

Contents



| | |
|-------------------|-------|
| To the Student | xv |
| To the Instructor | xviii |

| | |
|---|----|
| Identifying Relationships between Variables | 25 |
| Cross-Cultural (or Cross-Context) Research | 28 |
| Research Ethics | 29 |
| Why Study Research Methods? | 29 |
| Summary | 30 |
| Key Terms | 31 |

PART 1 INTRODUCTION

Basic Issues in the Study of Development 2

1

■ Perspectives on Development 3

Nature versus Nurture 3

DEVELOPMENT IN THE INFORMATION AGE: Child-Rearing Experts 4

Stages and Sequences 5

Internal and External Influences on Development 6

RESEARCH REPORT: How Do Behavior Geneticists Identify Genetic Effects? 7

The Ecological Perspective 10

Vulnerability and Resilience 12

■ Theories of Development 13

Psychoanalytic Theories 13

THE REAL WORLD: The Leopold and Loeb Trial 15

Cognitive-Developmental and Information-Processing Theories 16

Learning Theories 18

Comparing Theories 20

■ Finding the Answers: Research Designs and Methods 23

Relating Goals to Methods 23

Studying Age-Related Changes 23

NO EASY ANSWERS: It Depends . . . 24

PART 2 THE BEGINNINGS OF LIFE

Prenatal Development 32

2

■ Conception and Genetics 33

The Process of Conception 33

Genotypes, Phenotypes, and Patterns of Inheritance 35

■ Development from Conception to Birth 38

DEVELOPMENT IN THE INFORMATION AGE: The Youngest Celebrities 39

The Stages of Prenatal Development 39

Sex Differences in Prenatal Development 43

Prenatal Behavior 44

■ Problems in Prenatal Development 45

Genetic Disorders 46

THE REAL WORLD: Fetal Assessment and Treatment 47

Chromosomal Errors 48

Teratogens: Maternal Diseases 49

Teratogens: Drugs 52

NO EASY ANSWERS: Should Pregnant Women Be Prosecuted for Using Illicit Drugs? 54

Other Teratogens and Maternal Factors 55

Summary 59

Key Terms 60

Birth and Early Infancy 61

3

■ Birth 62

Birth Choices 62

The Process of Birth 64

Low Birth Weight 68

THE REAL WORLD: Singing to the Newborn 69

■ Behavior in Early Infancy 71

Reflexes and Behavioral States 71

RESEARCH REPORT: Variations in Infants' Cries 75

Physical and Cognitive Abilities 75

Temperament and Social Skills 79

■ Health and Wellness in Early Infancy 82

Nutrition, Health Care, and Immunizations 82

NO EASY ANSWERS: Breast or Bottle? 83

Illnesses 84

Infant Mortality 85

Summary 88

Key Terms 88

PART 3 THE PHYSICAL CHILD

Physical Development 90

4

■ The Brain and Nervous System 91

Growth Spurts 91

Synaptic Development 92

Myelination 94

Lateralization 95

■ The Endocrine and Reproductive Systems 97

Hormones 97

Sequence of Changes in Girls and Boys 100

The Timing of Puberty 101

■ Sexual Behavior in Adolescence 102

Prevalence of Sexual Behavior 102

Explaining Adolescent Sexual Behavior 103

Sexually Transmitted Diseases and Sex Education 104

Teenage Pregnancy 105

Homosexuality 106

■ Other Body Systems 107

Patterns of Change in Size and Shape 107

Bones 108

Muscles and Fat 109

Using the Body 110

■ Health and Wellness 110

Health in Childhood 111

THE REAL WORLD: Sports for Children 112

RESEARCH REPORT: Child Abuse and Neglect 114

NO EASY ANSWERS: Helping Obese Children 116

Adolescent Health 117

Poverty and Health 118

Mortality 120

Summary 121

Key Terms 122

Perceptual Development 123

5

■ Thinking about Perceptual Development 124

Ways of Studying Early Perceptual Skills 124

Explanations of Perceptual Development 125

■ Sensory Skills 126

Seeing 127

Hearing and Other Senses 128

■ Perceptual Skills 129

Looking 130

Listening 132

RESEARCH REPORT: Langlois's Studies of Babies' Preferences for Attractive Faces 133

