

BEHAVIOR MODIFICATION

Principles and Procedures

Fourth Edition

RAYMOND G. MILTENBERGER

University of South Florida



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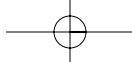
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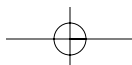
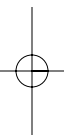
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*To my wife, Nasrin,
and my kids, Ryan, Roxanne, and Steven*



A B O U T T H E A U T H O R

Raymond G. Miltenberger received his Ph.D. in Clinical Psychology in 1985 from Western Michigan University. He is currently a professor and director of the Applied Behavior Analysis Masters Program at the University of South Florida. Dr. Miltenberger conducts applied behavior analysis research with his students and publishes widely in the areas of habit disorders, functional assessment and treatment of behavioral disorders, and self-protection skills training. He utilizes behavior modification in clinical work with children and individuals with mental retardation. In addition to spending time with his family, he enjoys running, golf, baseball, and travel.



CONTENTS

One / Introduction to Behavior Modification 1

P A R T **1 MEASUREMENT OF BEHAVIOR AND BEHAVIOR CHANGE**

Two / Observing and Recording Behavior 21

Three / Graphing Behavior and Measuring Change 47

P A R T **2 BASIC PRINCIPLES**

Four / Reinforcement 73

Five / Extinction 101

Six / Punishment 119

Seven / Stimulus Control: Discrimination and Generalization 143

Eight / Respondent Conditioning 165

P A R T **3 PROCEDURES TO ESTABLISH NEW BEHAVIOR**

Nine / Shaping 185

Ten / Prompting and Transfer of Stimulus Control 205

Eleven / Chaining 227

Twelve / Behavioral Skills Training Procedures 251

P A R T **4 PROCEDURES TO INCREASE DESIRABLE BEHAVIOR AND DECREASE UNDESIRABLE BEHAVIOR**

Thirteen / Understanding Problem Behaviors through Functional Assessment 273

Fourteen / Applying Extinction 303

Fifteen / Differential Reinforcement 327

Sixteen / Antecedent Control Procedures 359

Seventeen / Using Punishment: Time-Out and Response Cost 389

Eighteen / Positive Punishment Procedures and the Ethics of Punishment 411

Nineteen / Promoting Generalization 433

P A R T **5 OTHER BEHAVIOR CHANGE PROCEDURES**

Twenty / Self-Management 457

Twenty-One / Habit Reversal Procedures 479

Twenty-Two / The Token Economy 497

Twenty-Three / Behavioral Contracts 521

Twenty-Four / Fear and Anxiety Reduction Procedures 541

Twenty-Five / Cognitive Behavior Modification 565

CONTENTS

ONE

Introduction to Behavior Modification 1

DEFINING HUMAN BEHAVIOR 2

EXAMPLES OF BEHAVIOR 4

DEFINING BEHAVIOR MODIFICATION 5

CHARACTERISTICS OF BEHAVIOR MODIFICATION 5

HISTORICAL ROOTS OF BEHAVIOR MODIFICATION 7

Major Figures 7

Early Behavior Modification Researchers 9

Major Publications and Events 9

AREAS OF APPLICATION 10

Developmental Disabilities 10

Mental Illness 11

Education and Special Education 11

Rehabilitation 12

Community Psychology 12

Clinical Psychology 12

Business, Industry, and Human Services 12

Self-Management 13

Child Management 13

Prevention 13

Sports Psychology 13

Health-Related Behaviors 13

Gerontology 14

THE STRUCTURE OF THIS TEXTBOOK 14

Measurement of Behavior and Behavior Change 14

Basic Principles of Behavior 14

Procedures to Establish New Behaviors 14

Procedures to Increase Desirable Behaviors and Decrease Undesirable Behaviors 15

Other Behavior Change Procedures 15

CHAPTER SUMMARY 15

KEY TERMS 16

PRACTICE TEST 16

CHAPTER QUIZZES 17

PART 1 MEASUREMENT OF BEHAVIOR AND BEHAVIOR CHANGE

TWO

Observing and Recording Behavior 21

DIRECT AND INDIRECT ASSESSMENT 22

DEFINING THE TARGET BEHAVIOR 23

THE LOGISTICS OF RECORDING 24

The Observer 24

When and Where to Record 25

CHOOSING A RECORDING METHOD 27

- Continuous Recording* 27
- Percentage of Opportunities* 30
- Product Recording* 30
- Interval Recording* 31
- Time Sample Recording* 31

