

1 What Is Psychology? 1

Module 1.1 Psychologists' Goals 3

General Points about Psychology 3
Major Philosophical Issues in Psychology 4
What Psychologists Do 6
Should You Major in Psychology? 11

IN CLOSING: Types of Psychologists 13

Summary 13
Key Terms 13
Review Questions 14

Module 1.2 Psychology Then and Now 15

The Early Era 15
The Rise of Behaviorism 19
From Freud to Modern Clinical Psychology 20
Recent Trends 20

IN CLOSING: Psychology through the Years 22

Summary 22
Key Terms 22
Review Questions 23



2 Scientific Methods in Psychology 25

Module 2.1 Evaluating Evidence and Thinking Critically 27

Psychological Science 27
Gathering Evidence 27
Evaluating Scientific Theories 28

IN CLOSING: Scientific Thinking in Psychology 33

Summary 33
Key Terms 33
Answers to Other Questions in the Module 33
Review Questions 33
Thought Question 33

Module 2.2 Conducting Psychological Research 34

General Research Principles 34
Observational Research Designs 36
Experiments 41

what's the evidence? 44

Evaluating the Results **45**Ethical Considerations in Research **47**

IN CLOSING: Psychological Research 49

Summary 49
Key Terms 50
Review Questions 50
Appendix to Chapter 2: Statistical Calculations 52
Measures of Variation 52
Correlation Coefficients 54
Key Terms 54

3 Biological Psychology 55

Module 3.1 Neurons and Behavior 57

Nervous System Cells 57 The Action Potential 58 Synapses 60

what's the evidence? 61

Neurotransmitters and Behavior 63

IN CLOSING: Neurons, Synapses, and Behavior 64

Summary 64 Key Terms 64 Review Questions 65

Module 3.2 Drugs and Their Effects 66

Stimulants 66 Hallucinogens 67 Depressants 68 Narcotics 68 Marijuana 69

IN CLOSING: Drugs and Synapses 72

Summary 72 Key Terms 72 Review Questions 72

Module 3.3 Brain and Behavior 73

The Cerebral Cortex 74 The Two Hemispheres and Their Connections 78 Measuring Brain Activity 80 Subcortical Areas 81 Experience and Brain Plasticity 83 Social Neuroscience 84 The Binding Problem 84

IN CLOSING: Brain and Experience 85

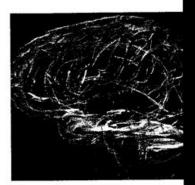
Summary 86 Key Terms 86 Review Questions 87

Module 3.4 Genetics and Evolutionary Psychology 88

Genetic Principles 88 How Genes Influence Behavior 93 Evolutionary Psychology 94

IN CLOSING: Genes and Experience 97

Summary 97 Key Terms 97 Review Questions 97



Sensation and Perception »

Module 4.1 Vision 101

Detecting Light 101 Color Vision 106

IN CLOSING: Vision as an Active Process 110

Summary 110 Key Terms 110

Answers to Other Questions in the Module 110 Review Questions 111

Module 4.2 The Nonvisual Senses 112

Hearing 112 The Vestibular Sense 115 The Cutaneous Senses 116 The Chemical Senses 119 Synesthesia 122

IN CLOSING: Sensory Systems 123

Summary 123 Key Terms 124 Review Questions 124

Module 4.3 Interpreting Sensory Information 125

Perceiving Minimal Stimuli 125 Perceiving and Recognizing Patterns 128 what's the evidence? 128

Similarities between Vision and Hearing 132 Perceiving Movement and Depth 133 Optical Illusions 136

IN CLOSING: Making Sense of Sensory Information 139

Summary 139 Key Terms 139 Answers to Other Questions in the Module 140 Review Questions 140



