

PSYC 241

Exam 4 - Notes

Physical Development In Adolescence & Early Adulthood

Development and Puberty

- Adolescence: the passage from childhood to adulthood
- **Puberty**: Process that leads to sexual maturity or fertility; **ends long before adolescence does**
 - Period and rapid physical maturation involving hormonal and bodily changes
 - Not a single, sudden event

Physical Changes

- Primary characteristics
 - Directly related to sex organs and fertility
 - **Menarche**: Girl's first menstruation
- Secondary changes
 - Show sexual maturation but aren't directly related to sex organs

Growth Spurt begins 2 years earlier for girls.*

Girls approximately 3 1/2 inches.

Boys gain approximately 4 inches.

Hormones

- Endocrine system's role in puberty involves interaction:
 - **Hypothalamus***: A structure in the brain that monitors eating and sex
 - **Pituitary gland**: An important endocrine gland that controls growth and regulates other glands
 - **Testosterone**: Hormone associated in boys
 - **Estradiol***
 - is a type of estrogen
 - In girls it is associated with breast, uterine, and skeletal development

What Triggers Puberty?

- **Lepton**, a protein produced by fat cells, may be the most important signal
- Rising levels of leptin signal hypothalamus
 - To stop inhibiting puberty and to set puberty in motion
- Thyroid and adrenal cortex secrete hormones which leads to somatic changes
- Adrenarche: Maturation of adrenal glands

Secular Trend - The Timing of Puberty

- A decrease in average of pubertal inset (happening at younger ages)
- Possible explanations:
 - Higher standard of living/better nutrition
 - Overweight (% body fat for hormones)
 - Relationship with father (Pheromones)

Pubertal Timing Effects: Boys

- Early Maturation
 - Positives: More popular
 - Negatives: More likely to get involved in antisocial or deviant activities
- LATE Maturation
 - Negatives: More childish
 - Positives: Show more exploratory behavior

Pubertal Timing

- Early maturation is a disadvantage
 - Weigh more and are shorter after puberty ends
 - May be less well-prepared for puberty
 - Problem behaviors
 - Deviant behavior
 - Early sexual behavior
- Late Maturation
 - Slimmer and taller
 - Catch up to the early maturing girls

Adolescent Body Image

- Preoccupation is strong throughout adolescence
- More dissatisfied with bodies during early adolescence
- Girls are more dissatisfied and have poorer body image

Brain Development

- Adolescents' brains undergo significant structural changes
 - Corpus Callosum - thickens and this improves ability to process information
 - **Prefrontal cortex*** - doesn't finish maturing until 18 to 25 years of age or later; **Intense emotions**
 - Amygdala is the seat of emotions such as anger - matures earlier than the prefrontal cortex

Sleep Needs

- Delayed sleep preference: Adolescents go to bed later and sleep in later
- Average sleep declines to less than 8 hours at age of 16

Eating Disorders

- **Anorexia Nervosa**: Self-starvation; Distorted body image
- **Bulimia Nervosa**: Binging and undoing of caloric intake on regular basis

Treatment of Anorexia and Bulimia

- Immediate goal is to get patient to eat and gain weight
- Patients may be hospitalized if severely malnourished
- Behavior Therapy - reward eating
- Cognitive Therapy - change body image

Drug Use and Abuse

- Substance use
- Dependence or Addiction
 - Physiological or psychological
 - Especially dangerous for adolescents

Direct Consequences of Alcohol Use

- 5,000 deaths among youth under 21 per year
- Physical and sexual assaults
- Altered academic vocational trajectories
- Possible adverse effects on developing brain

Alcohol Abuse in Early Adulthood

- 11% of men, 3% of women are heavy drinkers
 - About one-third
- Genetic, cultural factors
- Causes mental and physical problems
- High social costs
- Treatment is difficult

Sexual Behavior

- Average age at first intercourse
 - Females

Factors Associated with Early Sex

- Early puberty
- Poverty
- Poor school performance
- Risky behaviors such as drug use, delinquency, and school-related problems
- History of sexual abuse
- Neglect
- Cultural or family patterns
- Low parental monitoring
- Peer norms

Sexually Transmitted Infections

- Sexually transmitted infections (STIs): infections contracted primarily

Sex Education

- What Works
 - Programs that encourage abstinence AND discuss STI prevention and safe-sex practices
 - Delays initiation and increases contraception use
- What Does Not Work
 - Abstinence

Traits

- Many are sexually inexperienced
- Many grew up without a father
- Likely as children to have been abused and/or exposed to parental divorce
- Likely exposed to substance abuse

Teenage Mothers

- Teen mothers at risk for:
 - Dropping out of school or being poorly educated
 - Financial hardship
 - Repeated early pregnancies

Children of Teenage Mothers

- At increased risk for:
 - Premature and low birthweight
 - Fetal, neonatal, or infant death
 - Health and academic problems
 - Abuse or neglect

Motor Performance in Adulthood

- Athletic skills peak between ages 20 and 35
- Continued training slows loss

Exercise

- Only one third get enough
 - At least 20 minutes 5x a week
- About 40% of North Americans are inactive
 - Women

Sexually Activity in Emerging Adulthood

- Most have intercourse by age of 25; average age of marriage: 23 to 25