CHOOSING A RECORDING INSTRUMENT 32**REACTIVITY 36****INTEROBSERVER RELIABILITY 37****CHAPTER SUMMARY 38****KEY TERMS 38****PRACTICE TEST 39****APPLICATIONS 39****MISAPPLICATIONS 40****CHAPTER QUIZZES 43****THREE****Graphing Behavior and Measuring Change 47****COMPONENTS OF A GRAPH 48****GRAPHING BEHAVIORAL DATA 51****GRAPHING DIFFERENT DIMENSIONS OF BEHAVIOR 52****RESEARCH DESIGNS 54**

- A-B Design* 55
- A-B-A-B Reversal Design* 56
- Multiple-Baseline Design* 57

Alternating-Treatments Design 59*Changing-Criterion Design* 62**CHAPTER SUMMARY 64****KEY TERMS 65****PRACTICE TEST 65****APPLICATIONS 66****MISAPPLICATIONS 67****CHAPTER QUIZZES 69****PART 2 BASIC PRINCIPLES****FOUR****Reinforcement 73****DEFINING REINFORCEMENT 75****POSITIVE AND NEGATIVE REINFORCEMENT 78***Social versus Automatic Reinforcement* 80**ESCAPE AND AVOIDANCE BEHAVIORS 80****CONDITIONED AND UNCONDITIONED REINFORCERS 82****FACTORS THAT INFLUENCE THE EFFECTIVENESS OF REINFORCEMENT 83**

- Immediacy* 83
- Contingency* 84

Establishing Operations 84*Individual Differences* 85*Magnitude* 86**SCHEDULES OF REINFORCEMENT 86***Fixed Ratio* 88*Variable Ratio* 88*Fixed Interval* 89*Variable Interval* 90

viii Contents

REINFORCING DIFFERENT DIMENSIONS OF BEHAVIOR	91
CONCURRENT SCHEDULES OF REINFORCEMENT	91
CHAPTER SUMMARY	92
KEY TERMS	93

PRACTICE TEST	93
APPENDIX A	94
APPENDIX B	95
CHAPTER QUIZZES	97

FIVE Extinction 101

DEFINING EXTINCTION	102
EXTINCTION BURST	104
SPONTANEOUS RECOVERY	106
PROCEDURAL VARIATIONS OF EXTINCTION	107
A COMMON MISCONCEPTION ABOUT EXTINCTION	109

FACTORS THAT INFLUENCE EXTINCTION	110
CHAPTER SUMMARY	112
KEY TERMS	112
PRACTICE TEST	112
APPENDIX A	112
CHAPTER QUIZZES	115

SIX Punishment 119

DEFINING PUNISHMENT	119
A COMMON MISCONCEPTION ABOUT PUNISHMENT	122
POSITIVE AND NEGATIVE PUNISHMENT	122
UNCONDITIONED AND CONDITIONED PUNISHERS	127
CONTRASTING REINFORCEMENT AND PUNISHMENT	128
FACTORS THAT INFLUENCE THE EFFECTIVENESS OF PUNISHMENT	130
Immediacy	131
Contingency	131
Establishing Operations	131
Individual Differences and Magnitude of the Punisher	132

PROBLEMS WITH PUNISHMENT	133
Emotional Reactions to Punishment	133
Escape and Avoidance	134
Negative Reinforcement for the Use of Punishment	134
Punishment and Modeling	134
Ethical Issues	135
CHAPTER SUMMARY	135
KEY TERMS	136
PRACTICE TEST	136
APPENDIX A	137
CHAPTER QUIZZES	139

SEVEN Stimulus Control: Discrimination and Generalization 143

EXAMPLES OF STIMULUS CONTROL	144
DEFINING STIMULUS CONTROL	144

DEVELOPING STIMULUS CONTROL: STIMULUS DISCRIMINATION TRAINING	146
---	-----

<i>Discrimination Training in the Laboratory</i>	147	GENERALIZATION	151
<i>Developing Reading and Spelling with Discrimination Training</i>	148	<i>Examples of Generalization</i>	152
<i>Stimulus Discrimination Training and Punishment</i>	149	CHAPTER SUMMARY	157
THE THREE-TERM CONTINGENCY	149	KEY TERMS	157
STIMULUS CONTROL RESEARCH	150	PRACTICE TEST	157
		APPENDIX A	158
		CHAPTER QUIZZES	161

