PREFACE

SPOTLIGHTING "CASE STUDY RESEARCH"

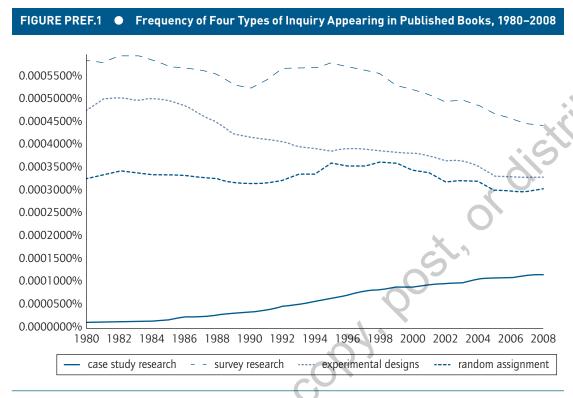
At the time of the first edition of this book (1984), although popular versions of case studies were plentiful, case study *research* was an obscure mode of inquiry, not well understood. Over the years, both awareness and practice have changed. You and many others have increasingly recognized the value of case study *research*, and it now has gained a spotlight within social science.

The spotlight comes from the sheer use of the term "case study research" (not just "case studies") in published books. The previous (fifth) edition of this book called attention to a rising trend in such use. Google's *Ngram Viewer* had provided data on the frequency of the term's appearance in publications from 1980 to 2008,¹ compared to the appearance of three alternatives: "survey research," "experimental designs," and "random assignment." Fig. Pref.1, reproduced from the fifth edition, compares the four terms.

In the figure, the frequency for "case study research" follows an upward trend, in contrast to the other three terms. Even though the absolute level of the trend is still lower than those of the other terms, the others are trending in the opposite direction. The contrasting trends may surprise you (as it did me), because of the decade-long hullabaloo at that time over random assignment designs as the preferred "gold standard" for doing any social science research.³ Notably, the hullabaloo had been accompanied by explicit attempts to downgrade other types of social science research—by giving little or no priority for using federal funds to support studies using any of these other methods. Private foundations, as well as other social science funding sources, followed suit, making support difficult for research not using random assignment designs.

To my knowledge, the 1980–2008 data as well as Google's *Ngram Viewer* had not been updated by this sixth edition's publication time. Thus, trends may have changed since 2008 and may have shifted in some unknown way. However, another Google source provided a different type of more recent data that seems to support a continuing spotlight on case study research.

The data represent citation frequencies from Google *Scholar* (see http://blogs.lse.ac.uk/impactofsocialsciences/2016/05/12/what-are-the-most-cited-publications-in-the-social-sciences-according-to-google-scholar/). These data show that the present



Source: Google's Ngram Viewer (http://books.google.com/ngrams), accessed March 2012.

book, through all its editions since 1984, placed second (!) on a list of the "10 most cited methodology books in the social sciences" (see Fig. Pref. 2, which originally appeared as Table 3 in the cited blog).

The tenfold list includes *all* social science methods books—qualitative *and quantitative* (Green, 2016). To place second, this book had well over 100,000 citations, which were 20,000 more than that of the third-place book.⁴ (Note that all the books on the list are over 25 years old; had the analysis normalized the totals by the number of years of a book's availability, more recent books might have had a fairer chance to be included.) So, whether mentioning "case study research" is still on an upward trend or not (the original trend from Google *Ngram*), a lot of people have been citing "case study research" when they cite this book and its title (the more recent data from Google *Scholar*). Along similar lines, 15 different academic disciplines and practicing professions now have at least one specialized work focusing on doing case study research in their particular discipline or profession (see Figure 1.1, Chapter 1).

