

## Adolescence



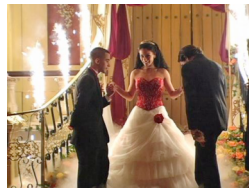
"At your age, Tommy, a boy's body goes through changes that are not always easy to understand."

## Defining Adolescence

- The [World Health Organization](#) (WHO) defines adolescence as the period of life between 10-19 yrs of age.
- In the [United States](#), adolescence begins approximately between ages 12-14, and ends from 19-21.

## Cultural Celebrations

- Bat or Bar Mitzvah for 12 yr old Jewish girls and 13 yr old Jewish boys
- Upanayanam for males in the Hindu world
- African boys have a coming of age ceremony which the males state a promise to never do anything to shame their families or their village.
- Sweet sixteen- U.S.
- Quinceanera- Latin culture



## Adolescence

Many psychologists once believed that our traits were set during childhood. Today psychologists believe that development is a lifelong process.

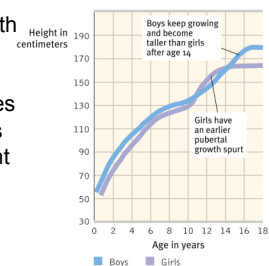


## Puberty



## Physical Development

Adolescence begins with **puberty** (sexual maturation). Puberty occurs earlier in females (11 years) than males (13 years). Thus height in females increases before males.



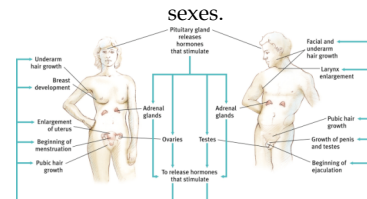
## Primary Sexual Characteristics

During puberty **primary sexual characteristics** — the reproductive organs and external genitalia — develop rapidly.



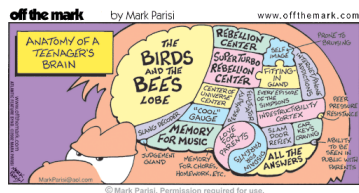
## Secondary Sexual Characteristics

Also **secondary sexual characteristics**—the nonreproductive traits such as breasts and hips in girls and facial hair and deepening of voice in boys develop. Pubic hair and armpit hair grow in both



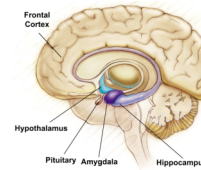
## Getting Inside the Adolescent Brain

Selective pruning of unused neurons and connections  
“You lose what you don’t use”



## Frontal Cortex

During adolescence, neurons in the frontal cortex grow myelin, which speeds up nerve conduction. The frontal cortex lags behind the limbic system’s development. Hormonal surges and the limbic system may explain occasional teen impulsiveness.



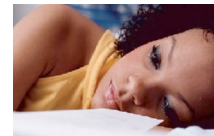
## Cognitive Development

Adolescents’ ability to reason gives them a new level of social awareness. In particular, they may think about the following:

- ☞ Their own thinking.
- ☞ What others are thinking.
- ☞ What others are thinking about them.
- ☞ How ideals can be reached. They criticize society, parents, and even themselves.

## Self-Esteem

- When females reach adolescence, they are about twice as likely to be depressed when compared to their male counterparts.
- Body image issues (for the girls and guys)



## Developing Reasoning Power

According to Piaget, adolescents can handle abstract problems (i.e., they can perform *formal operations*). Adolescents can judge good from evil, truth and justice, and think about religion/spirituality in deeper terms.



## Moral Development

Kohlberg's Moral ladder (1981, 1984)

**Preconventional Morality:** Before age 9, children show morality to avoid punishment or gain reward.

**Conventional Morality:** By early adolescence, social rules and laws are upheld for their own sake.

**Postconventional Morality:** Affirms people's agreed-upon rights or follows personally perceived ethical principles.



"Is it okay to steal medicine to save a life?"

## Moral Feeling

Moral feeling is more than moral thinking. When posed with simulated moral dilemmas, the brain's emotional areas only light up when the nature of the dilemmas is emotion-driven.



## Moral Action



Moral action involves doing the right thing. People who engage in doing the right thing develop empathy for others and the self-discipline to resist their own impulses.

