



Empirical Political Analysis

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BRIANS | WILLNAT | MANHEIM | RICH

Eighth Edition

EMPIRICAL POLITICAL ANALYSIS

QUANTITATIVE AND QUALITATIVE RESEARCH METHODS

Craig Leonard Brians

Virginia Polytechnic and State University

Lars Willnat

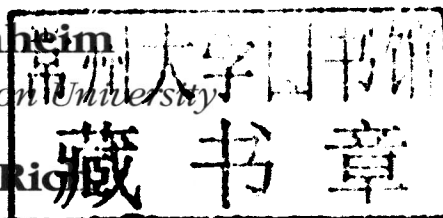
Indiana University

Jarol B. Manheim

The George Washington University

Richard C. Richey

Virginia Polytechnic and State University



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PREFACE

With this edition, *Empirical Political Analysis* comes full circle. More accurately, the principal author, Craig Brians, has come full circle—from reading a copy of the second edition of this text in his first college methods course, to joining the author team on the sixth edition, to becoming first author of the eighth edition. In fundamental ways, his professional formation has been shaped by—and now helps to shape—this premiere political science methods text, which was originally conceived by Jarol Manheim and Richard Rich a decade before most of today’s college freshmen were born.

This edition incorporates a more personal touch, reflecting Brians’ experience with (and scholarship on) teaching research methods. Like many of you who teach methods, Brians noticed that his students connect better with methods techniques when he relates how we study political science to his own life experience. Like many of you students reading this book for your first methods course, Brians grappled with the content of this class when he himself was a student. Unlike, say, taking a course that covers U.S. government or comparative politics, he had no idea why he was required to take a course that involved math. Rest assured, you will get through this! When you finish this book, you will have a much better idea why the discipline typically requires a methods course for graduate students and, increasingly, for undergraduates. The skills you gain in this course should help you be more successful in every future course you take (in political science or other fields), in your everyday life, and in your future career. The section below, describing the new features of this edition, outlines some of the techniques we use to deliver on this claim.

NEW TO THIS EDITION

Each chapter has been fully updated and revised to incorporate the most current political science research advancements. New features include:

- ***We Are All Researchers.*** This message resonates in each chapter. The introductory chapter starts with a story that demonstrates to students: “As a small child you were doing research, and you still perform research every day!” In each chapter we teach students to research more systematically and efficiently, yielding more predictable and easier-to-communicate results.
- ***Word Mining.*** A new chapter teaches this newly developed technique for literature reviewing, which capitalizes on tools students already use and *think* they know (e.g., Google) and scholarly tools they usually have not already used (e.g., indexed databases). Here, literature searching leads to writing the literature review.
- ***Choosing Your Methods.*** A new chapter puts the facets of both *qualitative* and *quantitative* approaches at the initial stages of the project, as students are developing their research designs. When students start by thinking more broadly, they research more broadly.
- ***Research Exercise.*** Each chapter features a new “Research Exercise” that directly involves students in demonstrating each step in the research process. Depending on the

chapter's topic, students find themselves standing up individually or in groups to be part of a sampling frame, or role-play a focus group in a circle in front of their class.

- **Lab Manual.** The newly updated companion *Quantitative Analysis Lab Manual* (Brians 2011) teaches hands-on data analysis in SPSS and Excel, as well as enhanced literature searching skills. Carefully selected data sets and tailored exercises illustrate each analytic procedure, from difference of means to crosstabs, and from regression to recoding. This manual provides essential hands-on explanations and practice with the research techniques that depend most heavily on math and computer software.

FEATURES

This edition reflects feedback from dozens of faculty and students from the United States and other countries. In the year before this text was revised, principal author Craig Brians traveled from coast to coast interviewing dozens of professors who teach in a wide variety of settings—from large research universities to small liberal arts colleges. The text you hold also reflects suggestions offered by many undergraduate and graduate students, who graciously responded to Brians' challenge for improvement.

