

The background of the book cover is a light beige or cream color. It is decorated with various mathematical symbols and geometric shapes scattered across the surface. These include green symbols such as  $\pi$ ,  $\Sigma$ ,  $\%$ , and  $\Delta$ , as well as blue circles and green triangles. Some of the symbols are slightly faded or overlapping. A prominent green triangle is located in the upper right corner, and another is in the lower right. A blue circle is visible in the upper left. The overall aesthetic is that of a technical or academic publication with a playful, mathematical theme.

# POLITICAL SCIENCE RESEARCH METHODS

THIRD EDITION

JANET BUTTOLPH JOHNSON  
RICHARD A. JOSLYN

# Political Science Research Methods

THIRD EDITION

**Janet Buttolph Johnson**  
*University of Delaware*

**Richard A. Joslyn**  
*Temple University*



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# **Political Science Research Methods**

*To our families*  
*Art, Ross, and Ned*  
*Kathy, Erin, and Andrew*

## PREFACE

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This third edition of *Political Science Research Methods* was prompted by our desire to continue to meet the three primary objectives that guided us in the two earlier editions. The first objective is to demonstrate that the research methods we describe here have been used by political scientists to produce worthwhile knowledge about significant political phenomena. To that end, we have extended our discussion of examples of research on political unrest and have added two new case studies of political science research to illustrate important aspects of the research process: the influence of Western media on print news in non-Western countries and political control of federal bureaucracies.

Fulfilling our other two objectives—giving readers the tools necessary not only to conduct empirical research projects of their own but also to evaluate others' research, and helping students with modest mathematical backgrounds to understand statistical calculations that are part of social science research—required fewer changes, although we have updated examples and added new material in response to requests from users of the second edition. New exercises also have been added throughout the book.

Chapter 1 introduces six case studies, which are integrated into our discussion of the research process in the subsequent chapters. Chapter 2 examines the definition of scientific research and the development of empirical political science. We discuss the role of theory in the research process and review some of the debates in modern political science.

In Chapters 3 and 4 we introduce the building blocks of scientific research. Chapter 3 explores concepts, hypotheses, variables, units of analysis, and the relationship between social theories and hypotheses. Chapter 4 includes some new examples that illustrate a variety of decisions and difficulties about conceptualization and the measurement of abstract political phenomena, including the measurement of different meanings of the concept "democracy," attitudes toward political change in the former Soviet Union, and attitudes in selected European countries

toward feminism. Also new to the chapter is a discussion of the use of factor analysis for exploring dimensionality of measures and for constructing multi-item scales.

Chapter 5 addresses research design and alerts readers to some of the important decisions that should be made before a research project reaches an advanced stage. This edition includes new examples of research designs and an expanded discussion of the types of non-experimental research designs used by political scientists.

In Chapter 6 we discuss how and why to conduct background research. We have added a section on journals and magazines with a government and policy focus, and have added to our list of compact disk databases and professional political science journals and abstracts.

Sampling is the topic of Chapter 7. We discuss how a sample is selected and define the limits to extrapolation; we have also added more discussion of sample size decisions.

Data collection is discussed in Chapters 8 through 10; our focus is on the research methods that political scientists frequently employ and that students are likely to find useful in conducting or evaluating empirical research. To reflect more closely the order of data collection methods used most frequently by students, as suggested by our reviewers, we start with a discussion of observation in Chapter 8, move to document analysis in Chapter 9, and close with survey research and elite interviewing in Chapter 10. In Chapter 9 we include more sources of aggregate statistics, particularly for state politics and world environmental information, and encourage students to pursue research topics using aggregate data.

The subject of Chapters 11, 12, and 13 is data analysis: how to interpret data and present it to others. All three chapters contain updated examples and discussion.

Finally, in Chapter 14, we evaluate an actual research report, using an example from the field of international relations, noting how it addresses each step of the research process. New appendices contain tables for chi-square values and critical values from *t* distribution, *F* distribution, and Pearson *r*.

We would like to thank several people who have contributed to this edition: Ronald Hrebenar of the University of Utah; Munroe Eagles, SUNY at Buffalo; and one anonymous reviewer who provided insightful criticism and useful suggestions for improving the second edition; our editors at CQ Press: Shana Wagger, Brenda Carter, Laura Carter, and Tracy Villano; University of Delaware reference librarians Margaret G. Bronner and Caroline Tibbetts, who helped compile data for the literature review in Chapter 6; and Gini Alvord, Geneva Tabb, Barbara Molino, and Alicia Jackson of Temple University, who helped prepare the manuscript.

We again dedicate this book to our families, especially to Erin, Andrew, Ross, and Ned, who were too young to appreciate the dedication the first time around but who are now old enough to help spend the royalties.

