Part I

PLANNING THE RESEARCH PROJECT

Chapter 1

INTRODUCTION

1.1 WHAT IS THE NATURE OF FUNDAMENTAL ORGANIZATIONAL RESEARCH?

The aim of fundamental organizational research is to gain insight into certain events, processes and phenomena. In this respect, fundamental organizational research is no different from any other scientific research. Fundamental organizational research, however, specifically refers to phenomena about and within organizations (for example, causes of absenteeism, effects of a particular management style, or the consequences of a particular financial reporting method).

Researchers want to describe, explain, predict and affect these phenomena. These phenomena may concern different aspects of an organization: the external environment such as suppliers, investors and clients; or the internal environment, such as personnel. The phenomena under investigation can be found at different levels: at an individual, group, organizational level; or at a societal level. All these aspects and levels are linked.

1.2 WHAT DISTINGUISHES FUNDAMENTAL ORGANIZATIONAL RESEARCH FROM APPLIED ORGANIZATIONAL RESEARCH?

In studying an organization, a researcher may have two objectives in mind:

1. To make a contribution to scientific knowledge by gaining a better understanding and explanation of organizations (*fundamental research*).

2. To make a contribution to a real-world situation by solving problems (*practical* or *applied research*).

A researcher may thus conduct research out of pure scientific interest in order to acquire general knowledge (the researcher's major aim is *to understand*) or may investigate a certain problem situation in order to solve this specific problem (the researcher's major aim is *to interfere*).

Although there are similarities between pure or fundamental, and practical or applied research, there are also clear differences. The main difference is that fundamental research primarily focuses on acquiring scientific knowledge, mostly in the form of explanations formulated in *theories*. Applied research primarily concerns real-world problems that must be solved, the focus is on *practical actions*.

To a certain extent, the difference between fundamental and applied research is artificial. Fundamental organizational research may lead to – intended or unintended – important adoptions or even a change in management. In addition, theories of a organizational scientist practically always concern issues that are relevant in real-life situations. No scientist will come up with a theory on a random issue. The occasion is usually a practical event.

Conversely, applied research may give rise to theory formulation. In solving problems, practice-oriented organizational researchers encounter new questions and problems, and find ways to solve them. By a systematic classification and analysis of their experiences, practice-oriented researchers can make a contribution to a scientific organizational theory.

Fundamental research is based on theories and abstract concepts. Therefore, in going from fundamental to applied research, concepts and their interrelationships must be operationalized. That is, they must be made concrete, specific and quantifiable. Vice versa, in going from applied to fundamental research, concrete and specific phenomena must be generalized.

An important difference between fundamental and applied research is related to the origin of the research questions. In fundamental organizational research, research questions arise from theory or scientific literature, and are therefore *created* by the researcher. In applied organizational research, research questions often stem from a particular client in an organization and are thus *presented* to the researcher. Therefore, applied organizational research often has a different *starting point*. For example, researcher and client have to exchange information or reach an agreement on the exact nature of the research question before the start of the research project.

Furthermore, fundamental organizational research and applied organizational research have different *end points*, the latter paying more attention to questions such as: What is the use of the study? For whom is this study interesting? In other words, the emphasis in applied organizational research is on usability and practical relevance.

It is important to note that – despite its focus on usability – applied organizational research is based on scientific methods. Applied research is just as scientific as fundamental research. Whether research can be qualified as scientific or not, depends on the research method – not on the research objective.

1.3 METHODOLOGICAL REQUIREMENTS AND RULES OF FUNDAMENTAL RESEARCH IN GENERAL

Fundamental research must meet a number of requirements. First, researchers must have a good knowledge of what already has been found out with respect to the research topic and should base their research questions on previous findings in the literature. A researcher cannot therefore just come up with a research question, but has to take into account all the findings from previous research.

