1

# CONCEPTUAL FOUNDATIONS OF QUALITATIVE CONTENT ANALYSIS

Chapter objectives —

In this chapter you will learn about:

- The distinction between qualitative and quantitative data
- The characteristics of qualitative, quantitative, and mixed methods research
- The basic problems of understanding texts; hermeneutic approaches
- The importance of the research questions for the analysis
- The need for methodological rigour in qualitative research
- The history of qualitative content analysis
- Important characteristics and a definition of qualitative content analysis
- Typical data types
- Relevant methodological issues.

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## 1.1 Qualitative and Quantitative Data – A Few Clarifications

This book is about methods for the analysis of qualitative data, but what do the terms 'qualitative data' and its complement, 'quantitative data', mean? While the term 'quantitative data' is directly associated – even by laypersons – with numbers, statistics and, in the economic field, possibly with costs, the term 'qualitative data' is not equally self-explanatory, because it has very different meanings in different scientific disciplines as well as in everyday life. In human resources, for example, it includes such areas as employee satisfaction, motivation, and the work environment – in contrast to quantitative (hard) data such as personnel costs and headcount. For geographers, the population figures of different municipalities represent typical quantitative data, while classifying a municipality into use zones involves qualitative data. Somewhat confusingly, in the methodological literature on the analysis of quantitative data, the phrase 'qualitative data' often refers to data on nominal or categorical scales, that is, this data type is a subset within the field of standardized (quantitative) research. There you will even find textbooks that introduce the term 'qualitative data' in the title, but which actually involve quantitative analysis methods for categorical data.

In the context of this book, we will use the following pragmatic definition of 'quantitative' and 'qualitative':

Quantitative data are numerical data (i.e., numbers).

Qualitative data are more diverse: they can be texts, but also videos, images, photographs, audio recordings, cultural artefacts, and more.

Despite the multimedia revolution that has been taking place in recent decades, and despite the noted epochal shift towards the visual in our culture, texts are still the dominant type of qualitative data in social sciences, such as psy-

chology and education. The methods of qualitative content analysis (QCA) described in the following are designed for the 'text' data type, and texts will be used in the examples shown. In principle, the methods can be transferred to other types of qualitative data such as videos, images, or photos.

Unlike the attitude often found in textbooks on social research methods, we do not view qualitative data as inferior to quantitative types of data. There is no hierarchy of analytical forms similar to that of scales – which includes nominal at the bottom, then ordinal, then interval and ratio at the highest level. Real science does not begin or end with quantification and the statistical analysis of quantitative data. One glance at other scientific disciplines proves this point. In many branches of science, not least in climate research, geophysics, and medicine, scientists work with non-numerical data, such as in the field of advanced medical imaging techniques (MRI, NMRI, etc.). Qualitative data are by no means a *weak* form of data; rather they are a *different* form that requires other, no less complex, and methodologically controlled analytical procedures.

An interesting aspect in this context has been introduced by Bernard and Ryan (2010, pp. 4–7). They have pointed out the ambiguity of the term 'qualitative data

analysis' which is immediately apparent when the three words 'qualitative', 'data', and 'analysis' are bracketed together in different ways. While '(qualitative data) analysis' refers to the analysis of qualitative data in the above sense of texts, images, films, etc., 'qualitative (data analysis)' means the qualitative analysis of all kinds of data, that is, both qualitative and quantitative data. Differentiating between data and analysis results in a four-cell table<sup>1</sup> as presented in Table 1.1.

Table 1.1 Qualitative and quantitative data and analysis (according to Bernard & Ryan, 2010, p. 4)

	Qualitative data	Quantitative data
Qualitative analysis	A	В
	Interpretive text studies, hermeneutics, grounded theory, etc.	Search for and presentation of meaning in results of quantitative processing
Quantitative analysis	С	D
	Turning words into numbers, quantitative content analysis, word frequencies, word lists, etc.	Statistical and mathematical analyses of numerical data

