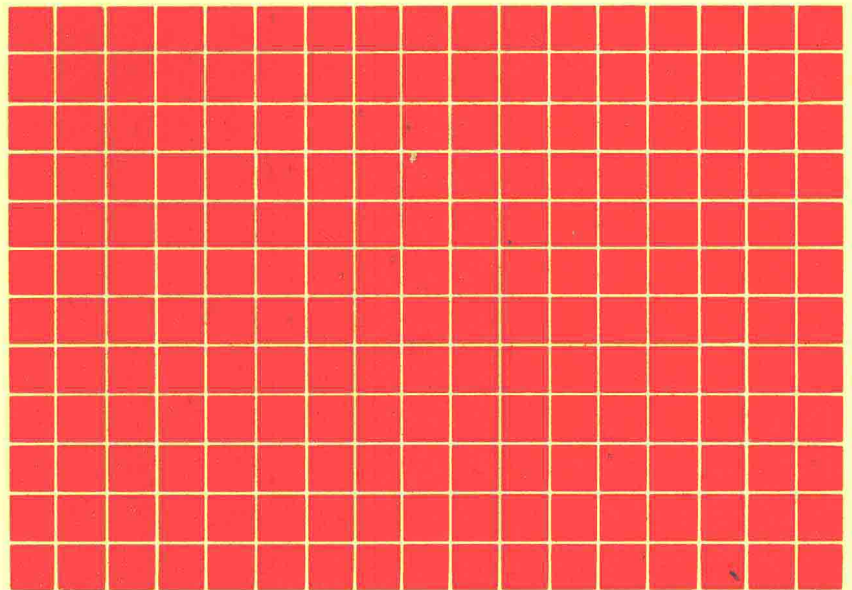


Methods of Social Research

**SECOND
EDITION**



Kenneth D. Bailey

Methods of Social Research

SECOND EDITION

Kenneth D. Bailey



THE FREE PRESS

A Division of Macmillan Publishing Co., Inc.

NEW YORK

Collier Macmillan Publishers

LONDON

Copyright © 1978, 1982 by THE FREE PRESS

A Division of Macmillan Publishing Co., Inc.

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the Publisher.

THE FREE PRESS

A Division of Macmillan Publishing Co., Inc.

866 Third Avenue, New York, N. Y. 10022

Collier Macmillan Canada, Inc.

Library of Congress Catalog Card Number: 81-67988

Printed in the United States of America

printing number

7 8 9 10

Library of Congress Cataloging in Publication Data

Bailey, Kenneth D.

Methods of social research.

Bibliography: p.

Includes index.

1. Sociology—Methodology. I. Title.

HM24.B295 1982 301'.07'2 81-67988

ISBN 0-02-901280-5 AACR

Methods of Social Research

To JNB and SJB

Preface to Second Edition

In preparing this second edition I have had two major goals in mind. One was to move *Methods of Social Research* into the 1980s. The other was to remedy omissions from and errors in the earlier edition, a task that was greatly facilitated by the comments of a number of reviewers, readers, and friends.

Perhaps the most revolutionary development since the first edition is the amazingly rapid development of telephone interviewing. Telephone interviewing was a minor survey method in the mid- to late 1970s. As late as 1978 it was characterized by Dillman as a “stepchild” to the face-to-face interview, and was discussed as a relatively minor method (but with distinct advantages) in the first edition of this volume. By the early 1980s telephone interviewing had clearly become a major survey method. Thus it is discussed at length in chapter 8. An important related development is Dillman’s (1978) “Total Design Method” (TDM), which is utilized for both mailed questionnaires and telephone interviewing, and is discussed in chapter 7. Among the other areas which have seen rapid recent growth and thus received enlarged discussion in this edition are ethics (chapter 17) and applications—particularly evaluation research and social indicators (chapter 18).

