



Physical Development and Health in Adolescence



Chapter 15



Question: What is “Adolescence”?

- *What age period do you think of when you hear the word “adolescence”? Decide when you think it begins and ends.*
- *What words or images come to your mind when you hear the word “teenager”? Make a list.*



Adolescence

- Adolescence refers to the age period between childhood and adulthood.
 - TWEENS: 10-12 years
 - TEENS: 13-18 years
 - EMERGING ADULTHOOD: 18-25 yrs



Assignment

- Chapter 15 Activity: Adolescence Now and Then
- Interview two different people.
- What do you see as the main difference between the teenagers of today and when you were a teenager? What do you think of today's teenagers?



Adolescence:

A Developmental Transition

- “Coming of Age” Markers

- Adolescence

- Developmental transition that involves physical, cognitive, emotional, and social changes and takes varying forms in different social, cultural, and economic settings

- Onset of puberty

- Process that leads to sexual maturation



Adolescence: A Developmental Transition

- Adolescence As a Social Construction
 - Adolescence is lasting longer
 - Puberty is starting earlier
 - Vocations occurs later
 - Less clear cut as in the past



Adolescence: A Developmental Transition

- Adolescence: A Time of Risks and Opportunities
 - Risks
 - High death rates from accidents, homicide, and suicide
 - Drugs
 - Opportunities
 - Cognitive and social competence
 - Autonomy and self-esteem
 - Intimacy



Puberty: The End of Childhood

- How Puberty Begins: Hormonal Changes
 - Rapid growth in height and weight
 - Changes in body proportions and form
 - Attainment of sexual maturity
 - Adrenarche: maturing of adrenal gland
 - Gonadarche: sex organ maturity



Puberty: The End of Childhood

- Timing, Signs, and Sequence of Puberty and Sexual Maturity
 - Primary sex characteristics
 - Organs necessary for reproduction
 - Secondary sex characteristics
 - Physiological signs of sexual maturation
 - Breasts of females
 - Broad shoulders of males



Puberty: The End of Childhood

- Timing, Signs, and Sequence of Puberty and Sexual Maturity
 - Signs of puberty
 - Breast tissue
 - Areolae enlarge
 - Pubic hair
 - Enlargement of testes
 - Voice deepens



Puberty: The End of Childhood

- Timing, Signs, and Sequence of Puberty and Sexual Maturity
 - Adolescent growth spurt
 - Rapid increase in height, weight, and muscle and bone growth
 - Lasts about 2 years
 - Boys: entry about age 10 ½ and 16
 - Girls: changes shown between ages 9 ½ and 14



Puberty: The End of Childhood

- Timing, Signs, and Sequence of Puberty and Sexual Maturity
 - Signs of sexual maturity: Sperm production and menstruation
 - Spermatarche
 - First ejaculation
 - Menarche
 - First menstruation



Puberty: The End of Childhood

- Timing, Signs, and Sequence of Puberty and Sexual Maturity
 - Influences on timing of puberty
 - Secular trend
 - Pheromones
 - Odorous chemicals that attract mates
 - May delay or accelerate puberty



Puberty: The End of Childhood

- Psychological Effects of Early and Late Maturation
 - Most boys like to mature early
 - Early maturers seems to gain in self-esteem but may have trouble meeting expectations
 - Late maturers may have more conflict and poorer social and coping skills



The Adolescent Brain

- Two major changes in brain
 - Before birth and during infancy: growth and pruning of gray matter
 - Before puberty: production of gray matter, may be related to surge of sex hormones
 - Mainly in frontal lobes: affects reasoning ability, judgment, emotions, and impulse control



The Adolescent Brain

- Changes in Brain Structures Affect...
 - Emotions
 - Judgment
 - Organization of behavior
 - Self-control



Physical and Mental Health

- Health Problems and Health-Related Behaviors
 - Physical activity
 - Improves strength and endurance
 - Helps build healthy bone and muscles
 - Helps control weight
 - Reduces anxiety and stress
 - Increases self-esteem, school grades, and well-being



Physical and Mental Health

■ Sleep Needs

- Sleep deprivation in adolescents is an epidemic
- Deprivation can sap motivation and cause irritability; concentration in school can suffer
- Melatonin secretion takes place later at night
 - Schools are out of sync with biological rhythms





Make it Real: School Schedules

- A few high schools have experimented with later start (and end) times for the school day, with positive results.
 - Would you have liked this idea?
 - What problems might it have created for you?