5 Development 143



Module 5.1 Cognitive Development in Infancy and Childhood 145

Research Designs for Studying Development 145 The Fetus and the Newborn 148

Infancy 148

Jean Piaget's View of Cognitive Development 152 Piaget's Sensorimotor Stage 152

what's the evidence? 152

Piaget's Preoperational Stage 155

what's the evidence? 155

Piaget's Stages of Concrete Operations and Formal Operations 159

How Grown Up Are We? 160

IN CLOSING: Understanding Children 161

Summary 161 Key Terms 162

Review Questions 162

Module 5.2 Social and Emotional Development 163

Erikson's Description of Human Development 163 Infancy and Childhood 164

Social Development in Childhood and Adolescence 165 Adulthood 167 Old Age 168 The Psychology of Facing Death 168

IN CLOSING: Social and Emotional Issues through the Life Span 169

Summary 169 Key Terms 170 Review Questions 170 Gender Influences 171

Module 5.3 Diversity: Gender, Culture, and Family 171

Gender Influences 171 Cultural and Ethnic Influences 174 The Family 176

IN CLOSING: Many Ways of Life 179

Summary 179 Key Terms 179 Review Questions 180



6 Learning 181

Module 6.1 Classical Conditioning 183

The Behaviorist View in Relation to Learning 183 Pavlov and Classical Conditioning 184 Drug Tolerance as an Example of Classical Conditioning 188 Explanations of Classical Conditioning 190

IN CLOSING: Classical Conditioning Is More than Drooling Dogs 192

Summary 192 Key Terms 192 Review Questions 192

Module 6.2 Operant Conditioning 194

Thorndike and Operant Conditioning 194 Reinforcement and Punishment 196 Additional Phenomena of Operant Conditioning 199 B. F. Skinner and the Shaping of Responses 199 Applications of Operant Conditioning 202

IN CLOSING: Operant Conditioning and Human Behavior 203

Summary 203 Key Terms 204 Review Questions 204

Module 6.3 Variations of Learning 205

Conditioned Taste Aversions 205 what's the evidence? 205 Birdsong Learning 207 Social Learning 208

IN CLOSING: All Learning Is Not the Same 211

Summary 211 Key Terms 211 Review Questions 211

7 Memory 213

Module 7.1 Types of Memory 215

Ebbinghaus's Pioneering Studies of Memory 215
Methods of Testing Memory 216
Application: Suspect Lineups as Recognition
Memory 218
Children as Eyewitnesses 219
The Information-Processing View of Memory 220

IN CLOSING: Varieties of Memory 224

Summary 224 Key Terms 224

Working Memory 223

Answer to Other Question in the Module 224
Review Questions 225

Module 7.2 Encoding, Storage, and Retrieval 226

Encoding 226 How to Organize Your Studying 230 Mnemonic Devices 231 Storage 232 Retrieval 233

IN CLOSING: Improving Your Memory 236

Summary 236 Key Terms 236

Answers to Other Questions in the Module 236
Review Questions 237

Module 7.3 Forgetting 238

Retrieval and Interference 238
A Controversy: "Recovered Memories" or "False Memories"? 239

what's the evidence? 240

Amnesia 242

IN CLOSING: Memory Loss and Distortion 246

Summary 246 Key Terms 247 Review Questions 247



8 Cognition and Language 249

Module 8.1 Attention and Categorization 251

Research in Cognitive Psychology 251 what's the evidence? 251

Attention 252 Attention Deficit Disorder 256 Categorizing 257

IN CLOSING: Thinking about Attention and Concepts 260

Summary 260 Key Terms 261

Answers to Other Questions in the Module 261
Review Questions 261

Module 8.2 Solving Problems and Making Decisions 262

Two Types of Thinking and Problem Solving 263 Other Common Errors in Human Cognition 265 Expertise 268 IN CLOSING: Successful and Unsuccessful Problem Solving 271

Summary 271 Key Terms 272

Answers to Other Questions in the Module 272
Review Questions 273

Module 8.3 Language 274

Nonhuman Precursors to Language 274
Human Specializations for Learning Language 276
Language Development 277
Understanding Language 279
Reading 281

