Changes in Psychological Science: Perspectives from Textbook Authors

Introductory textbook authors live on the leading edge of psychological science, examining the entire discipline from its history to the modern frontiers, distilling the most important aspects into a format digestible by first-year college students, and then repeating the process for the next edition. This work gives them rare perspective on trends in the field and on changes in the science and teaching. Some of the field’s most influential authors share their thoughts on how the science has evolved in recent decades as they have documented it for the field’s newest generations.

David Myers

Psychology

First Published: 1986

In 1990, 100 years after the publication of William James’ Principles of Psychology, I spent a summer holiday reading this ancestor of all our introductory psychology texts. Knowing that James could offer no split-brain research, no Milgram experiments, no REM sleep studies, I anticipated being amused by his relative ignorance. Instead, I was impressed by the timelessness of his insights on mind-brain relationships, perception, memory, motivation, and emotion.

Likewise, in the quarter century that will have elapsed between the first and upcoming 10th editions of my Psychology, I am first struck by what endures. Our collectively agreed-upon framework remains. An introductory text is like a sonnet. It has a prescribed form, dictated by history and instructor expectations, into which authors pour their own content and voice. Across books and across time, chapter titles and order have not greatly varied. Likewise, my eight original objectives (putting facts in the service of concepts, exemplifying the process of inquiry, teaching critical thinking, and so forth) endure.

Yet within that structure much has changed. New topics, such as evolutionary psychology, positive psychology, and dual processing, have come on stage. New methods, such as brain imaging, are informing an expanding cognitive neuroscience. New events, from terrorism to climate change, have stimulated fresh applications of psychology’s insights.

The accompanying pedagogy is also changing. Yesterday’s films, transparencies, and printed study materials are being replaced by today’s lengthening list of video clips, animations, and online study centers and communities.

Now the textbook itself is undergoing transformation, thanks to two new developments. The first is the advent of interactive e-books, offering integrated quizzes, videos, demonstrations,
simulations, and a continuous record of student engagement. The second is the prospect of new electronic readers that will offer color display of the new interactive books.

The new generation books will also enable instructors to add their own reflections and culturally sensitive commentary—a feature that, combined with their lower cost, may extend their use to developing countries (Myers, 2009). But with new technology comes new issues. For example, to what extent should publishers enable instructors to add to, and subtract from, an author’s content? And how do we reconcile the integrity and intent of authors’ works with the customizing needs of instructors?

Although James could not have envisioned today’s intellectual and pedagogical issues, he surely would have appreciated our ever-developing presentations of the field he loved.

Reference


Peter Gray

Psychology

First Published: 1990


Twenty years separate my first edition, published in 1990, and my sixth, published this year. Over this period, four major changes in psychology have altered the content, and to a lesser degree the structure, of the book. These are:

Decline in the tendency of psychologists to align themselves with one or another school of thought. Twenty years ago, it still made sense to introduce psychology by describing various psychological “perspectives” as competing schools of thought. The dominant perspective was the “cognitive,” which contrasted itself with the “behavioral” perspective. Other perspectives were the “psychodynamic,” “physiological,” and “sociobiological.” Over the past two decades, however, psychologists have increasingly identified themselves by the psychological process or set of phenomena they study—such as hunger, memory, or language acquisition—rather than by perspective. Psychologists today regularly bring several perspectives to bear on whatever problem they are studying. I now present the “perspectives” as complementary “levels of analysis” rather than as competing schools of thought.

Increased acceptance of the value of Darwinian, evolutionary analyses in psychology. This change is especially dear to me, as my first edition was the first modern introduction to psychology to employ evolutionary analyses throughout the book. Over editions, I have been able to strengthen the evolutionary analyses in many chapters, because of the great increase in good research grounded in evolutionary theory. I do, however, regret the tendency of some to
view “evolutionary psychology” as a competing school of thought rather than as one of many useful levels of analysis, a tendency that counters the trend described above.

*Great increase in cross-cultural research and in cultural analyses in psychology.* Since 1990, psychology has become a truly international discipline, with research conducted throughout the world, often by psychologists native to non-Western cultures. Many psychological phenomena that appeared to be aspects of human nature in 1990 now appear to be, at least in part, products of Western culture. Such research has enriched almost all areas of psychology, and that is reflected in the changes made in my and other introductory texts.

*Mushrooming of research relating psychological processes to observable changes in the brain.* In 1990, neuroimaging was a new, not well-developed technique. Today everyone and his brother are doing it. In recent editions, for essentially every topic in the book, I’ve waded through countless new neuroimaging studies to find those that tell us something worth reporting to first-year students. As a discipline, we are still learning how to use this tool most effectively.