The upper left cell A and the lower right cell D appear well known to us. Cell A contains the *qualitative analysis of qualitative data*, for instance in the form of hermeneutic analyses, grounded theory, or other qualitative analysis methods. Cell D, the *quantitative analysis of quantitative data*, is also familiar to us. This involves using statistical methods, that is, the typical process of analysing numerical data. However, the table also includes two unexpected combinations, namely the *qualitative analysis of quantitative data* (cell B) and the *quantitative analysis of qualitative data* (cell C). The latter may include, for example, the analysis of word frequencies and word combinations. The qualitative analysis of quantitative data (cell B), which involves interpreting quantitative data, begins when the statistical procedures have been done and the results are available in the form of tables, coefficients, parameters, and estimates. At this point it is time to identify and interpret the *meaning* of the results and to work out their substance. Without this qualitative analysis work, the mere numbers remain sterile and literally *meaningless*. As Marshall and Rossman emphasized, the interpretive act is inevitable:

The interpretive act remains mysterious in both qualitative and quantitative data analysis. It is a process of bringing meaning to raw, inexpressive data that is necessary whether the researcher's language is standard deviations and means or rich descriptions of ordinary events. Raw data have no inherent meaning; the interpretive act brings meaning to those data and displays that meaning to the reader through the written report. (Marshall & Rossman, 2011, p. 210)

<sup>&</sup>lt;sup>1</sup>The table is based on the earlier differentiation by Alan Bryman (1988) of qualitative and quantitative *research* rather than qualitative and quantitative *data*. Bryman classified cells B and C of the table as 'incongruent'.

Bernard and Ryan's differentiation makes it clear that the type of data does not necessarily determine the type of analysis. If one moves away from such a strict connection between data type and analysis type, it is clear that both a quantitative analysis of qualitative data and a qualitative analysis of quantitative data are possible. Thus, there is no reason to assume a deep divide between the qualitative and quantitative perspectives. In everyday life, as in science, we humans have a natural tendency to combine methods. We humans always try to keep both perspectives – the qualitative and the quantitative aspects of social phenomena – in mind.

# 1.2 Qualitative, Quantitative, and Mixed Methods Research

In a book on methods of analysing qualitative data, one might expect not only a definition of the terms 'qualitative data' and 'quantitative data', but also a definition of the term 'qualitative research' which goes beyond the phrase 'collection and analysis of non-numerical data'. There are many relevant definitions and many attempts to contrast quantitative and qualitative research (e.g., in Johnson & Christensen, 2020, pp. 33–34).

Flick's textbook *An Introduction to Qualitative Research*, now in its 6th edition (Flick, 2018a), begins with a note on the dynamics of qualitative research:

Qualitative research continues to be in an ongoing process of proliferation with new approaches and methods appearing and ... being taken up as a core part of the curriculum in more and more disciplines. (Flick, 2018, p. xxix)

In the latest edition of their handbook on qualitative research, Denzin and Lincoln emphasize the diversity of qualitative research, which shows how impossible it is to provide a 'one-size-fits-all' definition:

The open-ended nature of the qualitative research project leads to a perpetual resistance against attempts to impose a single, umbrella-like paradigm over the entire project. There are multiple interpretive projects, including the decolonizing methodological project of indigenous scholars and theories of critical pedagogy; new materialisms and performance (auto)ethnographies; standpoint epistemologies, critical race theory; critical, public, poetic, queer, indigenous, psychoanalytic, materialist, feminist, and reflexive, ethnographies; grounded theorists of several varieties; multiple strands of ethnomethodology ... (Denzin & Lincoln, 2018, p. xv)

Today, qualitative research presents itself as an almost unmanageable field of individual, sometimes exotic, methods and techniques.<sup>2</sup> In the early 1990s, Tesch tried to order

<sup>&</sup>lt;sup>2</sup>At least, this is the impression one gets when reading Denzin and Lincoln (2018) or the abstracts of the Qualitative Inquiry conferences (www.icqi.org).

the diversity of approaches to qualitative research. The result was a tableau of almost 50 different qualitative approaches, trends, and forms of analysis, ranging from 'action research' to 'transformative research' (Tesch, 1990, pp. 58–59). Tesch arranged the various approaches in a *cognitive map* and differentiated them according to whether the research interests were focusing on the characteristics of language, the discovery of regularities, understanding the meaning of the text or the act, or reflection.

It seems as if almost every author of a textbook on qualitative methods feels committed to creating a new systematization of qualitative approaches. The results of such systematizations differ greatly. For example, Creswell and Poth (2018) distinguish five (main) approaches of qualitative research: 'narrative research', 'phenomenology', 'grounded theory research', 'ethnography', and 'case study'. In contrast to Tesch's differentiation based on research interests, Creswell and Poth focus on epistemological and pragmatic aspects.