## Social Development

Peer groups  
Erikson's Identity VS Role Confusion



ERIKSON'S STAGES OF PSYCHOSOCIAL DEVELOPMENT		
Stage (approximate age)	Issues	Description of Task
Infancy (0 to 1 year)	Trust vs. mistrust	If needs are dependably met, infants develop a sense of basic trust.
Toddlerhood (1 to 2 years)	Autonomy vs. shame and doubt	Toddlers learn to exercise will and do things for themselves, or they doubt their abilities.
Preschooler (3 to 5 years)	Initiative vs. guilt	Preschoolers learn to initiate tasks and carry out plans, or they feel guilty about efforts to be independent.
Elementary school (6 years to puberty)	Competence vs. inferiority	Children learn the pleasure of applying themselves to tasks, or they feel inferior.
Adolescence (teen years into 20s)	Identity vs. role confusion	Teenagers work at refining a sense of self by testing roles and then integrating them to form a single identity, or they become confused about who they are.
Young adulthood (20s to early 40s)	Intimacy vs. isolation	Young adults struggle to form close relationships and to gain the capacity for intimate love, or they feel socially isolated.
Middle adulthood (40s to 60s)	Generativity vs. stagnation	In middle age, people discover a sense of contributing to the world, usually through family and work, or they may feel a lack of purpose.
Late adulthood (late 60s and up)	Integrity vs. despair	When reflecting on his or her life, the older adult may feel a sense of satisfaction or failure.

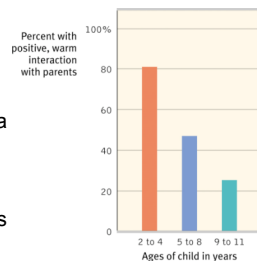
## Identity

- Independence from parents
- Figuring out "who we are"
- May be exploring sexual orientation, religious beliefs, etc.



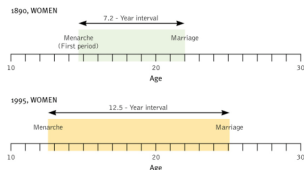
## Parent and Peer Influence

Although teens become independent of their parents as they grow older, they nevertheless relate to their parents on a number of things, including religiosity and career choices. Peer approval and relationships are also very important.



## Emerging Adulthood

Emerging adulthood spans ages 18-25. During this time, young adults may live with their parents and attend college or work.



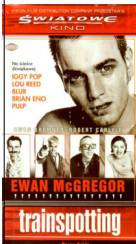
## Adulthood

- Independence
- Social Clock: The cultural prescription of "the right time" to leave home, get a job, marry, have children, and retire



## Sometimes we mock the predictability of our social clock...

<http://www.youtube.com/watch?v=T3g9nTOV9KM>



- "Choose life. Choose a job. Choose a career. Choose a family. Choose a f\*\*\*ing big television. Choose washing machines, cars, compact disc players, and electrical tin openers. Choose good health, low cholesterol and dental insurance. Choose fixed-interest mortgage repayments. Choose a starter home. Choose your friends. Choose leisure wear and matching luggage. Choose a three piece suite on hire purchase in a range of f\*\*\*ing fabrics. Choose DIY and wondering who you are on a Sunday morning. Choose sitting on that couch watching mind-numbing sprit-crushing game shows, stuffing f\*\*\*ing junk food into your mouth. Choose rotting away at the end of it all, p\*\*\*hing you last in a miserable home, nothing more than an embarrassment to the selfish, f\*\*\*ed-up brats you have spawned to replace yourself. Choose your future. Choose life"



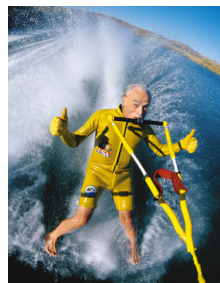
## Love & Marriage

- Average age
- Reasons for later marriage
- Cohabiting



## Adulthood

Although adulthood begins sometime after a person's mid-twenties, defining adulthood into stages is more difficult than defining stages during childhood or adolescence.



## Adulthood's Commitments

Love and work are defining themes in adult life. Evolutionary psychologists believe that commitment has survival value. Parents that stay together are likely to leave a viable future generation.