IN CLOSING: Language and Humanity 284

Summary 284
Key Terms 285
Review Questions 285



9 Intelligence 287



Module 9.1 Intelligence and Intelligence Tests 289

Defining Intelligence 289 IQ Tests 292 Individual Differences in IQ Scores 294

IN CLOSING: Measuring Something We Don't Fully Understand 297

Summary 297
Key Terms 298
Answers to Other Question in the Module 298
Review Questions 298

Module 9.2 Evaluation of Intelligence Tests 299

The Standardization of IQ Tests 299
Evaluation of Tests 302
Are IQ Tests Biased? 304
what's the evidence? 306

IN CLOSING: Consequences of Testing 307

Summary 308
Key Terms 308
Review Questions 308



10 Consciousness 311

Module 10.1 Conscious and Unconscious Processes 313

Measuring Consciousness 313
Brain Activity, Conscious or Unconscious 314
Can We Use Brain Measurements to Infer
Consciousness? 316
Consciousness and Action 317

what's the evidence? 317

What Is the Purpose of Consciousness? 319

IN CLOSING: Research on Consciousness 319

Summary **319**Key Terms **320**Review Questions **320**

Module 10.2 Sleep and Dreams 321

Circadian Rhythms 321 Why We Sleep 325 Stages of Sleep 326 Abnormalities of Sleep 328 Dreams 330

IN CLOSING: The Mysteries of Sleep and Dreams 333

Summary **333**Key Terms **333**Review Questions **333**

Module 10.3 Hypnosis 335

Ways of Inducing Hypnosis 335
The Uses and Limitations of Hypnosis 336
what's the evidence? 338

what's the evidence? 338

Is Hypnosis an Altered State of Consciousness? 339
Other States of Consciousness 340

IN CLOSING: What Hypnosis Is and Isn't 341

Summary **341** Key Terms **341** Review Questions **341**

11 Motivated Behaviors 343

Module 11.1 Work Motivation 345

Views of Motivation 345
Conflicting Motivations 346
Goals and Deadlines 347
what's the evidence? 348

Job Design and Job Satisfaction 350

IN CLOSING: Work and Ambition 353

Summary **353** Key Terms **354** Review Questions **354**

Module 11.2 Hunger Motivation 356

The Physiology of Hunger and Satiety 356 Social and Cultural Influences on Eating 359 Eating Too Much or Too Little 360

IN CLOSING: The Complexities of Hunger 363

Summary **363** Key Terms **363** Review Questions **363**

Module 11.3 Sexual Motivation 365

What Do People Do and How Often? 365
Sexual Development and Identity 369
Sexual Orientation 371
what's the evidence? 374

IN CLOSING: The Biology and Sociology of Sex 375

Summary 375 Key Terms 375 Review Questions 375



12 Emotions, Stress, and Health 377

Module 12.1 The Nature of Emotion 379

Measuring Emotions 379
Emotion, Arousal, and Action 381
what's the evidence? 382

Do We Have a Few "Basic" Emotions? 384 Usefulness of Emotions 389

Emotional Intelligence 390

IN CLOSING: Research on Emotions 392

Summary 392 Key Terms 392

Answers to Other Questions in the Module 392 Review Questions 393

Module 12.2 A Survey of Emotions 394

Fear and Anxiety 394
Anger and Related Emotions 396
Happiness, Joy, and Positive Psychology 396
Sadness 400