FIGURE PREF.2 • Ten Most Cited Methodology Books in the Social Sciences

Book	Author(s)	Date	Citations
Applied Multiple Regression/ Correlation Analysis for the Behavioral Sciences	J. Cohen, P. Cohen, S. West and L. Aiken	1975	131,033
Case Study Research: Designs and Methods	Robert Yin	1984	107,931
Psychometric Theory	Jim Nunnally	1967	80,196
The Discovery of Grounded Theory: Strategies for Qualitative Research	Barney Glaser and Anselm Strauss	1967	78,385
Multivariate Data Analysis	J.F. Hair, R.E. Anderson and R.L. Tatham	1979	70,700
Qualitative Data Analysis	Matthew Miles and A. Michael Huberman	1984	59,829
Using Multivariate Statistics	Barbara Tabachnick and Linda Fidell	1989	57,324
Econometric Analysis	William Greene	1990	54,524
An Introduction to Probability Theory and its Applications	William Feller	1950	51,825
Naturalistic Inquiry	Yvonna Lincoln and Egon Guba	1985	51,169

Source: Data from Google Scholar, compiled by Green (2016).

THE SIXTH EDITION: CASE STUDY RESEARCH AND APPLICATIONS

Special to this sixth edition. The spotlight on "case study research" suggested the desirability of a special effort in creating the sixth edition of this book—if nothing else, something to increase its breadth and usefulness to you. Thus, if you have followed the book's

previous editions, you will immediately note that, by comparison, the sixth edition has an augmented title: "Case Study Research *and Applications*." Now included in the sixth edition are 11 substantial case study applications. Although versions of these applications had appeared in earlier works (Yin, 2004, 2005, 2012a), the goal has been to put these materials into your hands in a single publication, along with a revised and much updated version of the material in the fifth edition.

The inclusion of the applications responds to requests and suggestions by readers and reviewers of earlier editions. In addition to the methodological ideas in the earlier editions, the readers always had wanted to "see how it's done." Even though every earlier edition (including this one) had contained numerous BOXES, representing concrete and exemplary examples of case studies or case study materials, the BOXES were only brief summaries. They were aimed at highlighting a specific issue in the text, but they did not reveal the breadth or depth of the original work. At the same time, the three earlier works (Yin, 2004, 2005, 2012a) did in fact consist of lengthy excerpts of actual case study applications, but readers may not have been able to connect the dots between these excerpts and the principles in the present text. So, directly including a bunch of the applications, along with the updated and revised version of the main text of this sixth edition, seemed like a useful step.

The inclusion of the 11 applications, however, comes with some trepidation. The first concerns the length of the new text. Despite having to add the new applications, the goal was to keep the full text within reasonable bounds of length *and cost*. To contribute to an offset, dropped from their appearance in the fifth edition have been Appendix C (which indexed the case studies in the BOXES) and the seven Tutorials. These supplementary materials, along with other potentially valuable slides, reprints, and briefs, all now appear on the study.sagepub.com/yin6e website that accompanies this book. The website, created for the first time in conjunction with this sixth edition, becomes your resource for gaining a more informed and personalized way of taking advantage of what case study research has to offer you.

Nevertheless, the text for the sixth edition has inevitably become longer than the previous editions. How much longer is difficult to tell, especially as of the time of this writing (prior to seeing the final page proofs and comparing their length with that of the fifth edition). My sincere hope is that the benefit from the inclusion of the applications will far outweigh the sixth edition's greater length and potential inconvenience *and cost*.

The second trepidation deals with the presentation of the applications. Some of them already were lengthy in their original form. Given the first trepidation, I had to pare down and edit these originals, in some instances to a rather aggressive degree. My sincere hope is that the original authors will not be offended by the shortening and editing of their works, as noted in the footnotes to each application. At the same

time—and especially to readers genuinely interested in the applications—by following their full citations, you do have the viable alternative of retrieving any of these works in their original form.

