Approaches to Psychology

Fifth Edition

William E. Glassman and
Marilyn Hadad

The McGraw-Hill Companies

London Boston Burr Ridge, IL Dubuque, IA Madison, WI New York San Francisco St. Louis
Bangkok Bogotá Caracas Kuala Lumpur Lisbon Madrid Mexico City Milan Montreal
New Delhi Santiago Seoul Singapore Sydney Taipei Toronto

Brief Table of Contents

List of Illustrations *xi*
Preface to the Fifth Edition *xiv*
Guided Tour *xviii*
Technology to Enhance Learning and Teaching *xx*
Acknowledgements *xxiii*

1 Behaviour and Psychology *1*

2 The Biological Approach *47*

3 The Behaviourist Approach *109*

4 The Cognitive Approach *163*

5 The Psychodynamic Approach *223*

6 The Humanistic Approach *277*

7 Perspectives on Development *325*

8 Perspectives on Social Behaviour *361*

9 Perspectives on Abnormal Behaviour *409*

10 Psychology in Perspective *457*

Appendix: Research Methods and Statistics *479*
Glossary *507*
References *525*
Index *577*

Detailed Table of Contents

List of Illustrations *xi*
Preface to the Fifth Edition *xiv*
Guided Tour *xviii*
Technology to Enhance Learning and Teaching *xx*
Acknowledgements *xxiii*

1 Behaviour and Psychology *1*
THE MAGIC OF BEHAVIOUR *2*
INTRODUCTION *2*
The Challenge of Psychology *3*
Why Different Approaches? *5*
Perception and Experience *5*
Perception and Theorizing *5*
THE ORIGINS OF PSYCHOLOGY *13*
METHODS OF STUDYING BEHAVIOUR *18*
The Role of the Scientific Method in Psychology *18*
Introspectionism and Public Observation *19*
Measures of Behaviour, Research Settings and Research Methods *21*
Non-experimental Methods: Interviews and Surveys *23*
Surveys and Sampling Procedures *25*
Limitations of Self-reports *26*
Naturalistic Observation and Unobtrusive Measures *26*
Case Studies *27*
Correlations and Non-experimental Research *29*
Experiments *32*
Quasi-experiments *36*
Ethics in Psychological Research *38*
CONCLUSION *42*
CHAPTER SUMMARY *44*

2 The Biological Approach *47*
LOOKING FOR THE MIND *48*
INTRODUCTION *48*
THE NATURE OF THE PHYSIOLOGICAL SYSTEM *51*
Mind, Brain and the CNS *51*
Neurons and the Nervous System *51*
The Brain *54*
Studying the Brain *59*
Electrical Recording and Stimulation *60*
Computerized Imaging Techniques *63*
Chemical Processes in Behaviour *66*
Neurotransmitters *66*
Hormones *67*
INTERACTIONS OF MIND AND BODY IN BEHAVIOUR *69*
The Effects of Body on Mind *70*
The Study of Drug Effects *70*
Types of Psychoactive Drugs *72*
The Split Brain and the Whole Mind *77*
The Split Brain and the Normal Brain *81*
The Effects of Mind on Body *83*
The Nature of Stress *84*
Coping with Stress *88*
Mental States and Health *90*
THE HEREDITARY BASIS OF BEHAVIOUR *93*
Basic Mechanisms of Heredity *94*
Nature and Nurture in Behaviour *98*
Evolution and Behaviour *100*
CONCLUSION *103*
CHAPTER SUMMARY *105*

3 The Behaviourist Approach *109*
MIND DOESN'T MATTER *110*
INTRODUCTION *110*
Basic Assumptions of Behaviourism *111*
The Pioneers of Behaviourism *112*
Stimuli and Responses *115*
CLASSICAL CONDITIONING *116*
Classical Conditioning Phenomena *119*
Stimulus Generalization and Discrimination *119*
Extinction and Spontaneous Recovery *122*
Higher Order Conditioning *123*
Applications of Classical Conditioning *124*
Conditioned Emotional Responses *125*
Conditioned Drug and Immune Responses *127*
OPERANT CONDITIONING *129*
Skinner and Operant Conditioning *130*
Reinforcers and Reinforcement *133*
Contingencies of Reinforcement *136*
Operant Conditioning Phenomena *139*
Shaping and the Learning Process *139*
Extinction *140*
Schedules of Reinforcement *140*
Discriminative Stimuli *145*

Non-contingent Reinforcement 145
APPLICATIONS AND IMPLICATIONS OF CONDITIONING 147
Negative Reinforcers and the Aversive Control of Operant Behaviour 147
Interrelationships of Classical and Operant Conditioning 149
Autonomic Conditioning and Biofeedback 150
Biological Constraints on Learning 154
CONCLUSION 158
CHAPTER SUMMARY 160