**James W. Kalat**

*Introduction to Psychology*

First Published: 1993


Asking textbook authors to comment on changes in psychology is an interesting choice. Certainly, we try to keep up to date. However, have you also noticed the inertia of introductory textbooks? Most of us feel obligated to include negative reinforcement, a concept whose main function is to provide difficult test items. And what was the last time you heard anyone mention the Cannon-Bard theory of emotions except when teaching it to introductory students?

A major trend in recent decades has been the growing attention to genetics and evolution. Clearly, genetic factors contribute to variation in almost all behaviors. Equally clearly, behavior genetics is a complicated field. Genes modify how we react to the environment, and experiences modify the activity of genes. Evolutionary psychology has also emerged, with its emphasis on evolved predispositions to behave in certain ways. Few today recall the days when the more extreme behaviorists attributed our circadian rhythms entirely to reactions to external stimuli. Many also assumed that facial expressions of emotion were entirely learned until Paul Ekman and others documented the similarities across cultures. Still, the question remains as to how extensively evolution micromanages our behavior.

Of the major content changes in psychology in recent decades, let me highlight a few: We are more aware of the plasticity of the brain throughout life. Before the 1990s, few foresaw that prolonged experience, such as that of musicians, could reorganize brain structure so extensively. In developmental psychology, the biggest change is our increased estimate of infants’ cognitive capacities, based largely on methods pioneered by Renee Baillargeon. In memory, the short-term versus long-term distinction has been supplanted by the more versatile concept of working
memory. We are now more aware of distorted and false memories. Researchers today are less nervous about approaching questions that seemed taboo decades ago—such as emotion and consciousness.

We sometimes hear that psychology is on the verge of breaking into subdisciplines, such as clinical, cognitive, and behavioral neuroscience. However, the trend I perceive is for various subfields to increase their overlap. Many of the best and brightest researchers today identify with hyphenated areas, such as social-affective-developmental-neuroscience.

One final note: Psychology of an earlier era was dominated by major theories, such as those of Freud, Piaget, and learning theorists. Most contemporary theories are narrower and less ambitious, with different investigators studying a huge variety of separate questions. This is not necessarily a bad thing, but it does complicate the task of summarizing what psychologists today are doing!

Charles G. (Tony) Morris

Psychology: An Introduction

First Published: 1973


Psychology has changed dramatically over the 37 years since the first edition of Psychology: An Introduction first appeared. Three significant changes come immediately to mind. Two of them are so visible that I am sure they will receive full attention from my colleagues in their own reflections: the biological revolution and the cognitive revolution. I would like to focus on a third change that in many ways is even more profound. I’m speaking of the belated recognition of human diversity. The “white malecentric” psychology of the early 1970s has rightly given way to a more robust, encompassing perspective that not only acknowledges but also celebrates diversity. It seems to me that there are at least two reasons for this change: (1) the rapidly shrinking world and (2) the dramatic change in the demographics of American psychologists.

Although it is a cliché to say that the world is shrinking, virtually everything in modern life is affected by globalization and North American psychology is no exception. As international travel, communication, and collaboration have become easier, crosscultural research has changed from being a relatively obscure specialty in the hands of such scholars as Harry Triandis (an APS Charter Member and Fellow) and the late Harold Stevenson to being an important factor in many major research areas.

During the same period, the demographics of American psychologists changed dramatically. In 1973, approximately 30 percent of the doctorate degrees in psychology were earned by women. In 2010, that number will exceed 70 percent. Early research by APS Charter Member and Fellow Eleanor Maccoby and Carol Jacklin drew our attention to some important ways in which men and women differ psychologically. Subsequent research by such scholars as Janet Shibley Hyde, Carole Gilligan, Diane Halpern, Jacque Eccles, and Alice Eagly (among them two more APS
Charter Members and four Fellows) has continued to shed light on ways in which men and women do, and do not, differ significantly.

One very rough measure of the impact of diversity on psychology is the fact that in 1970, PsychINFO included only 48 articles in which the keywords “diversity,” “gender,” or “cross-cultural” appeared. In 2008, that number had grown to 4,210. The subject matter of research has also changed perceptibly as the professional ranks have broadened. The questions psychologists ask and the topics they study reflect what they consider to be important. To our great benefit, many of the questions we ask today reflect a much richer, more encompassing perspective than the issues we examined in the 1970s.

Carol Tavris and Carole Wade

*Psychology*

First Published: 1987


What an interesting assignment! It’s been illuminating to cast our memories back more than 25 years, when we first started thinking about writing a textbook, and see what has changed in our field. Of course, specific findings and ideas have come and gone with the times, such as the tongue map, Kohlberg’s and Gilligan’s theories of moral development, and stage theories in general. But for us, the most significant changes are these:

The biological revolution has vastly enhanced our understanding of human commonalities and individual differences. Biomedical and behavioral genetic advances, and more recently astonishing findings in the emerging field of epigenetics, have put an end to the nature-nurture debate in the study of personality, mental abilities, child development, mental disorders, and many other fields. Evolutionary psychology has expanded beyond its original focus on sex differences (as controversial now as then) to show the influence of our species’ past history on language, cognition, social relations, perception, emotion, and many other areas.