A third trepidation was logistical: Where to locate the applications within the sixth edition was not an easy decision. My original preference was to locate all the applications at the end of the text of the entire sixth edition. However, Sage's editors pointed out that materials located at the back of a book are frequently ignored. In contrast, one editor thought that the applications should be located within the chapters themselves, at the point where the applications were called out. I felt that such a location would totally disrupt the reading of the basic text (you would be reading the text, be interrupted by the insertion of a multiple-page application, and might then have difficulty keeping your train of thought until you found where the text picked up again). A logical compromise was to locate the applications at the end of each relevant chapter. I hope this location, along with the bleeding of the pages to help you find where the next chapter starts, will lessen the disruptiveness of the applications but still make them readily accessible to you.

Other enhancements to this sixth edition. Aside from the applications, much of the layout and formatting of the rest of this sixth edition will appear similar to those of the fifth edition. However, please note that this edition gives more attention to certain topics, such as:

- More frequent reference to the opportunities for maintaining a *relativist* or
- Constructivist orientation in doing your case study;
- Similarly, more frequent attention to the possibilities of having your case study be part of a mixed-methods study, as such combinations appear to be increasing in frequency;
- Increased emphasis on the importance of considering rival explanations; and
- A stronger discussion of cross-case syntheses.

Along with these and other enhancements, this edition also has:

- An expanded list of 15 academic disciplines and practicing professions that have a work or text or devoted entirely to doing case study research in that particular field (the fifth edition only had 12 such fields)
- Scores of new citations, scores of updated citations, a sharpened glossary, and, hopefully, a sharpened terminology, especially following the discussion of the trilogy that comes next

A TRILOGY: CASE STUDY RESEARCH, CASE STUDIES, AND THE CASE(S)

Notwithstanding the enhancements and modifications to this sixth edition, the book's central topic still rests on what I have only belatedly come to recognize as a foundational trilogy:

- Case study research (the mode of inquiry),
- Case studies (the method of inquiry, or research method used in doing case study research), and
- Case(s) (the usual *unit* of inquiry in a case study).

I don't think this trilogy suggests anything unusual, so you don't need to conjure any deep thoughts. For instance, other trilogies in social science research might include: experimental research (mode), experiments (method), and subjects (units); or, survey research (mode), surveys (method), and respondents (units); or, historical research (mode), histories (method), and human events (units)—or, and possibly more speculatively, statistical research (mode), statistical modeling (method), and variables (units).

Regardless of the potential parallels among all these modes and methods, for case study research, the trilogy highlights two pairs of internal relationships—between "case study research" and "case study," and between "case study" and "case(s)." An intriguing by-product is that clarifying the trilogy and these pairings might help us to understand why "case studies" may still have a mixed reputation as a research method.

To examine the pairs, let's start with "case studies," which always has occupied the central position in the trilogy. Most of you entered this domain because you wanted to be an adept consumer of high-quality case studies, if not a respected producer of them. As one result, this book has increasingly attended to one of the pairings—between "case studies" and "case(s)." For instance, the past couple of editions have raised greater awareness over the important role of the "case(s)" in doing a case study, with (hopefully) better and fuller descriptions of the procedures for defining and bounding the "case(s)."

At the same time, the other pairing—between "case study research" and "case study"—has tended to be taken for granted. "Case study research" has been the main title of this book since its inception. As a direct offshoot, the body of the book has covered "case study" as a research method. These designations do not appear especially surprising or unusual.

A more recent realization, however, has been that case studies also exist *outside* the domain of case study *research*. People who do such case studies don't necessarily think of themselves as practicing a formal research method. In fact, a far more

common use of "case studies" takes place as an everyday form of exposition, appearing in newsprint, magazines, blogs, videos, and nearly every type of popular media. "Let's write a case study," or "We need to find a case" serve as common motives for engaging in such work, and just about anyone—you included—may participate. The result has been an ongoing stream of *popular case studies* that have been highly informative and useful. However, the case studies do not necessarily follow any explicit research procedures. Instead, you might think of them as *nonresearch* case studies.