Furthermore, researchers must stick to a number of methodological rules, reflect on them explicitly and answer for their use. Scientific research:

- is objective, reliable and precise;
- can be replicated;
- is public;
- is ethically well considered;
- presents simple answers to research questions ('parsimonious'); and
- presents general or generalized answers to research questions.

Objective means that research data are collected independently of the personal values of the researcher. *Replication* means that other researchers should be able to repeat the study. This leads us to another requirement: research must be *public*. In principle, the findings of research should be accessible for other researchers, so that they are able to repeat the research. Publicity also refers to the research design. Therefore, research reports pay a great deal of attention to the design and conduct of the research. *Ethically well considered* means that the conduct of research and its findings may not cause any harm – directly

or indirectly – to all parties involved in the research. *Simple* means that the research is conducted by using a minimum number of concepts and hypotheses on the relationships between them. Generally speaking, a theory that explains a phenomenon in a simple way is preferred to a more complex theory explaining the same phenomenon. Finding answers that can be *generalized* means that the research findings should be generally valid. That is, a researcher must produce findings that can be applied to other settings.

It is important to note that one cannot meet all requirements at the same time. It may be possible to combine two requirements, for example, to seek for answers that are simple and can be generalized. However, meeting two requirements at the same time will practically always be at the expense of a third requirement. This is further illustrated in Figure 1.1.

In Figure 1.1, general research is opposed to specific research and simple research is opposed to complex research. The opposite of precise research is global research. The diagram shows that simple and precise research will typically be specific, and thus less general. Conversely, general and precise research is often complex. This illustrates that it is practically impossible to meet the three requirements of general, simple and precise research at the same time.

Most of the time, general and simple statements are not precise, but global. For example: 'Organizations that do not become more flexible and customer-oriented will not survive'. We can easily think of organizations for which this statement does not apply. Besides that, this statement leaves us with questions: flexible in what; customer-oriented to whom? General and precise statements are often not simple, but as complex as reality itself.

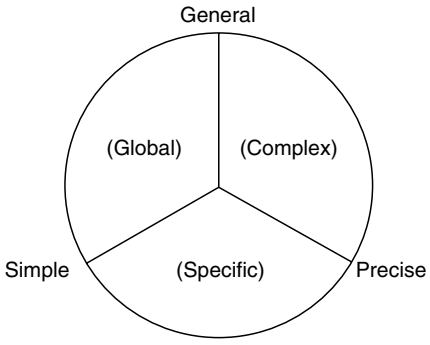

Figure 1.1 Research results: different quality criteria (from Weick, K.E. 1979. *The Social Psychology of Organizing*, 2nd ed. Reading, MA: Addison-Wesley).

For example:
'Socially supportive leadership affects the organizational commitment of independent task units, if dependent task characteristics, self-management, group cohesion and a high level of self-efficacy are observed for the group members involved'.

Often statements can be simple and precise only at the expense of generality.

For example:
'On Wednesday 15 April, 1998, the railroad traffic at Amsterdam Central Station was blocked from 16.14 for 43 minutes as a result of a power failure'.

A researcher should therefore – depending on the situation and nature of the problem – select two out of the three requirements. Meeting all three requirements at the same time is a mission impossible.

It is important to note here that a number of the requirements of objectivity, reliability, preciseness, replicability, publicity, ethics, simplicity and generalizability in conducting fundamental organizational research are harder to meet than in any other research. For example, the results of fundamental organizational research that was based on a specific organizational situation may be in conflict with the desired generalizability of the results. Replicability may also form a problem: it is not always possible to study the same phenomena in the same company in the same way. A study of organizational change is a good example: this type of research cannot be repeated under the same circumstances.

Finally, the desired publicity may be at stake because organizations are – because of competitors – not always keen on releasing information.

Meeting the requirements of scientific research is more difficult for an organizational researcher than for any other researcher. However, this does not mean that less effort is allowed: organizational researchers must take an objective, neutral and independent position at all times. They must respect all the different theories, facts, argumentation and logic in their line of reasoning. Clear and simple concepts must be defined to the maximum possible extent; and operationalized as well. Choices concerning the research method must be made explicit and answered for. Also, researchers must be aware of the ethical consequences of their actions for (persons within) the organization, during and after the research.

