UNDERSTANDING



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Understanding Human Behavior

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Introduction

We must all pledge ourselves to recovering accessible science as an honorable intellectual tradition. The rules are simple: no compromises with conceptual richness; no bypassing of ambiguity or ignorance; removal of jargon, of course, but no dumbing down of ideas (any conceptual complexity can be conveyed in ordinary English)....

-Stephen J. Gould

Introductory Psychology is a hard course. It not only requires mastering a great deal of sometimes complex material, it also entails thinking about behavior in ways that initially may seem very strange. For example, the idea that people may not be aware of many of the causes of their own behavior flies in the face of common sense. Nevertheless it happens to be right—psychological research has demonstrated time and again that people give reasons for their actions that cannot be so and fail to mention influences that have clearly affected their behavior.

For many students, this course will be the only one in psychology they will ever take. It will be perhaps their only encounter with explanations of behavior other than those from the legions of media celebrities, self-help book authors, and talk show guests who fancy themselves experts. We take all this to mean that the course should, in the literal sense, be a memorable one. It should have a lasting influence on the way you understand your own behavior and the behavior of others. It should have a lasting influence on what you regard as criteria for valid knowledge about behavior.

Understanding Human Behavior summarizes some of what psychological science has discovered about human nature over the last century. One major purpose is to give you an understanding and appreciation of the psychological phenomena that occur in your daily life,

but our intention is not to be "relevant" in the pop psychology sense, but rather in a broader, educational way. In this regard the goal is that of, say, a good popularized physics book, which can provide an understanding of things such as why sunsets tend to be red. Knowledge provides a deeper appreciation of the world. Why punishment sometimes doesn't work or that social influence is extremely powerful are, in our view, facts that educated people ought to know. Knowing these and other things about human behavior can provide a different and richer way to understand and appreciate your own life and that of others.

A second major purpose of this book is to foster thinking, both critical and creative. Throughout, a sharp distinction is drawn between evidence and the inferences that can be legitimately drawn from that evidence. The goal is not only to demonstrate why belief in a given psychological generalization is warranted but also to encourage the habit of thinking clearly about the relationship between knowledge claims and evidence, whether the claims are about human behavior or about other topics.

The third major purpose of the book is to present some of what psychology has discovered about human nature in a way that has a reasonable chance of being retained. The format of *Understanding Human Behavior* is intended help you grasp what is important and what is less important. We have had students come

into our offices with 75 percent or more of the text underlined. That is not an effective learning procedure.

One of the generalizations presented later is that learning is greatly enhanced if it occurs in the context of a coherent knowledge framework, or schema. One way in which we have attempted to incorporate this idea into the book is to focus on a relatively small number of well-supported generalizations about behavior, each presented as a separate chapter. Our hope is thereby to provide students with an overall framework for the material through the very organization of the text. Thus a partial answer to the plaintive student question "What am I supposed to learn?" is: "Start with the title of each chapter." A second, related technique we have adopted is to begin each section of the book with a short introduction in which we lay out what we call basic themes. These are fundamental ideas that occur not just within the chapters in a particular section, but throughout the book. Some are simply restatements of the general ideas expressed by the chapter titles; others are more specific elaborations of these general ideas. Another partial answer, then, to "What am I supposed to learn?" is: "The relationship between the basic themes and the specific material in each chapter."

If, five or ten years after using this book, you remember such **generalizations** as immediate memory is limited to just a few items, schizophrenia and major depression both have substantial neurochemical bases, ESP probably doesn't exist, and so on, plus a bit of the evidence that supports them, we will have accomplished one purpose.

What criteria were used to select the generalizations we present as the chapter titles? At one level the choices are idiosyncratic. We chose things that we, and over the years our students, have found to be interesting. We make no claim that they are the only generalizations that could have been selected from the domain of psychology, or even the best ones. Other psychologists with different interests and experience would no doubt come up with different lists, but there would be a great deal of overlap.

In addition to the "we think it's interesting" rule, we followed two additional criteria in selecting material for the book. These were:

- That the selected phenomena be well established.
 This meant that a consistent pattern of research findings had to exist; that a given effect had to have been shown to occur widely and robustly.
- That there be reasonable evidence of "external validity." This meant that there had to be grounds for believing that the research findings would generalize to nonlaboratory settings.

The Genesis of This Book

Michael Doherty taught an introductory psychology course for the first time in 1960, and Clifford Mynatt in 1985. Between us we have used many different textbooks, varying primarily in the extent of coverage and the level of difficulty. At the level of what their authors are trying to do the books tend to be quite similar. Many are excellent, given what the authors have set out to accomplish. But we have become convinced that the very nature of the course is in need of reconceptualization. We believe that what many authors have set out to do would not be in the best interest of most students, even if it were accomplished.

