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Human Development

99/00



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Twenty-Seventh Edition

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Members of the Advisory Board are instrumental in the final selection of articles for each edition of ANNUAL EDITIONS. Their review of articles for content, level, currentness, and appropriateness provides critical direction to the editor and staff. We think that you will find their careful consideration well reflected in this volume.

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In publishing ANNUAL EDITIONS we recognize the enormous role played by the magazines, newspapers, and journals of the public press in providing current, first-rate educational information in a broad spectrum of interest areas. Many of these articles are appropriate for students, researchers, and professionals seeking accurate, current material to help bridge the gap between principles and theories and the real world. These articles, however, become more useful for study when those of lasting value are carefully collected, organized, indexed, and reproduced in a low-cost format, which provides easy and permanent access when the material is needed. That is the role played by ANNUAL EDITIONS.

New to ANNUAL EDITIONS is the inclusion of related World Wide Web sites. These sites have been selected by our editorial staff to represent some of the best resources found on the World Wide Web today. Through our carefully developed topic guide, we have linked these Web resources to the articles covered in this ANNUAL EDITIONS reader. We think that you will find this volume useful, and we hope that you will take a moment to visit us on the Web at <http://www.dushkin.com/> to tell us what you think.

Correction, vigilance, conscientiousness versus corruption, negligence, immorality: why do humans behave the way they do? Violence: we all see it (road rage, sports, videos, games, movies, TV, the news). Why do some people resist behaving aggressively while others explode? The world's economies: why do some cultures prosper while others are wiped out? What forces lead human development, for better or worse? Selecting a few representative articles of good quality is difficult due to the magnitude of the subject. I am grateful to all the members of my advisory board for helping me cull through the collection and select some of the best articles available for 99/00 to shed light on the above questions and on many others.

Annual Editions: Human Development 99/00 is organized according to the absolute time concept of chronos, chronological time, from conception through death. However, the reader should be aware of other relative time concepts: kairos (God's time); preterition (retrospective time), and futurity (prospective time); transientness (short duration) and diuturnity (long duration); and recurrent time. Human development is more akin to a continuous circle of life than to a line with a distinct beginning and end. Like stars whose light reaches us thousands of years after they expire, our ancestors influence our behaviors long after their deaths. Our hopes for our own futures and for our children's futures also predestine our development. With an eye to the circle of life, articles have been selected that bridge the gap left by clocked time and indiscreet ages and stages. Thus, prenatal articles may discuss adult development and late adulthood articles may focus on grandchildren.

As you explore this anthology, you will discover that many articles ask questions that have no answers. As a student, I felt frustrated by such writing. I wanted answers, right answers, right away. Part of the lessons in tolerance that are necessary

to achieve maturity are lessons in accepting relativity and in acknowledging extenuating circumstances. Life frequently has no right or wrong answers but rather various alternatives with multiple consequences. Instead of right versus wrong, a more helpful consideration is "What will bring about the greater good for the greater number?" Controversies promote healthy mental exercise. Different viewpoints should be weighed against societal standards. Different cultural communities should be celebrated for what they offer in creativity and adaptability to changing circumstances. Many selections in this anthology reflect the cultural diversity and the cultural assimilation with which we live today.

The selections for *Annual Editions: Human Development 99/00* have attempted to reflect an ecological view of growth and change. Some articles deal with microsystems such as family, school, and employment. Some deal with exosystems such as television and community. Some writers discuss macrosystems such as economics and government. Most of the articles deal with mesosystems, those which link systems such as economics, health and nutrition, schools and culture, or heredity and environment. The unique individual's contribution to every system and every system linkage is always paramount.

We hope you will be energized and enriched by the readings in this compendium. Please complete and return the postage-paid article rating form on the last page to express your opinions. We value your input and will heed it in future revisions of *Annual Editions: Human Development*.



Karen Freiberg, Ph.D.
Editor

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A. GENETIC INFLUENCES

1. **The Struggle to Decipher Human Genes**, Nicholas Wade, *New York Times*, March 10, 1998. 8
In this article, Nicholas Wade explains the Human Genome Project. Someday this endeavor may allow us to prevent many of the **genetic** problems of human development, and/or to detect and treat **health** problems much sooner than is now possible.
2. **The World after Cloning**, Wray Herbert, Jeffrey L. Sheler, and Traci Watson, *U.S. News & World Report*, March 10, 1997. 12
Mammals are being cloned. Will human cloning be next? What **ethics** are involved? Will **genetic engineering** be used to create humans according to specifications? This article addresses many controversies raised by cloning technology.
3. **Nature's Clones**, Jim Neimark, *Psychology Today*, July/August 1997. 15
Twin research reveals fascinating facts; not all identical twins share all **genetic** traits. **Prenatal development** of twins can be different. An egg can split before it is **fertilized** by two sperm, resulting in one-egg fraternal twins. New genetic discoveries about twinning suggest that the nature-nurture question is still inexplicable and chaotic.

