

FUNDAMENTALS OF CRIMINOLOGICAL AND CRIMINAL JUSTICE INQUIRY

How to think about, conduct, and evaluate research is fundamental to the study and understanding of criminology and criminal justice. Students take methods, statistics, theory, and topic-specific classes, but they struggle to integrate what they learn and to see how it fits within the broader field of criminology and criminal justice research.

This book directly tackles this problem by helping students to develop a “researcher sensibility,” and demonstrates how the “nuts and bolts” of criminal justice research – including research design, theory, data, and analysis – are and can be combined.

Relying on numerous real-world examples and illustrations, this book reveals how anyone can “think like a researcher.” It reveals, too, why that ability is critical for being a savvy producer or consumer of criminological and criminal justice research.

Dr. Daniel P. Mears is the Mark C. Stafford Professor of Criminology at Florida State University and a Fellow of the American Society of Criminology. He has published over 120 articles, fifteen chapters, and several books, including the award-winning *American Criminal Justice Policy* and, most recently, *Out-of-Control Criminal Justice*. His frequently cited research and funded projects have been covered in major media outlets and examine a diverse range of crime and justice topics and policies. He served as a Senior Research Associate at the Urban Institute, a Peace Corps volunteer, and a program manager and counselor working with delinquent adolescents.

Dr. Joshua C. Cochran is Assistant Professor of Criminology at the University of Cincinnati. His award-winning research appears in leading criminology and policy journals and in *Prisoner Reentry in the Era of Mass Incarceration*. He is a recipient of the American Society of Criminology’s Division on Corrections and Sentencing Dissertation Award and its Distinguished New Scholar Award. He is also the recipient of the New Scholar Award from the Academy of Criminal Justice Sciences. Dr. Cochran teaches undergraduate and graduate courses on punishment, criminal justice, theory, and policy.

FUNDAMENTALS OF

Criminological and Criminal Justice Inquiry

The Science and Art of Conducting,
Evaluating, and Using Research

Daniel P. Mears

Florida State University

Joshua C. Cochran

University of Cincinnati



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press & Assessment

978-1-316-64513-0 — Fundamentals of Criminological and Criminal Justice Inquiry

Daniel P. Mears, Joshua C. Cochran

Frontmatter

[More Information](#)



CAMBRIDGE
UNIVERSITY PRESS

Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment,
a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of
education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781316645130

DOI: 10.1017/9781108149815

© Daniel P. Mears and Joshua C. Cochran 2019

This publication is in copyright. Subject to statutory exception and to the provisions
of relevant collective licensing agreements, no reproduction of any part may take
place without the written permission of Cambridge University Press & Assessment.

First published 2019

A catalogue record for this publication is available from the British Library

ISBN 978-1-107-19370-3 Hardback

ISBN 978-1-316-64513-0 Paperback

Cambridge University Press & Assessment has no responsibility for the persistence
or accuracy of URLs for external or third-party internet websites referred to in this
publication and does not guarantee that any content on such websites is, or will
remain, accurate or appropriate.

Brief Contents

	List of Figures	<i>page</i> xiii
	List of Tables	xv
	Preface	xvii
	Part I: Criminological and Criminal Justice Research	1
1	Introduction	3
2	Science and Criminological and Criminal Justice Research	18
3	The Science and Art of Conducting, Evaluating, and Using Research: Initial Observations	49
	Part II: Essential Research Ingredients: Theory, Data, and Analysis	79
4	The Role of Theory in Research	81
5	The Role of Data in Research	110
6	The Role of Analysis in Research	152
	Part III: Types of Criminological and Criminal Justice Research	189
7	Basic (Science-Focused) vs. Applied (Policy-Focused) Research	191
8	Identifying Causal Effects	215
9	Criminological and Criminal Justice Research Areas and Topics	233
	Part IV: Chefs in the Kitchen	257
10	Criteria for Conducting, Evaluating, and Using Research	259
11	The Science and Art of Conducting, Evaluating, and Using Research: Practical Steps	281
	References	315
	Index	345
		v