This is not the place for a synopsis of this multitude of systematizations; we merely point out the existence of a great variety of qualitative approaches that do not share a uniform theoretical and methodological understanding (Flick, 2007, pp. 29–30). Accordingly, the definitions of 'qualitative research' vary greatly. Some elements, including case orientation, authenticity, openness, and integrity, can be found in almost every definition. It will suffice here to refer to the 12 characteristics of qualitative research practice listed by Flick et al. (2017, p. 24):

- 1 Spectrum of methods rather than a single method
- 2 Appropriateness of methods
- 3 Orientation to everyday events and/or everyday knowledge
- 4 Contextuality as a guiding principle
- 5 Perspectives of participants
- 6 Reflective capability of the investigator
- 7 Understanding as a discovery principle
- 8 Principle of openness
- 9 Case analysis as a starting point
- 10 Construction of reality as a basis
- 11 Qualitative research as a textual discipline
- 12 Discovery and theory formation as a goal.

In textbooks on research methods, however, the position of a strict opposition between quantitative and qualitative research is not the only one advocated. Oswald (2010), for example, argues that qualitative and quantitative methods are located on a continuum, that is, there are similarities and overlaps and a variety of useful combinations between them. According to Oswald, there are qualitative characteristics (usually called categorical data) in quantitative research and the results of statistical analyses are also *interpreted*. Conversely, qualitative research often includes quasi-quantifications, which is reflected in the use of terms such as 'frequently', 'rarely', 'usually', and 'typically'. The result of Oswald's reflections is the following instructive description of the difference between qualitative and quantitative research:

Qualitative research uses non-standardized methods of data collection and interpretive methods of data analysis, where the interpretations are not only related to generalizations and conclusions, as in most quantitative methods, but also to the individual cases. (Oswald, 2010, p. 75)

What shines through in Oswald's position, namely that qualitative and quantitative methods are not mutually exclusive, is the focus of the discourse on mixed methods. Mixed methods approaches are – as the leading actors argue – a new contemporary understanding of methods that tries to overcome the old duality of approaches in a new, third paradigm. Scholars such as Bazeley (2018), Creswell and Plano Clark (2018), Mertens (2018), Morgan (2014), and Tashakkori et al. (2021) have elaborated mixed methods approaches in detail and developed a variety of precise design proposals for mixed methods research. In terms of research practice, the proposals of these authors are extremely interesting and relevant for research projects in many scientific disciplines. Methodologically, Udo Kelle's work to integrate methods should be taken into account in this context (Kelle, 2008). While the mixed methods movement is committed to pragmatism (Creswell & Plano Clark, 2011, pp. 22–36), Kelle's (2008) approach is epistemological, beginning with the controversy regarding the role of explanation and understanding that shaped the humanities and natural sciences for more than 100 years. His concept of the integration of methods is methodological and he attempts to substantiate the combination of methods at a much deeper level. Kelle goes back to the dawn of empirical social research and the qualitative-quantitative controversy, and asks how it is possible to develop empirically-based theories in the social sciences and arrive at a concept of 'causal explanation', which, in principle, was already present in Max Weber's research (Kuckartz, 2009).

## 1.3 The Challenge of Analysing Qualitative Data in Research Practice

The methodological orientation of empirical research in the social sciences, education, health sciences, political science and, to a lesser degree, psychology has shifted in recent decades: qualitative research has established itself and is very popular today, especially among young researchers. Meetings and conferences such as the Berlin Methods Meeting (www.berliner-methodentreffen.de) or the International Congress of Qualitative Inquiry (www.icqi.org) are evidence of the great resonance that qualitative research produces worldwide today.

Along with this shift of research methods towards qualitative methods, the amount of appropriate methods literature that is available has increased, especially literature in English. This literature is mainly concerned with data collection and design in qualitative research, while questions of analysing qualitative data are often dealt with in quite general terms and it is not clear how exactly to proceed.

In an online German doctoral forum, for example, a graduate student posted the following plea for help:

Hello,

I really wanted to create an online survey for my MA thesis (it's about differentiation/separation in the relationship of adult children to their parents). Since my constructs are difficult to understand, my supervisor recently said: Have you ever thought about tackling the whole research project qualitatively and conducting interviews?

Hmm. Now I am rummaging through a lot of literature, mostly from the social sciences. But I simply cannot find anything tangible for analysing qualitative data. This is all very vague. And I would really like to report some results at the end. Feeling a little hopeless at the moment. Can anyone here give me any tips?