1.4 CLIENTS

Organizational research mostly involves clients. A client may take many forms. A client may be external, for example, a company hiring a student for doing research – or internal, for example, the HR department of the company you work for asking you to study absenteeism. You can also think of a researcher at a university conducting research for an external client, a government department for instance.

The frequency of contact between researcher and client may vary. Sometimes the parties involved prefer to have no contact at all in order to safeguard the objectivity of the research. At other times, the only function of contact is the exchange of information. The researcher is then usually the one who takes steps towards contact. He or she decides when and what information is given to whom. In this situation, the researcher is the only one responsible for the research.

Contact is more frequent and intense when the client makes decisions about the individuals and issues that will be involved in the research, the interpretation of the results, or the content of the final research report. This influence may lead to very careful and delicate negotiations between the researcher and the client. For example, the client wants particular results. By narrowing down the research design, research method and sample size, it may be possible to obtain such results. Thus, indirectly, the client manipulates data. The research may be intended to maintain an existing situation, or to justify or postpone a decision. It is important to be aware of this influence. An organizational researcher must always watch out for possible hidden intentions of a client.

The conduct of research may lead to unconscious or unintended changes. For example, some groups of people receive certain relevant information – and other groups do not. It is also possible that the research brings up issues that have never received any attention within the organization. One of the issues playing a role here is the time frame between the research and the feedback on the results. Quick availability of results is the best starting point for a more detailed discussion on the causes (of the results) and any possible changes.

ORGANIZATIONAL DIAGNOSIS

The procedures in *organizational diagnosis* provide a clear example of cooperation between a researcher and client. Organizational diagnosis centres on a preventive study of the current organizational situation aimed at a timely identification of chances and threats. First, the internal and external functioning of an organization is mapped out in order to determine which situations are considered problematic. Second, an analysis is made of the exact nature of the problem and the fields of force of the different parties. Not all the parties experience problems in the same way. An insight into these differing views is gained by looking at the differences and similarities between, for example, the functional areas in an organization, the divisions, departments, regions and hierarchic levels. The information used for this investigation may (partly) be provided by the client. In addition, the researcher determines whether the problem is an individual, group, organizational or social problem. In this way, the problems are classified, key persons are identified, and priorities – according to these key persons – priorities are listed. Finally, consent on the steps to be taken must be reached, and formal arrangements on this matter must be made.

ACTION RESEARCH

Another example is *action research*. This type of research is often used in organizations with the aim of positively affecting cooperation problems, organizational change, organizational culture, and other situations in which more persons are involved.

In action research, the researcher makes an inventory of the problem field and – together with the persons involved in the organization – gains insight into the relationship between subfields. There are two reasons for actively involving these persons in such an organizational diagnosis:

1. The research provides a shared insight for all parties involved into their own situation, enabling them to suggest solutions based on their experiences.

(*Continues*)

Action Research (*Continued*)

2. The research convinces parties involved of the necessity to change, and motivates them hereby.

One important function of action research is thus to reduce the resistance to change. Often, workshops (work conferences) are organized to reach explicit commitment and agreement on a change. In addition, so-called *change agents* can be employed to facilitate changes.

The report of action research mostly takes the form of an intervention that is subject to evaluation, comments and adjustments.

Summarizing, action research adds to the implementation of change. This experience also generates knowledge. In such cases, it can be qualified as scientific research that can contribute to the development of a theory, and researchers must be able to explain to fellow researchers why they used certain scientific rules.

