

Lifespan Psychology: Chapter 11

Physical and Cognitive Development in
Adolescence

Outline

- Definition/Theories
- Physical Changes
 - Growth spurt
 - Hormonal changes
- Cognitive Development
- Adolescent Egocentrism
- Video – Teens What Makes them Tick

Defining Adolescence?

- **What are the central issues?**
- **Lerner's Four Traits of the Transition**
 - Relative plasticity
 - Relationism
 - Historical Embeddedness
 - Diversity and Individual Differences
- **When Does Adolescence Start?**

Theories of Adolescence

- **G. Stanley Hall**
 - Storm and stress & The Plague of Masturbation
- **Anna Freud's Psychological Theory**
 - Restoration of delicate balance between the ego and the id
 - Renewed Oedipal conflict
- **Erik Erikson's Psychosocial Theory**
 - Identity vs. Role Confusion
- **John Hill's Biopsychosocial Theory**
 - Biological factors
 - Psychological factors
 - Social factors

Biological changes of adolescence

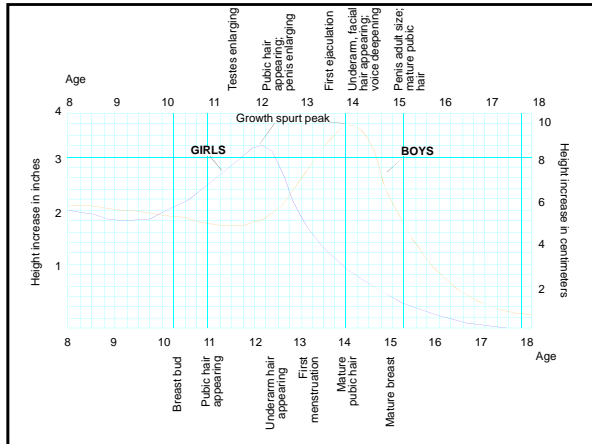
- Growth occurs.
- Body composition begins to change.
- The circulatory and respiratory systems begin to change.
- The primary sex characteristics develop.
- The secondary sex characteristics develop.

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Growth Spurt

- Usually occurs in girls about two years before boys.
- Triggers the legs to grow, followed by the body's trunk, and ending in the shoulders and chest.
- Bones become harder and more dense.
- Muscle and fat contribute to an adolescent increase in weight.

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Hormonal Changes

- Growth hormone.
 - Sex hormones.
 - Estrogens.
 - Androgens (testosterone).
- Sexual maturation.
 - Primary and secondary sex characteristics.
 - Secular trend.

GIRLS		BOYS	
Characteristics	Age of Occurrence	Characteristics	Age of Occurrence
Breasts grow	8-13 years	Testes and scrotal sac grow	10-13 years
Pubic hair develops	8-14 years	Pubic hair develops	10-15 years
The body grows	9 ½-14 ½ years	The body grows	10 ½-16 years
Menarche occurs	10-16 ½ years	Penis growth	11-14 ½
Underarm hair grows	Around 2 years after pubic hair	Voice changes (Larynx grows)	Around the same time as the penis
Oil/Sweat glands	Around time of underarm hair	Underarm and facial hair	Around 2 years after pubic hair
		Oil/Sweat glands	Around time of underarm hair

Motor Development

- Characterized by steady improvement
- Gender differences
 - Girls: slow and steady
 - Boys: dramatic (speed, strength and endurance)
- Biological influence
 - Body fat increases in girls
 - Boys develop larger muscles, hearts and lung capacity

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Cognitive Development

- **Variables in Cognitive Development: Piaget**
 - Formal operational stage (11+ years): groups of concrete operations are combined to become formal operations
 - Concrete to abstract thinking
 - Deductive reasoning emerges
 - Argumentativeness

Metacognition: potential problems

- Elkind's theory of adolescent egocentrism extreme self-absorption
 - imaginary audience
 - Behavior is the focus of other's concern
 - personal fable
 - Experiences are unique

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