EIGHT

Respondent Conditioning 165

EXAMPLES OF RESPONDENT CONDITIONING	165	<i>Contingency between the Conditioned Stimulus and Unconditioned Stimulus</i>	175
DEFINING RESPONDENT CONDITIONING	166	<i>The Number of Pairings</i>	175
TIMING OF THE NEUTRAL STIMULUS AND UNCONDITIONED STIMULUS	169	<i>Previous Exposure to the Conditioned Stimulus</i>	176
HIGHER-ORDER CONDITIONING	170	DISTINGUISHING BETWEEN OPERANT AND RESPONDENT CONDITIONING	176
CONDITIONED EMOTIONAL RESPONSES	171	RESPONDENT CONDITIONING AND BEHAVIOR MODIFICATION	179
EXTINCTION OF CONDITIONED RESPONSES	173	CHAPTER SUMMARY	179
<i>Spontaneous Recovery</i>	173	KEY TERMS	180
DISCRIMINATION AND GENERALIZATION OF RESPONDENT BEHAVIOR	174	PRACTICE TEST	180
FACTORS THAT INFLUENCE RESPONDENT CONDITIONING	174	CHAPTER QUIZZES	181
<i>The Nature of the Unconditioned Stimulus and Conditioned Stimulus</i>	175		
<i>The Temporal Relationship between the Conditioned Stimulus and Unconditioned Stimulus</i>	175		

PART 3 PROCEDURES TO ESTABLISH NEW BEHAVIOR

NINE

Shaping 185

AN EXAMPLE OF SHAPING: TEACHING A CHILD TO TALK	185	DEFINING SHAPING	186
		APPLICATIONS OF SHAPING	188

x Contents

Getting Mrs. F to Walk Again 188
*Getting Mrs. S to Increase the Time between
 Bathroom Visits* 189

RESEARCH ON SHAPING 189
HOW TO USE SHAPING 194
SHAPING OF PROBLEM BEHAVIORS 196

CHAPTER SUMMARY 198
KEY TERMS 199
PRACTICE TEST 199
APPLICATIONS 199
MISAPPLICATIONS 200
CHAPTER QUIZZES 201

TEN*Prompting and Transfer of Stimulus Control* 205

**AN EXAMPLE OF PROMPTING AND FADING: TEACHING
 LITTLE LEAGUERS TO HIT THE BALL** 205

WHAT IS PROMPTING? 207

WHAT IS FADING? 208

TYPES OF PROMPTS 210

Response Prompts 210

Stimulus Prompts 211

TRANSFER OF STIMULUS CONTROL 213

Prompt Fading 213

Prompt Delay 215

Stimulus Fading 216

**HOW TO USE PROMPTING AND TRANSFER OF STIMULUS
 CONTROL** 218

CHAPTER SUMMARY 220

KEY TERMS 221

PRACTICE TEST 221

APPLICATIONS 222

MISAPPLICATIONS 222

CHAPTER QUIZZES 223

ELEVEN*Chaining* 227

EXAMPLES OF BEHAVIORAL CHAINS 227

ANALYZING STIMULUS-RESPONSE CHAINS 228

TASK ANALYSIS 229

BACKWARD CHAINING 232

FORWARD CHAINING 234

TOTAL TASK PRESENTATION 236

**OTHER STRATEGIES OF TEACHING BEHAVIORAL
 CHAINS** 238

Written Task Analysis 240

Picture Prompts 240

Self-Instructions 241

HOW TO USE CHAINING PROCEDURES 243

CHAPTER SUMMARY 244

KEY TERMS 244

PRACTICE TEST 244

APPLICATIONS 245

MISAPPLICATIONS 245

CHAPTER QUIZZES 247

TWELVE*Behavioral Skills Training Procedures 251***EXAMPLES OF BEHAVIORAL SKILLS TRAINING PROCEDURES 251***Teaching Marcia to Say “No” to the Professors 251**Teaching Children to Protect Themselves from Abduction 252***COMPONENTS OF THE BEHAVIORAL SKILLS TRAINING PROCEDURE 252***Modeling 252**Instructions 255**Rehearsal 256**Feedback 256***ENHANCING GENERALIZATION AFTER BEHAVIORAL SKILLS TRAINING 257****IN SITU TRAINING 258****BEHAVIORAL SKILLS TRAINING AND THE THREE-TERM CONTINGENCY 259****BEHAVIORAL SKILLS TRAINING IN GROUPS 259****APPLICATIONS OF BEHAVIORAL SKILLS TRAINING PROCEDURES 260****HOW TO USE BEHAVIORAL SKILLS TRAINING PROCEDURES 264****CHAPTER SUMMARY 265****KEY TERMS 266****PRACTICE TEST 266****APPLICATIONS 267****MISAPPLICATIONS 267****CHAPTER QUIZZES 269**

