

# CONTENTS

|  |           |   |           |
|--|-----------|---|-----------|
| <b>List of Boxes</b>                           | xiii      |   |           |
| <b>Preface</b>                                 | xv        |   |           |
| <b>CHAPTER 1</b>                               |           |   |           |
| <b>ABOUT HUMAN DEVELOPMENT</b>                 | <b>1</b>  |   |           |
| <b>HUMAN DEVELOPMENT:</b>                      |           |   |           |
| <b>THE SUBJECT AND THE TEXT</b>                | <b>2</b>  |   |           |
| What Is Human Development?                     | 3         |   |           |
| How This Book Approaches Human Development     | 4         |   |           |
| <b>HUMAN DEVELOPMENT:</b>                      |           |   |           |
| <b>THE STUDY AND ITS HISTORY</b>               | <b>5</b>  |   |           |
| Aspects of Development                         | 6         |   |           |
| Periods of the Life Span                       | 6         |   |           |
| Individual Differences in Development          | 6         |   |           |
| Influences on Development                      | 6         |   |           |
| How the Study of Human Development Has Evolved | 10        |   |           |
| <b>HUMAN DEVELOPMENT:</b>                      |           |   |           |
| <b>RESEARCH METHODS</b>                        | <b>12</b> |   |           |
| Nonexperimental Methods                        | 12        |   |           |
| Experimental Methods                           | 17        |   |           |
| Methods of Data Collection                     | 19        |   |           |
| Ethics of Research                             | 20        |   |           |
| <b>HUMAN DEVELOPMENT:</b>                      |           |   |           |
| <b>THEORETICAL PERSPECTIVES</b>                | <b>21</b> |   |           |
| Theories and Hypotheses                        | 21        |   |           |
| Psychoanalytic Perspective                     | 23        |   |           |
| Mechanistic Perspective                        | 27        |   |           |
| Organismic Perspective                         | 31        |   |           |
| Humanistic Perspective                         | 33        |   |           |
| <b>A WORD TO STUDENTS</b>                      | <b>34</b> |   |           |
|  |           | <b>PART ONE</b>                           |           |
|  |           | <b>BEGINNINGS</b>                         | <b>37</b> |
|  |           | <b>CHAPTER 2</b>                          |           |
|  |           | <b>CONCEPTION THROUGH BIRTH</b>           | <b>39</b> |
|  |           | <b>FERTILIZATION</b>                      | <b>40</b> |
|  |           | How Does Fertilization Take Place?        | 40        |
|  |           | What Causes Multiple Births?              | 41        |
|  |           | What Determines Sex?                      | 42        |
|  |           | <b>HEREDITY AND ENVIRONMENT</b>           | <b>43</b> |
|  |           | What Is the Role of Heredity?             | 43        |
|  |           | How Do Heredity and Environment Interact? | 53        |
|  |           | <b>PRENATAL DEVELOPMENT</b>               | <b>63</b> |
|  |           | Stages of Prenatal Development            | 63        |
|  |           | The Prenatal Environment                  | 65        |
|  |           | <b>BIRTH</b>                              | <b>70</b> |
|  |           | Stages of Childbirth                      | 71        |
|  |           | Methods of Childbirth                     | 71        |
|  |           | Settings for Childbirth                   | 74        |
|  |           | <b>CHAPTER 3</b>                          |           |
|  |           | <b>PHYSICAL DEVELOPMENT</b>               |           |
|  |           | <b>IN INFANCY AND TODDLERHOOD</b>         | <b>79</b> |
|  |           | <b>THE NEONATE</b>                        | <b>80</b> |
|  |           | Physical Characteristics                  | 81        |
|  |           | Body Systems                              | 81        |
|  |           | The Brain and Reflex Behavior             | 82        |
|  |           | The Newborn's Health                      | 85        |

