Contents

Preface xiv

Part 1 Entering a Child's World

Chapter 1
Studying a Child's World 4

The Study of Child Development: Then and Now 6
- Early Approaches 6
- Developmental Psychology Becomes a Science 7
- Studying the Life Span 7
- New Frontiers 8

The Study of Child Development: Basic Concepts 8
- Domains of Development 8
- Periods of Development 8

Influences on Development 9
- Heredity, Environment, and Maturation 10
- Contexts of Development 11
- Normative and Nonnormative Influences 16
- Timing of Influences: Critical or Sensitive Periods 18

An Emerging Consensus 18

Summary and Key Terms 20

Boxes

1-1 Around the World: Children of Immigrant Families 13
1-2 The Everyday World: Studying the Life Course: Growing Up in Hard Times 17
1-3 The Research World: Is There a Critical Period for Language Acquisition? 19

Chapter 2
A Child's World: How We Discover It 22

Basic Theoretical Issues 24
- Issue 1: Is Development Active or Reactive? 25
- Issue 2: Is Development Continuous or Discontinuous? 25

Theoretical Perspectives 26
- Perspective 1: Psychoanalytic 27
- Perspective 2: Learning 29
- Perspective 3: Cognitive 32
- Perspective 4: Contextual 35
- Perspective 5: Evolutionary/Sociobiological 36
- A Shifting Balance 37

Research Methods 38
- Quantitative and Qualitative Research 38
- Sampling 39
- Forms of Data Collection 40
- Evaluating Quantitative and Qualitative Research 42
- Basic Research Designs 43
- Developmental Research Designs 48
- Collaborative Research 49

Ethics of Research 50
- Right to Informed Consent 51
- Avoidance of Deception 51
- Right to Self-Esteem 51
- Right to Privacy and Confidentiality 52

Summary and Key Terms 52

Boxes

2-1 The Research World: The Adaptive Value of Immaturity 38
2-2 Around the World: Purposes of Cross-Cultural Research 45

Part 2 Beginnings

Chapter 3
Forming a New Life: Conception, Heredity, and Environment 56

Conceiving a New Life 58
- Changing Theories of Conception 58
- How Fertilization Takes Place 59

Infertility 59
- Causes of Infertility 60
- Treatments for Infertility 60
- Alternative Ways to Parenthood: Assisted Reproductive Technology 60

Mechanisms of Heredity 64
- The Genetic Code 64

What Determines Sex? 65
Patterns of Genetic Transmission 66

Genetic and Chromosomal Abnormalities 69
Dominant or Recessive Inheritance of Defects 71
Sex-Linked Inheritance of Defects 71
Chromosomal Abnormalities 71
Genetic Counseling and Testing 73

Nature and Nurture: Influences of Heredity and Environment 75
Studying the Relative Influences of Heredity and Environment 76
How Heredity and Environment Work Together 77

Some Characteristics Influenced by Heredity and Environment 80
Physical and Physiological Traits 80
Intelligence 81
Personality 81
Psychopathology 82

Summary and Key Terms 82

Boxes
3-1 The Everyday World: Multiple Births 62
3-2 The Research World: Genetic Testing 75

Chapter 4
Pregnancy and Prenatal Development 84

Prenatal Development: Three Stages 86
The Germinal Stage (Fertilization to 2 Weeks) 89
The Embryonic Stage (2 to 8 Weeks) 90
The Fetal Stage (8 Weeks to Birth) 91

Prenatal Development: Environmental Influences 93
Maternal Factors 93
Paternal Factors 102

Monitoring and Promoting Prenatal Development 102
Disparities in Prenatal Care 102
The Need for Preconception Care 106

Summary and Key Terms 104

Boxes
4-1 Around the World: Mourning a Miscarriage or Stillbirth 92
4-2 The Everyday World: Fetal Welfare versus Mothers' Rights 98

Chapter 5
Birth and the Newborn Baby 106

Childbirth and Culture: How Birthing Has Changed 108
Reducing the Risks of Childbirth 108
Contemporary Settings for Childbirth 110

The Birth Process 110
Stages of Childbirth 111
Electronic Fetal Monitoring 111
Vaginal versus Cesarean Delivery 112
Medicated versus Nonmedicated Delivery 113

The Newborn Baby 114
Size and Appearance 114
Body Systems 116
Medical and Behavioral Assessment 117
States of Arousal and Activity Levels 119