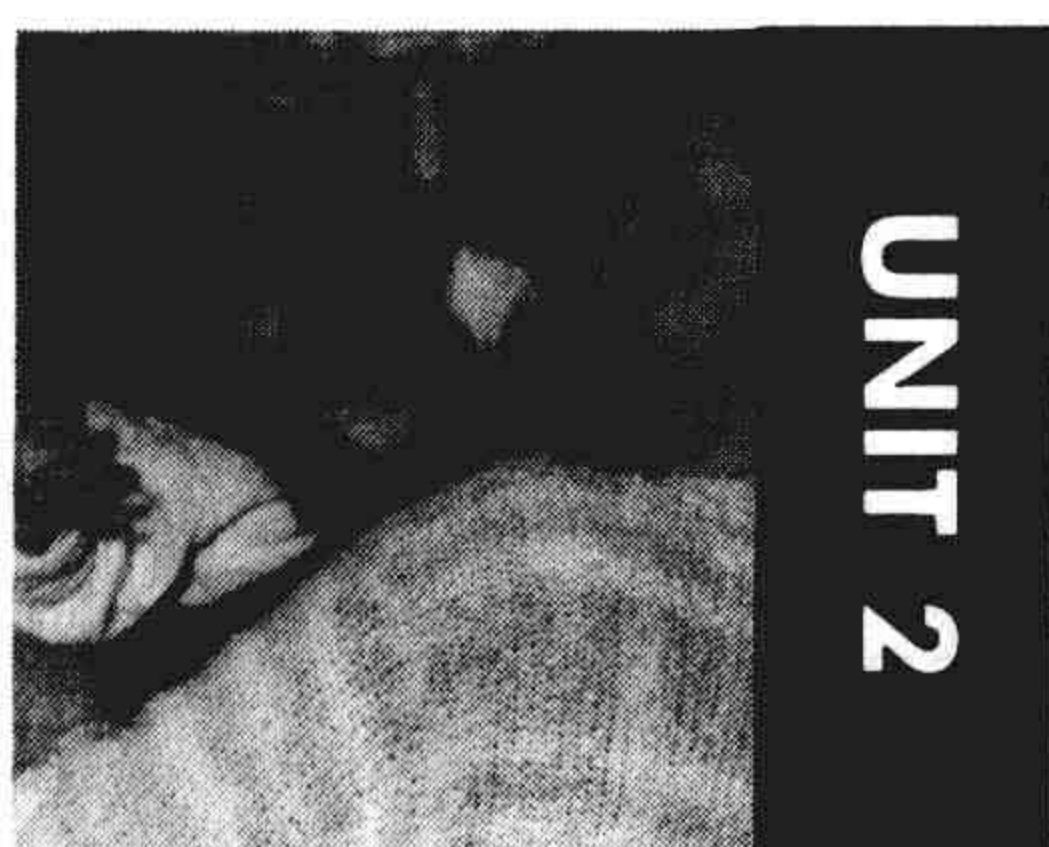
B. PRENATAL INFLUENCES

4. **The Role of Lifestyle in Preventing Low Birth Weight**, Virginia Rall Chomitz, Lilian W. Y. Cheung, and Ellice Lieberman, *The Future of Children*, Spring 1995. 23
Women's **health** during pregnancy has a profound effect on **pre-natal development**. Lifestyle changes, such as improved **nutrition**, cessation of **drug abuse** (for example, cigarettes, alcohol) and avoidance of **teratogens**, can prevent low birth weight.
5. **Behaviors of a Newborn Can Be Traced to the Fetus**, Beth Azar, *APA Monitor*, December 1997. 34
The **prenatal** environment sets the stage for **physical and motor development** in **infancy**. Research cited in this article suggests that each newborn behaves very much like it behaved as a fetus before birth. The tactile stimulation of the birth process imparts important survival information to the baby.
6. **Maternal Emotions May Influence Fetal Behaviors**, Beth Azar, *APA Monitor*, December 1997. 36
Research today suggests that a mother's **prenatal stress** may affect the infant's **emotional/personality development**. **Cultural** factors such as low socioeconomic status may decrease **physical development** and activity. **Drug abuse** and smoking also have **teratogenic** effects on **infant development**.



Genetic and Prenatal Influences on Development

Eight selections discuss genetic influences on development, cloning, and the role of lifestyle, including the effects of substance abuse, on prenatal development.



Development during Infancy and Early Childhood

Six selections profile the impressive abilities of infants and young children, examine the ways in which children learn, and the development of empathy in early childhood.

7. **Drug-Exposed Infants**, Lucy Salcido Carter and Carol S. Larson, *The Future of Children*, Summer/Fall 1997. **37**
Prenatal exposure to **drugs of abuse** is **teratogenic**. It affects **infant physical, cognitive, and social development and health**. Rather than punishing pregnant substance-abusing mothers, legislative efforts have been directed at detecting the problem mothers and treating them.
8. **Sperm under Siege**, Anne Merewood, *Health*, April 1991. **41**
Sperm as well as ova are susceptible to **teratogens**. Carcinogenic chemicals, tobacco, alcohol, and **drug abuse** can damage sperm, which, if they fertilize the ovum, can have devastating **effects on prenatal development**.

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A. INFANCY

9. **Fertile Minds**, J. Madeleine Nash, *Time*, February 3, 1997. **48**
Prenatal electrical activity directs the **physical development of the fetal brain**. **Cognitive development** begins immediately after birth. During infancy extraordinary changes take place in the brain, forging quadrillions of connections. Even **emotional development** is affected by neural circuitry laid down in **infancy**.
10. **Temperament and the Reactions to Unfamiliarity**, Jerome Kagan, *Child Development*, February 1997. **53**
Jerome Kagan's research demonstrates that **infant development** is shaped by both **genetics** and socialization. Babies born with reactive nervous systems may become subdued, fearful children, while those born with relaxed systems may become more sociable and secure. However, predicting future **personality** from infant reactivity without considering social forces would be a mistake. **Biological and psychological explanations** are both part of the **phenomena of human experiences**.
11. **Baby Talk**, Shannon Brownlee, *U.S. News & World Report*, June 15, 1998. **58**
Linguists are discovering that **infants** too young to use language can discern incorrect use of **language** rules. **Cognitive development** in the brain is literally sculpted and reorganized by language perception. Computer neural networks (artificial intelligence) have yet to come close to the computation powers of babies.

B. EARLY CHILDHOOD

12. **Your Child's Brain**, Sharon Begley, *Newsweek*, February 19, 1996. **65**
Early childhood is a critical period for learning **language**, cognitive skills, **physical skills**, and even **emotional** control. Research on the windows of opportunity for creating circuitry for these competencies is convincingly presented.

13. **Defining the Trait That Makes Us Human**, Beth Azar, *APA Monitor*, November 1997. 69

The development of empathy in **early childhood** is both a **cognitive** and an **emotional achievement**. While a **genetic** predisposition to empathize exists, **education** is important for shaping empathy. The author cites researchers' opinions on how it can best be taught in **family/parenting** contexts.

14. **Parents Speak: Zero to Three's Findings from Research on Parents' Views of Early Childhood Development**, Matthew Melmed, *Young Children*, July 1997. 72

This report by the executive director of a national organization that is dedicated to advancing **healthy infant** and **early childhood** development discusses **parents' knowledge**. **Emotional** development is viewed as more malleable than intellectual and social development. Parents want, and need, more information and support.

Overview 76

A. COGNITION

15. **The Genetics of Cognitive Abilities and Disabilities**, Robert Plomin and John C. DeFries, *Scientific American*, May 1998. 78

The authors of this article define heritability and explain how it influences **cognitive development**. They discuss the difficult hunt for specific **genes** for cognitive abilities at the molecular level and give a current status report. **Molecular genetics** may provide important answers to questions of how the environment also shapes the learning process.