|  |     |   |     |
|--|-----|---|-----|
| DEVELOPMENT DURING THE FIRST<br>3 YEARS OF LIFE                  | 94  | How Infants Show Their Emotions                             | 150 |
| Principles of Development  | 94  | How Emotions Are Communicated<br>between Infants and Adults | 151 |
| States: The Body's Cycles  | 95  | DIFFERENCES IN<br>PERSONALITY DEVELOPMENT                   | 152 |
| Growth and Nourishment   | 96  | Emotional Differences                                       | 152 |
| The Senses   | 99  | Temperamental Differences                                   | 153 |
| Motor Development  | 102 | Gender Differences  | 155 |
| How Different Are Boys and Girls?                                | 106 | THE FAMILY AND<br>PERSONALITY DEVELOPMENT                   | 155 |
| CHAPTER 4  |     | The Mother's Role   | 156 |
| INTELLECTUAL DEVELOPMENT<br>IN INFANCY AND TODDLERHOOD           | 111 | The Father's Role   | 163 |
| HOW INFANTS LEARN  | 112 | Stranger Anxiety and Separation<br>Anxiety                  | 164 |
| Learning and Maturation  | 112 | Disturbances in Family Relationships                        | 165 |
| Ways of Learning   | 113 | RELATIONSHIPS WITH OTHER CHILDREN                           | 169 |
| Learning and Memory  | 116 | Siblings  | 169 |
| STUDYING INTELLECTUAL<br>DEVELOPMENT: THREE APPROACHES           | 116 | Sociability   | 170 |
| Psychometric Approach: Intelligence<br>Tests                     | 117 | <b>PART TWO</b><br><b>EARLY CHILDHOOD</b>                   | 175 |
| Piagetian Approach: Cognitive Stages                             | 120 | CHAPTER 6   |     |
| Information-Processing Approach:<br>Perceptions and Symbols      | 126 | PHYSICAL AND INTELLECTUAL<br>DEVELOPMENT IN EARLY CHILDHOOD | 177 |
| DEVELOPMENT OF LANGUAGE  | 129 | <b>Physical Development</b>                                 | 178 |
| Theories of Language Acquisition                                 | 130 | PHYSICAL GROWTH AND CHANGE                                  | 178 |
| Stages in Language Development                                   | 130 | Height, Weight, and Appearance                              | 178 |
| Characteristics of Early Speech                                  | 134 | Structural and Systemic Changes                             | 179 |
| Influences on Language Acquisition                               | 134 | Nutrition   | 179 |
| DEVELOPMENT OF COMPETENCE  | 136 | HEALTH  | 179 |
| The Harvard Preschool Project                                    | 136 | Health Problems in Early Childhood                          | 180 |
| HOME: The Home Observation for<br>Measurement of the Environment | 138 | Influences on Health  | 182 |
| CHAPTER 5  |     | MOTOR SKILLS  | 183 |
| PERSONALITY AND SOCIAL DEVELOPMENT<br>IN INFANCY AND TODDLERHOOD | 143 | Large-Muscle Coordination                                   | 183 |
| THEORETICAL APPROACHES TO EARLY<br>PERSONALITY DEVELOPMENT       | 144 | Small-Muscle and Eye-Hand<br>Coordination                   | 183 |
| Psychosexual Theory: Sigmund Freud                               | 145 | SLEEP: PATTERNS AND PROBLEMS                                | 185 |
| Psychosocial Theory: Erik Erikson                                | 146 | Normal Sleep Patterns                                       | 185 |
| Evaluating the Theories  | 147 | Sleep Disturbances  | 185 |
| EMOTIONS: THE FOUNDATION<br>OF PERSONALITY                       | 148 | Bed-Wetting   | 186 |
| How Infants' Emotions Are Studied                                | 148 | <b>Intellectual Development</b>                             | 186 |
| How Emotions Develop:<br>The Emerging Sense of Self              | 149 | ASPECTS OF INTELLECTUAL<br>DEVELOPMENT                      | 187 |
|  |     | Development of Memory:<br>Information Processing            | 187 |