Regards,

Dana

Dana is right: a tangible and concrete method for analysing qualitative data is not easy to find. And that is where this book comes in: our aim is to show systematically and methodically ways in which qualitative data can be analysed. *Collecting* qualitative data is not only interesting and exciting but also usually feasible without major *methodological* problems. The difficulties with which researchers are faced in the early stages of a project are more related to field access or one's own behaviour in the field, rather than the methods employed to collect in the narrower sense. But what comes after you have collected the information, when the interviews or videos have been recorded and the field notes are written?

Students are not the only ones who feel unsure at this point in the research process, and many avoid the risks associated with qualitative research, because the analysis process and its individual steps are not described precisely and in enough detail in the literature and are therefore difficult to carry out. Even in the reports of large-scale funded research projects, there are often only very imprecise descriptions of the approach to data analysis. Researchers often use empty phrases or merely describe that they 'based their analysis on the grounded theory', 'interpreted according to Silverman', 'on the basis of qualitative content analysis', or by 'combining and abbreviating different methods'. A precise, well-understandable representation of the procedure is often omitted.

On the other hand, the mentality of 'anything goes' can often be found in the discourse on qualitative data analysis methods. Researchers who read qualitative methods

<sup>&</sup>lt;sup>3</sup>The slogan 'anything goes' of the American philosopher of science Paul Feyerabend was not meant as a licence for researchers to do anything they wanted methodically speaking, but as an invitation to use creative methods in their research.

texts and come to such a conclusion believe that they can more or less do what they want, make glorious interpretations, and let their own imaginations and associations have free rein, without the danger of strict methodologists rejecting them and/or putting them in their place. They can even call on the constructivist and postmodern positions encountered in the discussion of the quality standards for qualitative research, which emphasize that the social world itself is constructed cognitively and that multiple worlds and world-views exist side by side; thus, the question of universal and objective quality standards can be regarded as obsolete. Such positions are not shared in this book. For us, Seale's position of a 'subtle realism' (Seale, 1999a) is convincing: in the discourse on the quality of qualitative research, Seale pleaded pragmatically (building on Hammersley, 1992) for a compromise between the two extremes, namely between the adherence to the rigid rules of classical research concepts (objectivity, reliability, validity) on the one hand and the rejection of general criteria and standards on the other. Promoting the formulation of appropriate quality standards and precise descriptions and documentation of analytical procedures (see Chapter 9) would undoubtedly increase credibility and reputation when addressing a 'sceptical audience' (Seale, 1999a, p. 467) as well as research-funding institutions.

# 1.4 Understanding Meaning, the Role of Prior Knowledge, and Hermeneutics

How can you analyse a text in the context of social research? Without *understanding* a given text, you can only analyse its characters and words or its syntactic properties. This makes it possible to find out more about the length of the text, the total number of words and the number of different words, the average sentence length, the number of subordinate clauses, and so on. However, if you want to analyse the semantics of the text, you will have to address the question of how to understand and interpret it. In everyday interactions, we naively take it for granted that we can *understand* each other, as if we could open the newspaper, for example, and *understand* an article about the euro debt crisis in 2010 and how European countries are dealing with it. However, at second glance, it becomes clear that real understanding requires a wealth of prerequisites and extensive prior knowledge. First and foremost, we have to understand the language in which people are communicating. If the same newspaper article were written in *Kinyarwanda*, few of us would understand it. Most readers probably do not even know what Kinyarwanda is at this point. Even if you understand the language, you must also have a good deal of previous knowledge in order to understand, to continue the above

<sup>&</sup>lt;sup>4</sup>It is a language spoken in the East African country of Rwanda and the eastern Congo.

example, what the euro, the different countries in the EU, and the different financial policies are in order to understand the article. Finally, in order to really understand it, you have to know the history of the euro and be familiar with the aims of having a single currency in the EU.

The more we know, the better we are able to recognize that a text has different levels of meaning. For example, only with previous knowledge on the subject could you recognize that the politician quoted in a newspaper article who used to be a strict opponent of financial support for Greece has now given surprisingly balanced and convincing arguments in favour of such support. Moreover, if you know that that same politician is an active member of the state government, you can assume that that governmental body may be changing its stance on the issue as well.

