

- A. The Development of Thinking
- The best know theories of the development of thinking was by Jean Piaget (1896-1980).
  - A Swiss Psychologist credited with one of the most influential theories of cognitive development.
  - Stage Theory: Thinking progresses through 4 general stages going from less to more complex.
  - Mechanisms of Cognitive Development
    - Disequilibrium (disturbance) → Equilibration (stability)
  - How does a child achieve equilibration?
    - Assimilation: Changing new ideas to fit with old ones
    - Accommodation: Changing old ideas to fit with new ones.

#### III. CHILDHOOD

- A. The Development of Thinking
- Piaget's 4 stages of Cognitive development:
  - Sensorimotor Stage: (birth 2 years)
    - Infants understand the world through sensory and motor experiences.
    - Major accomplishments include:
      - Object permanence
      - Beginning of representational thought.
  - Preoperational Stage: (2 years 6 years)
    - Toddlers and young children can now use symbolic thought to engage in symbolic reasoning (pretense language, object search). But remain illogical (irreversible thinking) and egocentric (self-focused)
    - Major accomplishments include:
      - Accelerated use of symbols and language.

#### III. CHILDHOOD

- A. The Development of Thinking
- Piaget's 4 stages of Cognitive development:
  - Concrete Operations Stage: (about 6 11)
    - With the acquisition of operations (cognitively reversible actions) elementary-school-aged children are able to apply logic to things in the world including the self and its properties.
    - Major accomplishments include:
      - Conservation
      - Serial Ordering
      - Class Inclusion
      - Gender identity

## A. The Development of Thinking

- Piaget's 4 stages of Cognitive development:
  - Formal Operations Stage (12-adulthood).
    - By junior high school, preadolescents begin to apply logic to ideas not just things. The result is a set of abilities including logical, abstract, hypothetical, and evidential reasoning.
    - Major accomplishments include:
      - Scientific reasoning
      - Identity explorations
      - · "Adolescent" Thinking
        - Hypocrisy
        - Idealism

## III. CHILDHOOD

A. The Development of Thinking

- Problems with Piaget
  - Stage changes are neither as clear-cut nor as sweeping as Piaget believed.
    - Children sometimes understand more than Piaget believed.
    - Preschoolers are not as egocentric as Piaget thought.
  - Cognitive development depends on the child's education and culture
  - Piaget overestimated the cognitive skills of many adults.

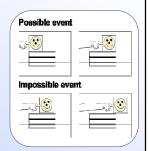
#### III. CHILDHOOD

## A. The Development of Thinking

- Infants' Cognitive Competence
- Infants look longer at objects that seem to violate physical laws than those that do not

Surprise indicates that their expectations were violated

They must know what is physically plausible for this to occur



#### III. CHILDHOOD

B. The Development of Morality

- Lawrence Kohlberg presented children, teens, and adults with moral dilemmas.
  - Stories presented a conflict between two moral values (e.g., property and life in the Heinz Dilemma).
  - The way an individual reasons about the dilemma, not the content of response, determines moral maturity.
  - Kohlberg claimed that moral growth is promoted by the same factors that promote cognitive growth.
    - Actively grappling with moral issues and noticing weaknesses in one's current thinking
  - Kohlberg proposed three general levels of moral development with 2 stages in each level.

B. The Development of Morality

#### Stages

- Pre-conventional: Morality is based on rewards, punishments, and the power of authority figures.
  - Punishment and obedience; Instrumental relativism
- Conventional: Conformity to social rules important to maintain current social system and to ensure positive relationships and social order.
  - Good boy-nice girl; Society-maintaining
- Post-conventional: Morality defined in terms of abstract principles and values that apply to all situations and societies.
  - Social contract; Universal ethical principles

## III. CHILDHOOD

B. The Development of Morality

#### **Evidence for Kohlberg**

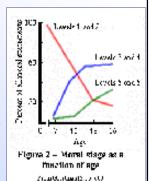
Longitudinal studies show that individuals slowly and gradually move through the stages in the expected order

#### **Some Limitations**

Participants perform more poorly on real-life than hypothetical dilemmas.

Moral thought is culturally relative and only weakly predicts behavior.

Unknown relation between moral thought and emotions.



