

# How to Think Straight About Psychology

ELEVENTH EDITION

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*To Paula, who taught me how to think straight about life*

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# Preface

There exists a body of knowledge that is unknown to most people. This information concerns human behavior and consciousness in their various forms. It can be used to explain, predict, and control human actions. Those who have access to this knowledge use it to gain an understanding of other human beings. They have a more complete and accurate conception of what determines the behavior and thoughts of other individuals than do those who do not have this knowledge.

Surprisingly enough, this unknown body of knowledge is the discipline of psychology.

What can I possibly mean when I say that the discipline of psychology is unknown? Surely, you may be thinking, this statement was not meant to be taken literally. Bookstores contain large sections full of titles dealing with psychology. Television and radio talk shows regularly feature psychological topics. Magazine articles and websites quote people called psychologists talking about a variety of topics. Yet, despite all of this, there is an important sense in which the *field* of psychology is unknown.

The transfer of “psychological” knowledge that is taking place via the media is largely an illusion. Few people are aware that the majority of the books they see in the psychology sections of many bookstores are written by individuals with absolutely no standing in the psychological community. Few are aware that many of the most visible psychological “experts” have contributed no information to the fund of knowledge in the discipline of psychology.

The flurry of media attention paid to “psychological” topics has done more than simply present inaccurate information. It has also obscured the very real and growing knowledge base in the field of psychology. The general public is unsure about what is and is not psychology and is unable to independently evaluate claims about human behavior. Adding to this problem is the fact that many people have a vested interest in a public that is either without evaluative skills or that believes there is no way to evaluate psychological claims. The latter view, sometimes called the “anything goes” attitude, is one of the fallacies discussed in this book, and it is particularly costly to the public. Many pseudosciences are multimillion-dollar industries that depend on the lack of public awareness that claims about human behavior can be tested. The general public is also unaware that many of the claims made by these pseudosciences (e.g., astrology, psychic surgery, speed reading, biorhythms, therapeutic touch, subliminal self-help tapes, facilitated communication, indigo children, psychic detectives) have been tested and proved false. The existence

of the pseudoscience industry, which is discussed in this book, increases the media’s tendency toward sensationalistic reporting of science. This tendency is worse in psychology than in other sciences, and understanding the reasons why this is so is an important part of learning how to think straight about psychology.

This book, then, is directed not at potential researchers in psychology but at a much larger group: the consumers of psychological information. The target audience is the beginning psychology student and the general reader who have encountered information on psychological issues in the general media and have wondered how to go about evaluating its validity.

This book is not a standard introductory psychology text. It does not outline a list of facts that psychological research has uncovered. Indeed, telling everyone to take an introductory psychology course at a university is probably not the ultimate solution to the inaccurate portrayal of psychology in the media. There are many laypeople with a legitimate interest in psychology who do not have the time, money, or access to a university to pursue formal study. More importantly, as a teacher of university-level psychology courses, I am forced to admit that my colleagues and I often fail to give our beginning students a true understanding of the science of psychology. The reason is that lower-level courses often do not teach the critical analytical skills that are the focus of this book. As instructors, we often become obsessed with “content”—with “covering material.” Every time we stray a little from the syllabus to discuss issues such as psychology in the media, we feel a little guilty and begin to worry that we may not cover all the topics before the end of the term.

Consider the average introductory psychology textbook. Many now contain between 600 and 800 multicolored pages and reference literally hundreds of studies in the published literature. Of course, there is nothing wrong with such books containing so much material. It simply reflects the increasing knowledge base in psychology. There are, however, some unfortunate side effects. Instructors are often so busy trying to cram their students full of dozens of theories, facts, and experiments that they fail to deal with some of the fundamental questions and misconceptions that students bring with them to the study of psychology. Rather than dealing directly with these misconceptions, the instructors (and the introductory textbook authors) often hope that if students are exposed to enough of the empirical content of psychology, they will simply *induce* the answers to their questions. All too often this hope is frustrated. In

a final review session—or in office hours at the end of the term—instructors are often shocked and discouraged by questions and comments that might have been expected on the first day of the course but not after 14 weeks: “But psychology experiments aren’t real life; what can they tell us?”; “Psychology can’t be a *real* science like chemistry, can it?”; “But I heard a therapist on TV say the opposite of what our textbook said”; “I think this theory is stupid—my brother behaves just the opposite of what it says”; “Psychology is nothing more than common sense, isn’t it?”; “Everyone knows what anxiety is—why bother defining it?” For many students, such questions are not implicitly answered merely by a consideration of the content of psychology. In this book, I deal explicitly with the confusions that underlie questions and comments such as these.