*Janet Buttolph Johnson*  
*Richard A. Joslyn*

## CONTENTS

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<b>Tables and Figures</b>	<b>xi</b>
<b>Preface</b>	<b>xv</b>
<b>1 Introduction</b>	<b>1</b>
Research on Regime Stability	4
The Western Media and Non-Western Nations: An Issue in International Relations	7
Study of How Congressional Elections Are Financed	8
Investigating Popular Influence on Public Policy	11
A Look into Judicial Decision Making	12
Influencing Bureaucracies	15
Explaining Variability in Checkoff Rates among the States	16
Conclusion	16
Notes	17
Terms Introduced	18
Exercises	18
<b>2 Studying Politics Scientifically</b>	<b>19</b>
Characteristics of Scientific Knowledge	19
Acquiring Scientific Knowledge: Induction and Deduction	27
Can Politics Be Studied Scientifically?	30
Political Science as a Discipline	32
Conclusion	36
Notes	36
Terms Introduced	38
Exercises	38
Suggested Readings	39

<b>3</b>	<b>The Building Blocks of Social Scientific Research: Hypotheses, Concepts, and Variables</b>	<b>41</b>
	Specifying the Research Question	41
	Proposing Explanations	44
	Defining Concepts	49
	Formulating Hypotheses	53
	Conclusion	66
	Notes	66
	Terms Introduced	66
	Exercises	67
	Suggested Readings	70
<b>4</b>	<b>The Building Blocks of Social Scientific Research: Measurement</b>	<b>73</b>
	Devising Measurement Strategies	74
	Examples of Political Measurement	76
	The Accuracy of Measurements	81
	The Precision of Measurements	91
	Multi-item Measures	95
	Conclusion	105
	Notes	106
	Terms Introduced	107
	Exercises	108
	Suggested Readings	109
<b>5</b>	<b>Research Design</b>	<b>111</b>
	Experimentation	112
	Experimental Designs	118
	Nonexperimental Designs	133
	Conclusion	147
	Notes	148
	Terms Introduced	150
	Exercises	151
	Suggested Readings	152
<b>6</b>	<b>Conducting a Literature Review</b>	<b>153</b>
	Where Do Research Topics Come From?	153
	Reasons for a Literature Review	154
	Conducting a Literature Review	159
	Conclusion	168
	Notes	168

Exercises	168
Suggested Reading	169
<b>7 Sampling</b>	<b>171</b>
Population or Sample?	173
The Basics of Sampling	174
Types of Samples	176
Sample Information	186
Sampling Error	189
Conclusion	190
Notes	191
Terms Introduced	192
Exercises	194
Suggested Readings	195
<b>8 Making Empirical Observations: Direct and Indirect Observation</b>	<b>197</b>
Types of Data and Collection Techniques	197
Observation	200
Direct Observation	201
Indirect Observation	215
Ethical Issues in Observation	218
Conclusion	222
Notes	223
Terms Introduced	225
Suggested Readings	226
<b>9 Document Analysis: Using the Written Record</b>	<b>227</b>
Types of Written Records	228
Content Analysis	244
Advantages and Disadvantages of the Written Record	251
Conclusion	255
Notes	256
Terms Introduced	258
Exercises	258
Suggested Readings	259
<b>10 Elite Interviewing and Survey Research</b>	<b>261</b>
Elite Interviewing	262
Survey Research	266
Conclusion	286
Notes	287
Terms Introduced	291

Exercises	292
Suggested Readings	293
<b>11 Univariate Data Analysis and Descriptive Statistics</b>	<b>295</b>
Frequency Distributions	298
Descriptive Statistics	306
The Normal Distribution	316
Conclusion	321
Notes	321
Terms Introduced	322
Exercises	323
Suggested Readings	324
<b>12 Measuring Relationships and Testing Hypotheses: Bivariate Data Analysis</b>	<b>325</b>
Crosstabulation	327
Difference of Means Test and Analysis of Variance	347
Regression and Correlation Analysis	353
Conclusion	368
Notes	368
Terms Introduced	369
Exercises	370
Suggested Readings	373
<b>13 Searching for Complete Explanations and Causal Knowledge: Multivariate Data Analysis</b>	<b>375</b>
Introduction	375
Multivariate Crosstabulation	378
Two-Way Analysis of Variance	386
Multiple Regression and Partial Correlation	389
Conclusion	396
Notes	397
Terms Introduced	397
Exercises	398
Suggested Readings	401
<b>14 The Research Report: An Annotated Example</b>	<b>403</b>
Polarity, the Offense-Defense Balance, and War	404
Conclusion	431
Exercises	431
<b>Appendix</b>	<b>433</b>
<b>Index</b>	<b>441</b>

