative impact upon any pre-understanding thereby sometimes severely limiting any decision-making process regarding methodological choice. It will therefore be helpful at this point to diagnose your own predispositions towards particular research approaches, by doing Stop and Think Exercise 1.1.

Stop and Think Exercise 1.1 Self-diagnose your research approach

Say whether you agree or disagree with the following statements by placing a tick (agree) or a cross (disagree) in the box against each statement.

1 Quantitative data are more objective and scientific than qualitative data. ☐
2 It is always necessary to define precisely the research topic before data collection. ☐
3 Of all methods the questionnaire is probably the best by which to collect objective data on management topics. ☐
4 Field experiments such as the Hawthorne Studies effectively determine cause and effect relationships. ☐
5 A good knowledge of statistics is essential for competence in all approaches to management research. ☐
6 A case study is an inappropriate way to undertake management research as it cannot be generalized. ☐
7 Anthropological methods are obviously fine as a means of studying exotic tribes but have little utility in management research. ☐
8 Laboratory experiments, such as studies of decision making in groups, should be used more widely in management research as they can be closely controlled by the researcher. ☐
9 Research into management issues is best achieved through the accumulation of quantitative data. ☐
10 As a management research method, participant observation is too prone to researcher bias to be valid. ☐

Method of scoring: For the method of scoring, see the instructions at the end of this chapter.

Approaches to management research

It has been suggested that a common stereotype firmly held by managers is to regard researchers as remote, ivory-tower individuals working on issues of little practical relevance. This stereotype, by analogy with the 'boffin' scientist, may of course be partly defensive and serve to preserve managers from the study of difficult philosophical concepts necessary for a comprehensive understanding of research methodology (Gill, 1986; Gill et al., 1989; Grey and Mitev, 1995; Johnson and Duberley, 2000).

Managers are not alone in this, for most people associate the word 'research' with activities which are substantially removed from daily life and which, it is assumed, usually take place in a laboratory. Further, research – and its connection in many minds with 'science' – is often understood to refer to the study of problems by scientific methods or principles deriving from the natural or physical sciences. Management is no exception and there is an influential body of writers who all apparently believe that science is basically a way of producing and validating knowledge which can be applied to managerial problems without too much difficulty. For example, House (1970), in discussing 'scientific' investigation in management, suggests that in order to be objective there is a requirement of public demonstration to prevent the construction of theories and the formulation of general laws on the basis of inadequately tested hypotheses (see also Donaldson, 1996; Hogan and Sinclair, 1996). The requirement of demonstration is satisfied, he believes, when the research design includes:

1. a priori hypotheses that specify causal predictions of relationships between variables that may be then tested empirically through data collection;
2. a priori criteria that can be used to measure the acceptability of those hypotheses;
3. isolation and control of the variables under investigation so as to enable testing; and
4. methods of quantitatively measuring and verifying the variables in the investigation.

Whilst we shall explore the logic underpinning this deductive approach to research, and how it has been criticized in much more detail in Chapters 3 and 9, it is worth stating here that this is also a 'positivist' approach which remains predominant in management research (see Alvesson and Willmott, 1996; Alvesson and Deetz, 2000; Symon et al., 2009). Whilst there are many important aspects to **positivism**, for the time being it is worth noting that positivists usually suggest that management research methodology has to be essentially similar to that used in the natural and physical sciences in order to emulate its evident successes. As Hogan and Sinclair (1996) also argue, positivist methods allow the checking of the **validity** of their findings through replication. The findings are therefore pivotal to promoting organizational effectiveness and efficiency by providing verified guides to managers' interventions into their organizations. However, the assumptions on which this normative view is based have been challenged on at least three main grounds:

1. That there is no single method which generates scientific knowledge in all cases.
2. That what may be an appropriate method for researching the natural or physical world may be inappropriate in the social world given the inherent

meaningfulness, and subjective or cultural basis, of all human behaviour including management action;