|                                    |     |  |     |
|------------------------------------|-----|--|-----|
| Cognitive Development:             |     | HEALTH, FITNESS, AND SAFETY            | 244 |
| Piaget's Preoperational Stage      | 189 | Children's Health                      | 244 |
| Development of Language            | 195 | Children's Safety                      | 246 |
| Development of Intelligence        | 197 | MOTOR DEVELOPMENT                      |     |
| THE WIDENING ENVIRONMENT           | 200 | IN MIDDLE CHILDHOOD                    | 247 |
| Day Care                           | 200 | <b>Intellectual Development</b>        | 248 |
| Preschool                          | 202 | ASPECTS OF INTELLECTUAL                |     |
| Kindergarten                       | 205 | DEVELOPMENT IN MIDDLE                  |     |
|                                    |     | CHILDHOOD                              | 248 |
|                                    |     | Cognitive Development: Piaget's Stage  |     |
|                                    |     | of Concrete Operations                 | 248 |
|                                    |     | Moral Development: Three Theories      | 250 |
| CHAPTER 7                          |     | Development of Memory:                 |     |
| PERSONALITY AND SOCIAL DEVELOPMENT |     | Information Processing                 | 255 |
| IN EARLY CHILDHOOD                 | 209 | Development of Language:               |     |
|                                    |     | Communication                          | 257 |
| PERSONALITY IN EARLY CHILDHOOD:    |     | Development of Intelligence:           |     |
| THEORETICAL APPROACHES             | 210 | Psychometrics                          | 258 |
| Psychoanalytic Theories:           |     | CHILDREN IN SCHOOL                     | 263 |
| Biology, Society, and Culture      | 211 | Educational Trends                     | 263 |
| Social-Learning Theory:            |     | Teachers' Characteristics and          |     |
| Observing and Imitating Models     | 213 | Expectations                           | 265 |
| Cognitive-Developmental Theory:    |     | Parents' Influence                     | 266 |
| Mental Processes                   | 214 | Education for Special Needs            | 266 |
| Gender-Schema Theory:              |     |  |     |
| A "Cognitive-Social" Approach      | 215 | CHAPTER 9                              |     |
| ASPECTS AND ISSUES OF PERSONALITY  |     | PERSONALITY AND SOCIAL DEVELOPMENT     |     |
| DEVELOPMENT                        | 216 | IN MIDDLE CHILDHOOD                    | 275 |
| Gender                             | 216 | THE SELF-CONCEPT                       | 276 |
| Fears                              | 221 | Components of the Self-Concept         | 276 |
| Aggression                         | 222 | Theoretical Perspectives               |     |
| Altruism: Prosocial Behavior       | 225 | on the Self-Concept                    | 279 |
| Child-Rearing Practices            | 227 | ASPECTS OF PERSONALITY                 |     |
| Relating to Other Children         | 230 | DEVELOPMENT IN MIDDLE                  |     |
| Play                               | 233 | CHILDHOOD                              | 280 |
|                                    |     | Everyday Life                          | 280 |
| <b>PART THREE</b>                  |     | The Child in the Peer Group            | 282 |
| <b>MIDDLE CHILDHOOD</b>            | 239 | The Child in the Family                | 286 |
|                                    |     | CHILDHOOD EMOTIONAL                    |     |
| CHAPTER 8                          |     | DISTURBANCES                           | 296 |
| PHYSICAL AND INTELLECTUAL          |     | Types of Emotional Problems            | 296 |
| DEVELOPMENT IN MIDDLE CHILDHOOD    | 241 | Treatment for Emotional Problems       | 298 |
| Physical Development               | 242 | STRESS AND RESILIENCE                  | 299 |
| GROWTH DURING MIDDLE CHILDHOOD     | 243 | Sources of Stress: Life Events, Fears, |     |
| Growth Rates                       | 243 | and the "Hurried Child"                | 299 |
| Nutrition and Growth               | 243 | Coping with Stress: The Resilient      |     |
|                                    |     | Child                                  | 301 |

## PART FOUR ADOLESCENCE

|   |     |
|---|-----|
| CHAPTER 10  |     |
| PHYSICAL AND INTELLECTUAL<br>DEVELOPMENT IN ADOLESCENCE | 307 |
| ADOLESCENCE:<br>A DEVELOPMENTAL TRANSITION              | 308 |
| <b>Physical Development</b>                             | 310 |
| MATURATION IN ADOLESCENCE                               | 310 |
| Physical Changes  | 310 |
| Psychological Impact of Physical<br>Changes             | 313 |
| HEALTH CONCERNS OF ADOLESCENCE                          | 316 |
| Nutrition and Eating Disorders                          | 316 |
| Use and Abuse of Drugs                                  | 318 |
| Sexually Transmitted Diseases (STDs)                    | 320 |
| <b>Intellectual Development</b>                         | 324 |
| ASPECTS OF INTELLECTUAL<br>DEVELOPMENT IN ADOLESCENCE   | 324 |
| Cognitive Development:                                  |     |
| Piaget's Stage of Formal Operations                     | 324 |
| Adolescent Egocentrism                                  | 326 |
| Moral Development:                                      |     |
| Kohlberg's Levels of Morality                           | 327 |
| HIGH SCHOOL   | 328 |
| High School Today                                       | 328 |
| Home Influences on Achievement<br>in High School        | 328 |
| Dropping Out of High School                             | 331 |
| DEVELOPING A CAREER                                     | 332 |
| Stages in Vocational Planning                           | 332 |
| Influences on Vocational Planning                       | 332 |
| CHAPTER 11  |     |
| PERSONALITY AND SOCIAL DEVELOPMENT<br>IN ADOLESCENCE    | 339 |
| UNDERSTANDING PERSONALITY<br>DEVELOPMENT                | 341 |
| Theoretical Perspectives                                | 341 |
| Research on Identity                                    | 343 |
| ASPECTS OF PERSONALITY<br>DEVELOPMENT IN ADOLESCENCE    | 345 |
| Relationships with Parents                              | 346 |

