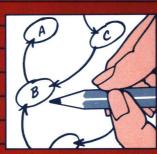
FINDING OUT

Conducting and Evaluating Social Research

June Audrey True





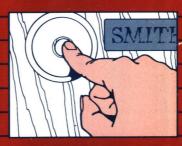


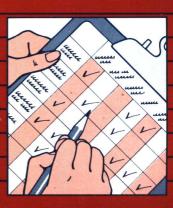












FINDING OUT Conducting and Evaluating Social Research

June Audrey True
Trenton State College

Wadsworth Publishing Company Belmont, California A Division of Wadsworth, Inc.

Dedication

To my grandmothers, Henrietta Carmen Wills and Ellen Catherine Garland; to my mother, Harriet May Day, writers all, in memoriam.

To my youngest daughter, Catherine Elizabeth Albert, who is the most recent representative of the writing tradition in the family.

Sociology Editor: Bill Oliver

Production Editor: Gary Mcdonald

Designer: Adriane Bosworth Copy Editor: Jonas Weisel

Technical Illustrator: Lisa Palacio, Georg Klatt

Cover Illustrator: D. J. Simison/Dow, Clement & Simison

Signing Representative: Jeff Wilhelms

© 1983 by Wadsworth, Inc. All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transcribed, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher, Wadsworth Publishing Company, Belmont, California 94002, a division of Wadsworth, Inc.

Printed in the United States of America 6 7 8 9 10 - 92 91 90 89 88

ISBN 0-534-01168-3

Library of Congress Cataloging in Publication Data

True, June A. Finding out.

Bibliography: p. Includes index.

1. Social sciences—Research.

H62.T69 300'.72 82-6943 ISBN 0-534-01168-3 AACR2

I. Title.

Preface

This book is for the student who wants to know the essentials of research methods and for the teacher who needs a clear, readable text to complement classroom lectures and discussions. It is intended as a main text in introductory methods courses.

The object of this book is to introduce research methods in practice as well as in theory. This is accomplished by presenting theory in textual descriptions, discussions, and illustrations, incorporating as little professional jargon as possible and including straightforward definitions of technical terms, followed by exercises that enable the student to put theory into practice. These exercises, which appear at the end of each chapter, allow the student to wrestle with techniques and problems presented in the text and, by singling out one or two aspects of a published work, provide training in critical examination.

Although the typical research methods course has traditionally been designed for students who expect to enter Ph.D. programs, the need now is for a comprehensive introduction that meets the needs of those who will either go directly into professional practice or pursue a master's degree in social work or business. Because these alternatives now require more sophisticated knowledge of research than in the past, the students also need to study the principles behind scientific research, its ethical requirements, basic techniques, and potential effect. They must not only be prepared for the occasional research project or for possible further study of these matters, but must also be skilled in reading and evaluating research reports relevant to their rapidly expanding fields.

Finding Out has an introduction and twelve chapters, organized into three parts: research design, data collection and analysis, and presentation of results. Ethical matters and political or social influence are considered as they are relevant. Each chapter is followed by a summary and conclusion and main points. Chapter Ten, on statistics, also provides lists of test statistics and symbols. Footnotes refer the student to published works, and these are supported by a complete bibliography at the end of the book. Following the book's main body, too, are five tabular appendices (random numbers, critical values of chi square, normal curve areas, estimated sampling error, and square roots), an appendix that describes recommended procedures for grant proposal writing, and a glossary.

This book is best used if, as the student reads each chapter, the topic is presented in class with a discussion of the exercises. If the student then completes the exercises and submits them to the teacher, an enlightening "postmortem" can be held and experiences exchanged. Exer-

andra i victoria de la composición del composición de la composici

cises can be done alone or with a partner at the discretion of the teacher. For the ten years I have used exercises in my classes, the students have learned a lot from them and seem to enjoy them. Students have also regaled the groups with some very funny stories, and the "postmortems" have charactistically been lively.

The Teacher's Manual, which is provided with this text, suggests a number of modifications and assignment programs that are designed to be compatible with term projects and examination schedules. Some exercises may be omitted, and all may be modified to increase or decrease the time necessary to complete them. The Manual also includes examination questions, discussion topics, and project ideas.