Complications of Childbirth—and Their Aftermath 120
Low Birth Weight 121
Postmaturity 124
Stillbirth 125
Can a Supportive Environment Overcome Effects of Birth Complications? 125

Newborns and Parents 126
Infant Care: A Cross-Cultural View 126
Childbirth and Bonding 127
What Do Newborns Need from Their Mothers? 128
The Father's Role 128
How Parenthood Affects Marital Satisfaction 129

Summary and Key Terms 130

Boxes
5-1 Around the World: Having a Baby in the Himalayas 114
5-2 The Everyday World: Comforting a Crying Baby 120

Part 3 Infancy and Toddlerhood

Chapter 6
Physical Development and Health during the First Three Years 134

Early Growth and Physical Development 136
Principles of Early Growth and Physical Development 136
Growth Patterns 137

Nutrition and Feeding Methods 137
Breast or Bottle? 138
Starting Solid Foods 139
Is Being Overweight a Problem in Infancy? 140

The Brain and Reflex Behavior 140
Building the Brain 140
Early Reflexes 146
Molding the Brain: The Role of Experience 147

Early Sensory Capacities 150
Touch and Pain 150
Smell and Taste 150
Hearing 151
Sight 151

Motor Development 151
Milestones of Motor Development 151
Motor Development and Perception 153
Eleanor and James Gibson's Ecological Theory of Perception 154

How Motor Development Occurs: Thelen's Dynamic Systems Theory 155
Cultural Influences on Motor Development 155

Health 156
Reducing Infant Mortality 156
Immunization for Better Health 160

Maltreatment: Abuse and Neglect 161
Maltreatment in Infancy and Toddlerhood 161
Contributing Factors: An Ecological View 162
Helping Families in Trouble 163
Long-Term Effects of Maltreatment 163

Summary and Key Terms 164

Boxes
6-1 The Research World: The Autism "Epidemic" 144
6-2 Around the World: Sleep Customs 159

Chapter 7
Cognitive Development during the First Three Years 166

Studying Cognitive Development: Six Approaches 168

Behaviorist Approach: Basic Mechanics of Learning 168
Classical and Operant Conditioning 169
Infant Memory 169

Psychometric Approach: Developmental and Intelligence Testing 170
Testing Infants and Toddlers 171
Assessing the Impact of the Home Environment 171
Early Intervention 172

Piagetian Approach: The Sensorimotor Stage 173
Substages of the Sensorimotor Stage 173
Do Imitative Abilities Develop Earlier Than Piaget Thought? 177
Development of Knowledge about Objects and Space 178
Evaluating Piaget's Sensorimotor Stage 179

Information-Processing Approach: Perceptions and Representations 180
Habituation 180
Visual and Auditory Processing Abilities 181
Information Processing as a Predictor of Intelligence 182
Information Processing and the Development of Piagetian Abilities 184
Evaluating Information-Processing Research on Infants 186

Cognitive Neuroscience Approach: The Brain's Cognitive Structures 187

Social-Contextual Approach: Learning from Interactions with Caregivers 188

Language Development 189
Sequence of Early Language Development 189
Characteristics of Early Speech 193
Classic Theories of Language Acquisition: The Nature-Nurture Debate 194
Influences on Language Development 195
Preparing for Literacy: The Benefits of Reading Aloud 198

Summary and Key Terms 199

Boxes
7-1 The Everyday World: Do Infants and Toddlers Watch Too Much Television? 183
7-2 Around the World: Inventing Sign Language 195

Chapter 8
Psychosocial Development during the First Three Years 202

Foundations of Psychosocial Development 204
Emotions 205
Temperament 209

Developmental Issues in Infancy 212
Developing Trust 212
Developing Attachments 213
Emotional Communication with Caregivers: Mutual Regulation 218

Developmental Issues in Toddlerhood 220
The Emerging Sense of Self 220
Developing Autonomy 221
The Roots of Moral Development: Socialization and Internalization 222

Gender: How Different Are Baby Boys and Girls? 225
Gender Differences in Infants and Toddlers 225
How Parents Shape Gender Differences 225

Contact with Other Children 226
Siblings 226
Sociability with Nonsiblings 227

Children of Working Parents 228
Effects of Maternal Employment 228
Early Child Care 229