PART

4**PROCEDURES TO INCREASE DESIRABLE BEHAVIOR AND DECREASE UNDESIRABLE BEHAVIOR****THIRTEEN***Understanding Problem Behaviors through Functional Assessment 273***EXAMPLES OF FUNCTIONAL ASSESSMENT 273***Jacob 273**Anna 275***DEFINING FUNCTIONAL ASSESSMENT 276****FUNCTIONS OF PROBLEM BEHAVIORS 277***Social Positive Reinforcement 277**Social Negative Reinforcement 277**Automatic Positive Reinforcement 278**Automatic Negative Reinforcement 278***FUNCTIONAL ASSESSMENT METHODS 278***Indirect Methods 278**Direct Observation Methods 280**Experimental Methods (Functional Analysis) 286***FUNCTIONAL ANALYSIS RESEARCH 289****CONDUCTING A FUNCTIONAL ASSESSMENT 292****CHAPTER SUMMARY 294****KEY TERMS 295****PRACTICE TEST 295****APPLICATIONS 295****MISAPPLICATIONS 298****CHAPTER QUIZZES 299**

FOURTEEN

Applying Extinction 303**THE CASE OF WILLY 303****USING EXTINCTION TO DECREASE A PROBLEM BEHAVIOR 306***Collecting Data to Assess Treatment Effects* 306*Identifying the Reinforcer for the Problem Behavior through Functional Assessment* 307*Eliminating the Reinforcer after Each Instance of the Problem Behavior* 307**TAKING ACCOUNT OF THE SCHEDULE OF REINFORCEMENT BEFORE EXTINCTION 313****REINFORCING ALTERNATIVE BEHAVIORS 315****PROMOTING GENERALIZATION AND MAINTENANCE 315****RESEARCH EVALUATING THE USE OF EXTINCTION 316****CHAPTER SUMMARY 319****KEY TERMS 320****PRACTICE TEST 320****APPLICATIONS 320****MISAPPLICATIONS 321****APPENDIX A 322****APPENDIX B 322****CHAPTER QUIZZES 323**

FIFTEEN

Differential Reinforcement 327**DIFFERENTIAL REINFORCEMENT OF ALTERNATIVE BEHAVIOR 327***Getting Mrs. Williams to Be Positive* 327*When to Use DRA* 329*How to Use DRA* 330*Using Differential Negative Reinforcement of Alternative Behaviors* 332*Variations of DRA* 334*Research on DRA* 335**DIFFERENTIAL REINFORCEMENT OF OTHER BEHAVIOR 338***Defining DRO* 339*Research Evaluating DRO Procedures* 341**DIFFERENTIAL REINFORCEMENT OF LOW RATES OF RESPONDING 344***Defining DRL* 345*Variations of DRL* 345*Implementing DRL Procedures* 346*Research Evaluating DRL Procedures* 348**CHAPTER SUMMARY 350****KEY TERMS 351****PRACTICE TEST 351****APPLICATIONS 352****MISAPPLICATIONS 352****CHAPTER QUIZZES 355**

SIXTEEN

Antecedent Control Procedures 359**EXAMPLES OF ANTECEDENT CONTROL 359***Getting Marianne to Study More* 359*Getting Cal to Eat Right* 360**DEFINING ANTECEDENT CONTROL PROCEDURES 361***Presenting the Discriminative Stimulus (S^D) or Cues for the Desired Behavior* 361

Arranging Establishing Operations for the Desirable Behavior	363
Decreasing Response Effort for the Desirable Behavior	364
Removing the Discriminative Stimulus or Cues for Undesirable Behaviors	366
Removing Establishing Operations for Undesirable Behaviors	367
Increasing the Response Effort for Undesirable Behaviors	368

RESEARCH ON ANTECEDENT CONTROL STRATEGIES 369

Manipulating Discriminative Stimuli	370
Manipulating Response Effort	372
Manipulating Establishing Operations	374

USING ANTECEDENT CONTROL STRATEGIES 377

Analysis of the Three-Term Contingency for the Desirable Behavior	378
Analysis of the Three-Term Contingency for the Undesirable Behavior	379
Functional, Nonaversive Interventions for Problem Behaviors	379

