
A Practical Guide to Behavioral Research

TOOLS AND TECHNIQUES

FOURTH EDITION

BARBARA SOMMER
ROBERT SOMMER



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Preface

As in previous editions, we continue to offer a multimethod approach, describing a wide range of techniques. But through our continued experience in using this book with undergraduate students, we have improved the overall clarity and comprehensiveness of the text throughout.

Since the 1991 edition, major changes have occurred in the behavioral sciences. Particularly in regard to the use of the Internet in research, we are running just to keep up. The computer is now a major presence in the behavioral sciences. Earlier it had seemed to be a tool, like its predecessor, the calculator, which had over time become increasingly more sophisticated. While uses of the calculator were limited largely to data analysis, the computer has pervaded all aspects of research. Statistical software packages have revolutionized data analysis. We have added a new chapter describing the research opportunities provided by the Internet. The chapter on equipment (formerly, apparatus) now includes a description of computers in running research studies (Chapter 15), plus a section on use of the camera in behavioral research. A guide to using computers in data analysis is provided in an appendix. The library chapter provides detailed information on how to access and use electronic databases. Other computer applications are integrated into the appropriate individual chapters.

Writing this book has led us to confront the difference between the ideal and the actual practice of behavioral research. Ideally, experimentation is the paramount method of finding cause-and-effect relationships. It is a powerful method for testing theory and permits ruling out alternative explanations. Within memory, the terms “research methods” and “experimental design” were synonymous. However, the questions asked behavioral scientists by policy makers, practitioners, and the public rarely involve tests of theory, as such, but rather reflect a search for accurate information on issues of social importance. Experiments often do not yield this type of information. We do not neglect experimentation but consider it one method among many for obtaining behavioral information.

We advocate a hands-on approach to research and provide many easily-understood examples. There is information about making conference presentations and writing technical reports, as well as the more typical guidelines for writing journal-style papers.

We have also tried to make this edition more international. A sabbatical leave spent teaching in Estonia and a continuing collaboration with researchers in Brazil have expanded our awareness of research methods appropriate for other nations. This edition includes more references to work outside North America. Additionally, we are impressed by international networks of researchers studying similar problems in different nations, such as aspects of parent-child interaction or the re-

sponse of people to natural disasters. Electronic communication has made it easy for researchers to contact those working on related issues in other locations and to undertake collaborative studies.

The book is suitable for students in research methods courses and for nonstudents who wish for a clear guide to conducting behavioral studies. Behavioral research methods are too important to be left in the hands of a small group of specialists. The long-run interests of a democratic society are served by the widest possible understanding and acceptance of these methods. The hands-on approach advocated in the book is ideally suited for small-scale program evaluation as well as a more general research. For example, an innovative project at a university, such as providing residence halls for specific majors, could be tried out in one or two residence halls with students from a small number of majors, and the results evaluated using interviews, questionnaires, an examination of student grades, and other criteria of program success. A similar approach could be used in a city-sponsored program of giving food vouchers to the homeless. The program could be tried out in one or two neighborhoods, carefully evaluated, and the problems reduced before the program is extended to the rest of the city.

We are indebted to those colleagues and students who have read and evaluated this and earlier editions. In particular, the comments of Ron Goldthwaite, Michael Winter, Harmut Guenther, and John Bower helped remove ambiguity, jargon, and the occasional error.

Davis, California
March 1996

B.S.
R.S.

A Practical Guide to Behavioral Research

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