## TABLES AND FIGURES

---

### Tables

3-1	Concept Development: The Relation between Economic Development and Democracy	51
3-2	Voting by Blacks, Italians, and Others for a Female Candidate	65
4-1	Construct Validity of Graduate Record Examination Test Scores	87
4-2	Hypothetical Interitem Association Validity Test of a Measure of Liberalism	88
4-3	Hypothetical Index for Measuring Freedom in Countries	97
4-4	Guttman Scale of Attitudes toward Abortion	101
5-1	Mail Survey Incentive Experiment	124
5-2	Response Rates in Mail Survey Experiment	125
5-3	Hypothetical Water Conservation Experiment	127
5-4	Experimental Design of New Jersey Income- Maintenance Experiment	129
6-1	Explanations for Political Efficacy Concepts Used as Independent Variables	158
7-1	Portion of a Random Numbers Table	177
7-2	Stratified Sample of Student Measurement	182
7-3	Five Samples of Family Income Measurement	187
7-4	The Relationship between Sample Size and Sampling Error	190
9-1	Presidential Personality Types	234
9-2	Coding Sheet for Hypothetical Content Analysis of Presidential Campaign Coverage	247
11-1	Distributions of Political Ideology and of Civil Liberties Votes among Supreme Court Justices	296
11-2	Number of Deaths from Political Violence and the Presence of Patterned Land Inequality in Latin America	297
11-3	Frequency Distributions: Two Examples	298
11-4	Frequency Distribution, Proportion, and Percentage of Delegate Votes, 1984 Democratic National Convention	299
11-5	Frequency Distribution and Percentage for Student Populations	299
11-6	Congruence between Changes in Public Opinion and Changes in Public Policy, 1935-1979	300

## *xii Tables and Figures*

11-7	Frequency Distribution Produced by the SPSS Software Program	301
11-8	Frequency Distribution of the Ages of a National Sample of Americans	304
11-9	Ordinal Grouping of Age of Respondents	311
11-10	Hypothetical Incomes in Two Communities	313
11-11	Distribution, Deviation, and Mean Deviation of Incomes in Community B	314
11-12	Sample Calculation of Variance and Standard Deviation	315
12-1	Relationship between Hair Color and Vote: A Simple Crosstabulation	328
12-2	Relationship between Hair Color and Vote: A More Complex Crosstabulation	329
12-3	A Crosstabulation Showing No Relationship between Hair Color and Vote: Column Percentages	330
12-4	A Crosstabulation Showing No Relationship between Hair Color and Vote: Row Percentages	330
12-5	Negative and Positive Relationships between Party Identification and Attitude toward Military Spending	331
12-6	Relationship between Party Identification and Attitude toward Military Spending: Different Table Construction	332
12-7	Perfect Relationship between Hair Color and Vote	333
12-8	A Strong but Imperfect Relationship between Hair Color and Vote	334
12-9	Relationship between Education and Voter Turnout	335
12-10	Sample Crosstabulation Produced by SPSS Software Program: The Relationship between Gender and Attitudes toward Life	335
12-11	Relationship between Education and Political Interest: Concordant, Discordant, and Tied Pairs	337
12-12	Relationship between Education and Political Interest: Calculating Measures of Association	338
12-13	Relationship between Race and 1984 Democratic Primary Votes: Predicting without the Help of an Independent Variable	341
12-14	1984 Democratic Primary Votes: Predicting with the Help of an Independent Variable	342
12-15	Relationship between Gender and Attitudes toward Nuclear Power Plants: Observed Table, Observations	343
12-16	Relationship between Gender and Attitudes toward Nuclear Power Plants: Expected Values Table, Marginals Only	344
12-17	Relationship between Gender and Attitudes toward Nuclear Power Plants: Expected Values Table, Cell Frequencies	345
12-18	Relationship between Income and Contacts with Public Officials: A Regression Analysis	353
12-19	Correlation Matrix Showing the Correlates of Civil Strife	364