Contents

	List of Figures	<i>page</i> xiii
	List of Tables	xv
	Preface	xvii
	Part I: Criminological and Criminal Justice Research . . .	1
1	Introduction	3
	The Goal of This Book	4
	The Argument and Structure of This Book	11
2	Science and Criminological and Criminal Justice Research	18
	Introduction	18
	What Is Science?	19
	Science and Research	19
	Scientific Progress and the Accumulation of Knowledge	25
	Natural Sciences vs. Social Sciences	29
	Science and “Evidence-Based” Policy	30
	The Art of Conducting Scientific Research	32
	What Is Criminological and Criminal Justice Research?	33
	Preliminary Observations	33
	Some Historical Context	36
	Criminological and Criminal Justice Research	45
	Conclusion	47
3	The Science and Art of Conducting, Evaluating, and Using Research: Initial Observations	49
	Introduction	49
	What Is Research Design?	49
	Research Goals	51
	Empirical Description of the Social World	54
	Identifying Socially Meaningful Descriptions and Possible Causes of Social Phenomena	57
		vii

viii Contents

	Identifying and Testing Causal Relationships and Theory	59
	Criminal Justice Policy-Focused Questions	61
	The Research Process	62
	Thinking Like a Chef, Architect, Composer, or . . . a Researcher	63
	Framing the Question	64
	Theorizing, Hypothesizing, and Mapping Out Causal Pathways	69
	Sampling People, Places, Organizations	71
	Collecting Data	72
	Analysis	74
	Presenting Findings in an Accurate and Useful Manner	75
	Experiments Are an Important Type of Research Design, but Far from the Only Kind	76
	Conclusion	77
	Part II: Essential Research Ingredients:	
	Theory, Data, and Analysis	79
4	The Role of Theory in Research	81
	Introduction	81
	What Is Theory?	82
	Theory as a Guide	82
	Theory Defined	82
	Theory in Practice	85
	How Is Theory Useful?	86
	Theory Can Help in Describing and Understanding Social Phenomena	86
	Theory Can Help in Providing Causal Explanations	90
	Theory Can Help in Guiding Policy	92
	The Problem of Proceeding without Theory	95
	The Problem of Proceeding with Theory	97
	How to “Do” Theoretical Research?	98
	What Types of Criminological and Criminal Justice Theories Exist?	104
	What Is the Relevance of Theory for Data and Analysis?	105
	Conclusion	108
5	The Role of Data in Research	110
	Introduction	110
	The Importance of Data for Research	111
	Obtaining the “Best” Data	114
	Understand First that Data Are Not Intrinsically Meaningful	115
	Theory and Research Questions Should Drive Data Decisions	118
	Rely on Accurate Data	119
	Create or Use Data that Are Representative or Allow for Generalizable Statements	120
	Create and Use Trustworthy Data	123

Contents	ix
Types of Data	123
Surveys	124
Interviews	127
Focus Groups	129
Ethnographies	130
Administrative Records	132
Still Other Data Sources: Content Analyses, “Big Data,” and More	134
Mixed-Methods Data Collection	137
Strategies for Obtaining the “Best” Data	138
Existing Data: Use It When Appropriate and When You Can!	139
Don’t Just Work through “Gatekeepers” to Obtain Data – Engage Them for Insights	139
Think Clearly about Samples and Sampling	140
Use Prior Data Collection Efforts as a Guide to Creating Data	143
Address Missing Data – Don’t Ignore It or Throw Out Information!	143
Be Pragmatic and Creative	144
A Nuts-and-Bolts Issue: Preparing Data for Analysis	145
“Cleaning” and Preparing Data	145
Creating Measures	147
Documenting and Describing Coding Decisions	150
Conclusion	151
6 The Role of Analysis in Research	152
Introduction	152
Many Analysis Options – What Is Best Depends on the Question, Data, and More	153
Analyses for Creating Better Measures	158
Analyses for Empirical Description	160
Analyses for Describing Social Meanings and Causes	162
Analyses for Identifying or Testing Causal Relationships	167
Experiments as a Way of Testing for Causal Effects	168
The Logic of Multivariate Analyses: Estimating Causal Effects	169
Regression Analysis with Various Kinds of Outcomes	170
Structural-Equation Modeling	171
Multilevel Analyses	173
Time Series Analyses	175
Life-Course Analyses	177
Spatial Analyses	178
Matching Analyses	179
Instrumental Variable Analyses	180
And Many Other Kinds of Quantitative Analyses	181
Qualitative Analyses	182
Analyses for Policy and Program Analysis	183
Meta-Analysis and Systematic Reviews	183
Effectively Displaying and Conveying Information	184
Conclusion	185