16. **Basing Teaching on Piaget's Constructivism**, Constance Kamii and Janice K. Ewing, *Childhood Education*, Annual Theme Issue, 1996. 85

Piaget's **cognitive theory** embraces the view that much of learning originates from inside the child. This theory of constructivism is clearly articulated in this article. Constructivism not only explains **how children construct knowledge** but also helps adults plan more sensitive ways to teach them.

17. **In Search of a Metatheory for Cognitive Development (or, Piaget Is Dead and I Don't Feel So Good Myself)**, David F. Bjorklund, *Child Development*, February 1997. 90

Physical development of the brain (developmental biology) is guiding research in **cognitive development** today. The author believes that we are losing our common set of assumptions about cognition as the influence of Piaget's theory is waning. The author suggests the new field of evolutionary psychology as a focus for the future.

B. SCHOOLING

18. **Bell, Book, and Scandal**, *The Economist*, December 24, 1994/January 6, 1995. 95

An overview of **IQ measurement** illustrates the virtues, exaggerations, or vices of Francis Galton, Alfred Binet, Charles Spearman, L. L. Thurstone, Arthur Jensen, Howard Gardner, and others. *The Bell Curve* by Charles Murray and Richard Herrnstein is critically reviewed. Questions are raised about **cultural determinism**, the relationship of **physical development** to intellect, and the use of IQ tests to order children into differential **educational placements**.



Development during Childhood: Cognition and Schooling

Seven selections examine human development during childhood, paying specific attention to social and emotional development, cognitive and language development, and development problems.



Development during Childhood: Family and Culture

Seven selections discuss the impact of home and culture on child rearing and child development. The topics include parenting styles, family structure, and cultural influences.

19. **The Death of Child Nature: Education in the Post-modern World**, David Elkind, *Phi Delta Kappan*, November 1997. 99
David Elkind argues that **education** continues to see children as alike and amenable to universal rules even though the postmodern world stresses the importance of differences. **Culture**, race, **gender**, learning styles and other phenomena have no regularity. Children should not be expected to melt into a common amalgam; as individuals, learning is always a **creative** activity.
 20. **Teaching Television to Empower Students**, David B. Owen, Charles L. P. Silet, and Sarah E. Brown, *English Journal*, January 1998. 104
Television in our **culture** is an **education** in itself. The authors suggest using it. Teach students that it is not just entertainment. Teach them critical viewing that changes their viewing habits. Use television for lessons on diversity, **gender** roles, **violence**, sex, **aggression**, and the power of advertising.
 21. **School Phobias Hold Many Children Back**, Bridget Murray, *APA Monitor*, September 1997. 111
A child's education is harmed when the child suffers from school phobia, which causes chronic absenteeism. This article differentiates separation anxiety from simple phobia, social phobia, and **peer**-related phobia. **Family/parenting** variables, such as dependency and permissiveness, and school variables, such as **aggression** and lack of **self-esteem**, must all be addressed to conquer the problem.
-
- ### Overview 114
- A. FAMILY**
22. **Fathers' Time**, Paul Roberts, *Psychology Today*, May/June 1996. 116
The author discusses **sex differences** in **parenting**. Fathers' playful, stimulating approach fosters **emotional development** with more cooperation, more communication of emotions, and less aggression, as well as **intellectual growth** with more independence. The article gives **strategies to strengthen** father-child bonds and tells why some dads disconnect.
 23. **Invincible Kids**, *U.S. News & World Report*, November 11, 1996. 124
Some children pass through adversities with surprising strength. Research suggests that good **parenting** can overcome bad environments. Several other factors build resiliency and foster **emotional maturity**. Positive influences can turn a foundering child into a thriving survivor.
 24. **Do Parents Really Matter? Kid Stuff**, Annie Murphy Paul, *Psychology Today*, January/February 1998. 128
This article argues that **genetic influences** largely predict children's behavior. **Parenting**, to a large extent, is a response to the unique child. Genetically endowed **personality** leads the child to choose **peers**, interests, and eventually an **occupation**. Some hope exists that parents can be critical to the outcome of those traits that could become either assets or liabilities.

