

AN INTRODUCTION TO
**BEHAVIOR
ANALYSIS**

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WILEY

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PREFACE

Why Study Behavior Analysis

The course in which you are currently enrolled will give you substantive training in the behavior-analytic principles that underlie effective behavior-change interventions. For example, the principles covered in this course have proven effective in the treatment of autism spectrum disorders (Bellini & Akullian, 2007; Eldevik et al., 2009), intellectual disabilities (Heyvaert et al., 2012), antisocial behavior (McCart et al., 2006), adult anxiety and depression (Öst, 2008; Powers et al., 2009), and substance-use disorders (Dutra et al., 2008) to name just a few. In this class, you will learn the principles that are foundational to these successes.

Taking a more expansive view, the course will prepare you to pursue further training at one of the more than 250 universities that offer graduate degrees in behavior analysis. Should you choose to pursue this training, you would join more than 51,000 Board Certified Behavior Analysts (BCBA) who are recognized by most US states as the appropriate providers of behavior-analytic services to children and adults with disabilities. These underserved populations depend on students like you to pursue careers in the helping profession of behavior analysis.

For those not drawn to serving those with disabilities, you should know that the principles covered in this book have proven beneficial in the practice of clinical, counseling, and school psychology. For example, in 2012 the *Inter-Organizational Task Force on Cognitive and Behavioral Psychology Doctoral Education* outlined the most important

principles that these practice-oriented psychologists must understand to be effective (Klepac et al., 2012). At least 60% of the competencies listed were behavior analytic, and many of these will be covered in this book (e.g., shaping, extinction/exposure).

Perhaps your interests lie elsewhere still. If so, you may be interested to know that the principles covered in this book have been successfully used in business settings. Indeed, some of the most effective managers are those who know how to (1) identify the behaviors of successful employees, (2) measure the occurrence and non-occurrence of those behaviors in all employees, and (3) develop behavior-management plans that encourage those successful behaviors. Managers who can do this are actually managing behavior, rather than acting like authoritarian dictators. Because behavior analysts rely on positive reinforcement in their management practices, employees tend to be happier while being more productive.

Still not interested? Well, consider that most readers of this book will one day be parents, if they are not already. Because the behavior-analytic principles covered in this book have proven so reliable in positively influencing behavior, they constitute the core of most parent-training programs; for example, the *Criando con Amor*, *Promoviendo Armonía y Superación* [*Raising with Love, Promoting Harmony & Improvement*] program (Baumann et al., 2014). So, if you hope to be a loving parent who helps their children to successfully navigate their world, you would do well to learn all you can from this book. Your children will never thank you for it, but you will thank yourself one day, particularly when you see other parents struggling to understand the behavior of their children.

If you are still not interested in the contents of this book, we have only one more plea – consider the words of

Socrates who said, “The unexamined life is not worth living.” Socrates was encouraging those of his age to use logic, wisdom, and philosophy in pursuit of self-knowledge, better relationships, and a harmonious existence with the natural world. These goals are timeless and universal. This book can open doors of self-discovery. So, use what you are about to learn to examine your life, your actions, your goals, your values. The examined life is even more worth living.

How to Use the Features of This Book

This book is designed to help students identify the important information they should know after taking this class. When important terms are first presented, they appear in bold. When you identify one of these terms you should take the following steps:

1. Write the term on one side of a 3 × 5 inch flashcard. For example, in [Chapter 1](#), the first term defined is “behavior.”
2. The definition of the term will always be provided nearby in *italics*. Once you have found the definition, write it on the back of the flashcard. For example, [Chapter 1](#) defines behavior as *an individual living organism’s activity, public or private, which may be influenced by external or internal stimulation*.
3. Sometimes the book will pose a question (e.g., what is behavior analysis?). When you identify one of these, write it on a flashcard and then, as you read on, write the answer to this question on the other side of the card.
4. Keep your flashcards with you throughout the day.

Effective Studying

Most college students think reading and rereading the textbook and their lecture notes is a good way to study (Karpicke et al., 2009). It isn't. This method of studying does little to help you remember the materials when you are taking a test or, more importantly, you are trying to apply the concepts in your everyday life. For example, in a study conducted by Roediger and Karpicke (2006), one group of students was asked to study by reading the materials four times (that's probably more than you normally study). Although the students thought this would be effective, when they were tested a week later they could recall only about 40% of the materials – that's a failing grade.

A better way to study is called "repeated retrieval," but most college students don't use it (Karpicke et al., 2009). Repeated retrieval involves reading the information that you are studying and then, without peeking, saying everything you can remember (you can say it out loud or to yourself, both work equally well; Smith et al., 2013). Want to try it right now? If so, without looking, say, write, or think the definition of behavior that was given in the previous section.

If you could not recall all of the important components of the definition, that's not a problem. Compare what you *could* recall with the definition provided above and then (without peeking) try again. When Karpicke and Roediger (2010) asked students to repeat this read-and-retrieve process three times, the students remembered about 80% of the materials one week later. That's twice as much as the students who read the book four times.

Repeated Retrieval Made Easy

The following steps outline a practical way to use repeated retrieval to improve the efficiency and efficacy of your studying (Karpicke et al., 2014):

1. Make the flashcards discussed previously.
2. At least twice a day, go through your flashcards:
 - a. Look at the term and say out loud (or to yourself) as much of what's on the back of the card as you can.
 - b. Turn the card over and see which parts you missed. If you were not 100% correct, try it one more time before moving on to the next card.
3. If you do this a couple times a day, most every day, you will study less and learn more than ever before.

An Added Benefit

Students who use repeated retrieval, by studying their flashcards 3-4 times a day, don't cram the night before an exam. They sleep anxiety-free. They also have a stack of flashcards to help them study for any comprehensive exams taken later in the semester. So, what are you waiting for? Get some flash cards and start earning better grades. Flash cards too old-school for you? There are several flash card apps you can use on your phone.

The Behavior Analysis Task List

Some readers of this book will be interested in earning the credential of BCBA. This credential is granted by the Behavior Analysis Certification Board (BACB) and it is the gold-standard credential of practicing and applied behavior analysts. The BACB's *Fifth Edition Task List* outlines the *Foundational* principles and concepts that students must master before beginning an internship as a behavior