3 That knowledge generated is not objective or neutral but is affected by, amongst other things, the goals of managers.

Key methodological concept

Performativity

Positivist methodology emphasizes objectivity and the importance of unbiased data collection in order to test hypotheses and protect against 'fanciful theorizing in management research' (Donaldson, 1996: 164). It is widely agreed that positivism is pivotal to management for two reasons. First, as Thomas (1997: 693) notes, positivism promises to enable control – something which managers expect to be provided by relevant knowledge. Second, if managers appear to deploy objective scientific knowledge, their subsequent practices are more likely to be justified as merely technical activities in which their superior knowledge of things is merely being deployed on behalf of others to improve organizational efficiency and effectiveness (Grey and Mitev, 1995; Grey 1997). Whilst we shall explore the largely philosophical criticisms of the positivistic approach to management research in subsequent chapters it is worth considering criticism number 3 (see p. xx) above in more detail. For instance, Grey and Willmott (2005: 5–6) draw attention to the issue of performativity. They argue that much management research presupposes the need to try to develop knowledge that is useful to managers (whether or not it actually does this is another question) with the acid test being whether or not the knowledge developed may be applied to enhance the efficient achievement of management sanctioned ends, or goals, that in effect become taken-for-granted by the researcher. In other words, knowledge only has value if it aids the means by which pre-established ends are achieved (i.e. it is performative). The problem for Grey and Willmott is that the findings of such research may at first sight appear neutral, but the point is that this is a masquerade because it pays little attention to the nature of the ends being pursued and aided by the research: in effect they are naturalized, by being assumed to be normal and thus unchallengeable. As they argue the result is that, 'ethical and political questions are unacknowledged or assumed to be resolved. It follows that issues of a fundamentally ethical and political character – such as the distribution of life chances within and by corporations – are ignored ... Efforts are then directed at the matter of how limitations and "dysfunctions" within the established system can be ameliorated without significantly changing or disrupting the prevailing order of privilege and advantage' (ibid.: 6).

Stop and Think Exercise 1.2 From the point of view of Grey and Willmott, what steps could the management researcher take to be more 'ethical' in their approach to undertaking management research?

The distinction between science ('normal science') and non-science ('pseudo-science') is essentially blurred. In the West, for some people, this line of demarcation is relatively clear; for something to be scientific it must use the agreed set of conventions, that is to say, it must use the scientific method. In other cultures, by contrast, alternative forms of inquiry are acceptable, for example meditation, and it seems inappropriate to reject them simply because those cultures are different from ours.

Moreover the conventions we agree to are simply those which have proved useful in the past. If these conventions, and so our scientific process, cease to be successful, however, it would be time to re-evaluate them. An exponent of this view, from 'management science' or operations research, believes that the extreme complexity of managerial problems, and attempts to apply natural scientific methodology to real-world, essentially social problems, have been responsible for the limited success of management science (Checkland, 1981, 1991).

Similarly, Bygrave (1989) endeavoured to account for what he regards as the unhelpful tendency for researchers to use the methods of the physical sciences in the context of research into entrepreneurship. He pointed out that many of the key contributors to business strategy have educational backgrounds in engineering, natural science and mathematics and are steeped in Newtonian mechanics at a very impressionable age. Amusingly he makes a plea for less 'physics envy' in approaches to research into the emerging field of entrepreneurship. As Van Maanen has more recently commented in his critique of positivism, 'we display more than a little physics envy when we reach for covering laws, causes, operational definitions, testable hypotheses and so forth' (1995a: 134). In relation to this issue of 'physics envy', now undertake Exercise 1.3.

Stop and Think Exercise 1.3 What are the main characteristics of the behaviour of the phenomena studied by physicists (i.e. physical things) as opposed to the behaviour of the phenomena studied by management researchers (i.e. human beings)? How are they different and if so what may be the implications for how we might study them? How does this relate to what you found out about yourself during Exercise 1.1? How do these differences relate to the issue of performativity in the natural and social sciences?

