

*A REVIEW OF BEHAVIOR MODIFICATION:  
PRINCIPLES AND PROCEDURES BY RAYMOND G. MILTENBERGER*

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In a marketplace that already includes several high-quality textbooks on applied behavior analysis (e.g., Cooper, Heron, & Howard, 1987; Kazdin, 1994; Martin & Pear, 1995; Sulzer-Azaroff & Mayer, 1991), creating one that makes a significant improvement in the presentation of the material is not an easy task. However, Miltenberger (1997) has accomplished this goal with his recent textbook entitled *Behavior Modification: Principles and Procedures*.

Miltenberger states that the goal of the textbook is to teach students the basic principles and procedures of behavior modification. To accomplish this goal, he first introduces students to the definition of behavior modification and its areas of application, and then follows this definition with chapters organized into five conceptual units. Part 1 (“Measurement of Behavior and Behavior Change”) includes chapters on observing and recording behavior, graphing, measurement, and research design. Placing the unit on measurement at the beginning of the book is a departure from the organization seen in most undergraduate behavior modification texts, which typically begin with the basic principles of behavior. A benefit of covering this information at the beginning of the text is that it imparts to stu-

dents that applied behavior analysis is a data-driven science concerned with precise measurement of behavior. It also provides them with the information they need to understand research examples presented later in the text. However, because measurement is typically not one of the more compelling topics taught in behavior analysis courses, placing it at the beginning of the book may require that the instructor work a bit more diligently to establish an initial excitement about learning the principles and procedures of applied behavior analysis.

Part 2 (“Basic Principles”) includes chapters on reinforcement, extinction, punishment, stimulus control, and respondent conditioning. The purpose of this unit is to familiarize students with the fundamental principles of behavior prior to applying those principles.

Part 3 (“Procedures to Establish and Increase Desirable Behavior”) includes chapters on differential reinforcement, shaping, prompting and transfer of stimulus control, chaining, behavioral skills training, antecedent control procedures, and promoting generalization. This unit covers some of the more current issues in behavior analysis, including brief coverage of stimulus preference assessment.

Part 4 (“Procedures to Decrease Undesirable Behavior”) includes chapters on functional assessment, extinction, differential reinforcement, antecedent manipulations,

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punishment procedures (two chapters), and promoting generalized behavior reduction. Miltenberger's exemplary chapter on functional assessment is located before the chapters on decelerative procedures; this emphasizes the importance of designing interventions based on behavioral function. Part 4 also includes a good discussion of the issue of using punishment for behavior reduction only after functional approaches have failed. This is a departure from other behavior modification textbooks that often include only the ethical considerations of *how* to use punishment procedures as opposed to *when* to use them, given our current understanding of behavioral function. Another specific strength of this section is that it includes discussion of several state-of-the-art interventions including demand fading, curricular revision, and noncontingent reinforcement.

Part 5 ("Other Behavior Change Procedures") includes chapters on habit reversal, token economies, behavioral contracts, fear and anxiety reduction, cognitive-behavior modification, and self-management. The chapter on habit reversal is probably the only one of its kind and includes many examples from the current literature. Overall, Part 5 provides good coverage of the relevant topics; however, the cognitive-behavior modification chapter should be updated to include some of the more current empirically validated therapies (e.g., dialectical behavior therapy, functional-analytic psychotherapy, acceptance and commitment therapy).

General strengths of Miltenberger's text include chapters that are short and consist of manageable amounts of information that can be covered in a single semester. The material is presented in a clear and concise manner, and important information is summarized and presented in useful tables throughout the chapters. The text also includes many easy-to-understand graphs of behavioral data, comprehensive chapter

summaries, and study questions. The text is rich with examples of both real-life and clinical situations that provide the student with a better understanding of how behavior analysis is utilized to make meaningful changes in human behavior.

Some of the most unique and helpful parts of the text are the application and misapplication sections at the end of most chapters. These sections present scenarios that require students either to apply the information they have learned in the chapter or to determine how principles or procedures may have been incorrectly applied. These sections give students an opportunity to test their proficiency with the material presented in the chapter. Answers to the applications and misapplications are provided in the text, so that students receive immediate feedback on their performance.

Weaknesses of Miltenberger's text include the absence of chapters covering group contingencies, behavioral programs, and rule-governed behavior. In addition, some of the chapters on procedures to increase behavior are almost identical to those on decreasing behavior (e.g., antecedent manipulations, promoting generalization). This material might be more effective and less repetitive if it were presented in a single chapter. Finally, it is unfortunate that Miltenberger chose to use the term *behavior modification* as opposed to *applied behavior analysis*. He states that the terms are synonymous in that they share common goals (i.e., the analysis and modification of behavior). However, Mace (1994) has proposed distinctions in the terms, in that *behavior modification* implies that the primary goal is behavior change and *applied behavior analysis* emphasizes a complete understanding of behavior prior to change. Clearly, Miltenberger's text stresses the importance of analyzing the function of behavior before change. Perhaps this point would have been more consistently conveyed

if he had used more accepted terminology to describe the field.

The accompanying instructor's manual provides a multitude of useful resources for instructors, including answers to textbook study questions, test questions for each chapter (true-false, fill-in-the-blank, open-ended), and chapter outlines in large font that are perforated and designed to be photocopied and used as overhead transparencies. In general, *Behavior Modification: Principles and Procedures* makes a sound contribution to the applied behavior analysis textbook market by providing understandable and innovative coverage of contemporary applied behavior-analytic issues. We look forward to future editions of this text.

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