

BRIEF CONTENTS

1 / Introduction to Behavior Modification 1

PART 1

Measurement of Behavior and Behavior Change

2 / Observing and Recording Behavior 19

3 / Graphing Behavior and Measuring Change 43

PART 2

Basic Principles

4 / Reinforcement 65

5 / Extinction 91

6 / Punishment 105

7 / Stimulus Control: Discrimination and Generalization 127

8 / Respondent Conditioning 145

PART 3

Procedures to Establish New Behavior

9 / Shaping 163

10 / Prompting and Transfer of Stimulus Control 181

11 / Chaining 201

12 / Behavioral Skills Training Procedures 223

PART 4

Procedures to Increase Desirable Behavior and Decrease Undesirable Behavior

13 / Understanding Problem Behaviors through Functional Assessment 243

14 / Applying Extinction 273

15 / Differential Reinforcement 297

16 / Antecedent Control Procedures 327

17 / Using Punishment: Time-Out and Response Cost 353

18 / Positive Punishment Procedures and the Ethics of Punishment 373

19 / Promoting Generalization 393

PART 5

Other Behavior Change Procedures

20 / Self-Management 413

21 / Habit Reversal Procedures 431

22 / The Token Economy 447

23 / Behavioral Contracts 469

24 / Fear and Anxiety Reduction Procedures 487

25 / Cognitive Behavior Modification 509

CONTENTS

Preface xvi

Chapter 1 Introduction to Behavior Modification 1

- Defining Human Behavior 2
- Examples of Behavior 4
- Defining Behavior Modification 5
- Characteristics of Behavior Modification 6
- Historical Roots of Behavior Modification 8
 - Major Figures 8
 - Early Behavior Modification Researchers 11
 - Major Publications and Events 11
- Areas of Application 12
 - Developmental Disabilities 12
 - Mental Illness 12
 - Education and Special Education 12
 - Rehabilitation 13
 - Community Psychology 13
 - Clinical Psychology 13
 - Business, Industry, and Human Services 13
 - Self-Management 14
 - Child Behavior Management 14
- Prevention 14
- Sports Performance 14
- Health-Related Behaviors 14
- Gerontology 15
- Professional Practice, Certification, and Ethics 15
- The Structure of This Textbook 15
 - Measurement of Behavior and Behavior Change 16
 - Basic Principles of Behavior 16
 - Procedures to Establish New Behaviors 16
 - Procedures to Increase Desirable Behaviors and Decrease Undesirable Behaviors 16
 - Other Behavior Change Procedures 16
- Chapter Summary 17
- Key Terms 17
- Practice Test 17

PART 1 Measurement of Behavior and Behavior Change

Chapter 2 Observing and Recording Behavior 19

- Direct and Indirect Assessment 20
- Defining the Target Behavior 21
- The Logistics of Recording 23
 - The Observer 23
 - When and Where to Record 24
- Choosing a Recording Method 26
 - Continuous Recording 26
 - Percentage of Opportunities 29
 - Product Recording 29
 - Interval Recording 30
 - Time Sample Recording 31
- Choosing a Recording Instrument 32

Reactivity	36
Interobserver Agreement	37
Chapter Summary	39
Key Terms	40

Practice Test	40
Applications	41
Misapplications	42

Chapter 3 Graphing Behavior and Measuring Change 43

Components of a Graph	45
Graphing Behavioral Data	47
Graphing Data from Different Recording Procedures	50
Research Designs	51
<i>A-B Design</i>	52
<i>A-B-A-B Reversal Design</i>	53
<i>Multiple-Baseline Design</i>	54

<i>Alternating-Treatments Design</i>	59
<i>Changing-Criterion Design</i>	60
Chapter Summary	61
Key Terms	62
Practice Test	62
Applications	62
Misapplications	63

PART 2 Basic Principles

Chapter 4 Reinforcement 65

Defining Reinforcement	67
Positive and Negative Reinforcement	70
<i>Social versus Automatic Reinforcement</i>	73
Escape and Avoidance Behaviors	73
Conditioned and Unconditioned Reinforcers	75
Factors That Influence the Effectiveness of Reinforcement	76
<i>Immediacy</i>	76
<i>Contingency</i>	77
<i>Motivating Operations</i>	77
<i>Individual Differences</i>	80
<i>Magnitude</i>	81