Boxes
8-1 The Everyday World: How Postpartum Depression Affects Early Development 219
8-2 Around the World: Are Struggles with Toddlers Necessary? 223

Part 4 Early Childhood

Chapter 9
Physical Development and Health in Early Childhood 236

Aspects of Physiological Development 238
Bodily Growth and Change 238

Sleep Patterns and Problems 239
Sleep Disturbances and Disorders 240
Bed-Wetting 240

Brain Development 241

Motor Development 241
Gross and Fine Motor Skills 242
Handedness 243
Artistic Development 243
Health and Safety 244
Nutrition: Preventing Obesity 244
Undernutrition 246
Food Allergies 248
Oral Health 248
Accidental Injuries and Deaths 249
Health in Context: Environmental Influences 249
Summary and Key Terms 252
Boxes
9-1 Around the World: Surviving the First Five Years of Life 245
9-2 The Everyday World: Food Security 247

Chapter 10
Cognitive Development in Early Childhood 254
Piagetian Approach: The Preoperational Child 256
Advances of Preoperational Thought 257
Immature Aspects of Preoperational Thought 260
Do Young Children Have Theories of Mind? 261
Information-Processing Approach: Memory Development 265
Basic Processes and Capacities 265
Recognition and Recall 266
Forming and Retaining Childhood Memories 266
Intelligence: Psychometric and Vygotskian Approaches 268
Traditional Psychometric Measures 268
Influences on Measured Intelligence 269
Testing and Teaching Based on Vygotsky's Theory 270
Language Development 270
Vocabulary 270
Grammar and Syntax 271
Pragmatics and Social Speech 271
Delayed Language Development 273
Preparation for Literacy 273
Media and Cognition 274
Early Childhood Education 274
Types of Preschools 274
Compensatory Preschool Programs 275
The School of the Twenty-First Century: Universal Preschool 277
The Child in Kindergarten 277
Summary and Key Terms 278
Boxes
10-1 The Everyday World: Imaginary Companions 264
10-2 The Research World: Private Speech: Piaget versus Vygotsky 272

Chapter 11
Psychosocial Development in Early Childhood 280
The Developing Self 282
The Self-Concept and Cognitive Development 282
Self-Esteem 283
Understanding and Regulating Emotions 284
Erikson: Initiative versus Guilt 285
Gender 286
Gender Differences 286
Perspectives on Gender Development 286
Play: The Business of Early Childhood 293
Cognitive Levels of Play 294
The Social Dimension of Play 295
How Gender Influences Play 296
How Culture Influences Play 298
Parenting 298
Forms of Discipline 298
Parenting Styles 301
Special Behavioral Concerns 303
Prosocial Behavior 303
Aggression 304
Fearfulness 306
Relationships with Other Children 307
Sibling Relationships 307
The Only Child 308
Playmates and Friends 308
Summary and Key Terms 309
Boxes
11-1 The Research World: Does Play Have an Evolutionary Basis? 294
11-2 The Everyday World: The Case against Corporal Punishment 300

Part 5 Middle Childhood

Chapter 12
Physical Development and Health in Middle Childhood 314
Aspects of Physical Development 316
Height and Weight 316
Tooth Development and Dental Care 317
Brain Development 318
Nutrition and Sleep 319
Nutritional Needs 319
Sleep Patterns and Problems 319
Motor Development and Physical Play 320
Recess-Time Play 320
Organized Sports 321

Health and Safety 322
Overweight and Body Image 322
Medical Conditions 325
Factors in Health and Access to Health Care 327
Accidental Injuries 329
Mental Health 329
Common Emotional Disturbances 329
Treatment Techniques 331
Summary and Key Terms 332
Boxes
12-1 The Everyday World: Do Barbie Dolls Affect Girls' Body Image? 323
12-2 Around the World: How Cultural Attitudes Affect Health Care 328