Unfortunately, research has shown that the average introductory psychology course does surprisingly little to correct students’ misconceptions about the discipline (Kowalski & Taylor, 2009; Lilienfeld, 2014; Taylor & Kowalski, 2004). This unfortunate fact provides the rationale for this book. Psychology students need explicit instruction in the critical thinking skills that will transform them into independent evaluators of psychological information.

Years after students have forgotten the content of an introductory psychology course, they will still use the fundamental principles covered in this book to evaluate psychological claims. Long after Erikson’s stages of development have been forgotten, students will be using the thinking tools introduced in this text to evaluate new psychological information encountered in the media. Once acquired, these skills will serve as lifelong tools that will aid in the evaluation of knowledge claims. For example, these skills provide some criteria for assessing the reliability of “expert” opinion. Because the need to rely on expert opinion can never be eliminated in a complex society, the evaluation of an expert’s credibility becomes essential to knowledge acquisition.

Many psychologists are pessimistic about any effort to stem the tide of misinformation about their discipline. Although this pessimism is, unfortunately, often justified, this “consumer’s guide” to psychology was motivated by the idea that psychologists must not let this problem become a self-fulfilling prophecy.

Although I have welcomed the opportunity to prepare several editions of *How to Think Straight About Psychology*, it is unfortunately true that the reasons for the book’s existence are just as applicable today as they were when I wrote the first edition. Students in introductory psychology courses enter with as many misconceptions as they ever did, and they think that unaided common sense is all they need to understand human behavior, or worse, they turn to pseudosciences. Thus, the goals of all subsequent editions have remained the same: to present a short introduction to the critical thinking skills that will help students to better understand the subject matter of psychology.

## New to the Edition

The eleventh edition of *How to Think Straight About Psychology* has no major structural revisions because a chapter reorganization occurred in a previous edition. The content and order of the chapters remain the same. At the request of reviewers and users, this edition remains at the same length as the tenth edition. Readers and users have not wanted the book to lengthen and, indeed, it has not. I have continued to update and revise the examples that are used in the book (while keeping those that are reader favorites). Some dated examples have been replaced with more contemporary studies and issues. I have made a major effort to use contemporary citations that are relevant to the various concepts and experimental effects that are mentioned. A large number of new citations appear in this edition (290 new citations, to be exact!), so that the reader continues to have up-to-date references on all of the examples and concepts.

New examples, discussions, and sections have been added. A sampling of these new additions include the following issues and discussions: cell phone use while driving; the use of psychology in child custody disputes; pseudoscience in clinical psychology; the efficacy of crisis counselling after traumatic events; the causes of people making bad investment decisions; the “reading wars” in education; the effects of violent video games; facilitating communication in autism; conducting experiments over the Internet; the left-brain/right brain fallacy; health outcomes of alcohol consumption; distraction from electronic dashboard devices; coverage of the replication crisis in psychology; a new emphasis on the evils of vanity publishing; an additional section on the relation between lab and field results in psychology; a discussion of the Amazon Mechanical Turk; a discussion of how vivid presentations of results from neuroscience can skew conclusions; a discussion of the fallacies surrounding the mistaken idea of multitasking; a new discussion of Walter Mischel’s famous marshmallow studies and how they exemplify going from basic to applied research; a discussion of the danger of the phrase “new study shows” in the media; many additional examples of the use of meta-analytic studies in psychology (including marriage longevity, brain training, predictors of job performance, and suicide prevention); a discussion of how the media suggest that science is non-cumulative in their reporting of research on autism and reading disability and ADHD.

The goal of the book remains what it always was—to present a short introduction to the critical thinking skills that will help the student to better understand the subject matter of psychology. During the past decade and a half there has been an increased emphasis on the teaching of critical thinking in universities (Arum & Roksa, 2011; Sternberg, Roediger, & Halpern, 2006). Indeed, some state university systems have instituted curricular changes mandating an



emphasis on critical thinking skills. At the same time, however, other educational scholars were arguing that critical thinking skills should not be isolated from specific factual content. *How to Think Straight About Psychology* combines these two trends. It is designed to provide the instructor with the opportunity to teach critical thinking within the rich content of modern psychology.

Readers are encouraged to send me comments at: keith.stanovich@utoronto.ca.

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