In a similar manner, case studies frequently appear as supplementary materials in professional training and practicums. These have been commonly called "teaching cases." The early ones served such professions as business, law, and, later, medicine. Currently, these kinds of case studies seem to be appearing with increasing frequency and in greater variety. They are now associated with professional development courses on such topics as career counseling, psychotherapy, nursing ethics, service innovation, finance, and marketing. Thus, the classic "teaching cases" may be considered part of a broader genre that might be recognized as *teaching-practice case studies*. The purpose of these kinds of case studies has been to present information about practical situations (for training or practice) but, again, not necessarily to follow any explicit research procedures.

Taken together, the *popular case studies, as well as the teaching-practice case studies*, probably typify the kind of case studies most commonly encountered by everyone (including scholars and specialists from non–social science fields). As a result, these two types of case studies, rather than *research case studies*, likely drive everyday impressions of what constitutes a case study. People may then inadvertently be led to believe that "case studies" are a form of literary exposition or supplemental practice material and not an explicit endeavor within social science research.

In other words, the visibility and prevalence of the two types of *nonresearch* case studies may be one reason for the sometimes disparaging reputation of *research* case studies. So—if you want to do case study *research*—be aware that you need to promote openly a higher set of expectations. Research inquiries are methodic, demand an acceptable level of discipline, and should exhibit transparency about their procedures. Especially to be avoided is the notion that the main skill needed to do case study research is to be a good writer (although being an enthusiastic writer does not hurt). More important, and as stated in earlier prefaces, this book's enduring objective is to guide you and others to do case studies as a formal research method.⁵

Having distinguished among the potentially different kinds of case studies, the entirety of this book is about case studies as a *research* method. Little is said about the popular case studies or about the teaching-practice case studies. To help keep your bearings straight, the text occasionally refers to the term "*research* case studies" to set them apart from the other two types. In summary, the topic of this book is "case study research," and your way of knowing about this topic is to understand "case studies" as a research method, with the case studies of interest usually focusing on a "case" as the main unit of inquiry.

SOME UNFINISHED BUSINESS

As with other modes of inquiry and research methods, case study research still has unfinished business that goes beyond this sixth edition. Three topics especially deserve your attention: (1) the role of plausible rival explanations, (2) case-based compared with variable-based approaches to designing and conducting case study research, and (3) the relationship between case study research and qualitative research.

Plausible rival explanations. The presence of rival explanations in designing and doing case study research remains critical. This sixth edition, like the previous ones, has given increasing attention to the need to address such rivals as a core part of interpreting case study findings. The challenge is to identify and address the most *plausible* rivals and not necessarily to deal with all rivals. At the same time, a broader spirit of rival thinking should pervade all your case study work, not just as the main quality control in interpreting your findings. For instance, you can express and discuss the implications of starting with a different set of research questions; similarly, you could give your reasons for choosing a particular data collection procedure instead of using some alternative or rival procedure.

The unfinished business has to do with the lack of formal procedures for rigorously testing rivals—for example,

- Whether in fact you have identified the most plausible ones or are only dealing with what later may turn out to be "red herrings" (and therefore not very compelling rivals),
- Whether you have sought the needed evidence as aggressively as possible or have unknowingly skewed your efforts in the direction of disfavoring the rival(s), and
- Whether a rival has definitively been ruled out successfully.

Currently, researchers still exercise complete discretion over these matters. Formal guidance as well as benchmarks (e.g., for successfully ruling out a rival) have yet to be developed and hence remain unfinished future business. A minimum initial step might be for *all* future case studies to address whether and how they examined rival explanations in some systematic and explicit manner—that is, similar to how methodologies now discuss "how a case was selected" or other choices in their methodological procedures. Chapter 6 of this book takes a stab at this initial step, offering a 4-point scale, to be used in your methodological discussion, simply indicating the degree of presence of any rival considerations in your case study. However, more work in this direction needs to be done in the future.