Schedules of Reinforcement	81
<i>Fixed Ratio</i>	82
<i>Variable Ratio</i>	83
<i>Fixed Interval</i>	84
<i>Variable Interval</i>	85
Reinforcing Different Dimensions of Behavior	86
Concurrent Schedules of Reinforcement	87
Chapter Summary	88
Key Terms	88
Practice Test	89
Appendix A	90
Appendix B	90

Chapter 5 Extinction 91

Defining Extinction	92
Extinction Burst	95
Spontaneous Recovery	97
Procedural Variations of Extinction	98
A Common Misconception about Extinction	100

Factors That Influence Extinction	101
Chapter Summary	103
Key Terms	103
Practice Test	103
Appendix A	104

Chapter 6 Punishment 105

- Defining Punishment 106
- A Common Misconception about Punishment 108
- Positive and Negative Punishment 109
- Unconditioned and Conditioned Punishers 113
- Contrasting Reinforcement and Punishment 115
- Factors That Influence the Effectiveness of Punishment 117
 - Immediacy* 117
 - Contingency* 118
 - Motivating Operations* 118
 - Individual Differences and Magnitude of the Punisher* 120

- Problems with Punishment 120
 - Emotional Reactions to Punishment* 121
 - Escape and Avoidance* 121
 - Negative Reinforcement for the Use of Punishment* 121
 - Punishment and Modeling* 122
 - Ethical Issues* 122

Chapter Summary 123**Key Terms 123****Practice Test 123****Appendix A 125****Chapter 7 Stimulus Control: Discrimination and Generalization 127**

- Examples of Stimulus Control 128
- Defining Stimulus Control 129
- Developing Stimulus Control: Stimulus Discrimination Training 131
 - Discrimination Training in the Laboratory* 131
 - Developing Reading and Spelling with Discrimination Training* 133
 - Stimulus Discrimination Training and Punishment* 134

- The Three-Term Contingency 134
- Stimulus Control Research 135
- Generalization 136
 - Examples of Generalization* 138

Chapter Summary 142**Key Terms 143****Practice Test 143****Appendix A 143****Chapter 8 Respondent Conditioning 145**

- Examples of Respondent Conditioning 146
- Defining Respondent Conditioning 146
- Timing of the Neutral Stimulus and Unconditioned Stimulus 149
- Higher-Order Conditioning 151
- Conditioned Emotional Responses 151
- Extinction of Conditioned Responses 153
 - Spontaneous Recovery* 154
- Discrimination and Generalization of Respondent Behavior 154

- Factors That Influence Respondent Conditioning 155

- The Nature of the Unconditioned Stimulus and Conditioned Stimulus* 155

- The Temporal Relationship between the Neutral Stimulus and Unconditioned Stimulus* 155

- Contingency between the Neutral Stimulus and Unconditioned Stimulus* 156

- The Number of Pairings* 156

- Previous Exposure to the Conditioned Stimulus* 156

Distinguishing between Operant and Respondent Conditioning	157
Respondent Conditioning and Behavior Modification	160

Chapter Summary	160
Key Terms	161
Practice Test	161

PART 3 Procedures to Establish New Behavior

Chapter 9 Shaping 163

An Example of Shaping: Teaching a Child to Talk	163
---	-----

Defining Shaping	164
------------------	-----

Applications of Shaping	166
-------------------------	-----

<i>Getting Mrs. F to Walk Again</i>	166
-------------------------------------	-----

<i>Getting Mrs. S to Increase the Time between Bathroom Visits</i>	167
--	-----

Research on Shaping	169
---------------------	-----

How to Use Shaping	173
--------------------	-----

Shaping of Problem Behaviors	175
------------------------------	-----

Chapter Summary	178
-----------------	-----

Key Terms	179
-----------	-----

Practice Test	179
---------------	-----

Applications	179
--------------	-----

Misapplications	180
-----------------	-----

Chapter 10 Prompting and Transfer of Stimulus Control 181

An Example of Prompting and Fading: Teaching Little Leaguers to Hit the Ball	182
--	-----