#### III. CHILDHOOD

B. The Development of Morality

## Gilligan's Critique

- Gilligan argued that Kohlberg's system was biased against women, who she claimed scored lower (average stage 3) than men (average stage 4).
  - Whereas Gilligan's feminine morality emphasizes an "ethic of care," Kohlberg's masculine morality emphasized "logical calculus of rights and justice"
- To Gilligan, a concern for others is a different, not less valid, basis for moral judgment than a focus on justice.
  - Studies show no gender difference in moral reasoning, and both sexes reported justice and caring themes.
  - Gender-based differences emerge in real-life dilemmas.

#### III. CHILDHOOD

C. The Development of Gender

## Some Definitions

- Sex: Biological status of male or female.
- Gender Identity: The fundamental sense of being male or female; it is independent of whether the person conforms to social and cultural rules of gender.
- Gender Typing: Process by which children learn the abilities, interests, personality traits, and behaviors associated with being masculine or feminine in their culture.

C. The Development of Gender

#### 1. Biological/Genetic factors

- Hormonal (e.g., testosterone) differences have important consequences for gender typing.
  - Testosterone higher in athletes of more aggressive sports and in criminals of more more aggressive crimes.
  - Hormones lead to rough, noisy movements among boys and calm, gentle actions among girls.
- Male and Female infants are born different
   Boys more active and physically stronger at birth
- Males tend to be more aggressive and dominant cross-culturally
  - but differences are slight.
- Environmental forces build on hereditary influences to promote the development of gender roles.

## III. CHILDHOOD

C. The Development of Gender

#### 2. Environmental factors

- Family
  - Parents raise boys and girls differently.
    - They push children toward "gender-appropriate" toys and behaviors (M=assertive behavior, F=dependency)
    - Fathers more intolerant of "cross-gender" behavior in their sons than in their daughters.
    - Parents who apply non-stereotyped values have less gender-typed children.
- Peers
  - Peers play very important role in developing and maintaining gender types
    - Praise for gender-appropriate and criticize genderinappropriate behavior .

#### III. CHILDHOOD

C. The Development of Gender

#### 2. Environmental factors

- Teachers
  - Teachers encourage children to conform to gender roles
    - Girls get more encouragement to participate in adultstructured activities at preschool.
    - Boys may get called on more often.
- Television
  - TV offers a window into gender stereotypes
    - Women appear less often than men and are portrayed in stereotypic roles.
    - Gender roles are stereotypic in programs for children and youth

#### III. CHILDHOOD

C. The Development of Gender

#### 2. Environmental factors

- Culture
  - Division of labor in some cultures and subgroups may be less gender-based.
    - Girls are less likely to experiment with "masculine" activities in cultures and subcultures in which the gap between male and female roles is especially wide.
    - When social and economic conditions make it necessary for boys to take over "feminine" tasks, their personalities and behaviors become less stereotyped.

C. The Development of Gender

#### 3. Cognitive factors

- Piagetian Theory (Lawrence Kohlberg)
  - Kohlberg: Kids first acquire gender constancy (knowing that sex remains the same even if clothing, hairstyle, and play activities change) before they imitate a role model.
- Information Processing (Gender Schema Theory)
  - Explains how social pressures and cognitive factors work together to shape gender-role development.
  - Gender schemas, or masculine and feminine categories, are theory-like mental structures used to predict and explain the world. They affect memory for inconsistent acts.

## III. CHILDHOOD

#### D. Role of Parents

- What role do parents play in the development of their children?
  - Long held belief that they a central role, but their role has been questioned
- 1. Arguments in favor of the role of parents
  - Discipline
    - Power Assertion: A method of child rearing in which the parent uses punishment and authority to correct the child's misbehavior.
    - Induction: A method of child rearing in which the parent appeals to the child's own resources, abilities, sense of responsibility, and feelings for others in correcting the child's misbehavior.

#### III. CHILDHOOD

## D. Role of Parents

- 1. Arguments in favor of the role of parents
  - Parenting Strategy
    - Authoritative parenting strategy is preferable because it involves keeping high standards for behavior and a caring environment.
    - Other parenting strategies (Neglect; Indulgent, and Authoritarian) not so effective

#### III. CHILDHOOD

## D. Role of Parents

- 2. Arguments against the role of parents
  - Temperament
    - Parenting strategy my reflect the temperament of the child not the style of the parent
  - Peers
    - Peers have a very strong influence on children (reaching a peek at 14 when adolescents are most influence by peer pressure)
    - Identification with peer group (cliques and groups) also reach a peek in adolescence.