In addition to these recent developments, a number of other topics have received extended coverage or revision, in some cases in response to reviewers’ or readers’ suggestions. Notable among the extended discussions are the discussion of social science as science (chapter 1), and the discussion of causality (chapter 3). As for revisions, chapter 9 (experiments) received the most extensive treatment. Following reviewers’ comments, chapter 9 now emphasizes random assignment to groups and factorial experimental designs more than did the first edition. Further, the discussion of semi-experimental designs has been greatly revised and updated. Scaling (formerly chapter 16) and statistics (formerly chapter 15) were transposed at the request of several readers so that scaling is now discussed be-

Preface to Second Edition

fore statistics, and the statistics chapter has undergone substantial revision, including extended explanation and interpretation. Virtually all of the other chapters have received some degree of revision and extended discussion, and all of them have been updated as thoroughly as possible. As in the other chapters mentioned, this task was greatly facilitated by reader and reviewer comments.

I have benefited greatly from four very detailed reviews. Three of these were anonymous and were secured by the Free Press. The fourth was graciously supplied by Dr. Maureen McConaghy of the University of Maryland, Baltimore County. I also owe special debts to Carollois Sturman and Ronald Watts, and particularly to K. Jill Kiecolt, who aided in the revision of several chapters. Also, a blanket debt is acknowledged to the many other colleagues, researchers, and students who provided suggestions or encouragement. Finally, special thanks go to Charles Smith and Kitty Moore of the Free Press for their excellent support at all stages of the project, and to Michael Sander of the Free Press for an excellent editorial job.

Preface to First Edition

It seems customary to preface a book on social research methods by stating that the book focuses on the interrelationship between theory and research. The implication seems to be that this will make it clear and easy to read. Unfortunately, things are not so simple. While not de-emphasizing the need to integrate theory and research, I have made it my major objective to write a book that is comprehensive and detailed enough to be useful while plainly written enough to be readable. Students are too often faced either with a book too simple to prepare them for the complexities of the real world of social research, with all its myriad problems, or too complex and abstract to be understood.

I have attempted to integrate the various data collection techniques by discussing the advantages and disadvantages and assessing the reliability and validity of each. I hope that this common framework will allow the student to compare methods more easily and will illuminate the compatibility of otherwise apparently diverse methods, thus dispelling the all too common but erroneous tendency to view the presentation of several methods in a single volume as a “cafeteria” approach having little continuity or depth.

Chapter 1 presents an overview of the research process and some examples to illustrate alternative approaches to the same research problem. Chapter 2 deals with the selection of the research problem, including such issues as differing paradigms and the role of values in social research. Chapter 3 discusses social explanation and hypothesis construction. Chapter 4 is a limited discussion of measurement, necessary at this point because I wished to introduce the notions of reliability and validity of the various data-collection methods to follow. A more comprehensive treatment of measurement, including methods of attitude-scale construction, appears in Chapter 16.

Chapters 5 through 8 all deal directly or indirectly with survey research. Too many books provide only one chapter on surveys even though the bulk of sociological studies analyze data gathered by this method. Thus, to provide adequate coverage of this important method, I have devoted separate chapters to survey

sampling (Chapter 5), questionnaire construction (Chapter 6), mailed questionnaires (Chapter 7), and interview studies (Chapter 8).

Chapters 9 through 13 deal with data-collection methods that serve as alternatives to survey research. The respective strengths and weaknesses of these techniques, including the survey, make them more suitable for certain types of research than for others. Chapter 9 discusses experiments, Chapter 10 observational methods, Chapter 11 ethnomethodology, Chapter 12 document study, and Chapter 13 simulation and games. The inclusion of Chapter 11 makes this volume unique among social research texts, for ethnomethodology is a relatively new approach that is not so well understood by researchers as some of the other methods. I hope this volume will help readers to understand the relationship of ethnomethodology to the more familiar methods.

Chapters 14, 15, and 16 deal with the processing and analysis of data after they have been collected. Topics discussed include coding and reduction of data to ready them for punching on computer cards (Chapter 14); analysis, presentation, and interpretation of data, including such topics as statistical analysis and presentation of data in tabular form (Chapter 15); and a discussion of various methods of attitude-scale construction (Chapter 16).