Psychology is no longer the study of the white male sophomore rat. In some ways, a far more profound change than the biological revolution has been a revolution in the treatment of culture and gender. Twenty-five years ago, most psychologists thought that proposals to make women “normal” in psychology and to include the study of cultural influences on behavior were fluffy, fringe ideas, ideological goals rather than scientific ones. In textbooks, “sex and gender” (i.e., women) might be ghettoized in a separate chapter at best, and culture meant a description of someone else’s odd customs. Today, no one doesn’t do women and culture, throughout the book.

The emergence of interdisciplinary specialties. When we began writing, the subspecialties of psychology were separate islands, and in some cases fiefdoms. We would never have imagined the rapid growth of social cognitive neuroscience, psychoneuroimmunology, behavioral economics, and other new fields that blend approaches and methods.
The widening of the “scientist-practitioner gap.” Psychological scientists have shown that many widely used clinical tests and diagnostic techniques—the Rorschach, facilitated communication, the Myers-Briggs Type Indicator, play therapy with anatomically correct dolls, and so forth—not only lack reliability and validity, but can generate mistaken diagnoses that cause great harm. Psychological scientists have also debunked many theories of personality and development that were (and still are) popular with clinicians but have not stood the test of time and replication. Reflecting this widening split, a recent issue of *Psychological Science in the Public Interest* calls for renewed efforts to assure a scientific grounding in clinical training (Baker, McFall & Shoham, 2009).

These and other changes pose great challenges for anyone who writes a textbook to introduce students to the scope of topics and issues in psychological science. What does the movement toward interdisciplinary research mean for the traditional organization of chapters? How should we balance the history of the field, including material that “has always been in there” even if it is now outdated, with the explosion of new findings? How to promote the importance of thinking critically about the biomedical revolution in an era when so many people equate technology with “doing science,” expect medication to solve their problems, and are inclined to pop reductionism? Writing a book that accurately reflects the excitement, arguments, and uncertainties of an entire discipline is a gigantic challenge—and that is one thing that hasn’t changed in 25 years.

Reference


**Edward E. Smith**

*Atkinson and Hilgard’s Introduction to Psychology*

First Contributed: 1979 Edition

Latest: 2004 Edition


Over the course of my years with the book I wrote multiple chapters, but for present purposes I’ll focus on the first two I did, “Remembering and Forgetting” and “Language and Thought.” When Dick Atkinson asked me to join the Hilgard team, the cognitive revolution had already swept through Stanford, and Dick wanted to make the above chapters more cognitive. It’s not as if there was no cognitive psychology in the Memory chapter of the previous edition; rather, it’s that
the cognitive approach to memory—with its emphasis on models, like the dual-memory model—had simply been added to the list of topics, which were mainly descriptions of phenomena. But cognitive psychology is not a phenomenon—it’s an approach to studying the mind, one that likens the mind to a computer and emphasizes how information is input, transformed, stored, manipulated, and retrieved in the service of our goals. So I reorganized the chapter around the short- and long-term memory systems, which made the chapter more theoretical, less phenomena-driven, and basically about information processing. In future editions, I held to this approach, and incorporated the major new developments in cognitive psychology, including neuropsychology (1979 edition), connectionist modeling (1993 edition), and neuroimaging (1996 edition). The emphasis on the neural bases of cognition continued to grow, and the last edition that I worked on (2004 edition) had subsections on “Neural Bases of Behavior” all over the place.

A similar story applies to the “Language and Thought” chapter. It was not until the 1971 edition that descriptive linguistics was mentioned (though Chomsky had published major work that had implications for psychology more than a decade earlier). This same edition also included the first, full treatment of Newell and Simon’s computer modeling of problem solving. These two additions signaled an early acceptance of two of the major pillars of the cognitive revolution. By the 1975 edition, Chomsky-style generative linguistics was a major topic. In the 1979 and ensuing editions, I introduced research that tried to combine the representations of generative linguistics with experimental studies of language understanding and production. And I enhanced the “Thinking” part of the chapter by updating the treatment of concepts, introducing what was to prove to be highly influential research on cognitive biases in reasoning and considering issues about imagistic representations in thinking. As it turned out, the other authors of the text were moving in the same cognitive direction, so a survey of the 14 editions of this classic text offers a glimpse of the rise of modern cognitive psychology.