## Adulthood's Commitments

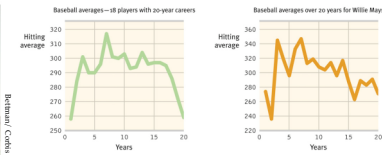
Happiness stems from working in a job that fits your interests and provides you with a sense of competence and accomplishment.



Charles F. Hartman / iStockphoto.com

## Middle Adulthood

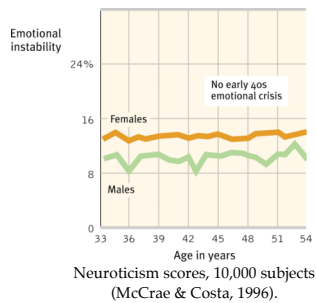
Muscular strength, reaction time, sensory abilities and cardiac output begin to decline after the mid-twenties. Around age 50, women go through menopause, and men experience decreased levels of hormones and fertility.



Willie Mays batting performance.

## Adulthood's Ages and Stages

Psychologists doubt that adults pass through an orderly sequence of age-bound stages. Mid-life crises at 40 are less likely to occur than crises triggered by major events (divorce, new marriage).



## Physical Development

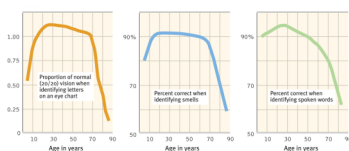
The peak of physical performance occurs around 20 years of age, after which it declines imperceptibly for most of us.

Benefits of healthy lifestyle become apparent during adulthood (as well as unhealthy lifestyles)



## Old Age: Sensory Abilities

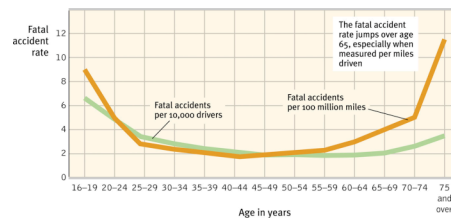
After age 70, hearing, distance perception, and the sense of smell and taste diminish, as do muscle strength, reaction time, and stamina. After 80, neural processes slow down, especially for complex tasks.



Michael Newman / iStockphoto.com

## Old Age: Motor Abilities

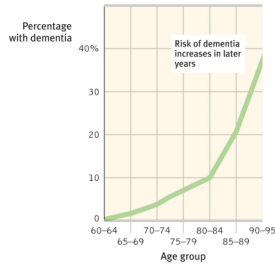
At age 70, our motor abilities also decline. A 70-year-old is no match for a 20-year-old individual. Fatal accidents also increase around this age.



## Old Age Disorders

### Dementia

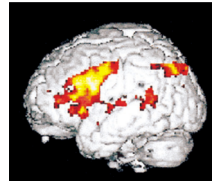
\*Cognitions  
\*Impairment



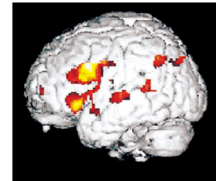
## Alzheimer's Disease

Individuals who are in the early stages of this disease show more MRI activity in the brain than do normal individuals of the same age.

Alzheimer's is linked with plaques and tangles in the brain.



At risk Alzheimer



Normal

<http://www.youtube.com/watch?v=cz8KTYNIWdQ>

## Alzheimer's Disease

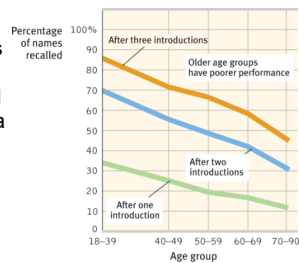
Risk of developing Alzheimer's increases as we age

The Nun studies  
(1986, 1990)



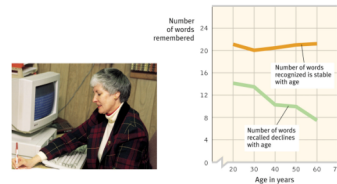
## Aging and Memory

As we age, we remember some things well. These include recent past events and events that happened a decade or two back. However, recalling names becomes increasingly difficult.



## Aging and Memory

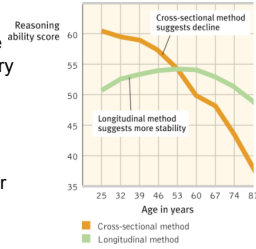
Recognition memory does not decline with age, and material that is meaningful is recalled better than meaningless material.