x Contents

	Part III: Types of Criminological and Criminal Justice Research	189
7	Basic (Science-Focused) vs. Applied (Policy-Focused) Research	191
	Introduction	191
	Basic (Science-Focused) Research vs. Applied (Policy-Focused) Research	192
	The Evaluation Research Hierarchy	194
	Needs Evaluation	197
	Theory Evaluation	198
	Implementation (or “Process”) Evaluation	199
	Outcome and Impact Evaluations	201
	Cost-Efficiency (Cost-Effectiveness or Cost–Benefit) Evaluation	203
	Benefits of Evaluation Research	205
	Basic Research Can Have Policy Implications and Policy Research Can Advance Science	206
	Challenges in Providing Useful Guidance to Policymakers and Administrators	208
	Conclusion	212
8	Identifying Causal Effects	215
	Introduction	215
	What Is Causality?	216
	Types of Causal Effects	218
	Linear Effects – The Assumed Causal Relationship in Many Theories and Policies	219
	Nonlinear Effects – The Reality that May Underlie Many Causal Relationships	222
	Curvilinear	222
	Tipping Point (Threshold)	223
	Interactive (Moderating)	224
	Dose	225
	Reciprocal or Self-Reinforcing Effects and Feedback Loops	226
	Still Other Causal Effects	227
	Direct vs. Indirect	227
	Proximity in Time or Space	228
	Reversible vs. Irreversible	229
	Multiple	230
	Conclusion	231
9	Criminological and Criminal Justice Research Areas and Topics	233
	Introduction	233
	The Research Matrix of Criminological and Criminal Justice Research	234
	The Partial Research Matrix: Research Goals and Topics	234
	Offending	237
	Crime Rates	238

Contents	xi
Informal Social Control	238
Formal Social Control	239
Corrections	240
Criminal Justice System	241
Juvenile Justice System	242
Victimization	243
Media	244
Public Opinion	244
Philosophy and Ethics	245
Measurement and Methods	247
Demographic Dimensions	248
Biological Dimensions	249
Psychological Dimensions	249
Social Dimensions	250
The Full Research Matrix: Goals × Topics × Units of Analysis × Data × Analyses	251
Research Opportunities and their Implications	253
Conclusion	255
Part IV: Chefs in the Kitchen	257
10 Criteria for Conducting, Evaluating, and Using Research . .	259
Introduction	259
Criteria for Conducting Research	260
Research Infrastructure and Staffing	262
Prior Relevant Literature	262
Appropriate Theory, Data, and Analyses	263
Accuracy and Trustworthiness	263
Consistent vs. Inconsistent Results	264
Hypothesis Testing	265
Specific Contributions and Limitations of a Study	266
Efficiency	268
Criteria for Evaluating Research – All of the Above Plus Several Others	268
Predictive Power of Theories	268
Replication	270
Relevance for Science or Policy	272
Criteria for Using Research	273
Ethics and Research	274
Political Influences on Research	275
Institutional Review Boards (IRBs) and Potential Harms to Human Subjects	276
Objective Research and Ethical Considerations	278
Other Considerations	279
Conclusion	280