What Is Prompting?	183
--------------------	-----

What Is Fading?	184
-----------------	-----

Types of Prompts	186
------------------	-----

<i>Response Prompts</i>	187
-------------------------	-----

<i>Stimulus Prompts</i>	188
-------------------------	-----

Transfer of Stimulus Control	190
------------------------------	-----

<i>Prompt Fading</i>	190
----------------------	-----

<i>Prompt Delay</i>	192
---------------------	-----

<i>Stimulus Fading</i>	193
------------------------	-----

How to Use Prompting and Transfer of Stimulus Control	195
---	-----

Prompting and Transfer of Stimulus Control in Autism Treatment	198
--	-----

Chapter Summary	198
-----------------	-----

Key Terms	199
-----------	-----

Practice Test	199
---------------	-----

Applications	200
--------------	-----

Misapplications	200
-----------------	-----

Chapter 11 Chaining 201

Examples of Behavioral Chains	202
-------------------------------	-----

Analyzing Stimulus-Response Chains	202
------------------------------------	-----

Task Analysis	204
---------------	-----

Backward Chaining	207
-------------------	-----

Forward Chaining	209
------------------	-----

Total Task Presentation	211
-------------------------	-----

Other Strategies for Teaching Behavioral Chains	215
---	-----

<i>Written Task Analysis</i>	215
------------------------------	-----

<i>Picture Prompts</i>	215
------------------------	-----

<i>Video Modeling</i>	216
-----------------------	-----

<i>Self-Instructions</i>	217
--------------------------	-----

How to Use Chaining Procedures	218
--------------------------------	-----

Chapter Summary	220
Key Terms	220
Practice Test	220

Chapter 12 Behavioral Skills Training Procedures 223

Examples of Behavioral Skills Training Procedures	224
<i>Teaching Marcia to Say "No" to the Professors</i>	224
<i>Teaching Children to Protect Themselves from Abduction</i>	224
Components of the Behavioral Skills Training Procedure	225
Instructions	225
Modeling	227
Rehearsal	229
Feedback	229
Enhancing Generalization after Behavioral Skills Training	230
In Situ Assessment	231

Applications	221
Misapplications	221
In Situ Training	231
Behavioral Skills Training and the Three-Term Contingency	232
Behavioral Skills Training in Groups	233
Applications of Behavioral Skills Training Procedures	234
How to Use Behavioral Skills Training Procedures	238
Chapter Summary	240
Key Terms	240
Practice Test	240
Applications	241
Misapplications	241

PART 4 Procedures to Increase Desirable Behavior and Decrease Undesirable Behavior

Chapter 13 Understanding Problem Behaviors through Functional Assessment 243

Examples of Functional Assessment	244
Jacob	244
Anna	245
Defining Functional Assessment	246
Functions of Problem Behaviors	247
Social Positive Reinforcement	248
Social Negative Reinforcement	248
Automatic Positive Reinforcement	248
Automatic Negative Reinforcement	248
Functional Assessment Methods	249
Indirect Methods	249

Direct Observation Methods	252
Experimental Methods (Functional Analysis)	257
Functional Analysis Research	261
Conducting a Functional Assessment	265
Functional Interventions	267
Chapter Summary	267
Key Terms	268
Practice Test	268
Applications	269
Misapplications	271

Chapter 14 Applying Extinction 273

The Case of Willy 274

Using Extinction to Decrease a Problem Behavior 276

Collecting Data to Assess Treatment Effects 277*Identifying the Reinforcer for the Problem Behavior through Functional Assessment* 277*Eliminating the Reinforcer after Each Instance of the Problem Behavior* 278

Taking Account of the Schedule of Reinforcement before Extinction 285

Reinforcing Alternative Behaviors 287

Promoting Generalization and Maintenance 287

Research Evaluating the Use of Extinction 288

Chapter Summary 292

Key Terms 292

Practice Test 292

Applications 293

Misapplications 293

Appendix A 294

Appendix B 295

Chapter 15 Differential Reinforcement 297

Differential Reinforcement of Alternative Behavior 298

Getting Mrs. Williams to Be Positive 298*When to Use DRA* 300*How to Use DRA* 300*Using Differential Negative Reinforcement of Alternative Behaviors* 304*Variations of DRA* 306*Research on DRA* 306