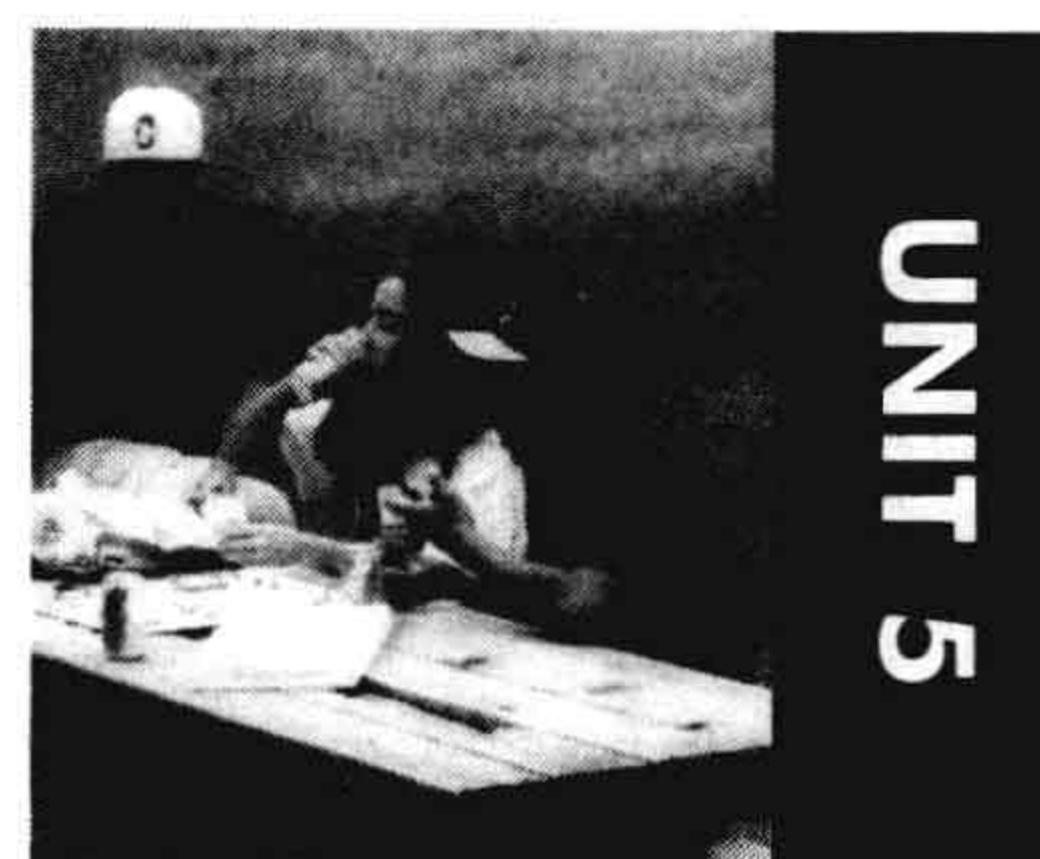
B. CULTURE

- 25. The Effects of Poverty on Children**, Jeanne Brooks-Gunn and Greg J. Duncan, *The Future of Children*, Summer/Fall 1997. **131**
This article reviews what poverty does to children's **physical development, health, nutrition, cognition, school achievement, and emotional development**. Poor children have less access to **peers** and see more **violence**. The authors back up their claims with extensive data.
- 26. TV Violence: Myth and Reality**, Mary A. Hepburn, *Social Education*, September 1995. **146**
Television in the United States is the most **violent** in the industrialized world. Research on the real and mythological effects of television violence is discussed. Myth: Viewing television violence is cathartic. Reality: Viewing television violence increases **aggression**. The author offers eight childhood activities that can foster critical viewing skills.
- 27. The Biology of Soul Murder**, *U.S. News & World Report*, November 11, 1996. **149**
Traumas (for example, **abuse, aggression, cultural violence**) experienced during childhood can effect brain chemistry, leading to **depression** and other mental and physical **health** problems. Can physiological brain changes be reversed? Much remains unknown. Love may be an antidote to **stress**.
- 28. The Cost of Children**, Phillip J. Longman, *U.S. News & World Report*, March 30, 1998. **151**
Our **culture** has made the decision to **parent** a very expensive choice. Food and **nutrition, health care, education**, transportation, clothing, and housing are only the tip of the iceberg. Phillip Longman concludes his account with his mom's words, "There's more to life than money."

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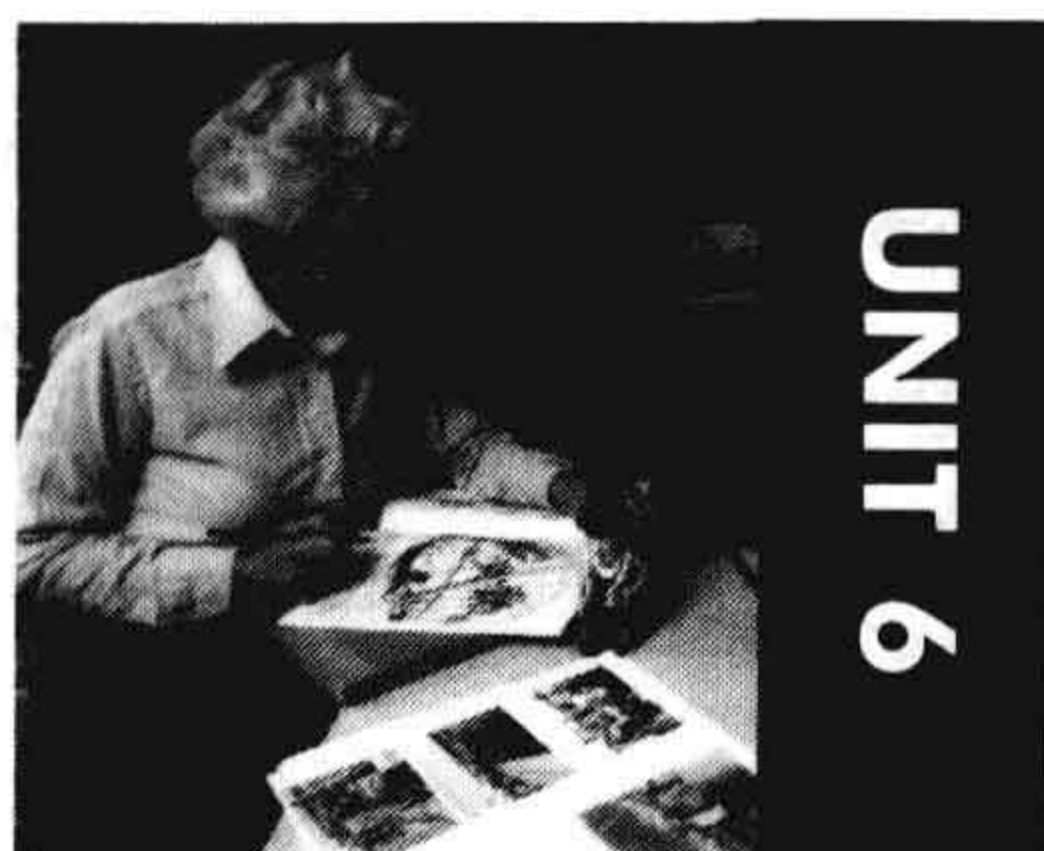
A. ADOLESCENCE

- 29. Growing Up Goes On and On and On**, Cynthia Crossen, *Wall Street Journal*, March 24, 1997. **160**
This article suggests that **adolescence** (the time between childhood and adulthood) is the longest it has ever been. **Physical** changes herald **emotional/personality** unsteadiness, **depression**, and threats to **self-esteem** that may last through age 21 or beyond. Comparisons are made with adolescence in previous decades.
- 30. Adolescence: Whose Hell Is It?** Virginia Rutter, *Psychology Today*, January/February 1995. **163**
Cognitive changes lead teens to challenge parents. **Physical development** forces parents to acknowledge teens' growing maturity. **Parents** and **adolescents** mutually withdraw. Distancing is intensified by employment, school, and social trends. Teens feel abandoned. Their turmoil includes high rates of **health** problems, **depression, violence, drug abuse, and sexual acting out**.



Development during Adolescence and Young Adulthood

Six selections explore a wide range of issues and topics concerning adolescence and early adulthood.



Development during Middle and Late Adulthood

Seven selections review a variety of biological and psychological aspects of aging, questioning the concept of set life stages.