It is impossible to gain an inductive understanding of a text by itself. Middle Age biblical illustrations serve as a good example of this: the more you know about the iconography of the time and the better your knowledge of Christian symbolism, the better you will understand a given illustration. This sort of understanding cannot be deduced from the illustration alone, as Christian symbolism goes beyond the illustration – and the Bible cannot be construed inductively based on illustrations of different biblical scenes.

Important points of orientation for the analysis of qualitative data are general considerations about understanding, specifically understanding and interpreting texts. In the German-speaking world, this is often associated with *hermeneutics*. But what exactly is meant by hermeneutics? What does this term mean, which hardly plays any role in the Anglo-Saxon social science methodological literature?

The term 'hermeneutics' is derived from the Greek word ἑρμηνεύειν, which means to explain, interpret, or translate. Hermeneutics, then, is the art of interpretation, the techniques involved in understanding written texts. As a theory of understanding, hermeneutics has a long history that extends as far back as the medieval interpretations of the Bible or even to Plato. Within the context of scientific thought, hermeneutics appeared in the late nineteenth century as leading philosophers, including Schleiermacher and Dilthey, proposed it as the scientific approach of the humanities in contrast to the explanatory methods of the natural sciences. Cultural products such as texts, illustrations, pieces of music, or even historical events were to be developed and understood within context. Dilthey wrote that we explain nature, but in the human sciences we have to establish a different methodological foundation based on understanding and interpretation (*Verstehen*). Dilthey's famous sentence 'We explain nature, we understand psychic life' is programmatic (Dilthey, 1894/1977, p. 27).

The contrast between explaining and understanding has been discussed a great deal in the literature on the philosophy of science and we will not address it any further here. If you are looking for an instructive text on the topic, see Kelle (2008, pp. 159–164), who tries to overcome the opposition of explaining versus understanding with a new approach. Kelle relies on the concept of multiple causality developed by the Australian philosopher John Mackie.

Over time, hermeneutics has evolved – from Schleiermacher and Dilthey to the modern-day approaches of Gadamer, Klafki, Mollenhauer, and others,<sup>5</sup> there is no single, uniform hermeneutical approach today. Some time ago, Anglo-American philosophers also became aware of hermeneutics through the work of Richard Rorty (1979). For the purposes of this book, we are interested less in the historical, theoretical, and philosophical aspects of hermeneutics and more in the guidelines hermeneutics offers for the analysis and interpretation of data collected in qualitative research projects. How do we take a hermeneutical approach to analysing the content of texts? Klafki presented a comprehensive example based on an interpretation of a Humboldt text about how to construct the Lithuanian city school system (Klafki, 1971/2001). In his text, Klafki formulated 11 methodological insights for his hermeneutical approach, which still apply today. Four of the main points are important within the context of QCA.<sup>6</sup>

First, pay attention to the conditions under which the text was created. Bear in mind the conditions under which the text to be analysed (e.g., an open interview) was created. Who is communicating with whom, under what circumstances? How much and what kind of interaction did the researcher have with the field prior to the interview? How would you characterize the interaction between interviewers and interviewees? What information have the research participants received about the project in advance? What are the mutual expectations? What role does social desirability in the interaction possibly play?

Second, the hermeneutic circle. The central principle in the hermeneutic approach is that a text can only be understood as the sum of its parts and the individual parts can only be understood if you understand the whole text. One approaches the text with a pre-understanding, with assumptions about the meaning of the text, reads it in its entirety, works through the text, which leads to a further development of the original pre-knowledge – always provided, of course, that one shows openness in working through the text and is prepared to change previously existing judgements.

Any attempt to understand a text presupposes some prior understanding on the part of the interpreters. Klafki noted that reading through the text and/or parts of the text multiple times results in a circular process (Klafki, 1971/2001, p. 145); however, it would seem that a spiral serves as a more suitable illustration since you do not circle back to your starting point. Instead, you develop a progressive understanding of the text. The hermeneutic circle or spiral is often visualized as shown in Figure 1.1.

<sup>&</sup>lt;sup>5</sup>Gadamer elaborated a concept of philosophical hermeneutics; in his book *Truth and Method* (2013) he dealt with the nature of human understanding.

<sup>&</sup>lt;sup>6</sup>In this section, we draw on central statements on hermeneutics in Vogt (2016).