Chapters 17, 18, and 19 deal with nonmethodological topics of interest to researchers. Chapter 17 discusses ethics in social research. A subject once largely confined to medical experimentation, in recent years ethics has been increasingly emphasized in all social research including survey research, with the result that most studies, especially if funded through a university, must pass the review of an ethics or human subjects committee that frequently requires informed consent on the part of the subject. Chapter 18 discusses the application of social research in various social programs and court cases, notably the ones dealing with integration and busing. This too is a subject that is neglected in many social research books. Chapter 19 ends the book by returning full circle to the topic of theory construction, evaluation, and testing, presenting a discussion considerably more technical than the discussion in Chapter 3.

I wish to thank Melvin Pollner for his careful reading of the chapter on ethnomethodology. His comments were very helpful. I also wish to thank Jill Kiecolt, who read the entire text and wrote the teacher's manual, and Linda Nilson and Susan Kataoka for advice on various chapters. The reactions of several students in my introductory social research methods classes, who received the bulk of the material in the form of lectures, were also very helpful. George Magee deserves much thanks for an excellent editorial job under great pressure. Finally, Charles Smith and Gladys Topkis, Free Press editors, were very helpful in all stages of the project.

Acknowledgments

We wish to thank the following for the use of their materials in the production of this book:

Patricia Breyer Wild for various questionnaire items, questionnaire portions, cover-letter portions, and descriptions of survey procedure from *Child Health Care Survey* (Los Angeles: University of California, 1973) and from *Sociological Utilization of a Prepaid Pediatric Health Care Plan* (Ph.D. dissertation, University of California at Los Angeles, © 1974 Patricia Breyer Wild). Reprinted by the permission of the author.

Gene N. Levine and Robert C. Rhodes for questionnaire items and introductory questionnaire statement from the *Nisei Male Questionnaire Mailed Instrument* (University of California at Los Angeles, Japanese-American Research Project [JARP] by Gene N. Levine and John Modell, 1967), which will be appearing in their forthcoming book, *The Japanese-American Community*. Reprinted by permission.

Leo G. Reeder for questionnaire items, opening statement, and face sheet from *Student Survey: Questionnaire* 1969a; *The UCLA Student Poll* 1969b; *Los Angeles Metropolitan Area Survey: III (LAMAS III): Questionnaire* 1971; and *Los Angeles Metropolitan Area Survey: IV (LAMAS IV): Questionnaire* 1972 by The Survey Research Center (SRC) of the University of California at Los Angeles. Reprinted by permission.

Marjorie N. Donald for material from "Implications of Nonresponse for the Interpretation of Mail Questionnaire Data" in *Public Opinion Quarterly* 24 (Spring): 102. Reprinted by the permission of the author and the publisher, © 1960 American Association for Public Opinion Research.

John R. Raser for material from *Simulation and Society: An Exploration of Scientific Gaming* (Boston: Allyn and Bacon). Reprinted by the permission of the author, © 1969 John R. Raser.

Otis Dudley Duncan for material from "Path Analysis: Sociological Examples" in *The American Journal of Sociology* 72 (July). Reprinted by the permission of

Acknowledgments

the author and the publisher, © 1966 the University of Chicago. All rights reserved.

Robert Brown for material from *Explanation in Social Science* (Chicago: Aldine). Reprinted by the permission of Routledge and Kegan Paul, Ltd. and Aldine Publishing Co., © 1963 Routledge and Kegan Paul, Ltd.

Contents

<i>Preface to Second Edition</i>	xvii
<i>Preface to First Edition</i>	xix
<i>Acknowledgments</i>	xxi

PART ONE Principles of Social Research

1 The Research Process	3
Social Science as Science	5
Stages of Social Research	9
<i>Circularity • Replication</i>	
Examples: Density Research	11
<i>Stage 1: Choosing the Problem and Stating the Hypothesis •</i>	
<i>Stage 2: Research Design • Stage 3: Gathering the Data •</i>	
<i>Stage 4: Coding and Analyzing the Data • Stage 5:</i>	
<i>Interpreting the Results and Testing the Hypothesis</i>	
Summary	16
2 Choosing the Research Problem	18
Factors Affecting Problem Selection	19
Examples of Current Research	20
Applied Versus Pure Research	21
<i>Applied Research • Pure Research • Pure and Applied Research</i>	
Research Paradigms	23
Values	25
<i>Value-free Sociology • The Myth of Value-free Sociology •</i>	
<i>Effects of Values in Social Research • Values and Perception</i>	
Reactivity	30