|                           |     |
|---------------------------|-----|
| Relationships with Peers  | 350 |
| Achieving Sexual Identity | 355 |

|                             |     |
|-----------------------------|-----|
| TWO PROBLEMS OF ADOLESCENCE | 357 |
| Teenage Pregnancy           | 357 |
| Juvenile Delinquency        | 362 |

|   |     |
|---|-----|
| A POSITIVE VIEW OF ADOLESCENCE:<br>THREE COHORT STUDIES | 363 |
|---|-----|

## PART FIVE YOUNG ADULTHOOD

|   |     |
|---|-----|
| CHAPTER 12  |     |
| PHYSICAL AND INTELLECTUAL<br>DEVELOPMENT IN YOUNG ADULTHOOD | 369 |
| <b>Physical Development</b>                                 | 370 |
| SENSORY AND PSYCHOMOTOR<br>FUNCTIONING                      | 370 |
| HEALTH IN YOUNG ADULTHOOD                                   | 371 |
| Health Status   | 371 |
| Influences on Health and Fitness                            | 372 |
| <b>Intellectual Development</b>                             | 381 |
| ADULT THOUGHT:<br>THEORETICAL APPROACHES                    | 381 |
| K. Warner Schaie:   |     |
| Stages of Cognitive Development                             | 381 |
| Robert Sternberg:   |     |
| Three Aspects of Intelligence                               | 382 |
| Beyond Jean Piaget: Postformal<br>Thought                   | 384 |
| ADULT MORAL DEVELOPMENT                                     | 384 |
| How Does Experience Affect<br>Moral Judgments?              | 384 |
| Are There Gender Differences<br>in Moral Development?       | 386 |
| COLLEGE   | 387 |
| Who Goes to College?  | 387 |
| Intellectual Growth in College                              | 387 |
| Gender Differences in Achievement<br>in College             | 388 |
| Leaving College   | 388 |
| STARTING A CAREER   | 389 |
| Work and Age  | 390 |
| Work and Gender   | 390 |

|  |     |  |     |
|--|-----|--|-----|
| CHAPTER 13                               |     | CHAPTER 15                                   |     |
| PERSONALITY AND SOCIAL DEVELOPMENT       |     | PERSONALITY AND SOCIAL DEVELOPMENT           |     |
| IN YOUNG ADULthood                       | 397 | IN MIDDLE ADULthood                          | 447 |
| PERSONALITY DEVELOPMENT IN               |     | MIDLIFE:                                     |     |
| YOUNG ADULthood: TWO MODELS              | 398 | THE NORMATIVE-CRISIS APPROACH                | 449 |
| Normative-Crisis Model                   | 398 | Theories and Research                        | 449 |
| Timing-of-Events Model                   | 404 | Evaluating the Normative-Crisis Model        | 454 |
| INTIMATE RELATIONSHIPS                   |     | PERSONAL RELATIONSHIPS                       |     |
| AND PERSONAL LIFESTYLES                  | 407 | AND TIMING OF EVENTS IN MIDLIFE              | 457 |
| Love                                     | 407 | Marriage and Divorce                         | 457 |
| Marriage                                 | 408 | Relationships with Siblings                  | 460 |
| Divorce                                  | 411 | Friendships                                  | 460 |
| Single Life                              | 413 | Relationships with Maturing Children         | 460 |
| Cohabitation                             | 414 | Relationships with Aging Parents             | 463 |
| Sexuality                                | 414 |  |     |
| Parenthood                               | 415 |  |     |
| Remaining Childless                      | 421 |  |     |
| Friendship                               | 423 |  |     |
|  |     | <b>PART SEVEN</b>                            |     |
|  |     | <b>LATE ADULthood</b>                        | 469 |
| <b>PART SIX</b>                          |     |  |     |
| <b>MIDDLE ADULthood</b>                  | 425 | CHAPTER 16                                   |     |
|  |     | PHYSICAL AND INTELLECTUAL                    |     |
| CHAPTER 14                               |     | DEVELOPMENT IN LATE ADULthood                | 471 |
| PHYSICAL AND INTELLECTUAL                |     | OLD AGE TODAY                                | 472 |
| DEVELOPMENT IN MIDDLE ADULthood          | 427 | What Is Our Attitude toward Old Age?         | 472 |
| <b>Physical Development</b>              | 429 | Who Are the Elderly?                         | 472 |
|  |     | How Can We Make the Most of                  |     |
| PHYSICAL CHANGES OF MIDDLE AGE           | 429 | the Later Years?                             | 475 |
| Sensory and Psychomotor Functioning      | 429 | <b>Physical Development</b>                  | 476 |
| Sexuality                                | 430 | LONGEVITY AND THE AGING PROCESS              | 477 |
| Appearance: The Double Standard of Aging | 433 | Life Expectancy                              | 477 |
|  |     | Why People Age: Two Theories                 | 478 |
| HEALTH IN MIDDLE AGE                     | 433 | PHYSICAL CHANGES OF OLD AGE                  | 479 |
| Health Status                            | 433 | Sensory and Psychomotor Functioning          | 479 |
| Health Problems                          | 434 | Other Physical Changes                       | 481 |
| <b>Intellectual Development</b>          | 436 | Reserve Capacity                             | 481 |
|  |     | HEALTH IN OLD AGE                            | 482 |
| ASPECTS OF INTELLECTUAL                  |     | Influences on Health and Fitness             | 482 |
| DEVELOPMENT IN MIDDLE                    |     | Health Care and Health Problems              | 483 |
| ADULthood                                | 436 | <b>Intellectual Development</b>              | 486 |
| Intelligence and Cognition               | 436 | ASPECTS OF INTELLECTUAL                      |     |
| The Adult Learner                        | 439 | DEVELOPMENT                                  | 486 |
| WORK IN MIDDLE ADULthood                 | 440 | Does Intelligence Decline in Late Adulthood? | 486 |
| Occupational Patterns                    | 440 | How Does Memory Change                       |     |
| Occupational Stress                      | 441 | in Late Adulthood?                           | 491 |
| Unemployment                             | 442 | LIFELONG LEARNING:                           |     |
| Work and Intellectual Growth             | 442 | ADULT EDUCATION IN LATE LIFE                 | 493 |