1.5 OTHER PARTIES INVOLVED IN THE RESEARCH PROJECT

Besides the client, there are other parties involved, who have their own interests and who may try to exert influence on the research. Colleagues, for example, are often concerned with evaluating the scientific relevance of research. They check whether research has been conducted according to the rules of science. Colleagues may be 'immediate' colleagues, working at the same university or research institute. They may also be professional colleagues: working on the same research topic, all over the world. Often, colleagues form groups, each of which represents a theoretic mainstream. On congresses, colloquia and in scientific journals, a forum of fellow scientists decides on the value of each individual research. In this way, the quality of the building blocks of scientific knowledge is being watched. Respondents may also have an interest in the results of the research. For example, a study is conducted into the amount of time (the number of hours) that a student spends on a specific subject. Students do not want their course to be worth fewer credits.

In general, personal influence from researchers in scientific research is reduced to the maximum possible extent. For example, the statement 'the aim of research is to extend the general body of

scientific knowledge' eliminates the client as a source of influence. The methodological rules that a researcher must follow in conducting research are directed at the principle of all researchers being exchangeable.

1.6 OVERVIEW OF THE STEPS IN THE RESEARCH PROCESS

The first step in scientific (or, more specifically, fundamental organizational) research is to define the subject of research: what is the research about? Then formulate a problem definition – that is, the key question you want to address in your research. As mentioned earlier, a problem definition may originate in a scientific interest, or stem from a real-life question, for example a client in an organization.

The second step is to gather all the relevant information that can be found on the subject: reading the literature and having exploratory talks with *experts* or so-called *key persons* of the organization involved is necessary to specify the problem explicitly.

Next, the problem definition, design and planning of the research are prepared in further detail. For fine-tuning in this matter, the client may be contacted. On the basis of specific literature reviews, formulate your expectations ('hypotheses') with regard to the practical part of the research. For example: 'Individuals with a low level of job satisfaction will call in sick more often than individuals with a high level of job satisfaction'. To test these expectations, design an empirical research. Look for or create *measurement tools* and select *research units* or *research objects*, for example, individuals, organizations or annual reports.

Next, the research is conducted. Collect the data. Process, prepare, analyse and interpret them. The final steps are the report and presentation of the research project.

Figure 1.2 gives a description of all the successive and interrelated steps. Each chapter in this book corresponds with a step in scientific research.

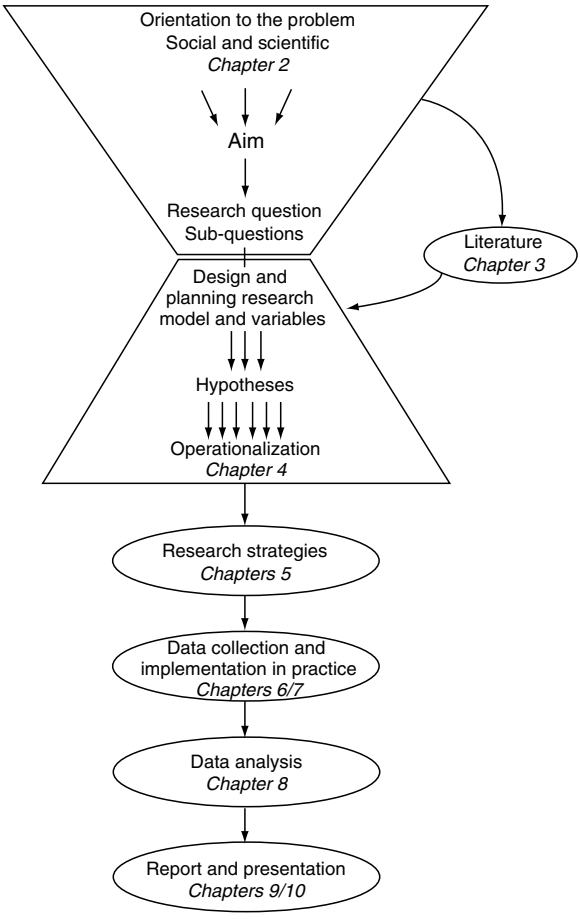

Figure 1.2 Overview of research steps.