Contents

Methodology Versus Method	32
The Unit of Analysis	33
Cross-sectional Versus Longitudinal Studies	34
Summary	35

3	Constructing Social Explanations	37
	Descriptive Studies	38
	Explanatory Studies	38
	<i>Explanation • Prediction</i>	
	Theory	39
	<i>Concepts and Variables • Propositions Defined •</i>	
	<i>Relationships Between Variables</i>	
	Types of Propositions	41
	<i>Hypotheses • Empirical Generalizations • Components of</i>	
	<i>Axiomatic Theory: Postulates, Axioms, Theorems</i>	
	Bivariate Relationships	45
	<i>Positive Versus Negative Relationships • Strength of the</i>	
	<i>Relationship • Symmetrical Versus Asymmetrical</i>	
	<i>Relationships • Independent and Dependent Variables •</i>	
	<i>Distinguishing Independent from Dependent Variables •</i>	
	<i>Causal Relationships • Linear Versus Nonlinear</i>	
	<i>(Curvilinear) Relationships • Spurious and Intervening</i>	
	<i>Relationships • Suppressor and Distorter Variables</i>	
	Alternate Strategies for Hypothesis Formulation and	
	Verification	53
	<i>The Classical Approach • Grounded Theory • Classical</i>	
	<i>Versus Grounded-Theory Approach • Operationalism • A</i>	
	<i>Critique of Operationalism • Classical, Grounded-Theory,</i>	
	<i>and Operational Approaches Compared</i>	
	Summary	59
4	Measurement	61
	The Quantitative/Qualitative Distinction	62
	Level of Measurement	63
	<i>Nominal • Ordinal • Interval • Ratio • Discrete Versus</i>	
	<i>Continuous</i>	
	Measuring the Validity and Reliability of Measurement	68
	Assessing Validity	69
	<i>Face Validity • Criterion Validity • Construct Validity •</i>	
	<i>Internal and External Validity</i>	
	Assessing Reliability	73
	<i>Alternate or Parallel Methods • Test/Retest Reliability</i>	

Error	75
Summary	78

PART TWO Survey Research Methods

5	Survey Sampling	83
	Technical Terms	85
	Sample Versus Population	85
	Sampling Efficiency	86
	<i>Notorious Sampling Failures • Sampling Successes • Advantages of Sampling</i>	
	Constructing the Sampling Frame	89
	Probability Sampling	91
	<i>Random Sampling • Systematic Sampling • Stratified Random Sampling • Cluster Sampling</i>	
	Nonprobability Sampling	97
	<i>Convenience Sampling • Quota Sampling • Dimensional Sampling • Purposive Sampling • Snowball Sampling</i>	
	Sample Size	100
	<i>Statistical Considerations of Sample Size • Sample Size Versus Sampling Proportion • Sample Size for Stratified Sampling • Weighted Samples • Examples of Weighted Samples • Sample Size for Cluster Sampling</i>	
	Summary	107
6	Questionnaire Construction	109
	Constructing Questionnaires	111
	Questionnaire Relevance	113
	<i>Relevance of the Study • Relevance of Questions to the Study • Relevance of Questions to Respondents</i>	
	Pitfalls in Questionnaire Construction: Wording the Questions	115
	<i>Double-barreled Questions • Ambiguous Questions • Level of Wording • Abstract Versus Factual Questions • Leading Questions • Sensitive or Threatening Questions</i>	
	Open and Closed Response Categories	123
	<i>Closed-ended Questions • Open-ended Questions • Open and Closed Questions Compared</i>	
	Response-category Format	128
	<i>Number of Categories • Ordinal Variables • Interval Scales</i>	
	Question Order	138

Contents

Contingency Questions	142
Cover Letter or Introductory Statement	144
Instructions for Interviewers or Respondents	147
Pretesting	148
Summary	153