The entire book is structured to follow the research process—not an ideal typical process, but one that more closely reflects what we actually see as students and faculty conduct their research. Although we frame the text in “stages” of research, we also make frequent references to the recursive process. For example, developing theories (Chapter 2) comes before researching the literature (Chapter 3), but they are closely related to one another; we cannot begin looking at research until we have an idea what we are researching, but we rarely know enough to develop a theory from whole cloth without consulting others' research on the topic(s).

Each chapter follows a straightforward path. Beginning with a set of learning goals, we then try to relate research to students' everyday lives through personal anecdotes, where possible. The chapters offer numerous examples, designed to demonstrate each concept and emphasize its importance. Research exercises are interspersed through the chapters to closely follow the topics they elucidate. All of the exercises use readily available resources to illustrate a research technique—some are designed to be 15-minute in-class exercises, while others can be assigned as homework. Ethics are crucial to every stage of the research enterprise; thus, a “Practical Research Ethics” box figures prominently in each chapter. Rather than isolate ethics in a separate location, our pedagogical approach infuses every chapter and every day in class with relevant ethical concerns and examples.

We try to anticipate the questions a student might raise and to respond to them. We introduce necessary technical terms—which is, after all, a central function of a methods text—but we strive to avoid unnecessary jargon. Specialized terms are defined in the glossary at the end of the book and are shown in **bold print** on their first use in context.

Finally, each chapter concludes with an annotated bibliography. The Research Examples are recent articles that feature high-quality articles that illustrate the research method used in the chapter. Faculty have told us they use these examples in two ways.

First, they may bring the article into class and show a portion of the text or a table or figure to demonstrate a facet of the research process. Alternatively, they may assign the articles to their students to read before class; by reading the article, the students get a more concrete feel for the research technique, or at least more concrete questions about the technique, which is an important starting point.

SUPPLEMENTS

Longman is pleased to offer several resources to qualified adopters of *Empirical Political Analysis* and their students that will make teaching and learning from this book even more effective and enjoyable. Several of the supplements for this book are available at the Instructor Resource Center (IRC), an online hub that allows instructors to quickly download book-specific supplements. Please visit the IRC welcome page at **www.pearsonhighered.com/irc** to register for access.

For Instructors

INSTRUCTORS GUIDE FOR THE LAB MANUAL. This guide includes suggestions for classroom exercises and homework assignments using the Lab Manual. Available exclusively on the IRC.

TEST BANK. This assessment resource includes multiple-choice, true-false, and essay questions for each chapter in this text. Available exclusively on the IRC.

For Students

LAB MANUAL. The newly updated companion *Quantitative Analysis Lab Manual* (0-205-79125-5) teaches hands-on data analysis in *SPSS* and *Excel*, as well as enhanced literature searching skills. Carefully selected datasets and tailored exercises illustrate each analytic procedure, from difference of means to crosstabs, and from regression to recoding. This manual provides essential hands-on explanations and practice with the research techniques that depend most heavily on math and computer software. To order the Lab Manual with this book, use ISBN 0-205-78833-5.

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ACKNOWLEDGMENTS

This text represents a collaborative effort of four authors, who hail from a range of political science fields. We publish research on topics ranging from political communications to environmental politics, from international studies to organizational networks, and more. Additionally, we work across the spectrum of methodologies—when we discuss a

given research method in this text, we speak from personal experience. For many political scientists, much of that experience has been gained using data obtained from the Inter-University Consortium for Political and Social Research at the University of Michigan (www.icpsr.umich.edu), and through hands-on exposure to qualitative and quantitative research techniques at the ICPSR Summer Program (www.icpsr.umich.edu/sumprog).

Although we collectively possess broad expertise, this text is written for students and has benefited from the useful feedback our own students have offered. Of particular assistance have been Craig Brians' students in the undergraduate (PSCI 2024) and graduate (PSCI 5116) Research Methods courses at Virginia Polytechnic and State University. We also have benefited from the comments we receive from students who use this text at colleges and universities across the United States and throughout the world—this book has been translated into numerous languages, including Arabic, Chinese, and Russian. Student responses have particularly contributed to the many Web-based resources incorporated into this book.