Susan Nolen-Hoeksema

Atkinson and Hilgard’s Introduction to Psychology

First Contributed: 1996 Edition

Latest: 2009 Edition

In 1996, when I first began writing the clinical psychology chapters for the Hilgard and Atkinson Introductory Psychology textbook, the general rule was “Everybody has won and all will have prizes.” We were obliged to give equal coverage and respect to biological, psychoanalytic, humanistic, behavioral, and cognitive theories and treatments for psychopathology, regardless of their empirical base.

The good news is that over the last 15 years, there has been a tectonic shift toward empirically supported theories and treatments, such that instructors often don’t want any coverage of unsupported perspectives, even when they have historical importance in the field. This is not just true of instructors of Introductory Psychology, most of whom probably are not clinical psychologists: I see the same trends in reviews and instructor comments on my textbook on
Abnormal Psychology, almost all of whom are clinical psychologists. It appears there is a critical mass of faculty who have been trained, or perhaps retrained, to favor empirically verified theories and treatments of psychopathology.

A second major trend has been in the prominence of biological theories of psychopathology. Fifteen years ago, our understanding of the biological correlates of mental disorders was rudimentary, and although we still have a long way to go, that understanding has grown massively. Indeed, one of the battles instructors often must fight is against students’ assumptions that mental disorders are only due to biological factors and that biological treatments are always better than psychological ones. Instructors are asking textbook authors to integrate across biological and psychosocial models to give students an appreciation of the complexity of contributors to psychopathology and to highlight studies that show the interaction of biological and psychosocial factors. This is a big improvement over the old model of discussing each theoretical perspective on a disorder in a serial fashion, with little integration.

Clearly the empirical base for theories and treatments of psychopathology is much bigger and better now than 15 years ago. It is unfortunate, then, that the pressure from publishers to shorten and simplify textbooks is making it much harder to go into detail about individual studies so that students learn how we know what we know about psychopathology. This is the bad news. On balance, however, I believe the positive trends in textbooks and the field toward emphasis on empirically-supported perspectives and integrative models outweigh the negative trends toward “dumbing down” textbooks.

Wayne Weiten

*Psychology: Themes and Variations*

First Published: 1989


How has the field of psychological science changed since I wrote the first edition of my introductory text back in the late 1980s? The first thing that stands out to me is that we have seen a revival of “schools of thought” or theoretical perspectives that inspire passion in their advocates. When I wrote my overview of the history of psychology for the first edition of my text, it ended with the cognitive revolution, a development that was followed by 20-25 years of theoretical stagnation. Since that first edition, however, I have felt compelled to add coverage of the rise of cross-cultural psychology, evolutionary psychology, and positive psychology. Each of these emerging theoretical perspectives could be characterized as somewhat rebellious movements with zealous champions that have called for profound changes in the field’s focus and research priorities. I think that all three of these perspectives have had a refreshing and nourishing impact on psychology.

A second major change that I have witnessed is the internationalization of psychological science. When I began my text in the 1980s, research seemed to be dominated by North American and British psychologists. I said “seemed to be” because I am sure this perception was partly illusory,
reflecting parochial interests on the part of our journals and equally parochial subscription lists at our libraries that limited our exposure to work from psychologists around the world. But those days are over. Today, I routinely find myself citing and highlighting cutting-edge studies from all over the globe. International research collaborations have become vastly more common. The editorial boards of many leading American journals have become internationally diverse, with one-quarter to one-third of the consulting editors coming from outside the U.S. And online journal collections in our libraries have provided us with greatly increased access to journals published in other countries. These are encouraging trends that seem likely to have an invigorating impact on the field.

Third, I have seen some interesting transitions in methodology over the course of the last 25 years. In the 1980s, many of the journal articles that I would profile consisted of a single study; today, the vast majority of articles present several studies, and many present five or more. I think this move toward more programmatic research has been healthy for the field, although it presents logistical problems for textbook authors, who often have to distill the essence of an article in a few sentences. On the other hand, authors’ work has been made easier by the rise of meta-analysis. The field’s reliance on this systematic approach to reviewing the literature has grown steadily over the last several decades. Meta-analytic estimates of variables’ effect sizes can provide enlightening guidance as textbook authors try to efficiently assimilate and assess contradictory findings on complex issues. The other trend in methodology that stands out is the increasing popularity of fMRI scans. Although this tool certainly seems to hold great promise, I am not all that enthusiastic thus far. I think the stunning images yielded by this seemingly sophisticated technique have been oversold as more precise, reliable, and unambiguous than they really are. The interpretation of fMRI data depends on an elaborate chain of inference, not to mention arcane technical decisions. I hasten to emphasize that I have no expertise in brain imaging, but as an introductory author I end up reviewing fMRI studies from all the diverse areas of psychology, and my subjective impression is that the findings have not been replicating very well.

In any event, those are some of the changes in psychological science that seem most salient to me from my perspective as an introductory textbook author. After 25 years, I continue to feel privileged to have the opportunity to chronicle our discipline’s progress.