The main contemporary criticisms of positivism have been well summarized by Burrell and Morgan (1979: 255) as follows:

> *Science is based on 'taken for granted' assumptions, and thus, like any other social practice, must be understood within a specific context. Traced to their source all activities which pose as science can be traced to fundamental assumptions relating to everyday life and can in no way be regarded as generating knowledge with an 'objective', value-free status, as is sometimes claimed. What passes for scientific knowledge can be shown to be founded upon a set of unstated conventions, beliefs and assumptions, just as every day, common-sense knowledge is. The difference between them lies largely in the nature of rules and the community which recognises and subscribes to them. The knowledge in both cases is not so much 'objective' as shared.*

Accordingly, we may need to change our conception of science to one of problem-or puzzle-solving, where science is simply regarded as a problem-solving process which uses certain conventions in that process (Kuhn, 1970; Morgan, 1993). In this respect Pettigrew's (1985a) view of problem-solving as a craft may be inadvertently misleading because if researchers are regarded as 'tool users rather than as tool builders then we may run the risk of distorted knowledge acquisition techniques' (Hirschheim, 1985: 15). An old proverb says 'for he who has but one tool, the

hammer, the whole world looks like a nail'. For the most part, the way we currently practise much research in management leads directly to that view, but times are changing and increasing awareness of, and sensitivity to, the various assumptions we inevitably make in undertaking any research should further facilitate these challenges to the positivist mainstream of management research.

In view of these concerns it is unsurprising that there are a number of approaches to management research and several ways of classifying them as a means to clarify the available approaches to research. This book aims to present and discuss certain key methodological approaches to management research and their underlying philosophical rationales.

The rationale and structure of the book

Management research may be classified according to its purpose. It may primarily be concerned with solving theoretical issues; something capable of wide generalization but difficult to achieve. On the other hand, it may be much more policy-orientated by being concerned with solving a very specific practical problem in one company; this may be achieved more readily but may be seen to have little application outside the particular case. Simultaneously, research may be classified according to the broad methodological approach taken to achieving its purposes. It is primarily with regard to these different approaches that this book is concerned. The book is not primarily concerned with such issues as selecting and justifying the research topic or with literature searching and reviewing except in so far as these activities may interact with decisions about the methodological approach to the investigation. To that extent, these issues are outlined in the Chapter 2. In the same way, means of presenting research findings will not be considered in any detail. Rather, we propose to address the methodological issues entailed in the various approaches to managerial research and managerial problem-solving. While to some extent we will at times be prescriptive, we hope to avoid a 'cookbook' approach with an emphasis on how research can be done by discussing many examples of how management research is actually done.

In Figure 1.2 we outlined the research process and within this process we will be particularly concerned, to varying degrees, with stage 3, deciding the approach or strategy; stage 4, formulating the plan; stage 5, collecting data; stage 6, interpreting and analysing the data; and stage 7 evaluating one's own findings and those of others. The variation in methodological approach to management research, outlined in this chapter, provides some degree of structure to the chapters that follow. In Chapter 2 we begin by offering some help to the new researcher who wishes to make a start. Then, in Chapter 3, we address the important role of theory in underpinning practical research activities. We believe this is fundamental to understanding, especially so for vocationally orientated management students, who may be inclined to regard some philosophical matters basic to any real appreciation of methodological issues as unnecessarily theoretical and academic. Here we explore the differences between deduction and induction in much more detail and how these competing logics have a different role for theory in undertaking research which impacts upon the nature of methodologies that may be deployed. We then initially turn to deductive methodologies in the subsequent chapters.

Deductive methodologies largely form the mainstream of management research: but it is through an array of largely philosophical, but varied, critiques of this

mainstream, that alternative approaches usually begin their methodological trajectories. So in Chapter 4 we begin with looking at the laboratory or 'true' experiment – often seen as the gold standard of deductive approaches. We trace how the logic of the experiment is taken out of laboratory conditions in the form of the quasi-experiment which looks at naturally occurring events. In either case there is some reliance upon highly structured methods derived from those used in the natural sciences. These, as has been mentioned above, have as their basis a **hypothesis** testing process using standardized instruments and controls and most usually generate quantitative data.