# IV. ADOLESCENCE A. Puberty

- 1. Puberty begins when the **hypothalamus** in the brain causes the **pituitary gland** to release or increase production of:
  - Gonadotropins: Stimulate ovaries (females) to produce estrogens and testes (males) produce androgens.
  - ACTH (Andrenocorticotropic hormone): Stimulates adrenal gland to make androgens.
  - Growth hormone (GH) and thyroxine: Contribute to the gains in body size and skeletal maturation during puberty.

# IV. ADOLESCENCE

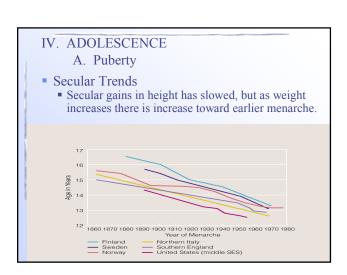
## A. Puberty

- Height and Weight
  - The **growth spurt** is the rapid gain in height and weight that is the first outward sign of puberty.
    - Growth is complete for girls by 16 and for boys by  $17\frac{1}{2}$ .
- **Body Proportions** 
  - Body proportions change for girls and boys
  - Boys' shoulders broaden relative to the hips.
    Girls' broaden hips relative to the shoulders and waist
- Sexual Maturation
  - Menarche is a girl's first menstruation.
  - Typically happens around 121/2 for North American girls.
  - Spermarche is the first ejaculation of seminal fluid.
    - Typically occurs around age 14 for boys.

# IV. ADOLESCENCE

## A. Puberty

- Individual Differences in Menarche
  - Timing is partly genetically controlled
    - Identical twins generally reach menarche within a month or two of each other, whereas fraternal twins can differ by 12 months
  - Also controlled biologically by weight and fat
    - A sharp rise in body weight and fat may trigger sexual maturation in females.
    - A trigger point may also come into play: 106 lbs
  - Home life affects menarche
  - Conflict promotes early, affection later menarche.
  - Health, SES, and world region affects timing
    - Menarche delayed in regions where malnutrition and infectious disease are widespread.



## IV. ADOLESCENCE A. Puberty

- Consequences of early versus late puberty different for girls and boys
  - Early maturing boys appear advantaged in many aspects of emotional and social functioning.
    - Early maturing boys viewed as, independent, relaxed, self-confident, and physically attractive.
    - Late maturing boys were viewed as anxious, overly talkative, and attention seeking in behavior.
  - Early maturing girls have emotional and social difficulties.
    - Run with an older crowd which proves problematic: Smoking, drinking, depression, eating disorders, etc.
    - Late maturing girls regarded as physically attractive, lively, sociable, and leaders at school, girlish figure.

## IV. ADOLESCENCE

- B. Turmoil and Adjustment
- 2. Turmoil and adjustment in adolescents
  - Adolescents more frequently have --
    - Conflict with parents: With the development of their own standards and values, adolescents and parents are on collision courses
      - Peers influence (strongest at 14years)
    - Mood Swings and depression: Loneliness, anger, and and depression tends to produce different reactions in boys and girls
      - Boys: Externalizing problems (Antisocial behavior and aggression.
      - Girls: Internalizing problems (Withdrawing, and eating problems)
    - Recklessness and risk taking

#### IV. ADOLESCENCE

- B. Turmoil and Adjustment
- Keep in mind that Adolescence is a difficult time only for a minority.
- Nonetheless, the challenges that adolescents experience are due to
  - Genetic/Biological changes:
    - Hormonal and physical changes
  - Psychological changes:
    - Cognitive Development and the ability to be hypothetical
  - Social-Cultural Expectation:
    - Social regulation of sexual behavior.
    - Focus on career planning.

#### IV. ADOLESCENCE

- C. Separation and Connection
- 3. Separation and Connection
  - Adolescent search for autonomy can be met with parental resistance.
    - Some parents respond to growing autonomy of their adolescents with increasing control and punishment.
  - Adolescents react negatively to stifled autonomy.
    - Less academic motivation & increase antisocial behavior
  - Parents need to support autonomy urges carefully so that the adolescent can be successful
  - Adolescents show less autonomy urges in Collectivist societies.