Other Emotions 400

IN CLOSING: Emotions and the Richness of Life 401

Summary 401 Key Terms 401 Review Questions 401

Module 12.3 Stress, Health, and Coping 402

Stress 402 How Stress Affects Health 404 Coping with Stress 405

IN CLOSING: Health Is Mental as Well as Medical 409

Summary **409** Key Terms **409** Review Questions **409**



13 Social Psychology 411



Module 13.1 Prosocial and Antisocial Behavior 413

Morality: Logical or Emotional? 413

Altruistic Behavior 414

Accepting or Denying Responsibility toward

Others 415

Violent and Aggressive Behavior 416

IN CLOSING: Is Cooperative Behavior Logical? 419

Summary 419

Key Terms 419

Review Questions 419

Module 13.2 Social Perception and Cognition 421

First Impressions 421
Stereotypes and Prejudices 422

Attribution 424

IN CLOSING: How Social Perceptions Affect Behavior 427

Summary 427

Key Terms 428

Review Questions 428

Module 13.3 Attitudes and Persuasion 429

Attitudes and Behavior 429
Mechanisms of Attitude Change
and Persuasion 431

IN CLOSING: Persuasion and Manipulation 435

Summary 435

Key Terms 436

Review Questions 436

Module 13.4 Interpersonal Attraction 437

Establishing Relationships 437

Marriage and Long-Term Commitments 439

IN CLOSING: Choosing Your Partners Carefully 440

Summary 441

Key Terms 441

Review Questions 441

Module 13.5 Interpersonal Influence 442

Conformity 442

Obedience to Authority 444

what's the evidence? 444

Group Decision Making 447

IN CLOSING: Fix the Situation, Not Human Nature 448

Summary 448

Key Terms 448

Review Questions 448



14 Personality 449

Module 14.1 Personality Theories 451

Sigmund Freud and the Psychodynamic Approach 451

Carl Jung and the Collective Unconscious 456 Alfred Adler and Individual Psychology 457 The Learning Approach 458

Humanistic Psychology 458

IN CLOSING: In Search of Human Nature 460

Summary 460

Key Terms 461

Review Questions 461

Module 14.2 Personality Traits 463

Personality Traits and States 463
The Search for Broad Personality Traits 463
The Big Five Model of Personality 465
The Origins of Personality 466

IN CLOSING: The Challenges of Classifying Personality 469

Summary 470

Key Terms 470

Review Questions 470

Module 14.3 Personality Assessment 471

Standardized Personality Tests 472
An Objective Personality Test: The Minnesota Multiphasic Personality Inventory 472
The NEO PI-R 473
The Myers-Briggs Type Indicator 473
Projective Techniques 474
Implicit Personality Tests 475
Uses and Misuses of Personality Tests 476

Personality Tests in Action: Criminal Profiling 476 what's the evidence? 477

IN CLOSING: Possibilities and Limits of Personality Tests 478

Summary 479
Key Terms 479
Review Questions 479

15 Abnormal Psychology: Disorders and Treatment 481

Module 15.1 An Overview of Abnormal Behavior 483

Defining Abnormal Behavior 483 DSM and the Categorical Approach to Psychological Disorders 485

IN CLOSING: Is Anyone Normal? 487

Summary 488
Key Terms 488
Review Questions 488

Module 15.2 Anxiety Disorders and Obsessive-Compulsive Disorder 489

Disorders with Excessive Anxiety 489
Phobia 490
what's the evidence? 491

Obsessive-Compulsive Disorder 494

IN CLOSING: Emotions and Avoidance 495

Summary **495**Key Terms **496**Review Questions **496**

Module 15.3 Substance-Related Disorders 497

Substance Dependence (Addiction) 497 Alcoholism 498

what's the evidence? 499 Opiate Dependence 501

IN CLOSING: Substances, the Individual, and Society 501

Summary **502** Key Terms **502** Review Questions **502**

Module 15.4 Mood Disorders, Schizophrenia, and Autism 503

Depression 503
Bipolar Disorder 507
Schizophrenia 508
Autistic Spectrum Disorder 512

IN CLOSING: Disabling Psychological Disorders 513

Summary 513 Key Terms 513 Review Questions 514

Module 15.5 Treatment of Mental Illness 515

Overview of Psychotherapy 515
Types of Psychotherapy 516
How Effective Is Psychotherapy? 519
Comparing Therapies 520
The Future of Psychotherapy and Prospects for Prevention 521
Social Issues Related to Mental Illness 521

IN CLOSING: The Science and Politics of Mental Illness 523

Summary **523** Key Terms **524** Review Questions **524**

Epilogue 525 References 527 Name Index 575 Subject Index/Glossary 589