Typical introductory psychology textbooks tend to be encyclopedic. The sheer number of facts they contain is astounding. The facts are organized around traditional sub-areas in psychology, and the chapter titles show a strong correspondence to the names of the upper division courses in most psychology departments. There is an almost universally adopted sequence of topics suggesting a strong degree of theoretical coherence in the field, with the more complex topics coming after the more "basic" ones. The goal is to exhaustively survey the "field of psychology" and students are left with the impression that all the material ties together, somehow, but that it must be beyond them.

Two decades ago the idea that an introductory psychology course ought to be organized around specific psychological phenomena began to have a profound influence on Clifford Mynatt's teaching of the course, as he looked at many texts and concluded that they were addressed more to describing psychology as a field than they were to teaching students how to understand behavior. A decade ago the idea of trying to construct each lecture so that students would be left with a single generalization about behavior, began to influence first his, and then later Michael Doherty's lectures more and more. The generalizations that constituted these lectures came from many sources: the various texts we have used, an informal survey of the psychology faculty at Bowling Green which asked each to provide the single idea that they would most like students to remember twenty years after having taken the course, a question asked at the end of our Intro courses about what had been the most important idea that the students had been exposed to, and, of course, our own experiences as teachers and researchers. Several years ago, while driving back together from a conference on research in reasoning, the first author said "Let's try to turn the way we teach into a text." This book is the result.

Some Distinguishing Features of the Book

There Are Many Short Chapters, Each Organized around a Single Idea

Each chapter is titled with an assertion—a generalization that should serve as a simple advance organizer. It also serves as a mnemonic (a memory aid) to help achieve the goal we have set out for this book: that you should remember generalizations about behavior. Each chapter is also subtitled in a way that is intended to give you an immediate idea of how the generalization can be applied, of what it is supposed to generalize to.

One of our early reviewers argued that we needed to walk a fine line between writing a book that was innovative and writing one that was "terrifyingly weird." As a move away from terrifying weirdness, we have organized the chapters into subgroupings in a way that is a bow in the direction of a more typical Intro course. The specific chapter topics fall, as they must, into many of the usual areas in psychology. Thus we have grouped the chapters in loose confederations corresponding roughly to the organization of a more traditional book. However, the *real* organization, as manifested in the way in which the book is written, is based on the individual chapters.

Most Chapter Subsections Have Headings That State Evidence for the Generalizations in the Chapter Titles

We have begun most of the subsections within each chapter with declarative sentences or questions. We have not typically used more traditional subheadings, which are often rather cryptic. For example, we entitled a subsection about conditioned taste aversions "Some Associations Are Very Easy to Condition" rather than "Conditioned Aversions." Once again, this was done to provide students with cues to what is important, to the larger meaning of the material. Talking to our students, we have found that many often ignore subsection headings. We think they do so because these headings are often single words or phrases with little meaning until *after* the subsection has been read.

Each chapter can be thought of as an *argument*, in the logician's meaning of that word; that is, an argument is a conclusion which follows from a set of premises. Each chapter title is a generalization about behavior, for example, "Reward Has Powerful, Predictable Effects on Behavior." The content of each

chapter is primarily the evidence that supports that chapter's title. In other words, in each chapter the title is a *conclusion* and the content is a set of supporting *premises* for that conclusion.

These supporting premises can be identified by the subsection headings, for example, "Operant Conditioning and Extinction Are Strongly Affected by the Pattern of Reinforcement." One excellent way to master the material in each chapter is to list each chapter title and each of the associated subsection headings on a single sheet of paper. The title is the most important single thing to know out of the chapter material. The subsection headings are the reasons why the generalization is believed to be valid.

A fundamental aspect of science is that it is about the relationship between generalizations and supporting evidence, about the relationship between conclusions and the premises from which those conclusions follow. The fundamental organization of *Understanding Human Behavior* is based on this relationship.

Each Chapter Ends with a Section Called "Going Beyond the Information Given" Not with a Summary

We have included at the end of each chapter a section entitled "Going beyond the Information Given" (GBIG), paraphrased from and with a nod to Jerome Bruner. These sections are short lists of questions asking the student to criticize or to apply the specific ideas in the chapter, or to try to come up with alternative ways to explain some of the data that we have provided as evidence for the generalization that gives the chapter its name. Again the goal is to foster active thinking as opposed to passive rote memorization, which is all too often what a typical summary does.

Another goal we hope to achieve with the Going beyond the Information Given sections is to have the students themselves increase the "coverage" of the course. We have self-consciously decided to omit a great deal of what is covered in the typical text. Many of the questions we have posed in these sections are aimed at getting the students to see relationships between the information presented in the text and the behavior that they see around them. This book leaves a great deal of room for the instructor to teach, and these GBIGs may call for some serious teaching: many students will profit from help with these sections. We have included in the Instructor's Manual fairly detailed suggestions about how to use each of the GBIGs to increase coverage.