31. **What Is a Bad Kid? Answers of Adolescents and Their Mothers in Three Cultures**, David S. Crystal and Harold W. Stevenson, *Journal of Research on Adolescence*, Volume 5, Number 1, 1995. 170
Twelve hundred adolescents and their mothers in the United States, Taiwan, and Japan answered questions about their perceptions of bad behavior. American teens mentioned **drug abuse** and school misconduct most. Chinese teens cited **rebellious** against society. Japanese teens emphasized **aggressive peer relations**. Mothers' answers were similar to their teens' across cultures.
32. **Experts Scrambling on School Shootings**, Scott Sleek, *APA Monitor*, August 1998. 181
Scott Sleek reports on the surge in school-based shootings in small towns and in rural and suburban areas. He notes that **teenagers** are exposed to **violence** on **television**, in movies, and in video games, and that **drug abuse** is a teenage problem everywhere. Youths with low **self-esteem** and high **stress** may resort to **aggressive** acts as a means of getting attention. Other prompts to these shootings may be the absence of **moral values** and feelings of rejection.

B. YOUNG ADULTHOOD

33. **Brain Sex and the Language of Love**, Robert L. Nadeau, *The World & I*, November 1997. 185
Young adults show **gender differences** in intimacy. Male **communication** emphasizes action and autonomy. Female language promotes sharing and consensus. Women give "lack of communication" as a reason for **divorce**. Robert Nadeau explains that some of these differences may result from sex-specific brain hemisphere functioning.
34. **Who Stole Fertility?** Virginia Rutter, *Psychology Today*, March/April 1996. 191
Each year over 3 million American **young adults** seek **fertility** counseling. Sexually transmitted diseases, hormones in meat, and delayed childbearing have caused fertility problems. Impatience and the technofertility industry have caused others. **Self-esteem** is tied to reproduction. The **stress** surrounding conception failure often leads to **divorce**.

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A. MIDDLE ADULTHOOD

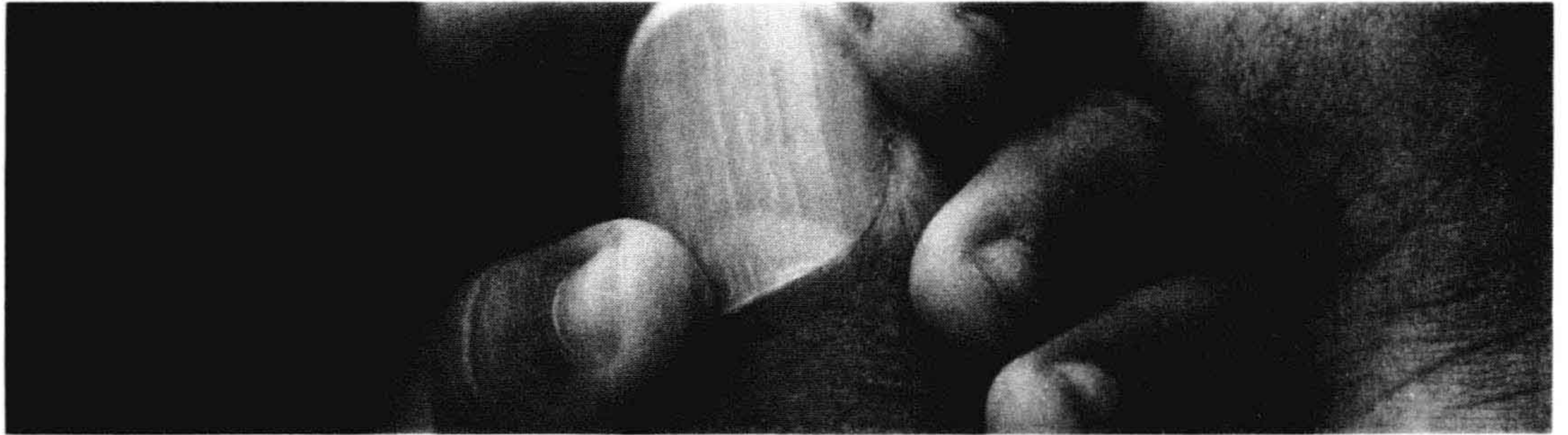
35. **Man's World, Woman's World? Brain Studies Point to Differences**, Gina Kolata, *New York Times*, February 28, 1995. 198
There are subtle but significant **sex differences** in the **cognitive** functioning of brains in **middle adulthood**. The limbic systems of men direct more physical actions (for example, jumps) while those of women direct more symbolic actions (such as growls). Other differences include sensitivity to emotions, spatial orientations, and **language** comprehension.
36. **Memory**, Geoffrey Cowley and Anne Underwood, *Newsweek*, June 15, 1998. 201
Forgetfulness is America's latest **health** obsession. What changes in **cognition** can be wrought with **nutrition**, **stress management**, and exercise? Books and seminars on memory retention sell quickly to **middle-aged adults**. This article discusses many antidotes for forgetfulness.

B. LATE ADULthood

37. The Age Boom, Jack Rosenthal, New York Times Magazine, March 9, 1997.	206
The institutions that are most important for older adults are the same as those for others: family, school, work . The author discusses raising grandchildren, going back to college after 50, and continuing to work after retirement as phenomena of the culture of late adulthood today.	
38. Studies Suggest Older Minds Are Stronger than Expected, Daniel Goleman, New York Times, February 26, 1996.	210
By late adulthood , the human brain loses about 10 percent of the mass it had at age 20. However, in healthy adults, the cognitive changes are minimal. The resourceful older brain compensates like a baseball pitcher who uses other pitches after the fastball slows down. Several research studies document this plasticity.	
39. Cure or Care? The Future of Medical Ethics, Robert B. Mellert, The Futurist, July/August 1997.	212
The right to die and doctor-assisted suicide are moral/ethical issues that confront many people in late adulthood . Is our culture moving in the direction of allowing patients to choose their time of death? Should cures be attempted even if they involve extraordinary, experimental procedures? What do these questions mean to health care providers?	
40. The DeathCare Business, Miriam Horn, U.S. News & World Report, March 23, 1998.	216
American culture now includes a megabucks funeral industry. Prices of funerals have risen three times faster than the cost of living in 5 years. This article questions the ethics of capitalizing on bereaved and distraught older adults , and of targeting groups with more traditional rituals for especially high-priced funerals.	
41. The Solace of Patterns, Robert M. Sapolsky, The Sciences, November/December 1994.	222
Human development is finite. Death ends late adulthood . Survivors go through stages of grieving. Robert Sapolsky compares and contrasts several life-stage theories (those of Sigmund Freud, Jean Piaget, Lawrence Kohlberg, and Erik Erikson) to Elisabeth Kübler Ross's death-stage theory and finds solace in their patterns.	
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Human Development

99/00

Twenty-Seventh Edition**EDITOR****Karen L. Freiberg***University of Maryland, Baltimore County*

Dr. Karen Freiberg has an interdisciplinary educational and employment background in nursing, education, and developmental psychology. She received her B.S. from the State University of New York at Plattsburgh, her M.S. from Cornell University, and her Ph.D. from Syracuse University. Freiberg has worked as a school nurse, a pediatric nurse, a public health nurse for the Navajo Indians, an associate project director for a child development clinic, a researcher in several areas of child development, and a university professor. She is the author of an award-winning textbook, *Human Development: A Life-Span Approach*, which is now in its fourth edition. Dr. Freiberg is currently on the faculty at the University of Maryland, Baltimore County.