xii **Contents**

11	The Science and Art of Conducting, Evaluating, and Using Research: Practical Steps	281
	Introduction	281
	Science and Art – There Is No Single Best Way to Conduct, Evaluate, or Use Research	282
	Guidance for Researchers	286
	Let your Interests and Questions Drive the Research	286
	Attend to the Craft of Research	290
	Let Prior Research Inform your Research	292
	Consult and Collaborate	293
	Enjoy the Benefits of Multidisciplinary Research	294
	Enjoy the Benefits of Multimethods Research	294
	Know and Leverage your Personality	296
	Balance Being a Specialist and a Generalist	297
	Look for and Seize Opportunities	297
	Avoid Piecemeal Publishing	298
	Be a “Renaissance” Person: Read Widely	299
	Be a “Renaissance” Researcher: Do Everything (Ideas, Theory, Data, Analysis, Writing)	300
	Take Charge of your Research Career	301
	Use a “Due Diligence” Research Checklist	303
	Guidance for Those Who Request and Need to Evaluate and Use Research	305
	Read Research	306
	Think Carefully about Generalizability and Truth	309
	Take Charge of Driving the Research Questions	310
	Listen to Researchers	311
	Obtain Information from Multiple Sources	312
	Seek Independent Research	312
	Create the Infrastructure Necessary to Provide the Research that You Need	313
	Check Whether a Study Used “Due Diligence”	313
	Conclusion	313
	References	315
	Index	345

Figures

1.1	The researcher sensibility and the science and art of research	<i>page 16</i>
2.1	Science vs. intuition: An illustration using the Earth and a golf ball	20
2.2	Dimensions along which science progresses	26
3.1	Research goals, questions, and studies	53
3.2	The art and science of framing and contextualizing a research study	68
4.1	Theory helps us to discern patterns	83
4.2	Theory as a guide for identifying causal relationships and mechanisms	91
4.3	Drug court theoretical (causal) logic	93
4.4	Theory as a guide to curvilinear causal relationships	106
5.1	Sample representativeness	121
6.1	Analyses and the doors they open	158
6.2	Structural equation analyses as a means of testing causal pathways	172
6.3	The logic of multilevel modeling	174
6.4	Time series analysis to assess policy or program impact	176
7.1	The evaluation research hierarchy	196
8.1	Causal vs. spurious relationships	217

Tables

5.1	Scientific vs. non-scientific approaches to data	<i>page</i> 112
5.2	Data do not speak for themselves: Constructs, measures, and data	117
8.1	Types of causal relationships	220
9.1	The research matrix of criminological and criminal justice research	235
10.1	An analogy – how credible research resembles building strong homes	260
11.1	Sources for learning the criminological and criminal justice research craft	287
11.2	A “due diligence” research checklist	304



Preface

Research can seem like an impenetrable and inaccessible undertaking, even for those who do it for a living. What exactly counts as “research”? How exactly does research get produced? How can we distinguish good studies from bad ones? What is an appropriate use of findings?

We wrote this book to provide a guide that might help readers to answer such questions and to develop what we term a “researcher sensibility.” Developing fluency in criminological and criminal justice research should not be hard. It can be, though. Why? Research typically gets taught in a piecemeal fashion. Take a course on theory, a course or two on data, courses on statistical techniques or other methods, and a few on policing, the courts, and corrections – and somehow one is supposed to be off to the races. But the end result is not research fluency; it is confusion. The problem for many students or others who try to pick up research on the fly is that no good one-stop-shop source exists to obtain that fluency.

That creates a big problem. Why? Advances in science and policy depend on understanding research. How, then, can students, criminal justice policymakers and practitioners, and members of the public acquire a researcher sensibility?

We believe that it can come from thinking about research in, well, more of the way in which researchers think about it. Existing books on criminology and criminal justice do not, in our view, do that well. They help. Theory books shed light on theory, data books shed light on data, and methods books shed light on methods. Typical introduction-to-research-methods books help, too, by shedding light on core concepts in research. Many books that tackle substantive topics (e.g., criminal behavior, policing, courts, corrections) help as well by exposing students to research. But none of them shows how to integrate different parts of the research process.