My intent has been to write Finding Out in language clear enough so that the student feels comfortable with research right away. I have provided simple illustrations in an easy style because I do not want the student to think of research as an inscrutable business, appropriate for only a few highly trained experts in a restricted number of fields. I have attempted, therefore, to relate the topics discussed to common experience and to apply research methods to the real world.

A student completing a research methods course with the help of this text should be well prepared to go on to further study in research methods or to go out into a field where a basic understanding of research is needed. Finding Out provides the practical knowledge of research methods so useful to social workers, corrections personnel, agency administrators, business executives, and government employees. It will also be of great benefit to the student hoping to enter a training position in market research or the opinion survey field. All of the major topics of research design, data collection and analysis, and project presentation are addressed; discussions also cover the principles behind the methods, the ethical dilemmas, and the emerging field of evaluation research.

I am grateful for the turn of fate that brought me under the tutelage of two dedicated and practical teachers at Rutgers University: Professor Matilda White Riley and Charles Herbert Stember. Much of the merit in this present work is directly traceable to their high standards and strict teaching methods. I am also grateful to a special group of Trenton State College students who inspired this book: Lenora Baker, Karen Blank, Sue Colangelo, Mary Farrington, Diane Harms, Sylvia Harris, Lisa Jachetti, Natalie Kaplan, Robert Land, Cassandra Macon, Wanda Miller, Janet Nieves, Rose Parks, Joanne Pedone, Chris Rao, Kathleen Robinson, Judy Samuels, Lewis Stephens, Peter Storey, and Annemarie Swatkowski. I want to thank my colleagues, Drs. Norman A. Heap, Sheila Mays, and Howard Robboy, all of Trenton State College, for their advice and opinions.

Comments on and careful evaluations of my manuscript were very valuable to me and I want to thank the reviewers: Sheila Cordray, University of Oregon; Elizabeth A. Rooney, San Francisco State University; Jane Sell, Texas A & M University; Ross Staton, Baylor University; Gary M. Stokely, Louisiana Tech University; Judith Thomas, Columbia Uni-

versity; Cheryl Tieman, Auburn University at Montgomery; and Kristen Wenzel, College of new Rochelle; the staff at Wadsworth: Adriane Bosworth, Laurie Foodim, Gary Mcdonald, Judith McKibben, Bill Oliver, Curt Peoples, and Jeff Wilhelms; and the careful copy editor, Jonas Weisel.

In addition to the inestimable help given by those already named, I thank the Trenton State College librarians, Cathy Emerson for typing help, and my faithful daughters, Emily and Katie Albert, who read, photocopied, collated, and supported my enterprise for what must have seemed a very long time.

Most of all, I would like to thank the readers who are considering this book and the students who are assigned it; to all of you I extend a warm invitation to join me in examining the intriguing and highly rewarding business of finding out.

201

June Audrey True Trenton, New Jersey

Contents

ix

What We Mean by Research

The Organization of This Book

6

Summary and Conclusion

Why Learn Scientific Research Methods?

1

, **W**. 1

3

Preface

Introduction

Main Points

	Notes 6
Part 1	Designing a Research Project 9
Chapter One	The Scientific Method of Research 11
	Basic Handicaps to Finding Out the Truth 11 The Scientific Method 18
	Research Design 22
	Summary and Conclusion 23
	Main Points 24
	Notes 24
	EXERCISES 25 1.1 Selective perception and unfocused observation 27 1.2 Social pressure 29 1.3 False conclusions 33
Chapter Two	The Research Question 35
	How to Ask the Question 35
	Operationalization 48
	Selecting a Research Mode 52