Combining Information from Several Senses 135

Ignoring Perceptual Information 136

Individual Differences in Perceptual Skills 137

■ The Object Concept 137

Object Perception 138

Object Permanence 139

■ Perception of Social Signals 141

Early Discrimination of Emotional Expressions 141

NO EASY ANSWERS: Infant Responses to Maternal Depression 142

Understanding Emotions at Later Ages 143

Cross-Cultural Commonalities and Variations 143

Summary 144

Key Terms 145

PART 4 THE THINKING CHILD

Cognitive Development I: Structure and Process 146

6

■ Piaget's Basic Ideas 147

Schemes 147

Assimilation and Accommodation 148

Equilibration 148

Causes of Cognitive Development 149

■ Infancy 150

Piaget's View of the Sensorimotor Period 151

Memory 152

Imitation 153

■ The Preschool Years 154

Piaget's View of the Preoperational Stage 154

DEVELOPMENT IN THE INFORMATION AGE: What Do Babies Really Learn from Watching Television? 155

Challenges to Piaget's View 156

THE REAL WORLD: Children's Play and Cognitive Development 158

Theories of Mind 159

False Belief and Theory of Mind across Cultures 160

Alternative Theories of Early Childhood Thinking 161

■ The School-Aged Child 163

Piaget's View of Concrete Operations 163

Concrete Operations as Rules for Problem-Solving 165

■ Adolescence 166

Piaget's View of Formal Operations 166

Post-Piagetian Work on Adolescent Thought 168

■ Development of Information-Processing Skills 170

Changes in Processing Capacity and Efficiency 170

NO EASY ANSWERS: The Child as Witness 171

Metamemory and Metacognition 172

Memory Strategies 173

Expertise 176

Summary 177

Key Terms 178

Cognitive Development II: Individual Differences in Cognitive Abilities 179

7

■ Measuring Intellectual Power 180

The First IQ Tests 180

Modern IQ Tests 182

THE REAL WORLD: Using Standardized Tests to Improve Schools 185

Stability of Test Scores 186

What IQ Scores Predict 186

■ Explaining Individual Differences in IQ Scores 188

Evidence for the Importance of Heredity 188

Evidence for the Importance of Environment 188

School Experience and Special Interventions 192

DEVELOPMENT IN THE INFORMATION AGE: Computers and Early Childhood Learning 193

Interactions of Heredity and Environment 195

- **Explaining Group Differences in IQ or Achievement Test Scores** 196
 - Racial Differences 196
 - Cross-Cultural Differences 198
 - NO EASY ANSWERS: To Test or Not to Test? 199
 - Sex Differences 200
- **Alternative Views of Intelligence** 202
 - Information-Processing Theory 202
 - Sternberg's Triarchic Theory of Intelligence 204
 - Gardner's Multiple Intelligences 205
 - Summary 206
 - Key Terms 207

The Development of Language 208



- **Before the First Word: The Prelinguistic Phase** 209
 - Early Perception of Language 210
 - Early Sounds and Gestures 210
 - Receptive Language 211
- **Learning Words and Word Meanings** 212
 - NO EASY ANSWERS: One Language or Two? 212
 - Characteristics of the First Words 213
 - The Naming Explosion 213
 - Later Word Learning 215
 - Extending the Class 216
 - Constraints on Word Learning 216
- **Learning the Rules: The Development of Grammar and Pragmatics** 218
 - Holophrases 218
 - First Sentences 218
 - The Grammar Explosion 219
 - Later Grammar Learning 221
 - Pragmatics 221
 - Language and Self-Control 222
- **Explaining Language Development** 223
 - Imitation and Reinforcement 223

Newer Environmental Theories 223

- DEVELOPMENT IN THE INFORMATION AGE: The Importance of Reading to a Young Child 225
- Nativist Theories 226
- Constructivist Theories 226

Individual and Group Differences in Language Development 227

- Differences in Rate 227
- Differences in Style 228
- Cross-Cultural Differences in Language Development 230

Learning to Read and Write 231

- The Early Foundation: Phonological Awareness 231
- Becoming Literate in School 232
- Learning a Second Language 234
- THE REAL WORLD: Dialects at School 234
- Summary 236
- Key Terms 237