12-20	Relationship between Self-Interest Measures, Racial Attitudes, and Attitudes toward Busing: Product-Moment Correlations	365
12-21	Relationship between Family Income and Democratic Candidate for President, 1992	372
13-1	Relationship between Attitudes toward Government Spending and Presidential Vote	378
13-2	Relationship between Attitudes toward Government Spending and Presidential Vote: Controlling for Income	380
13-3	Relationship between Income and Presidential Vote: Controlling for Government Spending Attitudes	381
13-4	Relationship between Income and Attitudes toward Government Spending	382
13-5	Relationship between Age, Education, and Turnout, 1972	384
13-6	Five Results When Controlling for a Third Variable	385
13-7	Relationship between State Auto Inspection Policy and State Auto Fatality Rates: Controlling for Population Density	388
13-8	Multivariate Explanation of Vote for Congressional Challengers: Multiple Regression Analysis, 1972-1978	393
13-9	Multivariate Explanation of Civil Strife: Multiple Regression Analysis	395
13-10	Multivariate Explanation of Congruence of Public Opinion with Public Policy: Multiple Regression Analysis	396
13-11	Relationship between Party and Environmental Support in the House, 93d (1973-74), 94th (1975-76), and 95th (1977-78) Congresses (in percentages)	398
13-12	Relationship between Party and Environmental Support by District Residential Pattern in the House, 93d (1973-74), 94th (1975-76), and 95th (1977-78) Congresses (in percentages)	399
13-13	Mean National and Regional Percentage Support for Environmental Legislation (LCV) by Party in the House, 93d (1973-74), 94th (1975-76), and 95th (1977-78) Congresses	400

## Figures

3-1	Arrow Diagrams of Adequacy of Medical Insurance and Voter Turnout Examples	47
3-2	Two Causal Models of Vote Choice	48
5-1	Examples of Pre-treatment Trends in the Dependent Variable	139
5-2	Hypothetical Results of a Time-Series-with-Quasi- Control-Group Research Design: Effect of a White House Media Campaign	140
5-3	Time Series Analysis of Measures of the Liberalism of the Public Mood and the Liberalism of Supreme Court Decisions	142

*xiv Tables and Figures*

7-1	Mean Family Income Estimate with Numerous Probability Samples: The Sampling Distribution	188
11-1	Frequencies of Student Majors at College A	302
11-2	Roll Call Vote on 1984 Democratic Presidential Nomination	302
11-3	Distributions of African Leaders' Years in Power	303
11-4	The Frequency Distribution of Age in a U.S. Adult Sample	307
11-5	Line Diagram Showing the Frequency Distribution of Presidential Job Performance Measure at Many Points in Time	308
11-6	Frequency Curves of Citizen Information Levels, 1952, 1976, 1984	309
11-7	Six Examples of Frequency Curves	310
11-8	Normal Distribution and Percent of Cases between Selected Points under the Curve	317
12-1	Using the Difference of Means Test: Average Death Rates in Inspected versus Uninspected States	349
12-2	Scattergram of Relationship between Income and Political Contacts: Ten Cases Only	354
12-3	Regression Line for Relationship between Income and Political Contacts: All 500 Cases	356
12-4	Regression Line for Relationship between Socioeconomic Development and Institutional Performance of Italian Regional Governments	358
12-5	Regression Line for Relationship between Coercive Force Size and Magnitude of Civil Strife in Twenty-one Western Communities	359
12-6	Six Different Types of Regression and Correlation Results	361
12-7	Example of Correlation Analysis: The Relationship between Justices' Ideology and Decisions on Civil Liberties Cases	362
12-8	A Curvilinear Relationship between Age and Vote Turnout in 1972	367
12-9	Regression Line for the Relationship between Unemployment and Robberies	373
13-1	Impact of Income on the Relationship between Government Spending Attitudes and Presidential Voting	382
13-2	Impact of Age on the Relationship between Education and Voter Turnout	383
13-3	Impact of State Population Density on the Relationship between State Inspection Policy and State Auto Fatality Rate	387
13-4	Impact of Age on Relationship between Education and Liberalism	390

# Introduction

Political scientists are interested in acquiring knowledge about and understanding a variety of important political phenomena. Some of us are interested, for example, in the conditions that lead to stable and secure political regimes without civil unrest, rebellion, or governmental repression. Some are interested in the relationships and interactions between nations and how some nations exercise power over other nations. Other political scientists are more interested in the relationship between the populace and public officials in democratic countries, and in particular with the question of whether public opinion influences the policy decisions made by public officials. Still others are more concerned with how particular political institutions function; they conduct research on questions such as, Does Congress serve the interests of organized groups rather than of the general populace? Do judicial decisions depend upon the personal values of individual judges and the group dynamics of judicial groups or on the relative power of the litigants? To what extent can American presidents influence the behavior of the members of the federal bureaucracy? Does the use of nonprofit service organizations to deliver public services change government control of and accountability for those services? Do political parties enhance or retard democratic processes? How much do the policy outputs of states vary and why do they vary?

This book is an introduction to the process and methods of using *empirical research*—research based on the actual, “objective” observation of phenomena—to achieve scientific knowledge about political phenomena. Scientific knowledge, which will be discussed in more detail in Chapter 2, differs from other types of knowledge, such as intuition, common sense, superstition, or mystical knowledge. One difference stems