CHAPTER SUMMARY 380

KEY TERMS 380

PRACTICE TEST 380

APPLICATIONS 381

MISAPPLICATIONS 382

CHAPTER QUIZZES 385

SEVENTEEN

Using Punishment: Time-out and Response Cost 389

TIME-OUT 390

Types of Time-out	392
Using Reinforcement with Time-out	392
Considerations in Using Time-out	393
Research Evaluating Time-out Procedures	396

RESPONSE COST 399

Defining Response Cost	399
Using Differential Reinforcement with Response Cost	400
Comparing Response Cost, Time-out, and Extinction	400

Considerations in Using Response Cost	401
---------------------------------------	-----

Research Evaluating Response Cost Procedures	402
--	-----

CHAPTER SUMMARY 404

KEY TERMS 404

PRACTICE TEST 405

APPLICATIONS 405

MISAPPLICATIONS 406

CHAPTER QUIZZES 407

EIGHTEEN

Positive Punishment Procedures and the Ethics of Punishment 411

APPLICATION OF AVERSIVE ACTIVITIES 411

Overcorrection	413
Contingent Exercise	414
Guided Compliance	415

Physical Restraint	417
--------------------	-----

Cautions in the Application of Aversive Activities	418
--	-----

APPLICATION OF AVERSIVE STIMULATION 418

POSITIVE PUNISHMENT: TREATMENT OF LAST RESORT 421**CONSIDERATIONS IN USING POSITIVE PUNISHMENT 422****THE ETHICS OF PUNISHMENT 423***Informed Consent 423**Alternative Treatments 423**Recipient Safety 424**Problem Severity 424**Implementation Guidelines 424**Training and Supervision 424**Peer Review 424**Accountability: Preventing Misuse
and Overuse 424***CHAPTER SUMMARY 425****KEY TERMS 425****PRACTICE TEST 426****APPLICATIONS 426****MISAPPLICATIONS 427****CHAPTER QUIZZES 429****NINETEEN****Promoting Generalization 433****EXAMPLES OF GENERALIZATION PROGRAMMING 433****DEFINING GENERALIZATION 434****STRATEGIES FOR PROMOTING GENERALIZATION OF BEHAVIOR
CHANGE 435***Reinforcing Occurrences of Generalization 435**Training Skills That Contact Natural
Contingencies of Reinforcement 436**Modifying Natural Contingencies of
Reinforcement and Punishment 437**Incorporating a Variety of Relevant Stimulus
Situations in Training 439**Incorporating Common Stimuli 442**Teaching a Range of Functionally Equivalent
Responses 442**Incorporating Self-Generated Mediators
of Generalization 443***IMPLEMENTING STRATEGIES TO PROMOTE
GENERALIZATION 445****PROMOTING GENERALIZED REDUCTIONS IN PROBLEM
BEHAVIORS 446****CHAPTER SUMMARY 448****KEY TERMS 448****PRACTICE TEST 448****APPLICATIONS 449****MISAPPLICATIONS 450****CHAPTER QUIZZES 453****TWENTY****Self-Management 457****EXAMPLES OF SELF-MANAGEMENT 457***Getting Murray to Run Regularly 457**Getting Annette to Clean up Her Mess 459***DEFINING SELF-MANAGEMENT PROBLEMS 459**

DEFINING SELF-MANAGEMENT 461**TYPES OF SELF-MANAGEMENT STRATEGIES 462**

- Goal-Setting and Self-Monitoring* 462
- Antecedent Manipulations* 463
- Behavioral Contracting* 464
- Arranging Reinforcers and Punishers* 464
- Social Support* 465
- Self-Instructions and Self-Praise* 466

STEPS IN A SELF-MANAGEMENT PLAN 467**CHAPTER SUMMARY 470****KEY TERMS 471****PRACTICE TEST 471****APPLICATIONS 472****MISAPPLICATIONS 472****CHAPTER QUIZZES 475****TWENTY-ONE***Habit Reversal Procedures 479***EXAMPLES OF HABIT BEHAVIORS 479****DEFINING HABIT BEHAVIORS 480**

- Nervous Habits* 480
- Motor and Vocal Tics* 481
- Stuttering* 482

HABIT REVERSAL PROCEDURES 482**APPLICATIONS OF HABIT REVERSAL 483**

- Nervous Habits* 483
- Motor and Vocal Tics* 484
- Stuttering* 486

WHY DO HABIT REVERSAL PROCEDURES WORK? 486**OTHER TREATMENT PROCEDURES FOR HABIT DISORDERS 488****CHAPTER SUMMARY 490****KEY TERMS 491****PRACTICE TEST 491****APPLICATIONS 491****MISAPPLICATIONS 492****CHAPTER QUIZZES 493****TWENTY-TWO***The Token Economy 497***REHABILITATING SAMMY 497****DEFINING A TOKEN ECONOMY 498****IMPLEMENTING A TOKEN ECONOMY 500**