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Topic Guide

This topic guide suggests how the selections and World Wide Web sites found in the next section of this book relate to topics of traditional concern to human development students and professionals. It is useful for locating interrelated articles and Web sites for reading and research. The guide is arranged alphabetically according to topic.

The relevant Web sites, which are numbered and annotated on pages 4 and 5, are easily identified by the Web icon (Ⓢ) under the topic articles. By linking the articles and the Web sites by topic, this ANNUAL EDITIONS reader becomes a powerful learning and research tool.

TOPIC AREA	TREATED IN	TOPIC AREA	TREATED IN
Adolescence	29. Growing Up Goes On and On 30. Adolescence: Whose Hell Is It? 31. What Is a Bad Kid? 32. Experts Scrambling on School Shootings Ⓢ 1, 26, 27, 28, 29	Early Childhood	32. Experts Scrambling on School Shootings Ⓢ 33, 21, 23, 26, 27, 28
Aggression	20. Teaching Television 21. School Phobias 22. Fathers' Time 26. TV Violence: Myth and Reality 27. Biology of Soul Murder 31. What Is a Bad Kid? 32. Experts Scrambling on School Shootings Ⓢ 2, 10, 13, 18, 21, 23, 27, 28	Education/School	12. Your Child's Brain 13. Defining the Trait That Makes Us Human 14. Parents Speak Ⓢ 6, 8, 9, 10, 11, 12, 14
Cognitive Development	7. Drug-Exposed Infants 9. Fertile Minds 11. Baby Talk 13. Defining the Trait That Makes Us Human 15. Genetics of Cognitive Abilities 16. Basing Teaching on Piaget's Constructivism 17. In Search of a Metatheory 25. Effects of Poverty on Children 30. Adolescence: Whose Hell Is It? 35. Man's World, Woman's World? 36. Memory 38. Studies Suggest Older Minds Are Stronger Ⓢ 6, 9, 17, 18, 19, 20	Emotional Development/Personality	13. Defining the Trait That Makes Us Human 18. Bell, Book, and Scandal 19. Death of Child Nature 20. Teaching Television 21. School Phobias 25. Effects of Poverty on Children 28. Cost of Children 31. What Is a Bad Kid? 37. Age Boom Ⓢ 17, 19, 20
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Culture	6. Maternal Emotions 18. Bell, Book, and Scandal 19. Death of Child Nature 20. Teaching Television 27. Biology of Soul Murder 28. Cost of Children 37. Age Boom 39. Cure or Care? 40. DeathCare Business Ⓢ 6, 9, 17, 18, 19, 20	Ethics/Morality	7. Drug-Exposed Infants 9. Fertile Minds 10. Temperament and the Reactions to Unfamiliarity 12. Your Child's Brain 13. Defining the Trait That Makes Us Human 14. Parents Speak 22. Fathers' Time 23. Invincible Kids 24. Do Parents Really Matter? 25. Effects of Poverty on Children 29. Growing Up Goes On and On Ⓢ 2, 5, 8, 13, 18, 23, 24, 25
Depression	29. Growing Up Goes On and On 30. Adolescence: Whose Hell Is It? Ⓢ 26, 27, 28, 29		10. Temperament and the Reactions to Unfamiliarity 32. Experts Scrambling on School Shootings 39. Cure or Care? 40. DeathCare Business Ⓢ 1, 2, 4
Divorce	33. Brain Sex and the Language of Love 34. Who Stole Fertility? Ⓢ 22, 24, 25	Family/Parenting	13. Defining the Trait That Makes Us Human 14. Parents Speak 21. School Phobias 22. Fathers' Time 23. Invincible Kids 24. Do Parents Really Matter? 28. Cost of Children 30. Adolescence: Whose Hell Is It? 37. Age Boom Ⓢ 22, 23, 24, 25
Drug Abuse	4. Role of Lifestyle 6. Maternal Emotions 7. Drug-Exposed Infants 8. Sperm under Siege 30. Adolescence: Whose Hell Is It? 31. What Is a Bad Kid?	Fertility	3. Nature's Clones 34. Who Stole Fertility?