In Chapter 5 we turn to forms of action research which, as with quasi-experiments, sometimes borrow the logic of experimentation but this methodology applies that logic to naturally occurring settings outside the laboratory. In this case, however, the solution of the problem, frequently some aspect of organizational change, is both an outcome of the research and a part of the research process itself, and used to identify further remedial interventions by the researcher. In doing so, action research may or may not involve experimental **control groups**. Action researchers would often claim both to solve idiosyncratic problems for clients and simultaneously to add to the stock of general knowledge about change processes. However, whilst the methodological origins of action research certainly lie in positivism and experimental logic, over the years it has developed into various participatory and emancipatory forms that have steadily distanced themselves, philosophically and methodologically, from these earlier beginnings.

Survey approaches, the subject matter of Chapter 6, vary in terms of their aims. All surveys use some form of questionnaire to measure phenomena important to the aims of the research. However some types of survey only try to describe the features of a population whereas others attempt to test already formulated theory deductively using complex statistical analyses in order to simulate the logic of the experiment by asserting control over the variables of interest which have been operationalized by the questionnaire format.

In Chapter 7 we present ethnographic approaches as an example of qualitative research. Firmly within the inductive tradition, qualitative methods usually express a particular philosophical critique of those working deductively that claim that the latter impose an external causal logic upon phenomena that have their own internal logics, deriving from the cultures to which people defer and refer in making subjective sense of their experience of the variable social context in which they socially construct meaningful action. There is then in this approach an emphasis on the analysis of subjective accounts which are generated by 'getting inside' situations and often involving the investigator in the everyday flow of life of the people who are being investigated (see Burrell and Morgan, 1979: 5–6). Emphasis is on generating theory grounded in empirical observations which take account of subjects' meaning and interpretational systems in order to explain by understanding that subjective domain. However qualitative methods have been most open to reconfiguration by the philosophical distancing some researchers have adopted in relation to positivism – these issues are taken up, more fully, in Chapter 8.

In Chapter 8 we return to the issue of how our methodological choices are influenced by our implicit and explicit philosophical commitments which we cannot avoid making in undertaking any research. Here we will try to describe the emergence of several key attacks upon the philosophical stance underpinning positivism and consider some of their methodological implications whilst trying to encourage the reader to attempt to interrogate their own philosophical preferences in relation to these developments. One key issue raised by the increasing methodological

diversity of management research, and which has partially developed in response to these philosophical debates and controversies, is the vexed issue of evaluating management research. This is taken up in our concluding Chapter 9. The aim of this chapter is to consider different ways in which the quality of management research may be evaluated. However this is a problematic issue because, since management research is so variable, 'quality' becomes a variable issue and therefore a somewhat elusive concept. There is a real danger that criteria used to judge the quality of the positivist mainstream of management research, that have embedded in them particular philosophical commitments, are assumed to be universally applicable and thus are used inappropriately to evaluate research adopting commitments at odds with those of the mainstream: a serious issue especially if you are on the receiving end of such unfair judgements! So in this chapter, not only do we discuss different ways of evaluating management research, but also look at how within a positivist framework multi-method approaches, such as the case study, attempt to deal with what are often presented as the inherent strengths and weaknesses that particular methods have built into them, by combining methods in a single study. We trace from this debate philosophical shifts that lead to alternative criteriologies to that presented by the mainstream of management research.