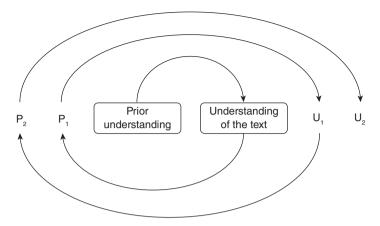


Figure 1.1 The hermeneutic approach

Third, the hermeneutic difference. The notion of the hermeneutic difference points to the central problem of all verbal communication, namely that we can only understand texts and communication in general – or think we understand them – through an interpretive process. The hermeneutic difference can vary greatly in degree. It is very high when, for example, we visit a foreign country and cannot understand the language that is spoken, even higher when – as in Chinese – the character system is foreign to us, and we cannot even look up the unknown words in a dictionary. In everyday communication, the hermeneutic difference seems small or even obsolete to us. According to Schleiermacher, no hermeneutics is necessary to talk about the weather or when we order 'Five rolls, please' at the bakery. As Gadamer noted, hermeneutics takes place in the grey area between foreign and familiar: 'Hermeneutics is situated in this place in between' (Gadamer, 1960, p. 279).

Four: Accuracy and suitability. Hermeneutic procedures attempt to understand cultural products such as texts, images, and art. As Mollenhauer and Uhlendorff (1992) emphasize, they attempt to understand accurately. However, no methodology can guarantee accuracy. In hermeneutics, it all depends on the person trying to understand or interpret something, and each person always has some sort of preconception about the object or subject at hand. Gadamer stressed that these are preconceptions or assumptions. Thus, a hermeneutic interpretation that fulfils the criteria for intersubjective agreement cannot be postulated per se. There is no right or wrong interpretation, only a more or less suitable interpretation.

<sup>&</sup>lt;sup>7</sup>Generally, we can distinguish between three forms of hermeneutic difference: linguistic, historical, and rhetorical. In the example above, it is a linguistic difference. Historical difference can manifest itself as a factual or linguistic difference, such as in the form of outdated terms or sayings, or unknown persons, facts, and situations.

In summary, hermeneutics provides five rules for understanding qualitative data in the context of social science data analysis:

- 1 Reflect on your own preconceptions and any assumptions you may have regarding the research question.
- 2 Work through the text as a whole, setting any unclear passages of the text aside until you gain a better understanding of the entire text which may shed light on the unclear passages.
- 3 Make yourself aware of the hermeneutic difference by asking yourself, 'Does the text contain a different language or culture with which I am unfamiliar?' Try to reduce these differences, such as by learning the new language or finding an interpreter.<sup>8</sup>
- 4 During your first reading of the text, pay attention to the topics or themes appearing in the text which are important to your research.
- 5 Differentiate between a logic of application (i.e., the identification of existing themes and categories in the text, as when the text is indexed) and a logic of discovery (i.e., the identification of important new, perhaps even unexpected things, in the text).

It is sometimes claimed that hermeneutics is a method that only partially corresponds to the scientific claims of intersubjectivity and validity. However, this is a very narrow view, since hermeneutic methods are indeed a part of empirical research, particularly in proposing hypotheses and interpretating results. Moreover, even strictly quantitative research cannot be conducted without hermeneutic considerations, that is, without thinking about the meaning of results. Klafki addressed the idea that research questions and research designs always have hermeneutic prerequisites. In the field of education, he noted:

I suspect that every hypothesis in empirical research is based on considerations that aim to determine the meaning or significance of something and can thus be considered hermeneutical considerations. This does not, however, mean that all empirical researchers would recognize the thought processes leading up to their hypothesis as hermeneutical steps or practise the necessary precision in formulating hypotheses as in hermeneutics. The fact that researchers arrive at hypotheses hermeneutically in empirical research is often overlooked because many professionals in the field already have common preconceptions. For example, they may find particular questions meaningful for a given time period or for their research as a whole because they already have a previous common understanding of the subject. (Klafki, 1971/2001, p. 129)

<sup>&</sup>lt;sup>8</sup>This is true in cross-cultural research, but it can also be useful for research conducted in a familiar environment. Sprenger (1989) tells of a social science project about the use of technology in critical care and how medical experts were invited to help the research team interpret the phenomena they observed, which made a scientific analysis possible.

### 1.5 The Importance of the Research Questions

The pivotal point of any research project are the *research questions*. What exactly is to be investigated in the research project? What is the specific problem about which the research should yield more insights? Why, with what practical purpose, and what benefit? What type of investigation should be conducted to obtain information about the research questions? What methods are most suitable for the research questions?