- Defining the Target Behaviors* 500
- Identifying the Items to Use as Tokens* 500
- Identifying Backup Reinforcers* 501
- Deciding on the Appropriate Schedule of Reinforcement* 502
- Establishing the Token Exchange Rate* 503
- Establishing the Time and Place for Exchanging Tokens* 503

Deciding Whether to Use Response Cost 504

Staff Training and Management 505

PRACTICAL CONSIDERATIONS 505**APPLICATIONS OF A TOKEN ECONOMY 507****ADVANTAGES AND DISADVANTAGES OF A TOKEN ECONOMY 510****CHAPTER SUMMARY 513****KEY TERMS 514****PRACTICE TEST 514****APPLICATIONS 514****MISAPPLICATIONS 515****CHAPTER QUIZZES 517**

TWENTY-THREE*Behavioral Contracts 521***EXAMPLES OF BEHAVIORAL CONTRACTING 521***Getting Steve to Complete His Dissertation 521**Helping Dan and His Parents Get Along Better 523***DEFINING THE BEHAVIORAL CONTRACT 523****COMPONENTS OF A BEHAVIORAL CONTRACT 524****TYPES OF BEHAVIORAL CONTRACTS 526***One-Party Contracts 527**Two-Party Contracts 527***NEGOTIATING A BEHAVIORAL CONTRACT 529****WHY DO BEHAVIORAL CONTRACTS INFLUENCE BEHAVIOR? 529****APPLICATIONS OF BEHAVIORAL CONTRACTS 531****CHAPTER SUMMARY 534****KEY TERMS 534****PRACTICE TEST 534****APPLICATIONS 535****MISAPPLICATIONS 535****CHAPTER QUIZZES 537****TWENTY-FOUR***Fear and Anxiety Reduction Procedures 541***EXAMPLES OF FEAR AND ANXIETY REDUCTION 541***Overcoming Trisha's Fear of Public Speaking 541**Overcoming Allision's Fear of Spiders 542***DEFINING FEAR AND ANXIETY PROBLEMS 543****PROCEDURES TO REDUCE FEAR AND ANXIETY 546***Relaxation Training 546**Systemic Desensitization 551**In Vivo Desensitization 554**Advantages and Disadvantages of Systematic and In Vivo Desensitization 555**Other Treatments for Fears 557***CLINICAL PROBLEMS 558****CHAPTER SUMMARY 558****KEY TERMS 558****PRACTICE TEST 559****APPLICATIONS 559****MISAPPLICATIONS 560****CHAPTER QUIZZES 561****TWENTY-FIVE***Cognitive Behavior Modification 565***EXAMPLES OF COGNITIVE BEHAVIOR MODIFICATION 565***Helping Deon Control His Anger 565**Helping Claire Pay Attention in Class 567***DEFINING COGNITIVE BEHAVIOR MODIFICATION 568***Defining Cognitive Behavior 568**Functions of Cognitive Behavior 569***COGNITIVE BEHAVIOR MODIFICATION PROCEDURES 570***Cognitive Restructuring 570**Cognitive Coping Skills Training 574**Acceptance-Based Therapies 577***CLINICAL PROBLEMS 578**

CHAPTER SUMMARY 578

KEY TERMS 578

PRACTICE TEST 578

GLOSSARY 585

REFERENCES 597

CREDITS 623

NAME INDEX 625

SUBJECT INDEX 631

APPLICATIONS 579

MISAPPLICATIONS 579

CHAPTER QUIZZES 581

PREFACE

We are gratified that the first three editions of *Behavior Modification: Principles and Procedures* received positive reviews from students and professors. The fourth edition has kept the positive features of the first three editions, and has been revised to address the suggestions of reviewers and updated to reflect the latest research in behavior modification.

The goal of this fourth edition (as with the earlier editions) is to describe basic principles of behavior, so that the student learns how environmental events influence human behavior, and to describe behavior modification procedures, so that the student learns the strategies by which human behavior may be changed. The text is divided into 25 relatively short chapters, each of which covers a manageable amount of information (for example, one principle or procedure).

This text can be used in a standard one-semester course in behavior modification, applied behavior analysis, behavior management, or behavior change.