Physical and Mental Health: Body Image

- Adolescents report that their **body image** is the *most important* predictor of their self-esteem.
- Unfortunately, this can lead to eating disorders.



PHOTODISC



Physical and Mental Health

- Obesity/Overweight
 - Girls need 2,200 calories per day; boys need 2,800
 - Overweight is 50 more prevalent in poor families
 - Overweight teenagers tend to be in poorer health than peers
 - Genetic and other factors do not influence lifestyle choices and willpower but can affect overweight susceptibility



Physical and Mental Health

- Nutrition and Eating Disorders
 - Body image and eating disorders
 - Body image concerns linked to eating disorders
 - Girls more affected
 - Anorexia Nervosa
 - Bulimia Nervosa
 - Binge eating disorder
 - Treatments and outcomes



Physical and Mental Health

- Use and Abuse of Drugs
 - Substance abuse
 - Harmful use of alcohol or other drugs
 - Substance dependence
 - Addiction
 - Physiological
 - Psychological



Physical and Mental Health

- Use and Abuse of Drugs
 - Trends in drug use
 - 48 percent of U.S. adolescents have tried illicit drugs by the end of high school
 - Nonmedical use of prescription drugs
 - Abuse of nonprescription cough and cold medications



Physical and Mental Health

- Use and Abuse of Drugs
 - Risk factors for drug abuse
 - “Difficult” temperament
 - Poor impulse control and sensation seeking
 - Family influences
 - Early and persistent behavior problems
 - Academic failure; lack of educational commitment
 - Peer rejection
 - Associating with drug users
 - Alienation and rebelliousness
 - Favorable attitudes toward drug use
 - Early initiation into drug use



Physical and Mental Health

■ Use and Abuse of Drugs

■ Alcohol

- Potent, mind-altering drug with effects on physical, emotional, and social well-being

■ Marijuana

- Most widely used illicit drug in the United States

■ Tobacco

- Use has declined by one-third to one-half since mid-1990s



Physical and Mental Health

- Use and Abuse of Drugs
 - Dangers of early initiation
 - Early commencement of a drug is linked to more frequent use and a greater tendency to abuse.
 - Average age for starting to drink is 13 to 14



Physical and Mental Health

- Use and Abuse of Drugs
 - Influences on smoking and drinking
 - Peer influence
 - Use of substances in the media
 - Watching more than four hours of television per day increased the prevalence of smoking 5 to 6 times compared to those who watched less than two hours of television per day



Make it Real: Drug Use

■ What was the atmosphere regarding drug use at your high school, or in your neighborhood?



STUART FRANKLIN / MAGNUM PHOTOS



Physical and Mental Health

■ Depression

- May appear as irritability, boredom, or inability to experience pleasure
- Risk factors
 - Gender, anxiety, fear of social contact, stressful life events, chronic illness, parent-child conflict, abuse or neglect, alcohol and drug use, sexual activity, and genetics



Physical and Mental Health

- Death in Adolescence
 - Motor vehicle collisions are the leading cause of death among U.S. teenagers
 - Firearm-related deaths of 15 to 19-year-olds (suicide, homicide, accidents) occur more in U.S. than in other industrialized countries
 - Ready availability of guns in the home is a major factor in teenage suicide





Physical and Mental Health

■ Death in Adolescence

■ Suicide

- Adolescent boys are 6 times more likely to commit suicide than girls
- Native American boys, homosexual and bisexual youth are at the highest risk
- African American girls: lowest rates
- History of emotional illness
- Neurocognitive deficits in executive function found in postmortem studies



Physical and Mental Health

- Protective Factors:
Health in Context
 - Perceptions of connectedness to others
 - Parents' spending time with and being available
 - Sense that parents and teachers are warm and caring and have high expectations for achievement