PART 5 THE SOCIAL CHILD

Personality Development: Alternative Views 238



- **Defining Personality** 239
 - The Big Five 239
 - Links to Temperament 242
 - Dimensions of Temperament 242
- **Genetic and Biological Explanations of Personality** 244
 - The Biological Argument 244
 - Critique of Biological Theories 247
 - THE REAL WORLD: Temperament and Behavior Problems 248
- **Learning Explanations of Personality** 249

- The Learning Argument 249
- Critique of Learning Models 251

DEVELOPMENT IN THE INFORMATION AGE: Role Models for Minority Children in Life and in the Media 252

■ Psychoanalytic Explanations of Personality 253

- The Psychoanalytic Argument 254
- Some Differences between Freud and Erikson 254
- Freud's Psychosexual Stages 255
- Erikson's Psychosocial Stages 257
- Bowlby's Model of Attachment 259
- Evidence and Applications 259

NO EASY ANSWERS: Adoption and Development 260

Critique of Psychoanalytic Theories 261

■ A Possible Synthesis 262

Summary 264

Key Terms 265

Concepts of Self, Gender, and Sex Roles 266

10

■ The Concept of Self 267

- The Subjective Self 267
- The Objective Self 268
- The Emotional Self 270
- Self-Concept at School Age 271
- Self-Concept and Identity in Adolescence 272
- Ethnic and Racial Identity in Adolescence 276

THE REAL WORLD: Adolescent Rites of Passage 278

■ Self-Esteem 279

- The Development of Self-Esteem 279
- Consistency of Self-Esteem over Time 280

■ The Development of the Concepts of Gender and Sex-Roles 281

- NO EASY ANSWERS: A Troublesome Cluster of Traits 282
- Developmental Patterns 282
- Sex-Role Concepts and Stereotypes 284
- Explaining Sex-Role Development 288
- Individual Differences in Sex-Typing and Sex-Role Stereotypes 290

RESEARCH REPORT: The Significance of Early Childhood Cross-Gender Behavior 291

Summary 293

Key Terms 294

The Development of Social Relationships 295

11

■ Relationships with Parents 296

- Attachment Theory: Concepts and Terminology 296
- The Parent's Bond to the Child 297
- The Child's Attachment to the Parent 298
- Parent-Child Relationships in Adolescence 302

■ Variations in the Quality of Attachments 303

- Internal Working Models of Attachment 303
- Secure and Insecure Attachments 304
- Stability and Long-Term Consequences of Attachment Quality 307
- Does Quality of Attachment Matter in Adulthood? 308

■ Relationships with Peers 309

- Peer Relationships in Infancy and the Preschool Years 310
- Peer Relationships at School Age 310
- Peer Relationships in Adolescence 312
- RESEARCH REPORT: Are African American Adolescents More Susceptible to Peer Influence? 315
- Sibling Relationships 317

■ Behavior with Peers 318

- Prosocial Behavior 318
- Aggression 318
- THE REAL WORLD: Rearing Helpful and Altruistic Children 319
- NO EASY ANSWERS: Bullies and Victims 321

■ Individual Differences in Social Relationships 322

- Failure to Form an Attachment 322
- Temperament and Attachment 322
- Social Status 323
- Trait Aggression 325

Summary 325

Key Terms 326

Thinking about Relationships: Social-Cognitive and Moral Development 327

12

■ The Development of Social Cognition 328

Some General Principles and Issues 328

Describing Other People 329

Reading Others' Feelings 331

RESEARCH REPORT: An Intervention to Increase Children's
Emotional Competence 332

Describing Friendships 334

Understanding Rules and Intentions 335

Social Cognition and Behavior 336

■ Moral Development 338

Dimensions of Moral Development 339

Kohlberg's Stages of Moral Development 341

Causes and Consequences of Moral
Development 346

THE REAL WORLD: Application of Kohlberg's Theory to
Education 347

Alternative Views 348

NO EASY ANSWERS: Why Doesn't Stage of Moral Reasoning
Always Predict Moral Behavior? 349