4 The Cognitive Approach 163
THOUGHT AND ACTION 164
INTRODUCTION 164
PERCEPTION AND COGNITION 168
LEARNING AND MEMORY 169
Learning as Information Gathering 169
Memory as the Retention of Learning 170
A Basic Model of Memory 171
Encoding and Storage in Memory 174
STM 174
LTM 176
Forgetting 178
Forgetting in STM 178
Forgetting in LTM 179
Memory as Reconstruction 184
Eyewitness Testimony 185
Improving Memory 186
Problem Solving 191
Defining Problems 191
Stages of Problem Solving 191
Types of Problems 192
Models of Problem Solving 193
Gestalt Theory 193
Problem Solving as Information Processing 195
Algorithms 196
Heuristics 197
Creativity in Problem Solving 199
The Formation of Problem Solving Skills 200
LANGUAGE 201
Language Learning 202
Of Apes and Language 204
Language and Thinking 206
THE COGNITIVE VIEWPOINT IN OTHER AREAS 207
Attitudes and Cognitive Dissonance 208
Attribution Theory 210
Cognition and Emotions 212
CONCLUSION 216
CHAPTER SUMMARY 219

5 The Psychodynamic Approach 223
MOTIVATION AND THE MIND 224
INTRODUCTION 224
FREUD AND PSYCHOANALYSIS 225
Freud's Assumptions about Behaviour 226
Exploring the Workings of the Mind 228
Freud's Theory of Consciousness 229
Dreams and Symbolic Expression 230
Drives and the Psychodynamics of Behaviour 232
Freud's Psychodynamic Model of Personality 234
Psychosexual Stages of Development 236
Oral Stage 237
Anal Stage 238
Phallic Stage 239
Latency Stage 242
Genital Stage 242
Fixation and Regression During Development 243
Anxiety and Defence Mechanisms 245
Observing the Unconscious in Behaviour 250
Freudian Slips 251
Free Association 252
Dreams 254
Cross-cultural Studies 254
Self-analysis 254
Art 255
Assessing Freud's Work 255
NEO-FREUDIAN AND NON-FREUDIAN PSYCHODYNAMIC THEORIES 260
Carl Jung and the Collective Unconscious 261
Alfred Adler and Individual Psychology 266
Other Psychodynamic Theorists 268
Karen Horney 269
Erik Erikson 269
CONCLUSION 271
CHAPTER SUMMARY 274

6 The Humanistic Approach 277
KEEPING THE PERSON IN 'PERSONALITY' 278
INTRODUCTION 278
Phenomenological Viewpoint 279
The Capacity for Choice 280
The Role of Meaning 280
Carl Rogers's Theory 281
Personality and the Self 282
The Organism and the Actualizing Tendency 283
The Phenomenal Field and the Self 285
The Ideal Self, Congruence and Incongruence 286

Personality Development and Conditions for Growth 287
Conditions of Worth and the Would–Should Dilemma 287
Conditional and Unconditional Positive Regard 289
Congruence and Conditions for Growth 290
Human Potential and the Fully Functioning Person 292
ABRAHAM MASLOW'S THEORY 296
Motivation and the Hierarchy of Needs 297
Needs and Self-development 300
Self-actualization and Peak Experiences 302
Maslow's Concept of Healthy Growth 304
EXTENDING THE HUMANISTIC APPROACH 308
Existential Psychology 308
Frankl's Logotherapy 309
Positive Psychology 314
Coaching as an Application of Humanistic and Positive Psychology 317
CONCLUSION 320
CHAPTER SUMMARY 322

7 Perspectives on Development 325
OBSERVING THE JOURNEY OF LIFE 326
INTRODUCTION 326
Methods of Studying Development 327
Issues in Interpreting Development 330
Continuity vs. Discontinuity 332
Generality vs. Specificity of Models 332
Heredity and Environment 335
PERSONALITY AND GENDER ROLE DEVELOPMENT 339
Personality and its Origins 339
Perspectives on Personality 340
The Biological Approach 341
The Behaviourist Approach 342
The Cognitive Approach 343
The Psychodynamic Approach 345
The Humanistic Approach 346
Summary 347
The Development of Gender Roles 347
The Biological Approach 348
The Behaviourist Approach 350
The Cognitive Approach 351
The Psychodynamic Approach 353
The Humanistic Approach 354
Summary 355
CONCLUSION 356
CHAPTER SUMMARY 357