Differential Reinforcement of Other Behavior 309

Defining DRO 310*Implementing DRO* 311*Research Evaluating DRO Procedures* 313

Differential Reinforcement of Low Rates of Responding 316

Defining DRL 317*Variations of DRL* 317*How are DRO and Spaced-Responding DRL Different?* 318*Implementing DRL Procedures* 318*Research Evaluating DRL Procedures* 320

Chapter Summary 322

Key Terms 323

Practice Test 323

Applications 324

Misapplications 325

Chapter 16 Antecedent Control Procedures 327

Examples of Antecedent Control 328

Getting Marianne to Study More 328*Getting Cal to Eat Right* 328

Defining Antecedent Control Procedures 329

Presenting the Discriminative Stimulus (S^D) or Cues for the Desired Behavior 329*Arranging Establishing Operations for the Desirable Behavior* 331*Decreasing Response Effort for the Desirable Behavior* 333*Removing the Discriminative Stimulus or Cues for Undesirable Behaviors* 334*Presenting Abolishing Operations for Undesirable Behaviors* 336*Increasing the Response Effort for Undesirable Behaviors* 337

Research on Antecedent Control Strategies	338
<i>Manipulating Discriminative Stimuli</i>	338
<i>Manipulating Response Effort</i>	341
<i>Manipulating Motivating Operations</i>	343
Using Antecedent Control Strategies	346
<i>Analysis of the Three-Term Contingency for the Desirable Behavior</i>	347

<i>Analysis of the Three-Term Contingency for the Undesirable Behavior</i>	348
<i>Functional Interventions for Problem Behaviors</i>	348

Chapter Summary	349
Key Terms	349
Practice Test	349
Applications	350
Misapplications	351

Chapter 17 Using Punishment: Time-Out and Response Cost 353

Time-Out	354
<i>Types of Time-Out</i>	356
<i>Using Reinforcement with Time-Out</i>	357
<i>Considerations in Using Time-Out</i>	357
<i>Research Evaluating Time-Out Procedures</i>	361
Response Cost	364
<i>Defining Response Cost</i>	365
<i>Using Differential Reinforcement with Response Cost</i>	365

<i>Comparing Response Cost, Time-Out, and Extinction</i>	365
<i>Considerations in Using Response Cost</i>	366
<i>Research Evaluating Response Cost Procedures</i>	368
Chapter Summary	370
Key Terms	370
Practice Test	370
Applications	371
Misapplications	371

Chapter 18 Positive Punishment Procedures and the Ethics of Punishment 373

Application of Aversive Activities	374
<i>Overcorrection</i>	375
<i>Contingent Exercise</i>	377
<i>Guided Compliance</i>	378
<i>Physical Restraint</i>	379
<i>Cautions in the Application of Aversive Activities</i>	381
Application of Aversive Stimulation	381
Positive Punishment: Treatment of Last Resort	384
Considerations in Using Positive Punishment	385
The Ethics of Punishment	386
<i>Informed Consent</i>	387

<i>Alternative Treatments</i>	387
<i>Recipient Safety</i>	387
<i>Problem Severity</i>	387
<i>Implementation Guidelines</i>	388
<i>Training and Supervision</i>	388
<i>Peer Review</i>	388
<i>Accountability: Preventing Misuse and Overuse</i>	388
Chapter Summary	389
Key Terms	389
Practice Test	389
Applications	390
Misapplications	390

Chapter 19 Promoting Generalization 393

Examples of Generalization Programming 393

Defining Generalization 395

Strategies for Promoting Generalization of Behavior Change 395

Reinforcing Occurrences of Generalization 395

Training Skills That Contact Natural Contingencies of Reinforcement 397

Modifying Contingencies of Reinforcement and Punishment in the Natural Environment 399