The material in the text is discussed at an introductory level, so that it may be understood by students with no prior knowledge of the subject. This text is intended for undergraduate students or beginning graduate students. It would also be valuable for individuals working in human services, education, or rehabilitation who must use behavior modification procedures to manage the behavior of the individuals in their care.

I have made a concerted effort in this text to be gender neutral. When discussing case examples, I include males and females about equally as often.

FEATURES OF THE TEXT CONTINUED FROM THE FIRST THREE EDITIONS

The following features of the text are intended to help the reader learn easily.

Organization of the Text

Following a general introduction to the field in Chapter 1, Chapters 2 and 3 present information on behavior recording, graphing, and measuring change. This information will be utilized in each subsequent chapter. Next, Chapters 4–8 focus on the basic principles of operant and respondent behavior. The application of these principles forms the subject of the remaining 17 chapters. Procedures to establish new behaviors are described in Chapters 9–12, and procedures to increase desirable behaviors and decrease undesir-

able behaviors are considered in Chapters 13–19. Finally, Chapters 20–25 present a survey of other important behavior modification procedures.

Principles and Procedures

The various procedures for changing behavior are based on fundamental principles of behavior established in experimental research over the last 70 years. In the belief that the student will better understand the procedures after first learning the fundamental principles, the principles underlying operant and respondent behavior are reviewed in Chapters 4–8; the application of the principles in the behavior modification procedures is described in Chapters 9–25.

Examples from Everyday Life

Each chapter uses a variety of real-life examples—some relevant to college students, some chosen from the author's clinical experience—to bring the principles and procedures to life.

Examples from Research

In addition, both classic studies and the most up-to-date research on behavior modification principles and procedures are integrated into the text.

Quizzes Accompany Each Chapter

At the end of each chapter are three fill-in-the-blank quizzes with 10 questions each. The quizzes provide students with further exercises for self-assessment of their knowledge of the chapter's content. The quizzes are on perforated pages, which can be easily torn out so that the instructor can have students hand the quizzes in as homework assignments or have students take the quizzes in class.

Practice Tests

Practice tests at the end of each chapter have short-answer essay questions, complete with page numbers where the answers can be found.

Application Exercises

At the end of each chapter where procedures are taught (Chapters 2, 3, and 9–25), several application exercises are provided. In each exercise, a real-life case is described and then the student is asked to apply the procedure described in the chapter. These exercises give students an opportunity to think about how the procedures are applied in real life.

Misapplication Exercises

The application exercises are followed by misapplication exercises. In each one, a case example is provided, and the procedure from the chapter is applied to the case in an incorrect or inappropriate manner. The student is asked to analyze the case example and to describe what is wrong with

the application of the procedure in that case. These misapplication exercises require the student to think critically about the application of the procedure. Answers to Applications and Misapplications are in the Instructors Manual, making them valuable tools for instructors as they assess their students' abilities to apply the information provided in the chapter.

Step-by-Step Approach

In each chapter in which a particular behavior modification procedure is taught, the implementation of the procedure is outlined in a step-by-step fashion, for ease of comprehension.

Summary Boxes

Periodically throughout the text, information from a chapter is summarized in a box that has been set off from the text. These boxes are intended to help the student organize the material in the chapter.

Chapter Summaries

Chapter summaries provide information that is consistent with the opening questions in each chapter.

Examples for Self-Assessment

In the early chapters on basic principles (Chapters 4–7) there are tables with examples of the principle discussed within that chapter. Later in the chapter (or in a subsequent chapter), the student is directed to return to a specific table and, using the new information being presented in the chapter, to analyze specific aspects of the examples provided in that table.

Self-Assessment Questions

At intervals throughout the text, students are presented with self-assessment questions. To answer these questions, students will need to utilize the information already presented in the chapter. These questions will help students assess their understanding of the material. In most cases,

xx Preface

answers are presented in the text immediately following the question.

Figures

Most of the chapters include figures from the research literature to illustrate important principles or procedures. Students must use information from earlier chapters on behavior recording, graphing, and measuring change to analyze the graphs.

Glossary

At the end of the text is a glossary of the important behavior modification terms used in the text. Each term is followed by a succinct and precise definition.

Improved Test Bank

The test bank includes multiple-choice questions, fill-in-the-blank questions, true-false questions, and short-answer essay questions.

NEW FEATURES IN THE FOURTH EDITION

In addition to the features continued from the first three editions, three major features have been added to the fourth edition.