Chapter 13
Cognitive Development in Middle Childhood 334
Piagetian Approach: The Concrete Operational Child 336
Cognitive Advances 336
Influences of Neurological Development and Schooling 339
Moral Reasoning 339
Information-Processing Approach: Attention, Memory, and Planning 340
How Do Executive Skills Develop? 341
Selective Attention 341
Working Memory 341
Metamemory: Understanding Memory 342
Mnemonics: Strategies for Remembering 342
Information Processing and Piagetian Tasks 343
Psychometric Approach: Assessment of Intelligence 344
The IQ Controversy 344
Influences on Intelligence 345
Is There More Than One Intelligence? 347
Other Directions in Intelligence Testing 349
Language and Literacy 349
Vocabulary, Grammar, and Syntax 350
Pragmatics: Knowledge about Communication 350
Second-Language Learning 350
Literacy 351
The Child in School 353
Entering First Grade 353
Influences on School Achievement 353
Educating Children with Special Needs 357
Children with Learning Problems 358
Gifted Children 361
Summary and Key Terms 362
Boxes
13-1 The Research World: The Homework Debate 355
13-2 The Everyday World: The Math Wars 356

Chapter 14
Psychosocial Development in Middle Childhood 364
The Developing Self 366
Self-Concept Development: Representational Systems 366
Self-Esteem 366
Emotional Growth and Prosocial Behavior 367
The Child in the Family 368
Family Atmosphere 368
Family Structure 371
Sibling Relationships 378
The Child in the Peer Group 379
Positive and Negative Effects of Peer Relations 379
Gender Differences in Peer-Group Relationships 379
Popularity 380
Friendship 381
Aggression and Bullying 381
Stress and Resilience 386
Stresses of Modern Life 386
Coping with Stress: The Resilient Child 388
Summary and Key Terms 389
Boxes
14-1 The Research World: Pass the Milk: Family Mealtimes and Child Well-Being 369
14-2 The Everyday World: Talking with Children about Terrorism and War 388

Part 6 Adolescence

Chapter 15
Physical Development and Health in Adolescence 394
Adolescence: A Developmental Transition 396
Adolescence as a Social Construction 396
Adolescence: A Time of Opportunities and Risks 396
Puberty: The End of Childhood 398
How Puberty Begins: Hormonal Changes 398
Timing, Signs, and Sequence of Puberty and Sexual Maturity 399
Implications of Early and Late Maturation 402
The Adolescent Brain 403
Physical and Mental Health 404
Physical Activity 404
Sleep Needs and Problems 405
Nutrition and Eating Disorders 405
Use and Abuse of Drugs 409
Depression 412
Death in Adolescence 413
Protective Factors: Health in Context 414
Summary and Key Terms 414

Box

15-1 Around the World: The Globalization of Adolescence 397

Chapter 16

Cognitive Development in Adolescence 416

Aspects of Cognitive Maturation 418
- Piaget's Stage of Formal Operations 418
- Elkind: Immature Characteristics of Adolescent Thought 420
- Language Development 422
- Changes in Information Processing in Adolescence 422

Moral Development 423
- Kohlberg's Theory of Moral Reasoning 423
- Gilligan's Theory: An Ethic of Care 428
- Prosocial Behavior and Volunteer Activity 428

Educational and Vocational Issues 429
- Influences on School Achievement 429
- Dropping Out of High School 434
- Preparing for Higher Education or Vocations 434

Summary and Key Terms 437

Boxes

16-1 The Research World: Fowler's Stages of Faith 427
16-2 The Everyday World: Multitasking and Gen M 431

Chapter 17

Psychosocial Development in Adolescence 438

The Search for Identity 440
- Erikson: Identity versus Identity Confusion 440
- Marcia: Identity Status—Crisis and Commitment 441
- Gender Differences in Identity Formation 443
- Ethnic Factors in Identity Formation 443

Sexuality 445
- Sexual Orientation and Identity 445
- Sexual Behavior 447
- Sexually Transmitted Diseases (STDs) 449
- Teenage Pregnancy and Childbearing 451

Relationships with Family and Peers 453
- Is Adolescent Rebellion a Myth? 454
- Changing Time Use and Changing Relationships 454
- Adolescents and Parents 455
- Adolescents and Siblings 459
- Peers and Friends 459

Antisocial Behavior and Juvenile Delinquency 462
- Becoming a Delinquent: Genetic and Neurological Factors 462
- Becoming a Delinquent: How Family, Peer, and Community Influences Interact 463
- Long-Term Prospects 465
- Preventing and Treating Delinquency 465

Emerging Adulthood 466

Summary and Key Terms 467

Boxes

17-1 Around the World: Preventing Teenage Pregnancy 453
17-2 The Everyday World: The Youth Violence Epidemic 463

Glossary G-1
Bibliography B-1
Credits C-1
Name Index I-1
Subject Index I-19