Conclusions

It will be clear from the foregoing that one of our main aims in this book is to challenge the physical science model as the only approach to knowledge acquisition, particularly for management studies. Often one finds that many researchers are committed to a particular school of thought or methodology, either because it has affinity with the academic discipline from which they have originally come, or because of a combination of habit and conviction. It is very often the lack of understanding of the precise nature of alternatives and their philosophical rationales that generates a great deal of criticism and cynicism, some of which may be justified, but more often may be embedded in prejudice and misunderstanding. We hope that an informed debate on the methodological rationales and philosophical assumptions of alternative approaches to management research, together with the implications of such issues for how we evaluate the findings of management research will contribute to a greater understanding and awareness of others.

However it is important here to emphasize a cautionary note regarding the nature of the research process illustrated in this chapter. Whilst it is always helpful to conceptualize the research process as a series of logically directed steps, this does not of course provide a description of the way in which research is actually conducted. Rather like the managerial process, which sometimes was idealized by textbooks as a logical, orderly one of planning, controlling and the like (Mintzberg, 1973), we must be very careful not to overly idealize the research process in a manner that ignores the often messy nature of actual research in practice. This warning is best summarized by the quotation from Becker below and it is always worth bearing in mind when planning any research.

As every researcher knows there is more to doing research than is dreamt of in philosophies of science, and texts in methodology offer answers to only to a

fraction of the problems one encounters. The best laid research plans run up against unforeseen contingencies in the collection and analysis of data; the data one collects may prove to have little to do with the hypothesis one sets out to test; unexpected findings inspire new ideas. No matter how carefully one plans in advance, research is designed in the course of its execution. The finished monograph is the result of hundreds of decisions, large and small, made while the research is under way and our standard texts do not give us procedures and techniques for making those decisions . . . It is possible, after all, to reflect on one's difficulties and inspirations and see how they could be handled more rationally the next time around. In short one can be methodological about matters that earlier had been left to chance and improvisation and thus cut down the area of guesswork. (Becker, 1965: 602–3, quoted in Kulka, 1982)

Method of scoring Exercise 1.1

Count each tick as a plus and each cross as a minus. Subtract ticks from crosses. The greater your minus score the more you are disposed towards inductive research approaches and, conversely, the greater your plus score the more you are disposed towards deductive approaches. The nearer your score is to zero, the more flexible you are likely to be when making methodological choices.

Further reading

The philosophical debate between Pfeffer (1993) and Van Maanen (1995a) about the relevance of natural science methodology to management research illustrates two very different perspectives regarding management research which have significant methodological implications which are explored throughout the rest of this book. The nature of the diversity in management research is outlined and explained by Hardy and Clegg (1997) with specific reference to an array of philosophical disputes that continue to impact upon how research is undertaken. Methodological innovations, in the domain of qualitative methods, that have developed in response to some of those philosophical disputes, are explored by Prasad and Prasad (2002). Meanwhile Willmott (1998) provides an interesting account of the development of approaches to management research that question the prevailing positivist consensus and its somewhat technocratic agenda: a critique that is further developed through the evolution of Critical Management Studies which is comprehensively reviewed by Keleman and Rumens (2008) and in an edited collection of essays by Grey and Willmott (2005). For an analysis of how researchers methodologically react to institutional pressures to conform to the quantitative mainstream of management research the reader should turn to Symon et al. (2008). Finally, for an extremely useful overview of the factors that impact upon how researchers make choices about research methods the reader should turn to Buchanan and Bryman (2007). In this article they argue how the choice of research method is not just influenced by the aims of the research and the researcher's own philosophical commitments, but also by a combination of other factors, including those deriving from significant characteristics of the field of research including various institutional pressures, and other personal attributes of the researcher.

The following recommended readings are available on the companion website:

Fournier, V. and Grey, C. (2000) At the critical moment: conditions and prospects for critical management studies, *Human Relations*, 53(1): 7–32.

Grey, C. and Mitev, N. (1995) Management education: a polemic, *Management Learning,* 26(1): 73–90.

Symon, G., Buering, A., Johnson, P. and Cassell, C. (2008) Positioning qualitative research as resistance to the institutionalization of the academic labour process, *Organization Studies,* 29(10): 1315–36.