In preparing this eighth edition, we owe a particular debt to Bruce Pencek, Ph.D., College Librarian for the Social Sciences at Virginia Polytechnic and State University's Newman Library, whose expertise in teaching students (and faculty) to locate research and learn to tell stories through their research is reflected in an entirely new Chapter 3. Jessica Folkart, Ph.D., a language professor at Virginia Polytechnic and State University, substantially enhanced the clarity and readability of every part of this text. Additionally, we received detailed suggestions for every chapter from Caitlin Dwyer of the University of Minnesota as well as from Martin G. Evans of the University of Toronto. Also offering important suggestions were Danie Stockmann of Leiden University in the Netherlands, Joseph Fletcher of the University of Toronto, and Lindsey Lupo of Point Loma Nazarene University in California. Daniel Doherty of the College of William and Mary and Yale University provided suggestions that helped refine and clarify the text in the new stand-alone chapter on Experimental Research (Chapter 6). Virginia Polytechnic and State University graduate students who went out of their way to contribute include Burke Thomas, Miranda Canody, and Ted Farmer. Last, but certainly not least, three of Brians' undergraduate researchers contributed to this project: Nelson Gunther, Ryan Mowery, and Tyler Garrafa.

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We are grateful to Donna Bahry, whose knowledge of comparative politics and contributions to this text over the years are still reflected in Chapter 12, and to the literary executor of the late Sir Ronald A. Fisher, F.R.S., to Dr. Frank Yates, F.R.S., and to Longman

Group, Ltd., London, for permission to reprint Tables IV and VII from its book *Statistical Tables for Biological, Agricultural and Medical Research* (6th ed., 1974).

Finally, we want to thank our families, who, once again, have put up with our undoubtedly intolerable behavior as we came to terms with the fact that signing a publishing contract is not the same as turning in a completed manuscript.

With all of this assistance, the final product is ours. We are responsible for its weaknesses and for continually improving this text's value as a teaching tool. Thus, we welcome your comments and suggestions. Enjoy your research experience!

Craig Leonard Brians

Lars Willnat

Jarol Manheim

Richard Rich

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Research as a Process

In this chapter you will learn:

- How we formulate and test theories in everyday life.
- How empirical qualitative and quantitative scientific research differ from normative approaches to knowledge.
- The six steps of the political science research process.

You have always been a scientist, even before you attended school. Watch a small child explore her world. What does she do? She tests, observes, and queries her surroundings. She generalizes the accumulated knowledge into principles that closely resemble what we would call theories.

My younger daughter is now a college student, but when she was 2½ years old we visited my family's farm in Central California. Where I grew up, we did our cooking on a wood stove. My daughter knew not to touch ranges, because they were hot. She had never seen a wood stove before, though, so she walked up to the large white box on one side of the kitchen in the farm house and put her hand directly on the chrome rim to lean against it. I rushed across the room, grabbed her hand, and removed it from the hot stove. As I was putting ice on her palm and drying her tears, she was confused and asked me how she got hurt. I suddenly realized that she had not recognized the wood cook stove as something that could be hot. That day her "theory," which told her what should not be touched because it could be hot and burn her, was expanded to include any large metal box in a kitchen.

This story anecdotally illustrates the idea that children learn to navigate their world more safely through making observations and developing guiding theories from the information they gather. What does children's tendency to generalize from their experiences in the physical world tell us about the study of social relations and politics? This chapter addresses this question, and the entire book will teach ways to formalize the research skills you already possess and relate them to political science.

MAKING SCIENTIFIC POLITICAL THEORIES

Tacit Political Theorizing

In addition to developing theories to explain the physical world around you, as you were growing up you also merged your observations of the social and political world