Case-based compared with variable-based approaches. Dwelling on the holistic feature of the case(s) being studied represents a core feature of case study research. The

goal is to understand "the case"—what it is, how it works, and how it interacts with its real-world contextual environment. Many people still think that a case can be characterized by a set of variables—that is, the micro elements, such as a case's demographic profile, and many people still use a collection of variables to define a case. However, the relevant holism seems to go beyond a mere collection of micro elements.

Nevertheless, variables are still important in case study research. How to keep the holistic essence of case study research while still appreciating the collection of variables represents a second type of unfinished business. Sufficient clarification still awaits. For instance, Charles Ragin's (1987/2014) qualitative comparative analysis (QCA) is a case-based approach that involves defining *patterns* of variables *within* each case—and that then creates case typologies—before making cross-case comparisons. However, QCA is still at a frontier, and other approaches have yet to establish how to maintain a sufficiently holistic orientation in defining a suitable *pattern* of variables or an insightful *typology* at a holistic level.

As noted in Tutorial 1, which is posted on the companion website at study .sagepub.com/yin6e, the reference to variables does not mean that case study research is variable based. On the contrary, the multiplicity of variables (compared to the small number of cases in most case studies) raises doubts about the usefulness of conventional, variable-based methods in analyzing case study data. Still waiting to be developed—and therefore the unfinished business—are methodic and holistic, case-based methods for doing such analyses. Without such methods, Chapter 5 of this book later alerts readers to the potential difficulties created when researchers try to do cross-case syntheses but remain captives of variable-based thinking.

Relationship between qualitative research and case study research. The sixth edition gingerly touches upon a third unfinished topic: the relationship between case study research and qualitative research. Chapter 1 briefly contrasts the realist and relativist perspectives, and in the literature, you may encounter occasional reference to the possibility of doing a "qualitative case study." In fact, an earlier tradition, reflected by the treatment of case studies in the first edition of the *Handbook of Qualitative Research* (Denzin & Lincoln, 1994), as well as the inclusion of "case study" as one of the five major types of qualitative research in a well-received textbook on qualitative research (Creswell & Poth, 2017), implicitly tends to assume that doing a case study might be considered one of the acceptable variants in doing qualitative research.

An opposing perspective, however, suggests that case study research may be separate from qualitative research. Case studies may need to follow their own customized research procedures—as in identifying and defining the case to be studied, along with numerous other procedures as discussed in the chapters of this book. In a complementary manner, even a comprehensive presentation of qualitative research

(e.g., Yin, 2016) may not need to include much discussion about case study research—just as a presentation of qualitative research does not need to include much discussion about survey, experimental, historical, or archival research.

The entire issue of whether case study research is automatically to be subsumed under qualitative research or whether and in what way it might be a separate method deserves much further explication. In psychology, case study research seems to appear entirely apart from qualitative research, as briefly discussed in Appendix A at the end of this book. However, in other disciplines and professions, the issue may assume contrasting forms. Likewise, the issue may have received varying treatments over major methodological eras, including the evolution of both case study research and qualitative research since the mid-1950s. To be authoritative, the desired explication will therefore need to embrace a broad literature, having both cross-disciplinary and historical perspectives. For these reasons, the complexity of the issue seems to represent another piece of unfinished business.

A NEW AND COMPANION WEBSITE

Despite the unfinished business, the sixth edition still represents a comprehensive introduction to case study research. If you want to learn about or do case study research, you will not find any comparable breadth or depth elsewhere. Nevertheless, the continuing advances in case study research methods create an ongoing challenge: how to balance the book's orientation between newcomers to case study research, compared with those already more experienced and accomplished in knowing about case study research.

As currently constituted, the sixth edition veers more toward the former audience. The book hopes to entice, expose, and even enthrall students and scholars who may not have previously done or been exposed to case study research.