We recommend that instructors have students write responses to some of the GBIGs, perhaps divide

them up among the students. If the class itself is a large one that divides up into discussion sections one day a week, written responses to the GBIGs might form the basis for discussion sections.

There Are No "Suggestions for Further Reading" in the Text

Instead of putting a large number of suggestions for further reading in the text, suggestions that we believe are rarely followed without explicit assignments to do so, we have put these suggestions in the Instructor's Manual. Again, we believe that the book leaves a lot of room for teaching, and we think that the student who does wish to follow up a particular topic would be better advised to get direction from the instructor rather than to follow the suggestions for further reading often made in texts—readings that are, in our opinion, often far beyond the abilities of even excellent introductory students.

There Is a Relatively Short Reference List

Another thing we have not included is a long list of references associated with each chapter. Most introductory psychology tests are encyclopedic. Many list over 2,000 references to scholarly books, journal articles, and other sources. This density of citations is fully appropriate for a journal article or a graduate level text, but is it appropriate for introductory level textbooks? How does a list of 2,000 references, 99 percent of which most introductory students will never even see, let alone read, foster learning? Perhaps the point is to impress students with how "scientific" the field is, but in our view, if the content doesn't convey this, long strings of citations won't do it either. And if the content does convince students that psychology is a true science, long strings of citations are superfluous.

Here again, we have taken as our model good general science writing, not traditional introductory psychology texts. *Bully for Brontosaurus*, from which the opening quote is taken, is one of a series of excellent books on biology and paleontology by one of America's best science writers. It contains about 250 references. That's roughly how many are in this book.

There Is a Relatively Short List of Important Terms and Names

Just as we believe that many intro books overwhelm students with too many references, we also believe that many overwhelm them with too many "important" terms. Few students can master several thousand new terms and concepts in a single course, but most students can master a few hundred. We've included a Glossary with a list of the terms and concepts we think are the most important for Intro-level students. It contains about 400 entries. The glossary terms are also highlighted in **boldface type** in the body of the text.

Of course, your instructor may not agree with us about which terms and concepts are most important. He or she may well add to (or delete from) our list. Nevertheless, mastering the terms in the glossary and the ideas and concepts that the terms are related to will take you a long way toward a basic understanding of the material in this book.

We don't think the average well-educated person needs to know the names of most psychologists. If you continue on in the study of psychology you will learn names such as "Tversky" and "Loftus" and "Seligman" soon enough. If you don't continue on in psychology, it is not clear to us what memorizing such names will add to your education, even though as professional psychologists we have the highest regard for the work of these three people and for countless others. However, we do think that there are some people in the history of psychology whom *any* educated person should know something about. We've highlighted the names of these people with **boldface type** and provided some brief biographical material in the text about them.

Once again, of course, your instructor may not agree with us about who is most important in the history of psychology, or where the cutoff is between "really important" and "sort of important." Thus, he or she may well add some names to our very short list. He or she may also require that you "encode" some of the research that is covered in the book in terms of the names of the people who did it. That's an excellent way to help remember the research.

There Are No Chapter Outlines

Active learning is much superior to passive learning. Our experience is that many students just sit and passively stare at an outline. That won't help very much. That's why we haven't provided any. However, we strongly encourage you to make *your own* chapter outlines.

There Are No Cartoons or Other Gee-Whiz Graphics

We have avoided the use of cartoons, newspaper clippings, pictures, and so forth. The major reason for this is our belief that a textbook filled with interest-grabbers delivers a couple of none-too-subtle messages to the reader. One is that the content of the book is so awfully dull that it has to be jazzed up. Another is that the student is, after all, not very serious about learning and has to be entertained. A different sort of reason, perhaps the most important one, is that we believe that

the cartoons, pictures, and boxes very often generate intrusive thoughts. The student is in the middle of reading the author's carefully reasoned argument, turns the page, and sees Snoopy. Where does the eye go? Where does the thought process go?

We do have occasional paragraphs that are essentially asides, dealing with ethical or methodological issues that have just been raised or suggested by the material in the text. These function much as boxes do in many books, but the asides are typically more tightly integrated with the immediately preceding content than are most boxes, and we want them read in the flow of the text, rather than independently.

We've Assumed That College Students Can Deal with Complex Ideas

While we have tried to make the book as user-friendly as possible in ways that enhance active learning, we have, taking our cue once again from Gould, not tried to "dumb it down." That means that parts of it are hard. Some important ideas in psychology are difficult to grasp. We've tried as best as we know how to present such ideas in a clear and understandable way. But in the end you are the one who has to do the work. If you have to read some parts of the book five or six times before you really understand them, that's par for the course. There is nothing in this book that is beyond your grasp.

We've Assumed That College Students Can Use a Dictionary

We have not eschewed big words. A large vocabulary is a powerful cognitive tool, useful in many areas of life. We encourage you to develop one.

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