Incorporating a Variety of Relevant Stimulus Situations in Training 400

Incorporating Common Stimuli 403

Teaching a Range of Functionally Equivalent Responses 403

Providing Cues in the Natural Environment 404

Incorporating Self-Generated Mediators of Generalization 405

Implementing Strategies to Promote Generalization 406

Promoting Generalized Reductions in Problem Behaviors 407

Chapter Summary 409

Key Terms 410

Practice Test 410

Applications 410

Misapplications 411

PART 5 Other Behavior Change Procedures

Chapter 20 Self-Management 413

Examples of Self-Management 414

Getting Murray to Run Regularly 414

Getting Annette to Clean Up Her Mess 414

Defining Self-Management Problems 416

Defining Self-Management 418

Types of Self-Management Strategies 418

Goal-Setting and Self-Monitoring 419

Antecedent Manipulations 419

Behavioral Contracting 420

Arranging Reinforcers and Punishers 421

Social Support 422

Self-Instructions and Self-Praise 423

Steps in a Self-Management Plan 424

Clinical Problems 427

Chapter Summary 428

Key Terms 428

Practice Test 429

Applications 429

Misapplications 430

Chapter 21 Habit Reversal Procedures 431

Examples of Habit Behaviors 432

Defining Habit Behaviors 432

Nervous Habits 433

Motor and Vocal Tics 433

Stuttering 434

Habit Reversal Procedures 435

Applications of Habit Reversal 436

Nervous Habits 436

Motor and Vocal Tics 437

Stuttering 438

<i>Why Do Habit Reversal Procedures Work?</i>	439
Other Treatment Procedures for Habit Disorders	442
Chapter Summary	444
Key Terms	444

Chapter 22 The Token Economy 447

Rehabilitating Sammy	447
Defining a Token Economy	449
Implementing a Token Economy	449
<i>Defining the Target Behaviors</i>	449
<i>Identifying the Items to Use as Tokens</i>	451
<i>Identifying Backup Reinforcers</i>	451
<i>Deciding on the Appropriate Schedule of Reinforcement</i>	453
<i>Establishing the Token Exchange Rate</i>	454
<i>Establishing the Time and Place for Exchanging Tokens</i>	454
<i>Deciding Whether to Use Response Cost</i>	455

Chapter 23 Behavioral Contracts 469

Examples of Behavioral Contracting	470
<i>Getting Steve to Complete His Dissertation</i>	470
<i>Helping Dan and His Parents Get Along Better</i>	471
Defining the Behavioral Contract	472
Components of a Behavioral Contract	473
Types of Behavioral Contracts	475
<i>One-Party Contracts</i>	475
<i>Two-Party Contracts</i>	476

Chapter 24 Fear and Anxiety Reduction Procedures 487

Examples of Fear and Anxiety Reduction	488
<i>Overcoming Trisha's Fear of Public Speaking</i>	488
<i>Overcoming Allison's Fear of Spiders</i>	488
Defining Fear and Anxiety Problems	490

Practice Test	444
Applications	445
Misapplications	445

<i>Staff Training and Management</i>	456
Practical Considerations	456
Applications of a Token Economy	457
Advantages and Disadvantages of a Token Economy	464
Chapter Summary	464
Key Terms	465
Practice Test	465
Applications	465
Misapplications	466

Negotiating a Behavioral Contract	477
Why Do Behavioral Contracts Influence Behavior?	478
Applications of Behavioral Contracts	479
Chapter Summary	483
Key Terms	483
Practice Test	483
Applications	484
Misapplications	484

Procedures to Reduce Fear and Anxiety	492
Relaxation Training	492
<i>Systematic Desensitization</i>	498
<i>In Vivo Desensitization</i>	499

<i>Advantages and Disadvantages of Systematic and In Vivo Desensitization</i>	503	Key Terms	506
<i>Other Treatments for Fears</i>	504	Practice Test	506
Clinical Problems	505	Applications	506
Chapter Summary	505	Misapplications	507
Chapter 25 Cognitive Behavior Modification	509		
Examples of Cognitive Behavior Modification	510	<i>Cognitive Coping Skills Training</i>	520
<i>Helping Deon Control His Anger</i>	510	<i>Acceptance-Based Therapies</i>	522
<i>Helping Claire Pay Attention in Class</i>	511	Clinical Problems	523
Defining Cognitive Behavior Modification	513	Chapter Summary	523
<i>Defining Cognitive Behavior</i>	513	Key Terms	523
<i>Functions of Cognitive Behavior</i>	514	Practice Test	524
Cognitive Behavior Modification Procedures	515	Applications	524
<i>Cognitive Restructuring</i>	515	Misapplications	525
Glossary	527		
References	539		
Name Index	557		
Subject Index	563		
Quizzes	Q1		