7	Mailed Questionnaires	155
	Advantages of Mailed Questionnaires	156
	Disadvantages of Mailed Questionnaires	157
	The Total Design Method	160
	Factors Affecting Mail Surveys	161
	<i>Sponsorship • Questionnaire Format and Color •</i>	
	<i>Questionnaire Length • Cover Letter • Ease of Completing</i>	
	<i>and Returning Questionnaire • Inducements to Reply • The</i>	
	<i>Nature of Respondents • Type of Mailing • Day, Week, or</i>	
	<i>Month of Mailing • Follow-up Letters and Telephone Calls</i>	
	<i>• Number and Timing of Follow-ups or Reminders</i>	
	Adequate Response Rate	177
	Validity and Reliability	178
	<i>Validity • Reliability</i>	
	Summary	180
8	Interview Studies	181
	Advantages of Interview Studies	182
	Disadvantages of Interview Studies	183
	The Interview as Social Interaction	184
	The Interview as a Secondary Relationship	186
	Effects of Interviewer Characteristics	189
	<i>Race and Ethnicity • Sex • Social Status • Age • Clothing</i>	
	<i>and Grooming</i>	
	The Interview	194
	<i>Approaching the Respondent • Dealing with Refusals •</i>	
	<i>Conducting the Interview</i>	
	Less Structured Interviews	197
	<i>Open-ended Questions • Probes • Semistructured Interview</i>	
	<i>• The Clinical Interview • The Unstructured Interview •</i>	
	<i>Reliability and Validity of Unstructured Interview</i>	
	Interviewing Children	203
	<i>Language Skills • The Child-Adult Relationship • The</i>	
	<i>Interview Situation</i>	
	Projective Methods	206
	The Telephone Interview	207

<i>The Revolution in Telephone Interviewing</i>	
Interviewer Training	211
Entering the Field	213
The Panel Study	214
Validity and Reliability	215
Summary	216

PART THREE Nonsurvey Data Collection Techniques

9 Experiments	221
Advantages of Experiments	223
Disadvantages of Experiments	224
Closure	225
The Logic of Experimentation	227
One- and Two-Group Experimental Designs	228
<i>Before and After Experiment with No Control Group</i>	
Assignment of Subjects to Control Groups	230
<i>Randomization • Simple Matching (Precision Control) •</i>	
<i>Frequency Distribution Control</i>	
Multiple-Group Designs	233
<i>Two Experimental Groups with One Control Group •</i>	
<i>Factorial Designs • Latin Square Design • Interaction</i>	
<i>Effect • Solomon Two Control Group Design • Solomon</i>	
<i>Three Control Group Design</i>	
Further Examples of Laboratory Experiments	240
<i>Field Experiments • Quasi-experimentation</i>	
Validity and Reliability	244
Summary	
10 Observation	247
Advantages of Observation	249
Disadvantages of Observation	250
Types of Observation	252
Field Studies	254
<i>Gaining Entry • Gaining Rapport • Observing and</i>	
<i>Recording • Dealing with Crises • Data Analysis</i>	
Completely Structured Observation	264
<i>Semistructured Study • Unstructured Laboratory Study</i>	
Indirect Observation	272
<i>Erosion Measures • Accretion Measures</i>	

Validity and Reliability	275
<i>Validity of Direct Observation • Measured Validity •</i>	
<i>Validity of Indirect Observational Methods • Reliability</i>	
Summary	281
11 Ethnomethodology	283
Ethnomethodology Versus Survey Research	286
<i>Process Versus Product • Indexical Expressions</i>	
Conversational Structures	291
Validity and Reliability	294
<i>Validity • Reliability</i>	
Comparison of Positions	297
Advantages of Ethnomethodology	299
Disadvantages of Ethnomethodology	299
Summary	300
12 Document Study	301
Advantages of Document Study	302
Disadvantages of Document Study	304
Data Sources	307
Secondary Analysis	308
Types of Documentary Analysis	309
Personal Documents	310
Content Analysis	312
<i>Purpose • Sampling • Categories • Recording Unit •</i>	
<i>Context Unit • Systems of Enumeration</i>	
Historical Research	324
Validity and Reliability	326
<i>Validity • Reliability</i>	
Summary	329
13 Simulations and Games	330
Advantages of Simulation	331
Disadvantages of Simulation	333
Types of Games	334
<i>Two-person Games • N-person Games</i>	
Computer Simulation	339
Validity	340
Summary	342