To cater to the latter audience, Sage Publications has made a companion website, study.sagepub.com/yin6e, available to post supplementary materials. The website therefore contains the materials that might be more helpful and informative for scholars already advanced in their knowledge of case study research. Hopefully, such an arrangement will permit anyone to make their own forays into case study research, and on their own terms. For instance, the fifth edition had contained several *tutorials* that explored some key issues, with authoritative references, in greater depth. This material, along with a lot of other reprints and writings that preceded even the first edition of this book, is now found on the website. The hope is that the website can help anyone who might want to know more but not to interfere with those of you just setting out on your initial journey with case study research.

One place where the sixth edition remains steadfastly consistent with all the earlier editions deserves repeated mention: Donald Campbell's insightful foreword. His succinct words, written over 30 years ago, still stand as a masterpiece about social science methods. Within the context of today's research dialogues, Campbell's work continues, remarkably, to speak with freshness and direct relevance. His foreword also positions well the role of case study research as portrayed in this book. I continue to be deeply honored by the inclusion of this foreword and have attempted to return but a modest contribution, now to his memory, in a subsequent publication (Yin, 2000b).

The successful practicing of this edition's techniques and guidance means that case study research will be better than in the past. The ultimate goal, as always, is to improve our social science methods and practices over those of previous cohorts of scholars. Only in this manner can every cohort make its own mark, much less establish its own competitive niche.

As a final note, I conclude this preface by repeating a portion from the preface to the fourth edition. In it, I suggested that anyone's ideas about case study research—and about modes of social science inquiry more generally—must have deeper roots. Mine go back to the two disciplines in which I was trained: history as an undergraduate and brain and cognitive sciences as a graduate. History and historiography first raised my consciousness regarding the importance (and challenge) of methodology in the social sciences. The unique brand of basic research in brain and cognitive science that I learned at MIT then taught me that empirical research advances only when accompanied by theory and logical inquiry, and not when only treated as a mechanistic data collection endeavor. This lesson turns out to be a basic theme in doing case study research. I have therefore dedicated this book to the person at MIT, Prof. Hans-Lukas Teuber, who taught me this best and under whom I completed a dissertation on face recognition, though he might only barely recognize the resemblances between past and present were he alive today.

Notes

- The counts are based on the appearance of a given word or term in published books. Unfortunately, Ngram Viewer does not indicate the number of books covered during any particular period of time, so the website does not provide the number of books accessed from 1980 to 2008. Overall, Ngram Viewer claims that it has amassed about 4% of all books ever published (Michel et al., 2010).
- I chose not to select a fifth term, "qualitative research," because its usage overlaps in some unknown way with "case study research." The inclusion would have clouded my main intended comparison, which was between "case study research" and the other three types of inquiries.
- 3. Avid supporters of the gold standard have nevertheless published a research article using "case study" in its title (Cook & Foray, 2007). Readers should not take this as an example of how to do case study

research, however. The article mainly contains the authors' rendition of a set of events at the outset of the decade in question (a set that apparently could not be told with quantitative methods) but does not present much actual evidence to support that rendition. (The rendition may be insightful, but whether it should be accepted as an example of case study research or as a "popular" case study remains an open question.)

- 4. The Internet source of this tally does not indicate the time period that it covered, but Google *Scholar* started in 2004 and the source for the tally appeared in 2016, so an estimate of 2004-2015 as the years that were covered would be one guess.
- 5. An interesting side note would point to developments in one of the other social science methods—surveys. In contemporary political polls, note that the "margin of error" is now reported in the popular media every time a polling result is cited. Such reporting did not usually occur in the past. One offshoot of the reference to the margin of error is that it readily reminds (and educates) the audience that these data were based on surveys that respectfully followed relevant research procedures. What might be helpful in the (distant) future is for the popular case studies to contain an analogous reminder, if the case study indeed used any research procedures, such as triangulating data from two or more sources of evidence.

att. Proof.