1.30

Notes 62	
EXERCISES 63 2.1 Specifying a question and framing a hypothesis 2.2 Operationalizing the variables 67 2.3 Critique 69	65
Chapter Three The Sample and Significance 71	
The Sample 71	
Techniques of Sampling 74	
The Number of Samples 83	
Choosing a Sampling Technique 85	
Summary and Conclusion 87	
Main Points 88	
Notes 88	
EXERCISES 89 3.1 Drawing samples 91	
3.2 Critique 93	
3.2 Critique 93 Chapter Four Choosing the Methods 95	
Chapter Four Choosing the Methods 95	
Chapter Four Choosing the Methods 95 Major Research Methods 95	
Chapter Four Choosing the Methods 95 Major Research Methods 95 Time 101	
Chapter Four Choosing the Methods 95 Major Research Methods 95 Time 101 Money and Sponsorship 106	
Chapter Four Choosing the Methods 95 Major Research Methods 95 Time 101 Money and Sponsorship 106 Access 111	
Chapter Four Choosing the Methods 95 Major Research Methods 95 Time 101 Money and Sponsorship 106 Access 111 Ethics 116	
Chapter Four Choosing the Methods 95 Major Research Methods 95 Time 101 Money and Sponsorship 106 Access 111 Ethics 116 Multifaceted Research 119	
Chapter Four Choosing the Methods 95 Major Research Methods 95 Time 101 Money and Sponsorship 106 Access 111 Ethics 116 Multifaceted Research 119 Summary and Conclusion 121	

The state of the s

Summary and Conclusion

61

Part 2	Methods of Data Collection 133
Chapter Five	Indirect Methods of Data Collection 135
	Unobtrusive Measures 135
	Content Analysis 137
	Available Data 141
	Summary and Conclusion 147
	Main Points 148
	Notes 148
	EXERCISES 149 5.1 Unobtrusive measures 151 5.2 Content analysis 153 5.3 Available data 155 5.4 Critique 157
Chapter Six	Participant and Nonparticipant Observation 159
	Goals and Methods 159
	Modes of Observation 168
	Summary and Conclusion 174
	Main Points 175
	Notes 176
	EXERCISES 177 6.1 Participant observation 179 6.2 Nonparticipant observation 181 6.3 The sociogram 185 6.4 Critique 187
Chapter Seven	Interviews and Questionnaires 189
	Interviews 190
	Questionnaires 207
	Interviews versus Questionnaires 219
	Summary and Conclusion 220
	Main Points 221
	Notes 222

EXERCISES	223
-----------	-----

7.1 The unstructured interview 225

7.2 The semistructured interview 227

7.3 The questionnaire 229

7.4 Critique 231

Chapter Eight

Experiments and Quasi-experiments 233

Experiments 233

Quasi-experiments 241

Summary and Conclusion 248

Main Points 248

Notes 249

EXERCISES 250

8.1 An experiment in the effect of dress

8.2 Critique 255

8.3 Choosing the methods 257

Part 3

Bringing in the Sheaves

259

253

Chapter Nine

Analyzing the Data 261

The Goals 261

Techniques 265

Summary and Conclusion 291

Main Points 292

Notes 293

EXERCISES 294

9.1 Organizing the data 295

9.2 Preparing a bivariate table 297

9.3 Critique 299

Chapter Ten

The Significance of Tests 301

Descriptive Statistics 303

Inferential Statistics 311

Two Kinds of Significance 317

Summary and Conclusion 318

Main Points 319

Notes 320

EXERCISES 321

10.1 Descriptive statistics 323

10.2 *Critique* 325

Chapter Eleven Coming to Conclusions 327

Front Matter 327

Text 331

Back Matter 344

Reminders 345

Summary and Conclusion 346

Main Points 346

Notes 346

EXERCISE 347

11.1 Critique 349

Chapter Twelve The Consequences of Research 363

Ethical Dilemmas 363

Social and Political Policy 367

Evaluation Research 369

Differences Between Evaluation Research and Basic Research 372

Summary and Conclusion 372

Main Points 373

Notes 373

Epilogue 374

EXERCISE 375

12.1 Program evaluation (critique) 377

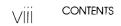
Appendix A Random Numbers 380

Appendix B Critical Values of Chi-Square 382

Appendix C Normal Curve Areas 384

Appendix D Estimated Sampling Error 385

Appendix E Square Roots 386



Appendix F Proposal Writing 391

Glossary 397

Bibliography 410

1.1

- 18484c . I

Index 419

Introduction

This book is about the most exciting and rewarding of intellectual enterprises. It's about exploration and discovery, solving mysteries, confirming suspicions, and being surprised. It's about finding out. In a word, this book is about research.

What We Mean by Research

An easy definition of **research** might be the process of studying in order to discover something. By this definition, if someone is moving in next door and you want to know about the new household, your research could consist of sitting at your window and watching as the furniture is unloaded. You might learn quite a lot that way. What you learn would depend greatly on luck—for example, whether or not your phone rings or you have to go to work before the movers are finished. Our definition of research in this book is more comprehensive because we want to imply a process that reduces the role of luck as far as possible. Therefore, our definition specifies the dimensions, the scope, and the method of research.