Miller and Salkind (2002) distinguish between three basic types of research, which are reflected in the corresponding research designs: *basic, applied,* and *evaluation research*. Although basic research is ideal for experimental methods and hypothesis testing, in general all three types of research may work with both qualitative and quantitative methods. According to Miller and Salkind, the various directions of research questions constitute the differences between the methods:

They are not another way to answer the same question. Instead, they constitute a relatively new way to answer a different type of question, one characterised by a unique approach with a different set of underlying assumptions reflecting a different worldview of how individuals and group behaviour can best be studied. (Miller & Salkind, 2002, p. 143)

Diekmann makes a somewhat more differentiated distinction between the forms of empirical studies. He distinguishes four types of studies (2007, pp. 33–40): *explorative*, *descriptive*, and *hypothesis-testing* studies and, as a fourth type, *evaluation* studies. Both qualitative and quantitative methods can be used in all four types of study, and it is also possible to combine both methods within one type of study. According to Diekmann, the proportion of qualitative methods is different for the different types of studies. While mostly qualitative methods can be found in exploratory studies, descriptive studies, which will give the most generalized overview possible, rely on more quantitatively oriented survey research.

The starting points for all of the above forms of research are the *research questions*. Without such questions, research is difficult to imagine. Because no matter whether you are planning a bachelor's, master's, or doctoral thesis or you are writing a research proposal to receive third-party funding, the first step is always to face the challenge of drawing up an exposé, a research plan, or research proposal, in which the presentation and discussion of the research question plays a central role.

When *formulating research questions*, you should always reflect on the theoretical background and your own prior knowledge, that is, ask yourself: How much have I thought about this field of research. What research already exists? Which theories seem to have explanatory power regarding my research questions? What prejudices do I have myself and what prejudices are common among the scientific community of which I am a part?<sup>9</sup>

<sup>&</sup>lt;sup>9</sup>Those looking for further suggestions on how to formulate research questions will find them, among others, in Creswell and Creswell Báez (2021, pp. 95–104), Creswell and Poth (2018, pp. 127–146), Flick (2018a, pp. 83–95), and O'Leary (2018).

To ask such questions is not in conflict with the idea of openness that is characteristic of qualitative research. The common assumption that researchers can be a 'tabula rasa' or a 'blank slate', able to devote themselves to a research subject entirely without prior knowledge is an illusion (Kelle, 2007). Prior knowledge is always a factor, as the researcher's brain is never 'empty'. Even if, after well-founded consideration, you choose not to refer to existing research results because you would like to approach your research question and approach the field 'without prejudice', you should reflect on your reasons for doing so and record them on paper. A mere reference to scholars who recommend such a theory-free and unprejudiced approach is not sufficient to justify it; instead it requires reflection regarding exactly why such a theory-abstinent approach to answering your research question is appropriate and why this promises better results. It is not uncommon to come across statements referring to grounded theory, according to which reading books on the topic of the research is said to be counter-productive in terms of research methodology. This is grotesque nonsense that is at best suitable for discrediting qualitative approaches in the scientific community and the wider public. In grounded theory itself, this misunderstanding found in the reception of the early grounded theory texts (Glaser & Strauss, 1998) has long been corrected (Corbin interviewed by Cisneros-Puebla, 2004; Kelle, 2007; Strauss interviewed by Legewie & Schervier-Legewie, 2004).

Of course, there are situations in social research in which it is advantageous to gain experience in the field first. For instance, anyone who wants to observe and experience how homeless people live should not simply plan to sit in the library reading the sociological and psychological literature on homeless people. However, it would make sense to consider the state of research either following the observation and in the course of the data analysis, or at the latest when discussing the results. On the other hand, it is hard to imagine that anyone who wants to analytically explore the causes of right-wing thinking in adolescents would consistently ignore all of the research literature that already addresses that very problem. In this book, the position is taken that it is wise and necessary to start with the existing research when exploring social phenomena. We agree with Hopf and Schmidt who encouraged researchers to delve into the current state of research on the chosen topic:

Therefore, there is no reason to prematurely view the independence of your own judgement pessimistically, thus destroying many opportunities for gaining insight that are associated with theory-driven, empirical studies based on existing research. (Hopf & Schmidt, 1993, p. 17)

### 1.6 The Need for Methodological Rigour

What is the justification for analysing qualitative data in a systematic manner and according to strict rules? Does such an approach hinder the creativity and openness of qualitative methods? In qualitative research since the mid-1990s, issues of quality and