8 Perspectives on Social Behaviour 361
THE INDIVIDUAL AND SOCIETY 362
INTRODUCTION 362
Methods of Studying Social Behaviour 365
Issues in the Study of Social Behaviour 368
PERSPECTIVES ON AGGRESSION 370
Defining Aggression 371
Methods of Studying Aggression 372
Theories of Aggression 373
The Biological Approach 373
The Behaviourist Approach 377
The Cognitive Approach 379
The Psychodynamic Approach 383
The Humanistic Approach 384
Summary 387
Aggression and the Media 390
PERSPECTIVES ON PROSOCIAL BEHAVIOUR 393
Defining Prosocial Behaviour 393
Theories of Altruism 394
The Biological Approach 395
The Behaviourist Approach 396
The Cognitive Approach 396
The Psychodynamic Approach 397
The Humanistic Approach 398
Summary 399
Altruism and Bystander Behaviour 399
CONCLUSION 404
CHAPTER SUMMARY 405

9 Perspectives on Abnormal Behaviour 409
WHO AND WHAT IS NORMAL? 410
INTRODUCTION 410
Abnormality in Historical Context 411
Classifying Abnormal Behaviour 412
PERSPECTIVES ON AETIOLOGY AND TREATMENT 418
The Biological Approach 418
The Behaviourist Approach 420
The Cognitive Approach 425
The Psychodynamic Approach 428
The Humanistic Approach 431
Evaluating Therapeutic Techniques 433
UNDERSTANDING SCHIZOPHRENIA 437
The Biological Approach, the Medical Model and Schizophrenia 439
Alternatives to the Medical Model of Schizophrenia 442
The Behaviourist Approach 443
The Cognitive Approach 445
The Psychodynamic Approach 447
The Humanistic Approach 448

Evaluating Our Understanding of Schizophrenia 450
CONCLUSION 452
CHAPTER SUMMARY 454

10 Psychology in Perspective 457
SEARCHING FOR ANSWERS 458
INTRODUCTION 458
RECONSIDERING THE ORIGINS OF THE APPROACHES 458
Perception and Theory Formation 459
Objective Evidence vs. Shifting Paradigms 461
Paradigms in Psychology 462
Psychology and Science 464
Limitations of the Scientific Method for Psychology 464
The Search for a New Methodology 466
Psychology and Culture 469
THE MANY AND THE ONE 471
Seeking Convergence 472
Embracing Pluralism 474
CONCLUSION 475
CHAPTER SUMMARY 475

Appendix: Research Methods and Statistics 479
MAKING SENSE OF THE EVIDENCE 479
INTRODUCTION 480
THE LOGIC OF RESEARCH 480
Making Observations: Measurement and Sampling 480
Designing Research 483
Pitfalls in Experimental Research 484
Confounds 484
Bias 485
Going from Observation to Interpretation 487
STATISTICS – MAKING SENSE OF THE DATA 488
Descriptive Statistics – Describing the Data 490
Frequency Distributions 490
Measures of Central Tendency 490
Measures of Variability 492
Properties of Normal Distributions 496
Correlations 497
Inferential Statistics 498
Sampling and Variability 499
Drawing Inferences from a Normal Distribution 499
Inferences about the Significance of Results 500
Decision Errors in Interpreting Data 501
CONCLUSION 503
CHAPTER SUMMARY 504

Glossary 507
References 525
Index 577

List of Illustrations

Figures

Figure 1.1 Phrenology
Figure 1.2 Ambiguous Figures
Figure 1.3 Ambiguous Figures
Figure 1.4 Ambiguous Figures
Figure 1.5 The Gestalt Concept of Similarity
Figure 1.6 The Gestalt Concept of Proximity
Figure 1.7 The Gestalt Concept of Closure
Figure 1.8 Expectations and Perceptions
Figure 1.9 The Interaction of Induction and Deduction in Research
Figure 1.10 Correlation of Academic Grades
Figure 1.11 Latané and Darley's Field Experiment
Figure 1.12 Milgram's Obedience Experiment

Figure 2.1 The Central and Peripheral Nervous Systems
Figure 2.2 Neurons and Neural Transmission
Figure 2.3 Exterior View of the Cortex
Figure 2.4 Tactile and Motor Representation in the Cortex
Figure 2.5 Internal View of the Brain
Figure 2.6 PET Scans of Brain Activity
Figure 2.7 The Endocrine System and Hormonal Functions
Figure 2.8 Hemispheric Specialization
Figure 2.9 A Schematic Diagram of the Body's Response to Stress
Figure 2.10 Cells Chromosomes, Genes and DNA
Figure 2.11 Unigenic Inheritance
Figure 2.12 Certainty of Genetic Relatedness and Emotional Closeness