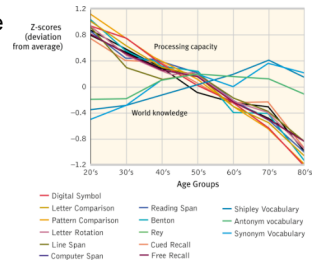
## Aging and Memory

- **Crystallized:** One's accumulated knowledge as reflected in vocabulary and analogies tests (increases for elderly)
- **Fluid:** One's ability to reason speedily and abstractly (decreases for elderly)



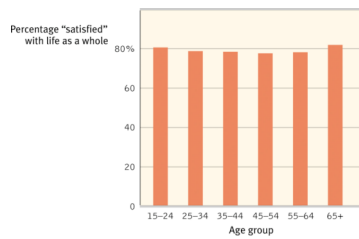
## Aging and Other Abilities

A number of cognitive abilities decline with age. However, vocabulary and general knowledge increase with age.



## Well-Being Across the Life Span

Well-being and people's feelings of satisfaction are stable across the life span.



## Successful Aging

### Biological influences:

- no genetic propensity for Alzheimer's, dementia, or other diseases
- neural changes that hinder negative thinking
- appropriately meeting nutritional needs

### Psychological influences:

- optimistic outlook
- physically and mentally active

Successful aging

### Social-cultural influences:

- support from family and friends
- access to meaningful work or activities
- positive expectations of the surrounding culture
- stable and safe living conditions

## Developmental Issues

### Continuity and Stages

Researchers who view development as a slow, continuous process are generally those who emphasize experience and learning. Biologists, on the other hand, view maturation and development as a series of genetically predisposed steps or stages. These include psychologists like Piaget, Kohlberg and Erikson.

## Developmental Issues

### Stability and Change

Lifelong development requires both stability and change. Personality gradually stabilizes as people age. However, this does not mean that our traits do not change over a lifetime. Some temperaments are more stable than others.

## Old Age: Life Expectancy

Life expectancy at birth increased from 49% in 1950 to 67% in 2004 and to 80% in developed countries. Women outlive men and outnumber them at most ages.



George Obed / AP Photo

## Death and Dying

People who reach a sense of integrity in life (in Erikson's terms) see life as meaningful and worthwhile.



Chris Sander / Reuters / Magnum Photos

Professional "mourners"

## Grief

- There is no "normal" reaction or series of grief stages after the death of a loved one. Grief is more sudden if death occurs unexpectedly.

5 Stages Theory (Kubler-Ross, 1969)

- \*Denial
- \*Anger
- \*Bargaining
- \*Depression
- \*Acceptance



Let's not end on a sad note...

**Quiz Time!**

(Not graded, but several relevant questions may help you study)

1. There are approximately \_\_\_\_ sperm deposited during intercourse.

- A) 200,000.
- B) 2 million.
- C) 20 million.
- D) 200 million.

2. The prenatal stage of development has three phases, in the order of:

- A) embryo, fetus, zygote.
- B) zygote, fetus, embryo.
- C) fertile, fetal, birth.
- D) zygote, embryo, fetus.



### 3. Teratogens are:

- A) recessive genes that result in birth defects.
- B) microorganisms that can cause mutations in normal development.
- C) toxic agents which can cause defects in an embryo or fetus.
- D) alleles that react negatively to the environment.

### 4. The leading cause of mental retardation is now:

- A) genetic abnormalities.
- B) malnutrition.
- C) Down Syndrome.
- D) fetal alcohol syndrome.

### 5. You have a pregnant friend who is having a glass of wine with dinner. She tells you that she is only having one glass. You tell her:

- A) to be sure to limit it to one glass.
- B) beer would be safer.
- C) there is no safe level of alcohol when someone is pregnant.
- D) as long as it is with food, it shouldn't be a problem.

### 6. Touching a newborn's cheek can trigger the \_\_\_ reflex, turning its head toward the source of touch and opening its mouth.

- A) sucking.
- B) rooting.
- C) grasping.
- D) nuzzling.

### 7. Newborns prefer to look at:

- A) a bull's eye pattern.
- B) a human face.
- C) a circle.
- D) a shiny object.

### 8. As infants gain familiarity with repeated exposure to a visual stimulus, their interest wanes and they look away sooner. This is called:

- A) habituation.
- B) visual boredom.
- C) visual exhaustion.
- D) object permanence.