For Further Reading

In each of the chapters on behavioral principles (Chapters 4–8) and procedures (Chapters 9–25) a For Further Reading box has been added. In this feature, interesting articles that are relevant to the content of the chapter are identified and briefly described. Citations for these articles have also been provided. These articles are from JABA (or JEAB), so they can be easily accessed online by students. (The JABA website is <http://seab.envmed.rochester.edu/jaba/>.) Instructors can assign these articles for extra credit or as reading assignments for when more advanced students use the textbook.

List of Key Terms

After each Chapter Summary section, there is now a list of the new terms that were used in the chapter. The list of key terms shows the page number on which each term was introduced. Although these terms are all found in the Glossary at the end of the text, having the new terms listed at the end of each chapter with page numbers will allow the student to make easy reference to

the terms when reading the chapter or when studying for a test or quiz.

Updated and Expanded References

The fourth edition includes 125 additional references—many of which are from the most recent volumes of JABA—to present students with the most recent scholarship in the field.

Other New Features

Chapter 1 has a brief discussion of the relationship between applied behavior analysis and behavior modification. Chapter 2 has new information on structured versus unstructured assessment and on recording percentage of opportunities. Chapter 4 has an added discussion of social versus automatic reinforcement. Chapter 7 has a new figure from Lalli et al. (1998), showing another example of a generalization gradient relevant to an applied problem. Chapter 12 has a new section on in situ training, a method used to increase generalization following the use of behavioral skills training. New chapter headings are provided to help the reader better organize the research on antecedent control in Chapter 16. In Chapter 19, one figure was eliminated (Figure 19.2 from Ayllon, Kuhlman, & Warzak, 1982), and another figure and text was added (Durand, 1999) to highlight a study on programming generalization.

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FOR THE BEHAVIOR MODIFICATION STUDENT

To get the most out of this text and out of your behavior modification course, you are encouraged to consider the following recommendations.

1. Read the assigned chapters before the class meeting at which the chapter is to be discussed. You will benefit more from the class if you have first read the material.
2. Answer each of the self-assessment questions in the chapter to see if you understand the material just covered.
3. Answer the practice test questions at the end of each chapter. If you can answer each question, you know that you understand the material in the chapter.
4. Complete the end-of-chapter quizzes to assess your knowledge of the chapter content (unless your professor plans to use the quizzes in class).
5. Complete the application and misapplication exercises at the end of the procedure chapters. In that way, you will understand the material in the chapter well enough to apply it or to identify how it is applied incorrectly.
6. The best way to study for a test is to test yourself. After reading and rereading the chapter and your class notes, test yourself in the following ways.
 - Look at key terms in the chapter and see if you can define them without looking at the definitions in the text.
 - Look at each practice test question at the end of the chapter and see if you can give the correct answer without looking up the answer in the text or in your notes.
 - Come up with novel examples of each principle or procedure in the chapter.

xxii Preface

- Make flash cards with a term or question on one side and the definition of the term or the answer to the question on the other side. While studying, look at the term (or question) on one side of the card and then read the definition (or answer) on the other. As you study, you will find that you need to turn the cards over less and less often. Once you can supply the answer or definition on the back of the card without looking, you'll know that you understand the material.
- Always study in a location that is reasonably free from distractions or interruptions.
- Always begin studying for a test at least a few days in advance. Give yourself more days to study as more chapters are included on the test.

The following websites provide a range of valuable information about different aspects of behavior modification or applied behavior analysis.

<http://seab.envmed.rochester.edu/jaba/>
<http://seab.envmed.rochester.edu/jeab/>
<http://www.abainternational.org>
http://www.auburn.edu/~newlamc/apa_div25/
<http://www.abct.org>
<http://fabaworld.org>
<http://www.calaba.org/>
<http://www.unt.edu/behv/txaba/>
<http://www.babat.org/>
<http://www.behavior-analyst-online.org/index.html>
<http://www.behavior.org>
<http://www.bf Skinner.org/>
<http://www.bacb.com/>

Journal of Applied Behavior Analysis*
 Journal of the Experimental Analysis of Behavior
 The Association for Behavior Analysis
 APA Division 25 (Behavior Analysis)
 Association for Behavioral and Cognitive Therapy
 Florida Association for Behavior Analysis
 California Association for Behavior Analysis
 Texas Association for Behavior Analysis
 Berkshire Association for Behavior Analysis and Therapy
 The Behavior Analyst Online
 Cambridge Center for Behavioral Studies
 B.F. Skinner Foundation
 Behavior Analysis Certification Board

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