Figure 3.1 The Basic Classical Conditioning Procedure
Figure 3.2 Stimulus Generalization
Figure 3.3 Pure Generalization
Figure 3.4 Stimulus Discrimination
Figure 3.5 Changes in the Strength of a Conditioned Response
Figure 3.6 Higher Order Conditioning
Figure 3.7 Thorndike and the Law of Effect
Figure 3.8 Types of Reinforcers
Figure 3.9 Contingencies of Reinforcement
Figure 3.10 Schedules of Reinforcement
Figure 3.11 Biofeedback
Figure 3.12 Seligman's Preparedness Continuum

Figure 4.1 Closure in Perception and Memory
Figure 4.2 A General Model of Memory
Figure 4.3 Episodic, Semantic and Procedural Memory
Figure 4.4 Retroactive and Proactive Interference
Figure 4.5 A Walk Down Memory Lane
Figure 4.6 Children's Learning of Language Rules
Figure 4.7 Emotions and Facial Expressions

Figure 5.1 Visual Representations of Freud's Theory
Figure 5.2 Studying Verbal Slips
Figure 5.3 Ambiguous Stimuli and Projective Tests
Figure 5.4 Symbolism in Psychoanalytic Theories

Figure 6.1 Maslow's Hierarchy of Needs
Figure 6.2 Peak vs. Plateau Experiences

Figure 7.1 Research Designs in Developmental Research
Figure 7.2 Cognition in Infancy

Figure 8.1 Line Length and Conformity
Figure 8.2 Effects of the Introduction of Television
Figure 8.3 Determining Response to an Emergency

Figure 9.1 Incidence Rates for Mental Disorders
Figure 9.2 How SSRIs Work
Figure 9.3 Aversive Conditioning as a Form of Classical Conditioning
Figure 9.4 Comparing the Efficacy of Behaviour Modification and Psychoanalysis
Figure 9.5 A Meta-analysis of Treatment Results

Figure A.1 Subject Bias in Experiments
Figure A.2 Analysing the Frequency Distribution for a Set of Data
Figure A.3 A Frequency Distribution Graph
Figure A.4 A Frequency Distribution for Salaries in Company 'X'
Figure A.5 A Skewed Frequency Distribution
Figure A.6 A Normal Distribution
Figure A.7 Comparing Groups
Figure A.8 Correlational Patterns
Figure A.9 Errors in Evaluating Hypotheses

Boxes

Box 1.1 The Problem of Interpretation in Research
Box 1.2 Basic Types of Research Methods in Psychology
Box 1.3 Research Ethics in a Multicultural World

Box 2.1 Major Neurotransmitters and their Functions
Box 2.2 Types of Drugs and their Effects
Box 2.3 The Holmes–Rahe Social Readjustment Rating Scale
Box 2.4 Stress and Culture

Box 3.1 Taste Preferences: Experience and Culture

Box 4.1 A Test of Short-term Memory
Box 4.2 Maximizing Use of Memory
Box 4.3 Persistence of Set in Problem Solving
Box 4.4 Cultural Values in Problem Solving
Box 4.5 Stages of Language Development
Box 4.6 Events and Emotions

Box 5.1 Freud's Theory of Development
Box 5.2 Repression and Recovered Memories of Abuse
Box 5.3 Defence Mechanisms and Behaviour
Box 5.4 Culture and the Oedipal Conflict
Box 5.5 Anxiety, Insecurity and Culture
Box 5.6 Comparing Freud's and Erikson's Models of Development

Box 6.1 Theories of Self
Box 6.2 Values in the Mature Person
Box 6.3 Interactions of Needs and Behaviour
Box 6.4 Characteristics of Self-actualized Individuals
Box 6.5 Culture and Concepts of Self

Box 7.1 A Basic Framework for Looking at Development
Box 7.2 Piaget's Theory of Cognitive Development
Box 7.3 Heredity and Environment in Studies of Twins
Box 7.4 Personality, Parents and Culture
Box 7.5 Nature, Nurture and Gender Identity
Box 7.6 Gender Roles and Stereotypes

Box 8.1 Friends and Lovers
Box 8.2 Topic Areas in Social Psychology
Box 8.3 A Cross-cultural Look at Aggression
Box 8.4 Perspectives on Aggression
Box 8.5 Categories of Prosocial Behaviour
Box 8.6 Culture and Expectations of Prosocial Behaviour

Box 9.1 Culture-bound Psychological Disorders
Box 9.2 Classifying Mental Disorders
Box 9.3 Do Antidepressant Drugs Actually Work?
Box 9.4 The Basic Procedure for Systematic Desensitization
Box 9.5 Negative and Positive Self-statements
Box 9.6 Aetiology and Treatment: Comparing the Approaches
Box 9.7 Major Sub-types of Schizophrenia
Box 9.8 A Cross-cultural Look at Schizophrenia