TOPIC AREA	TREATED IN	TOPIC AREA	TREATED IN
Genetics	1. Struggle to Decipher Human Genes 2. World after Cloning 3. Nature's Clones 10. Temperament and the Reactions to Unfamiliarity 15. Genetics of Cognitive Abilities 24. Do Parents Really Matter? • 6, 7, 8, 9	Physical Development	5. Behaviors of a Newborn 6. Maternal Emotions 7. Drug-Exposed Infants 9. Fertile Minds 12. Your Child's Brain 17. In Search of a Metatheory 18. Bell, Book, and Scandal 25. Effects of Poverty on Children 29. Growing Up Goes On and On 30. Adolescence: Whose Hell Is It? • 2, 7, 8, 9, 10, 15, 17, 19, 20
Health	1. Struggle to Decipher Human Genes 4. Role of Lifestyle 7. Drug-Exposed Infants 14. Parents Speak 25. Effects of Poverty on Children 27. Biology of Soul Murder 28. Cost of Children 30. Adolescence: Whose Hell Is It? 36. Memory 38. Studies Suggest Older Minds Are Stronger 39. Cure or Care? • 3, 5, 11, 12, 13, 15, 26, 27, 28, 30, 31	Prenatal Development	3. Nature's Clones 4. Role of Lifestyle 5. Behaviors of a Newborn 6. Maternal Emotions 7. Drug-Exposed Infants 8. Sperm under Siege 9. Fertile Minds • 3, 5, 6, 8, 9
Infant Development	5. Behaviors of a Newborn 6. Maternal Emotions 7. Drug-Exposed Infants 9. Fertile Minds 10. Temperament and the Reactions to Unfamiliarity 11. Baby Talk 14. Parents Speak • 6, 7, 8, 9, 11, 12, 13, 14	Self-Esteem	21. School Phobias 29. Growing Up Goes On and On 32. Experts Scrambling on School Shootings 34. Who Stole Fertility? • 21, 23, 24, 25
Language/Communication	11. Baby Talk 12. Your Child's Brain 33. Brain Sex and the Language of Love 35. Man's World, Woman's World? • 9, 10, 11, 12, 13, 14, 31	Sex/Gender Differences	19. Death of Child Nature 20. Teaching Television 22. Fathers' Time 33. Brain Sex and the Language of Love 35. Man's World, Woman's World? • 23, 24, 25, 26, 27, 28, 29
Late Adulthood	37. Age Boom 38. Studies Suggest Older Minds Are Stronger 39. Cure or Care? 40. DeathCare Business 41. Solace of Patterns • 30, 31, 32, 33, 34, 35	Stress	6. Maternal Emotions 27. Biology of Soul Murder 32. Experts Scrambling on School Shootings 34. Who Stole Fertility? 36. Memory • 2, 8, 9, 10, 18, 21
Middle Adulthood	35. Man's World, Woman's World? 36. Memory • 31	Television	20. Teaching Television 26. TV Violence: Myth and Reality 32. Experts Scrambling on School Shootings • 4
Nutrition	4. Role of Lifestyle 25. Effects of Poverty on Children 28. Cost of Children 36. Memory • 11, 14, 15, 26, 33	Teratogens	4. Role of Lifestyle 6. Maternal Emotions 7. Drug-Exposed Infants 8. Sperm under Siege • 5, 14, 15, 21
Occupation/Work	24. Do Parents Really Matter? 30. Adolescence: Whose Hell Is It? 37. Age Boom • 22, 24, 25	Violence/Rape	20. Teaching Television 25. Effects of Poverty on Children 26. TV Violence: Myth and Reality 30. Adolescence: Whose Hell Is It? • 26, 27, 28, 29
Peers	21. School Phobias 24. Do Parents Really Matter? 25. Effects of Poverty on Children 31. What Is a Bad Kid? • 18, 21, 24, 25	Young Adulthood	33. Brain Sex and the Language of Love 34. Who Stole Fertility? • 26, 27, 28, 29

● AE: Human Development

The following World Wide Web sites have been carefully researched and selected to support the articles found in this reader. If you are interested in learning more about specific topics found in this book, these Web sites are a good place to start. The sites are cross-referenced by number and appear in the topic guide on the previous two pages. Also, you can link to these Web sites through our DUSHKIN ONLINE support site at <http://www.dushkin.com/online/>.

The following sites were available at the time of publication. Visit our Web site—we update DUSHKIN ONLINE regularly to reflect any changes.

General Human Development Issues

1. Association for Moral Education

<http://www.wittenberg.edu/ame/index.html>

This association is dedicated to fostering communication, cooperation, training, curriculum development, and research that links moral theory to educational practices.

2. Behavior Analysis Resources

<http://www.coedu.usf.edu/behavior/bares.htm>

This site is dedicated to promoting the experimental, theoretical, and applied analysis of behavior. It encompasses contemporary scientific and social issues, theoretical advances, and the dissemination of professional and public information.

3. Healthfinder

<http://www.healthfinder.org/default.htm>

Healthfinder is a consumer health site that contains the latest health news, prevention and care choices, and information about every phase of human development.

4. Social Influence

<http://www.public.asu.edu/~kelton/>

This site focuses on persuasion, compliance, and propaganda and includes practical examples and applications.

Genetic and Prenatal Influences on Development

5. American Academy of Pediatrics

<http://www.aap.org/>

This organization provides data for optimal physical, mental, and social health for all children. The site links to professional educational sources and current research.

6. Basic Neural Processes

<http://psych.hanover.edu/Krantz/neurotut.html>

This highly interactive site provides an extensive tutorial on brain structures.

7. Evolutionary Psychology: A Primer

<http://www.psych.ucsb.edu/research/cep/primer.htm>

A complete paper on evolutionary psychology is at this site. A great deal of background information is included.

8. Human Genetics and Human Genome Project

<http://www.kumc.edu/instruction/medicine/genetics/homepage.html>

The University of Kansas Medical Center provides information on human genetics and the human genome project at this site. A number of links to research areas are available.

9. Serendip

<http://serendip.brynmawr.edu/serendip/>

Organized into five subject areas (brain and behavior, complex systems, genes and behavior, science and culture, and science education), this site contains interactive exhibits, articles, links to other resources, and a forum.

Development during Infancy and Early Childhood

10. Aggression and Cooperation: Helping Young Children Develop Constructive Strategies

<http://ericps.crc.uiuc.edu/eece/pubs/digests/1992/jewett92.html>

Jan Jewett wrote this ERIC Digest report on how to help children deal effectively with aggression. Helping children develop prosocial attitudes and behaviors is its goal.

11. Children's Nutrition Research Center (CNRC)

<http://www.bcm.tmc.edu/cnrc/>

CNRC, one of six USDA/ARS (Agricultural Research Service) facilities, is dedicated to defining the nutrient needs of healthy children, from conception through adolescence, and of pregnant and nursing mothers.

12. Early Childhood Care and Development

<http://www.ecdgroup.com/>

Child development theory, programming and parenting data, and research can be found at this site of the Consultative Group, which is dedicated to the improvement of conditions of young children at risk.

13. Society of Pediatric Psychology (SPP)

<http://macserv.psy.miami.edu/SPP/>

The homepage for the Society of Pediatric Psychology, which provides a forum for scientists and professionals who are interested in the health care of children, adolescents, and their families, links to publications and other sites.

14. Zero to Three: National Center for Infants, Toddlers, and Families

<http://www.zerotothree.org/>

This national organization is dedicated solely to infants, toddlers, and their families. It is headed by recognized experts in the field and provides technical assistance to communities, states, and the federal government.

Development during Childhood: Cognition and Schooling

15. Children Now

<http://www.childrennow.org/>

Children Now focuses on improving conditions for children who are poor or at risk. Articles include information on education, influence of media, health, and security.

16. Council for Exceptional Children

<http://www.cec.sped.org/>

This is the home page of the Council for Exceptional Children, which is dedicated to improving education for exceptional children and the gifted child.