The dimensions of research

Research has width, depth, and duration. It must be wide enough to include the relevant facts, deep enough to go beneath the superficial impression, and it must endure long enough to get a reasonably complete picture. If these requirements are not met, the outcome will be as unsatisfactory as those fragments of conversation one sometimes overhears in an elevator. Our need for width, depth, and duration arises from the types of objectives our research will be trying to meet, that is, the scope of research.

The scope of research

We include in the scope of research three main types of objective: discovery, classification, and detection. As we shall see in this section, these objectives lead to three modes of research: exploratory, descriptive, and explanatory. Let's take a look at some examples.

Suppose you wanted to find out what life is like in a society unfamiliar to you. One way you could accomplish this would be to go and live in that society for a while until you come to understand it through direct experience. Janheinz Jahn, a student of African culture, proceeded this way. In his travels through Nigeria and Togo he insisted on living like an

African and being treated like one. His objective was discovery of the African way of life. His research was **exploratory**.

Another objective included in the scope of research, as we are defining it, could be to accumulate facts about something and record them for the benefit of human knowledge. John James Audubon pursued this goal when he ranged over the fields and woodlands of the nation observing and recording the appearance of our native birds in their natural habitats.² His objective was **classification** of our wild birds. His research was **descriptive**.

The last research objective with which we shall be concerned is detection. Detection is finding out the truth about something. It goes beyond discovery and classification because it searches for the reasons why something exists. Such a study was done by Bruno Bettelheim, the world-renowned psychologist, who studied children in the kibbutzim of Israel. These kibbutzim, or communally run farms, are organized so that children are not with their own parents except for brief visits. Nevertheless, unlike children raised in institutions in the United States, the Israeli kibbutz children do not find it difficult to adjust to life later on. Wishing to find out why this was so, Bettelheim went to Israel and studied the kibbutz way of life.³ His objective was detection of the child-rearing practices that yielded a different result from our own. His research was **explanatory**.

To meet our need for width, depth, and duration and to reach our objectives, we follow a well-organized procedure. This is the method of research. You will learn many research methods in this book, but they are all part of scientific research. Thus, they are all subdivisions of a special approach called the scientific method.

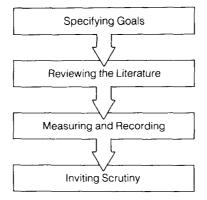
The method of research

Scientific research means studying something carefully and thoroughly. Using a specific set of rules, it asks and answers questions about the world. These rules are called the scientific method. The scientific method includes ideals and procedures that guide the preparation and execution of a research design. The ideals are objectivity, or freedom from bias; empirical verification, or checking facts in the real world; contribution to knowledge, or advancing existing knowledge; and publication, or sharing the result with the scientific community.

The procedures of the scientific method are specifying goals, or defining the object of one's project; **reviewing the literature**, or familiarizing oneself with the published work already done on the topic; measuring and recording, or careful specification of what is actually observed; and inviting scrutiny, or submitting one's work to the judgment of others in the field of study (see flowchart).

Throughout this book the word *research* refers to scientific research, and the use of the scientific method is assumed. There are other ways of asking and answering questions. You use some of them every day.

Procedures of the scientific method



Competent people are all around. Hairdressers, bartenders, clergymen, friends, teachers, and family members can be consulted. You can also find things out by looking (Is the water boiling?), testing (If I stop short, will my brakes hold?), and counting (How many gallons of fuel oil did we use this month?). All of these inquiries are worthwhile. The reason they are not scientific research lies in the method.

Since you already know other methods of inquiry, you may wonder why it is useful for you to study scientific research method. Let's look at four main reasons.

Why Learn Scientific Research Methods?

You have chosen to attend college and become a professional in one of the fields of endeavor that requires such training. Modern professionals need a knowledge of research in order to perform it, evaluate it, use it, and understand its implications.