Taking our cue from two classics of how to think about research – C. Wright Mill’s *The Sociological Imagination* and Howard Becker’s *Tricks of the Trade* – we created this book to address that gap. We wanted to

highlight how science and art go into thinking about criminological and criminal justice research and, more broadly, to help readers to develop a researcher sensibility. Obtaining this sensibility is possible! And it opens the door to seeing so many more possibilities for creating knowledge and generating better crime and justice policy.

STRUCTURE OF THE BOOK

In the first part of the book, we describe what motivated us to write it, the field of criminology and criminal justice, and the nature of science. In addition, we provide an overview of the central theme of the book – that a researcher sensibility can be easily acquired and that it is essential for conducting, evaluating, and using research. It then turns to a discussion of theory, data, and analysis, the essential ingredients of research studies. Building on that account, the book identifies different types of research. We discuss science-focused versus policy-focused research, varieties of causal relationships that research can examine, and the vast array of criminological and criminal justice areas and topics that can be investigated. In the final part of the book, we conclude with a focus on how readers can appraise research. We identify specific strategies that we and many others have found useful in developing a researcher sensibility. The chapters, described below, all build to that one central goal.

Chapter 1 (Introduction). In Chapter 1, we discuss the varied motivations for the book. A central starting point is the concern that too many students – as well as criminal justice policymakers and practitioners and members of the public – do not understand how to think about research. They therefore do not know how to evaluate or use it. We argue that anyone can develop a researcher sensibility and, with it, learn to see the science and the art that go into criminological and criminal justice research.

Chapter 2 (Science and Criminological and Criminal Justice Research). Chapter 2 steps back and zeroes in on what science is and what the field of criminology and criminal justice encompasses. The chapter highlights how an understanding of science lays the foundation for understanding all types of research and “evidence-based” policy.

Chapter 3 (The Science and Art of Conducting, Evaluating, and Using Research: Initial Observations). In this chapter, we describe the science and the art of research. We demonstrate the need for a researcher sensibility and emphasize that no cookie-cutter approach works in conducting, evaluating, or using research. The chapter underscores the importance of recognizing the different goals that guide research and how these goals can and should

Preface**xix**

affect research designs and studies. The goals include empirical description, understanding social meanings and the causes of crime and criminal justice phenomena, testing causal relationships, and answering different types of criminal justice policy questions.

Chapter 4 (The Role of Theory in Research). Theory constitutes a cornerstone of research. We show how theory, even if not articulated, guides all research and why it can assist us in discerning and explaining patterns and trends. We show, too, how theory dictates the types of data and analyses that go into credible research.

Chapter 5 (The Role of Data in Research). Data can be considered the second pillar of research. It grounds the scientific enterprise – indeed, without data, there is no science. In this chapter, we describe types of data, what data can best answer research questions, and consequences that flow from the limitations that attend to almost any data source. To think about data is to think like a researcher; as we argue, doing so does not require special training.

Chapter 6 (The Role of Analysis in Research). Analysis can be viewed as the third and final pillar of research. Chapter 6 showcases a range of analytic techniques and methods that can be used to discern patterns in data and to show cause-and-effect. More importantly, it identifies how theory and data together dictate the types of analyses that are appropriate. It identifies, too, how awareness of different types of analyses can lead to more creativity in thinking about and evaluating research. To think about analysis is also to think like a researcher!

Chapter 7 (Basic (Science-Focused) vs. Applied (Policy-Focused) Research). We discuss how these two types of research – studies that seek to advance science and those that seek to advance policy – have always been central to the field of criminology and criminal justice. Awareness of them can open the door to considering questions and ideas that otherwise would go unnoticed. The chapter includes a discussion of needs, theory, implementation (or process), outcome and impact, and cost-efficiency evaluations. Policy research requires use of such evaluations. Yet, these evaluations can provide unique opportunities for simultaneously advancing science.