Summary 352

Key Terms 353

Bronfenbrenner's Ecological Approach 356

■ Dimensions of Family Interaction 357

The Emotional Tone of the Family 357

Methods of Control 358

Communication Patterns 360

THE REAL WORLD: To Spank or Not to Spank? 361

■ Patterns of Child Rearing 362

Parenting Styles 362

A Research Example: The Work of Steinberg
and Dornbusch 363

Racial and Ethnic Differences in Parenting
Styles 365

Adding Up What Is Known about Parenting
Style 367

■ Other Aspects of Family Dynamics 368

The Child's Characteristics 368

Differential Treatment of Siblings 370

The Parents' Characteristics 371

■ Family Structure and Divorce 371

Family Structure 372

RESEARCH REPORT: The Benefits of Extended Families 374

Divorce 375

Understanding the Effects of Family Structure
and Divorce 376

NO EASY ANSWERS: When Divorce Is Unavoidable 377

■ Some Exosystem Effects 377

Parents' Jobs 377

Social Support for Parents 380

Summary 380

Key Terms 381

PART 6 THE WHOLE CHILD

The Ecology of Development: The Child within the Family System 354

13

■ Theoretical Approaches 355

Systems Theory 355

Beyond the Family: The Impact of the Broader Culture 382

14

■ Nonparental Care 383

Difficulties in Studying Nonparental Care 383

THE REAL WORLD: Latchkey Children 384

Who Is Taking Care of the Children? 385

- Effects of Nonparental Care on Cognitive Development 386
- Effects of Nonparental Care on Personality 387
- Effects of Nonparental Care on Attachment 387
- **The Impact of Schools 389**
- Schooling and Cognitive Development 390
- Fitting In and Adapting to School 391
- School Transitions 392
- Engagement In and Disengagement from Secondary School 394
- NO EASY ANSWERS: Reaching the High School Dropout 397
- Homeschooling 398
- **Joining the Work World: The Impact of Jobs on Teenagers 398**
- The Pessimistic View 399
- The Optimistic View 400
- **The Impact of Mass Media 401**
- Effects of Television on Learning 401
- Television and Aggression 401
- DEVELOPMENT IN THE INFORMATION AGE: Terrorism, Television, and Children 403
- Parents' Regulation of Television Viewing 404
- **Macrosystem Effects: The Impact of the Larger Culture 405**
- Economic Variations: Social Class and Poverty 405
- Race and Ethnicity 409
- The Culture as a Whole 414
- Summary 415
- Key Terms 416
- Atypical Development 417**
- 15
- **Understanding Atypical Development 418**
- A New Approach to Atypical Development 418
- Vulnerability and Resilience 419
- NO EASY ANSWERS: Why Are Boys More Vulnerable? 420
- Types and Frequency of Problems 422
- **Attention Problems and Externalizing Problems 423**
- Attention Deficit Hyperactivity Disorder 423
- Conduct Disorder 427
- **Internalizing Problems 429**
- Eating Disorders 430
- Depression 432
- Adolescent Suicide 434
- **Atypical Intellectual Development 435**
- Mental Retardation 435
- Learning Disabilities 437
- Giftedness 439
- **Living and Working with Atypical Children 440**
- The Impact of the Atypical Child on the Family 441
- THE REAL WORLD: Knowing When to Seek Professional Help 441
- Schooling for Atypical Children 442
- Summary 445
- Key Terms 446
- EPILOGUE**
- Putting It All Together: The Developing Child 447**
- **Transitions, Consolidations, and Systems 448**
- **From Birth to 18 Months 448**
- Central Processes 450
- Influences on the Basic Processes 452
- **The Preschool Years 453**
- Central Processes 454
- Influences on the Basic Processes 455
- **The Elementary School Years 455**
- The Transition between 5 and 7 456
- Central Processes 457
- Influences on the Basic Processes: The Role of Culture 458

- **Adolescence 458**
 - Early and Late Adolescence 459
 - Central Processes and Their Connections 461
 - Influences on the Basic Processes 462
- **A Return to Some Basic Questions 463**
 - What Are the Major Influences on Development? 463
 - Does Timing Matter? 466
 - What Is the Nature of Developmental Change? 468
 - What Is the Significance of Individual Differences? 469
 - A Final Point: The Joy of Development 470
- **Glossary 471**
- **References 483**
- **Name Index 531**
- **Subject Index 545**
- **Photo Credits 563**