|                                       |     |                                     |     |
|---------------------------------------|-----|-------------------------------------|-----|
| WORK AND RETIREMENT                   | 493 | Childlessness                       | 522 |
| Why People Retire                     | 494 | Grandparenthood and                 |     |
| How People Feel about Retirement      | 494 | Great-Grandparenthood               | 522 |
| Making the Most of Retirement         | 495 |                                     |     |
| <br>                                  |     |                                     |     |
| CHAPTER 17                            |     | <b>PART EIGHT</b>                   |     |
| PERSONALITY AND SOCIAL DEVELOPMENT    |     | <b>THE END OF LIFE</b>              | 527 |
| IN LATE ADULTHOOD                     | 499 |                                     |     |
| <br>                                  |     | CHAPTER 18                          |     |
| THEORY AND RESEARCH ON                |     | DEATH AND BEREAVEMENT               | 529 |
| PERSONALITY DEVELOPMENT               | 500 | THREE ASPECTS OF DEATH              | 531 |
| Erik Erikson:                         |     | FACING DEATH                        | 531 |
| Crisis 8—Integrity versus Despair     | 501 | Attitudes toward Death and Dying    |     |
| Robert Peck:                          |     | across the Life Span                | 531 |
| Three Adjustments of Late             |     | Confronting One's Own Death         | 534 |
| Adulthood                             | 501 | Bereavement, Mourning, and Grief    | 538 |
| George Vaillant: Factors in Emotional |     |                                     |     |
| Health                                | 502 | CONTROVERSIAL ISSUES                |     |
| Research on Changes in Personality    | 503 | OF DEATH AND DYING                  | 544 |
| AGING                                 | 503 | Euthanasia and the Right to Die     | 544 |
| Approaches to "Successful Aging"      | 503 | Suicide                             | 546 |
| Personality and Patterns of Aging     | 505 | FINDING A PURPOSE IN LIFE AND DEATH | 550 |
| Social Issues Related to Aging        | 507 | The Meaning of Death                | 550 |
| PERSONAL RELATIONSHIPS IN LATE LIFE   | 512 | Reviewing a Life                    | 550 |
| Marriage                              | 512 |                                     |     |
| Divorce                               | 514 | Glossary                            | 555 |
| Surviving a Spouse                    | 514 | Bibliography                        | 565 |
| Remarriage                            | 517 | Permissions and Credits             | 605 |
| Single Life: The "Never Marrieds"     | 517 | Indexes                             |     |
| Sexual Relationships                  | 517 | Name Index                          | 609 |
| Relationships with Siblings           | 518 | Subject Index                       | 620 |
| Friendships                           | 519 |                                     |     |
| Relationships with Adult Children     | 521 |                                     |     |