9. Psychologists who study physical, social and cognitive changes throughout the human life cycle are:

- A) child psychologists.
- B) developmental psychologists.
- C) clinical psychologists.
- D) cognitive-behavioral psychologists.



10. Timmy's father covered up a toy with a towel. At age 4 months, Timmy did not look for it, but at 5 months, Timmy lifted the towel to get the toy. Timmy has developed:

- A) egocentrism.
- B) object permanence.
- C) accommodation.
- D) conservation.

11. Changes in height, weight, body hair, voice changes and in girls, breast development which happen in adolescence are known as:

- A) menarche.
- B) puberty.
- C) secondary sex characteristics.
- D) primary sex characteristics.

12. An adolescent's occasional impulsive and immature behavior is at least partly a reflection of the last brain area to mature, the:

- A) frontal cortex.
- B) temporal lobes.
- C) sensory strip.
- D) parietal lobes.

13. According to Kohlberg's theory of moral development, following the "letter of the law" is:

- A) called conventional morality.
- B) called postconventional morality.
- C) the highest level of morality.
- D) difficult for adolescents.

14. According to Erik Erikson's Psychosocial Stages of Development, adolescence must deal with the psychosocial conflict of:

- A) intimacy vs. isolation.
- B) identity vs. role confusion.
- C) industry vs. inferiority.
- D) initiative vs. guilt.

**15. Three areas of character education stressed for adolescents are:**

- A) responsible thinking, compassion, delayed gratification.
- B) empathy, delayed gratification, service learning.
- C) following rules, keeping quiet, helping others.
- D) social harmony, communication, cleanliness.

**16. Women's foremost sign of biological aging is \_\_\_\_, which occurs around the age of \_\_\_\_.**

- A) amenorrhea; 40
- B) menarche; 45
- C) puberty; 20
- D) menopause; 50

**17. During middle adulthood, the primary psychosocial task is to:**

- A) experiment with different roles.
- B) review his or her life to find meaningfulness.
- C) establish lasting and meaningful relationships.
- D) contribute to future generations.

**18. Which of the following is true:**

- A) Life satisfaction peaks at age 50 and then declines after 65.
- B) Most people over 90 are senile.
- C) Most women feel relief after going through menopause.
- D) older people become more susceptible to short-term illnesses.

**19. Underlying Alzheimer's disease is loss of brain cells and deterioration of neurons that produce:**

- A) endorphins
- B) acetylcholine
- C) serotonin
- D) dopamine

**20. On which of the following tasks are 60-year-old adults most likely to outperform 20-year-old adults?**

- A) analogies.
- B) solving an abstract geometry problem.
- C) recalling previously presented nonsense syllables.
- D) answering questions quickly.

21. The culturally defined preferred time for major life events, such as marriage, parenthood and retirement is known as:

- A) the life cycle.
- B) cultural dictates.
- C) the social clock.
- D) cultural dogma.

22. The difference between a 12-month-old child and most 18-month-old children when you put rouge on one cheek and place them in front of a mirror is:

- A) there is no difference.
- B) the 12 month old will think it is cute.
- C) the 18 month old will be less upset.
- D) the 18 month old will try to wipe it off.

23. Many couples cohabit before marriage, believing this will ensure success when they marry. Statistics show:

- A) they remain married longer.
- B) they have less chance of being divorced.
- C) this makes no difference.
- D) they are at higher risk of divorce.

24: When children leave home, it creates a situation called, “the empty nest,” which effects most parents by:

- A) increasing the risk of depression.
- B) increasing the risk of divorce.
- C) increasing the level of life satisfaction.
- D) increasing work involvement.

25. Jamie does not steal a candy bar from the store because he is afraid his mother will spank him if he is caught. Jamie best represents a(n) \_\_\_\_\_ morality.

- A) preoperational
- B) preconventional
- C) conventional
- D) postconventional

### Answers

1.	D	9.	B	17.	D	25.	B
2.	D	10.	B	18.	C		
3.	C	11.	C	19.	B		
4.	D	12.	A	20.	A		
5.	C	13.	A	21.	C		
6.	B	14.	B	22.	D		
7.	B	15.	B	23.	D		
8.	A	16.	D	24.	C		