Chapter 8 (Identifying Causal Effects). Causality stands at center stage in many criminological and criminal justice studies. But what is a causal effect? What kinds exist? This chapter presents different types of causal effects and identifies their importance in developing more accurate explanations and in improving policy.

Chapter 9 (Criminological and Criminal Justice Research Areas and Topics). The field of criminology and criminal justice covers so much terrain that it can be difficult to appreciate its scope. We present a “research matrix” to convey this scope. It provides a platform for

xx Preface

thinking about criminological and criminal justice research possibilities. For example, considering the goals of research, different units of analysis, and types of data and analyses opens the door to imagining more research ideas than otherwise would be possible. We argue that this ability to imagine possibilities goes hand-in-hand with developing a researcher sensibility.

Chapter 10 (Criteria for Conducting, Evaluating, and Using Research). Research does not magically produce results that stand on their own. The credibility and relevance of findings instead depend on different criteria. A lack of awareness of these criteria can lead to misunderstanding and misuse of research. We therefore describe criteria that can be used to judge the credibility of studies and their relevance for science and policy.

Chapter 11 (The Science and Art of Conducting, Evaluating, and Using Research: Practical Steps). Chapter 11 wraps up the book by reinforcing the core theme – that a researcher sensibility is necessary to conduct, evaluate, and use research appropriately and effectively – and by identifying nuts-and-bolts guidance for developing this sensibility.

ACKNOWLEDGEMENTS

This book would not have happened without Robert Dreesen, Senior Editor at Cambridge University Press. We owe him a debt of gratitude. He believed in the idea before it was fully articulated and then supported it and us wholeheartedly. Thank you as well to Lisa Pinto, the Development Team Lead at the Press, and several reviewers for guidance in adding final polishes. We thank Sonja Siennick and Brandon Welsh for early conversations about possible topics to include in the book and ways to demonstrate what a researcher “sensibility” means. Frank Cullen may not know it, but he has influenced this book through many conversations with both authors and by sharing many important works in criminology and criminal justice. Dan owes a special debt of gratitude to Bill Kelly and Mark Stafford. They were and remain exemplary role models for “thinking like a researcher,” and a number of the insights described in the book emanated from conversations with them. Thank you for that and for your friendship. Although they may not realize it, colleagues at the Urban Institute, Florida State University, and the University of Cincinnati have greatly influenced the content of this book as well. A “researcher sensibility” is alive and well among them. The world is a better place for it.

Thank you most especially to Emily, Eli, and Ashley. They all have an ear for “bunk.” With research, as in life, that is no small part of what one needs when filtering the good, the bad, and the irrelevant!

A FINAL PERSONAL NOTE TO THE READER

We wrote this book to be useful to anyone – researchers, criminal justice policymakers and practitioners, and members of the public. But it is students who likely will find it to be the most useful. Indeed, in writing this book, we thought constantly about the undergraduate and graduate students who we have taught and with whom we work.

Their frustration at seeing how to connect different classes is palpable. One day they take a class on theory. Another day they take one on data, sampling, survey design, or the like. On yet another day they take a statistics class or two, or perhaps classes on qualitative methods or policy evaluation. In the meantime, they take classes on criminology and criminal justice that summarize and discuss large amounts of research. To many of them, it is akin to learning a language by taking a class on vocabulary, another on grammar, still another on culture, and then trying to read, speak, or write in that language. That approach does not work very well in learning any language. And it does not work well in learning to think like a researcher.

This book is meant for you and for anyone else who has struggled to make sense of crime and justice research. It is meant to help you to become “fluent” in research and to see the connections that run through all parts of the research process. It is meant ultimately to advance your own interests in criminology and criminal justice.

Research can be learned by doing. But we believe it also can be learned through a book like this one. It shows how theory, data, and analysis are connected. It shows the science and the art that go into the research process. More importantly, it shows how it is *your* ability to imagine research possibilities that creates the foundation for seeing these connections and developing the ability to conduct, evaluate, and use research.