Physical Development in Middle Childhood

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PSY 356

Physical Growth

- Average 7 year old: 49 inches, 55 pounds
- Average 11 year old: 58 inches, 80 pounds
- No gender differences in size at age 9.
- By age 11, girls are 1.5 inches taller and 8 pounds heavier.
- Boys will be taller and heavier by age 14.

Childhood Obesity

- Body mass index (BMI) at or above the 95th percentile for child’s age and sex
Childhood Obesity – Risk Factors

- High birthweight
- Mother with diabetes
- Overweight family members
- Poverty
- Parent attitudes

Brain Growth and Development

- By age 6, child's brain is 90% of adult size
- Up to age 10, cerebral cortex is still growing
- After age 10, brain shrinks in some areas: pruning
  - Occipital, parietal and temporal lobes
  - Results in more efficiency in brain functions
Attention deficit/hyperactivity disorder (ADHD)

- Symptoms
  - Inability to sustain attention
  - Excessive activity
  - Low impulse control
- Signs emerge before age 7
- 4 to 6% meet clinical definition
- 3 times more boys than girls

Causes of ADHD

- Genetics
- Brain Development
  - Frontal Lobes (attention/self-control)
- Prenatal exposure to lead/alcohol/tobacco

These positron emission tomography (PET) scans show that patients with ADHD had lower levels of dopamine transporters in the nucleus accumbens, a part of the brain’s reward center, than control subjects.

ADHD Outcomes

- Family conflict
- Academic difficulties
Treatment for ADHD

- Stimulant Medications – Ritalin, Cylert
- Anti-depressants
- Behavior management programs
- Combination of the above