Performance

As a professional you will be expected to be capable of performing research even if you are not usually called upon to do it. The people who hire you will take it for granted that you can conduct a piece of research if necessary. Such an assignment can come your way at any time, and you have to be prepared for it. Moreover, there is no other way to gain a real understanding of research except by doing it. You can, of course, acquire a superficial knowledge of research by reading books about it, just as you can acquire a superficial knowledge of how to maintain your car by reading the manual. For adequate knowledge that will carry you through in practice, however, you need hands-on experience. As you get it, you will also develop an ability to read other people's research reports and evaluate them.

1.11 E. F. S. 19 (4.4)

品輪 自己 自动和自己

Evaluation

Modern professionals, whether in the academy or in the field, need to keep up with scientific activity and progress in their own and other areas. They must be able to read intelligently, recognize superior efforts, see where a particular work fits in the collective scientific effort, and assess the importance of a contribution. They must also be able to judge the competence with which the work was carried out. Your professional training continues throughout your professional career, and your perusal of the scientific literature is an important part of it. Your accumulation of information about your line of work is necessary because you need to use that information.

Utility

Our world moves very fast. Technology provides rapid international communication, and science exchanges information with business so that both can take advantage of the information. As a professional you will be expected to have the latest developments in knowledge and technique at your command, insofar as is humanly possible. Your education and experience in the approach, methods, and limitations of research will help you immeasurably here. They will give you confidence and skill in incorporating new ideas into your work. One of the special skills that you will begin to acquire while studying research and that you will develop and refine all through your professional life is the ability to make connections between abstract ideas and real situations. You will understand the implications of the research you do and read.

Understanding implications

In order to understand the implications of research you must be familiar with the relevant body of existing theory as well as with the relevant research already accomplished. Only then will you understand how the new result fits into the body of existing work and what implications it has for professional practice as well as for further research. For example, theories about the social structure assume a status set, or number of social positions, for each person. Each status in the set has a variety of roles to be played, or expected behaviors. You might be a son, a truck driver, a father, a husband, and the captain of the local softball team. There is a lot of theory about the way in which people juggle their statuses in order to accommodate demands made on their time and energy; there is also a good deal of theory about acquiring new statuses and learning the roles and about moving through a sequence of statuses. At the start of this research, however, not very much attention was paid to the process of losing statuses, which happens gradually with age and as people experience bereavement, retirement, and infirmity.

In the late thirties William Foote Whyte conducted a study that at first glance has nothing to do with old age and its problems. Nonetheless, this study about unemployed young men in Boston describes an incident in which one of the study's subjects loses his status as a member of

a little of the state of the st

the inner circle of his group and gets sick as a result.⁴ The idea that losing a status can affect one's health is an important one for medicine, social work, criminal justice, and sociology. Consider the implications for gerontological social work. A social worker who is familiar both with status and role theory and with research findings such as Whyte's will be aware of the physical problems that can be triggered by status losses, such as when a person retires from his or her job.

Since Whyte's time several studies on aging have addressed the problem of losing social statuses and roles. Many new research projects have been engendered by the growing awareness of the influence of social status on health. Some of the consequences have been social programs designed to deal with this problem.

As this example illustrates, fledgling professionals from all fields benefit by training in basic research methods. This is the main purpose of the present book.

The Organization of This Book

In order to make it easier for you to learn the basics of research method, this book begins by explaining the obstacles we all face that hinder our finding out the truth. This is followed by an explanation of how to overcome these obstacles by the use of the scientific method and the principles of research design.

The book continues by outlining the process of developing and putting into operation a research question. After that you will learn what considerations may lead you to choose a particular group of subjects to study. Part 1 concludes with an overview of the methods used to collect information and the resources needed to employ them.

Part 2 offers a detailed discussion of the methods summarized in Part 1, citing examples of how they have been used in previous research. The advantages and disadvantages of each method are explained.

The last part of the book focuses on the **analysis** and **evaluation** of the collected information and the presentation of results. The book ends with the important topic of the consequences of research and the social and political influences that affect it.

Throughout this book exercises are included to provide practice in basic research techniques as well as experience in grappling with typical problems. Professional terms are explained when introduced and are collected in a complete glossary at the end of the book. You should not be intimidated by the appearance of many new words and some old words that have been given new meanings. The special language used in research is not intended to confuse but is meant to add precision to what we are saying. When we refer to information as **data**, we are saying that it is a special kind of information, for example, information collected for analysis in a research project.