

# Research Methods in the Social Sciences



SIXTH EDITION



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David Nachmias

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# RESEARCH METHODS IN THE SOCIAL SCIENCES

Sixth Edition

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## PREFACE

The goal of the Sixth Edition of *Research Methods in the Social Sciences*, as in the previous editions, is to offer a comprehensive, systematic presentation of the scientific approach within the context of the social sciences. We emphasize the relationship between theory, research, and practice, and integrate research activities in an orderly framework so that the reader can more easily learn about the nature of social science research.

In our view, social science research is a cyclical, self-correcting process consisting of seven major interrelated stages: definition of the research problem, statement of the hypothesis, research design, measurement, data collection, data analysis, and generalization. Each of these stages is interrelated with theory in that it both affects and is affected by it. The text leads the reader through each stage of this process.

### THE NEW EDITION

The Sixth Edition incorporates the following revisions:

- Appendix A, "Introduction to SPSS" has been updated to SPSS version 9.0 for Windows. Appendix A serves to assist students in preparing and executing computerized data analysis using this widely available and often-used software package. It includes step-by-step instructions covering basic and intermediate procedures normally required for management and analysis of survey data. The step-by-step instructions are illustrated with the appropriate window screens. Demonstrations of the various procedures are integrated into the Appendix using the GSS 1996 data set.
- New SPSS problems were developed for the following chapters: 3, 7, 8, 10, 11, 14, 15, 16, 17, 18, and 19. The new problems fully utilize the GSS 1996 data set and have a rich substantive context.
- Appendix B has been expanded to include guidelines on how to conduct a literature search successfully.

The new edition continues to blend a broad range of classic social science research studies with up-to-date examples of contemporary social science issues. The additions and changes reflect the concerns and developments that have surfaced in the field since the publication of the previous edition. The text has also benefitted from the constructive criticism offered by instructors, both users and nonusers, in research methods courses taught across the global village. Following their advice, we have revised the prose to make the tone less formal and the concepts even more accessible for students.

### THE PLAN OF THE BOOK

The book's organization progresses logically from the conceptual and theoretical building blocks of the research process to data analysis and computer applications, offering students a comprehensive and systematic foundation for comprehending the breadth and depth of social science research. The book's self-contained yet integrated chapters promote flexibility in structuring courses, depending upon the individual instructor's needs and interests. The text adapts easily to two kinds of courses: a basic methods course or one that covers methods and statistics sequentially.

Chapter 1 examines the foundations of knowledge, the objectives of scientific research, and the basic assumptions of the scientific approach. Chapters 2 and 3 discuss the basic issues of empirical research and the relationship between theory and research.

They cover the topics of concept formation, the roles and types of theories, models, variables, and the various sources for research problems and for the construction of hypotheses. Chapter 4 focuses on ethical concerns in social science research and proposes ways to ensure the rights and the welfare of research participants, including the right to privacy.

Chapters 5 and 6 present the research design stage. A research design is a strategy that guides investigators; it is a logical model for inferring causal relations. Experimental designs are discussed and illustrated in Chapter 5, and quasi- and pre-experimental designs are examined in Chapter 6. Chapter 7 is concerned with measurement and quantification. The issues of validity and reliability—inseparable from measurement theory—are also reviewed here, together with the issue of measurement error. In Chapter 8, we present the principles of sampling theory, the most frequently used sampling designs, and the methods for estimating sample size.

In Chapters 9 through 13, we present and illustrate the various methods of data collection available to social scientists. Observational methods, laboratory experiments, and field experimentation are the subjects of Chapter 9. Survey research—particularly the mail questionnaire, the personal interview, and the telephone interview—is examined in Chapter 10. Chapter 11 describes and illustrates methods of questionnaire construction: the content of questions, types of questions, question format, and the sequence of questions. The discussion of the pitfalls of questionnaire construction addresses the issue of bias. Chapter 12 is devoted to the theory and practice of qualitative research, with a particular emphasis on participant observation and field research. In Chapter 13 we discuss major issues of secondary data analysis—the census, unobtrusive data as private and public documents, and content analysis.

The next five chapters are concerned with data processing and analysis. In Chapter 14 we present the latest techniques of codebook construction, coding schemes and devices, ways to prepare data for computer processing, the use of computers in social science research, and communication network linkages. Chapter 15 introduces the univariate distribution, measures of central tendency and dispersion, and various types of frequency distributions. Chapter 16 examines the central concept of bivariate analysis, concentrating on several measures of nominal, ordinal, and interval relationships, which are discussed and compared. The major topics of multivariate analysis, statistical techniques of control and interpretation, causal inferences, and path analysis are the subjects of Chapter 17. Chapter 18 presents common techniques used in constructing indexes and scales; and in Chapter 19 we discuss strategies of hypothesis testing, the level of significance, the region of rejection, and several parametric and nonparametric tests of significance.

This text, together with the supporting materials, will help readers move through the major stages of the research process.

## ANCILLARY MATERIALS

*Research Methods in the Social Sciences* is accompanied by several useful ancillaries:

- A *Study Guide* by Kenrick S. Thompson of Arkansas State University Mountain Home, which lists chapter objectives, key terms and concepts, and main points in the chapters, and provides self-evaluation exercises, review tests, and exercises and projects.
- An *Instructor's Manual/Test Bank*, also by Kenrick S. Thompson, that provides chapter abstracts, objectives, main points, lists of key terms, suggested research projects;

and essay, discussion, and multiple-choice questions for each chapter, as well as transparency masters of selected summary boxes and figures.

- *Computer Software*, in the form of two data sets taken from the General Social Survey for 1996, conducted by the National Opinion Research Center. The first data set—*gss96worth*—includes 119 variables and 950 cases and can be used with the full version of SPSS. The second data set—*gss96student*—has 44 variables and 950 cases and can be used with the SPSS student version. These data are keyed to new SPSS exercises at the ends of 11 chapters.
- A computerized test item file, which provides the test items from the *Instructor's Manual Test Bank* in either Macintosh or IBM formats.

## ACKNOWLEDGMENTS

Our literary debts are testified to throughout the text. Many students, instructors, reviewers, and colleagues have offered useful ideas and comments since the First Edition was published in 1976.

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*Chava Frankfort-Nachmias*  
*David Nachmias*

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