CRITICAL THINKING IN PSYCHOLOGY

Good scientific research depends on critical thinking at least as much as factual knowledge; psychology is no exception to this rule. And yet, despite the importance of critical thinking, psychology students are rarely taught how to think critically about the theories, methods, and concepts they must use. This book shows students and researchers how to think critically about key topics such as experimental research, statistical inference, case studies, logical fallacies, and ethical judgments. Using updated research findings and new insights, this volume provides a comprehensive overview of what critical thinking is and how to teach it in psychology. Written by leading experts in critical thinking in psychology, each chapter contains useful pedagogical features, such as critical thinking questions, brief summaries, and definitions of key terms. It also supplies descriptions of each chapter author's critical thinking experience, which evidences how critical thinking has made a difference to facilitating career development.

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Second Edition

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Contents

List	of Figures	<i>page</i> vii
List	of Tables	viii
List	of Contributors	ix
Pref	Preface	
Ι	An Introduction to Critical Thinking: Maybe It Will Change Your Life <i>Diane F. Halpern and Robert J. Sternberg</i>	I
2	Nobelists Gone Wild: Case Studies in the Domain Specificity of Critical Thinking Scott O. Lilienfeld, Candice Basterfield, Shauna M. Bowes and Thomas H. Costello	IO
3	Why Science Succeeds, and Sometimes Doesn't Jonathan Baron	39
4	Critical Thinking and the Rejection of Unsubstantiated Claims <i>D. Alan Bensley</i>	68
5	Promoting Critical Thinking by Teaching, or Taking, Psychology Courses <i>Douglas A. Bernstein</i>	103
6	Avoiding and Overcoming Misinformation on the Internet Jason L. G. Braasch and Arthur C. Graesser	125
7	Critical Thinking Impacts Our Everyday Lives <i>Heather A. Butler and Diane F. Halpern</i>	152
8	Research Suffers When We All Agree: How Sociopolitical Homogeneity Impairs Critical Thinking in the Academy Stephen J. Ceci and Wendy M. Williams	173

v

vi	Contents	
9	When All Is Just a Click Away: Is Critical Thinking Obsolete in the Digital Age? <i>Gerd Gigerenzer</i>	197
IO	Critical Thinking: Promise, Progress, and Paradox Jane S. Halonen and Dana S. Dunn	224
II	Evaluating Experimental Research Henry L. Roediger, III and Jeremy K. Yamashiro	249
12	Critical Thinking as Scientific Reasoning: Examining the Power of Sports Momentum <i>John Ruscio and Kevin Brady</i>	280
13	Critical Thinking in STEM Disciplines Robert J. Sternberg	309
14	Why Would Anyone Do or Believe Such a Thing? A Social Influence Analysis <i>Anthony R. Pratkanis</i>	328
15	Conclusion: How to Think Critically about Politics and Anything Else! <i>Robert J. Sternberg and Diane F. Halpern</i>	354
Index		377

Figures

8.1	Percentage of participants answering 4–7 on "willingness	<i>page</i> 178
	to discriminate against" items	
8.2	Number of Democratic faculty members for every	186
	Republican in 25 academic fields	
9.I	Probability of HIV infection when test is positive	203
9.2	Lead time bias	207
10.1	Bloom's taxonomy updated	227
II.I	Jenkins's tetrahedral model of memory experiments	270
12.1	Autocorrelations for two illustrative team-seasons	295
12.2	Do smaller samples of more recent games predict outcomes	301
	better than larger samples that include more distant games?	
12.3	Are long streaks observed more often than expected by chance	? 302

Tables

2.1	Other Nobel laureates who held/hold weird ideas	page 13
4.I	Percentage of undergraduates endorsing various	74
	psychological misconceptions	
5.1	Common claims about behavior and mental processes	106
5.2	Some sources of scientifically unsupported claims	109
5.3	Some targets for critical thinking	IIO
5.4	Additional topics for use in a course on myths and illusions	116
	about human behavior	
7 . I	Critical thinking skills	154
7.2	Characteristics of a critical thinking disposition	155
8.1	Number of faculty and their registration by liberal arts college	e 185
12.1	Does a bye week affect the probability of winning?	298
12.2	Are there fewer runs than expected by chance?	299
12.3	Are outcomes for back-to-back games positively correlated	300
13.1	Why critical thinking is largely domain-specific	321
14.I	Some additional influence tactics used to promote strange	343
	beliefs and behavior	

viii

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ix

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Preface

More than a decade ago, we coedited with Henry Roediger, III, a volume on *Critical Thinking in Psychology*, published by Cambridge University Press. The goal then, as now, was to promote critical thinking in the field of psychology. But the world has changed greatly in the past twelve years:

- Students rely much more on unedited Internet content than they did in the past. Often, they accept what they read without thinking about it critically.
- At the same time, students rely much less on carefully edited and factvetted textbooks than they did before. Indeed, the textbook industry is in something of a turmoil because it has become so hard to sell books. Some students, it appears, read hardly at all.
- Despite some textbooks claiming to emphasize critical thinking, the reading levels of textbooks continue on a downward trend. (The average adult in the US reads at a 7th or 8th grade level.)
- Students of psychology need to learn to think in a different way. A decade ago, terms like "registered replications," "preregistration of hypotheses and data analyses," "results-free reviewing," and the like either did not exist or were not relevant to the life of a psychologist, whether a student or a professional. HARKing (hypothesizing after results are known) was standard practice. So-called *p*-hacking (collecting data as needed to reach a hoped-for *p* value) was not only common, but in many institutions, encouraged. Critical thinking today thus is not even quite the same as what it was back then.
- The results of "uncritical" thinking today are in some ways more severe. In the past, at worst, one was privately excoriated by confidential journal or grant reviewers. Today, there is an active "industry" of bloggers and other psychological scientists who go after and sometimes attack those whose work they believe does not represent sound critical

xii

Preface

thinking. Sometimes, the blogs themselves represent thinking that is less than critical.

• We live in an age in which, frankly, many people have begun to wonder whether our society as a whole and its governing officers have lost their ability to think critically. Officials at the highest levels of government talk about "alternative facts" or argue that "truth isn't truth."

If ever there has been a need for a volume on critical thinking, we believe that time is now. Psychologists, who study thinking and factors that affect thinking, should be in an excellent position to encourage, teach for, and assess critical thinking. But how should they go about doing these things? And how can they do so in a way that will encourage transfer of training not only to psychology courses, but also to people's everyday professional and personal lives?

In this collection, we present essays by some of the foremost experts on critical thinking in the field of psychology. The book is oriented toward students of psychology who hope to learn how to improve their critical thinking skills, and also to instructors who seek to teach and assess for critical thinking.

In order to facilitate attainment of our goals, we have asked all authors to include in their chapters:

- Key terms (stated and defined), so that users of the book can be sure they understand what the key terms are and how they are defined.
- A chapter summary, so that readers will have a sense of the main issues discussed in each chapter.
- Critical thinking about critical thinking questions (at least five per chapter), so that readers can think critically about what they have learned with regard to critical thinking.
- A section in each chapter on how critical thinking has played an important role in the author's own professional career, so that readers can see how the authors apply their own ideas about critical thinking to their work and their lives.

We hope you find the book useful in learning about critical thinking and also for improving your own and others' critical thinking.