17. Educational Resources Information Center (ERIC)

<http://www.ed.gov/pubs/pubdb.html>

This Web site is sponsored by the United States Department of Education and will lead to numerous documents related to elementary and early childhood education.

18. Federation of Behavioral, Psychological, and Cognitive Science

<http://www.am.org/federation/>

The Federation's mission is fulfilled through legislative and regulatory advocacy, education, and information dissemination to the scientific community. Hotlink to the National Institutes of Health's Project on the Decade of the Brain.

19. The National Association for the Education of Young Children (NAEYC)

<http://www.naeyc.org/>

The NAEYC is the nation's largest organization of professionals devoted to improving the quality of education programs for children from birth through the age of eight.

20. Project Zero

<http://pzweb.harvard.edu/>

Harvard's Project Zero has investigated the development of learning processes in children and adults for 30 years. Today, Project Zero is helping create communities of reflective, independent learners; to enhance deep understanding within disciplines; and to promote critical and creative thinking.

Development during Childhood: Family and Culture

21. Childhood Injury Prevention Interventions

<http://weber.u.washington.edu/~hiprc/childinjury/menu.html>

This site offers systematic reviews of childhood injury prevention interventions on such diverse subjects as adolescent suicide, child abuse, accidental injuries, and youth violence.

22. Families and Work Institute

<http://www.familiesandworkinst.org>

The Families and Work Institute conducts policy research on issues related to the changing workforce and operates a national clearinghouse on work and family life.

23. National Committee to Prevent Child Abuse

<http://www.childabuse.org/>

This site is dedicated to the NCPA's child abuse prevention efforts. It provides statistics, parenting tips, chapter data, and other resources.

24. The National Parent Information Network

<http://ericps.crc.uiuc.edu/npin/>

This NPIN site contains resources related to many of the controversial issues faced by parents raising children in contemporary society. Discussion groups are also available.

25. Parentsplace.com: Single Parenting

<http://www.parentsplace.com/family/singleparent/>

This resource focuses on issues concerning single parents and their children. The articles range from parenting children from infancy through adolescence.

Development during Adolescence and Young Adulthood

26. AMA - Adolescent Health On Line

<http://www.ama-assn.org/adolhlth/adolhlth.htm>

This AMA adolescent health initiative describes clinical preventive services that primary care physicians and other health professionals can provide to young people.

27. American Academy of Child and Adolescent Psychiatry

<http://www.aacap.org/web/aacap/>

This rich site provides up-to-date data on a host of topics: facts for families, public health, and clinical practice.

28. Ask NOAH About: Mental Health

<http://www.noah.cuny.edu/illness/mentalhealth/mental.html>

An enormous resource, NOAH contains information about child and adolescent family problems, mental conditions and disorders, suicide prevention, and much more.

29. Biological Changes in Adolescence

<http://www.personal.psu.edu/faculty/n/x/nxd10/biologic2.htm>

This site offers a discussion of puberty, sexuality, biological changes, cross-cultural differences, and nutrition for adolescents, including a look at obesity.

Development during Middle and Late Adulthood

30. The Alzheimer Page

<http://www.biostat.wustl.edu/ALZHEIMER/>

This site links to a wide range of sites devoted to Alzheimer's disease and dementia.

31. American Psychological Association's Division 20, Adult Development and Aging

<http://www.iog.wayne.edu/APADIV20/lowdiv20.htm>

Dedicated to studying the psychology of adult development and aging, this division provides links to research guides, laboratories, instructional resources, and other related areas.

32. Gero Web

<http://www.iog.wayne.edu/GeroWebd/GeroWeb.html>

This virtual library on aging contains information on gerontology, geriatrics, and the process of aging.

33. Goldenage.Net

<http://elo.mediasrv.swt.edu/goldenage/intro.htm>

Here is a great starting point for Internet research on aging topics such as housing and long term care, health, and nutrition. It links to home pages across the Web.

34. Grief Net

<http://rivendell.org/>

Produced by a nonprofit group, Rivendell Resources, this site provides many links to the Web on the bereavement process, resources for grievers, and support groups.

35. Huffington Center on Aging

<http://www.hcoa.org/>

The Huffington Center on Aging home page offers links to sites on aging and Alzheimer's disease.

We highly recommend that you review our Web site for expanded information and our other product lines. We are continually updating and adding links to our Web site in order to offer you the most usable and useful information that will support and expand the value of your Annual Editions. You can reach us at:
<http://www.dushkin.com/annualeditions/>.

Unit Selections

Genetic Influences

1. **The Struggle to Decipher Human Genes**, Nicholas Wade

2. **The World after Cloning**, Wray Herbert, Jeffrey L. Sheler, and Traci Watson

3. **Nature's Clones**, Jim Neimark

Parental Influences

4. **The Role of Lifestyle in Preventing Low Birth Weight**, Virginia Rall Chomitz, Lilian W. Y. Cheung, and Ellice Lieberman

5. **Behaviors of a Newborn Can Be Traced to the Fetus**, Beth Azar

6. **Maternal Emotions May Influence Fetal Behaviors**, Beth Azar

7. **Drug-Exposed Infants**, Lucy Salcido Carter and Carol S. Larson

8. **Sperm under Siege**, Anne Merewood

Key Points to Consider

- ❖ How much do we know about the human genome? Why do we want a complete genetic blueprint of humans?
- ❖ What controversies are emerging from cloning technology? How do you feel about the moral/ethical questions?
- ❖ Do studies of identical twins give answers to the age-old nature–nurture questions? What strategies can reduce the numbers of babies born with low birth weight and at risk of developmental disabilities?
- ❖ Why is prenatal tactile stimulation imperative to survival?
- ❖ How do women who are stressed or who smoke during pregnancy influence their baby's temperament?
- ❖ What is the status of drug abuse prevention and treatment programs for pregnant women?
- ❖ How do sperm contribute to prenatal development?



Links

www.dushkin.com/online/

5. **American Academy of Pediatrics**

<http://www.aap.org/>

6. **Basic Neural Processes**

<http://psych.hanover.edu/Krantz/neurotut.html>

7. **Evolutionary Psychology: A Primer**

<http://www.psych.ucsb.edu/research/cep/primer.htm>

8. **Human Genetics and Human Genome Project**

<http://www.kumc.edu/instruction/medicine/genetics/homepage.html>

9. **Serendip**

<http://serendip.brynmawr.edu/serendip/>

These sites are annotated on pages 4 and 5.