CHAPTER 10: HUMAN DEVELOPMENT

DEVELOPMENTAL PSYCHOLOGY

- Study of how behavior changes over the lifespan

3 adjectives: children, adolescents, adults, and elderly
Children: small, cute, energetic
Adolescents: uncomfortable, self-conscious, dramatic
Adults: stressed
Elderly: slow, old, achy

CHALLENGES TO THE DEVELOPMENTAL APPROACH

- Post hoc fallacy: false assumption that if one event happens before another, it will cause the later
  - Does A really cause B?
- Bidirectional influences
  - Development ←→ Experiences
    - ex. teen girls that mature physically quicker tend to associate themselves w/ older boys, may become self-conscious, etc. Ultimately might become sexually active, start drinking quicker, etc.
- Cohort effects: people who live during one period of time differ greatly from people of other periods of time
  - it may look like people become more conservative over time w/ gender roles, but it's really b/c they grew up in a time period that was more conservative.

RESEARCH DESIGNS

- Crosse-sectional design – examines people of different ages at a single point in time.
  - Where cohort effects might play a role
- Longitudinal – examines development in the same group of people on multiple occasions over time
  - Remember: LONG period of time, SAME group
    - tricky to keep track of same group

THE NATURE-NURTHURE DEBATE

- Both play large roles in shaping development
- It's not an "either-or" issue
- Gene-environment interaction
  - Impact of genes on behavior depends on the environment where behavior develops
    - Someone with schizophrenia may have had a genetic predisposition that was triggered by traumatic event

NATURE-NURTURE CONT.

- Nature via nurture
  - Children with certain genetic predispositions often seek out and create their own environments
- Gene expression
  - Activation or deactivation of genes by environmental experiences throughout development

PHYSICAL AND MOTOR DEVELOPMENT

CONCEPTION AND PRENATAL DEVELOPMENT

- Most dramatic changes occur during early **prenatal** development
- A **zygote** is formed when sperm cell fertilizes an egg
- After this, three stages of development occur

STAGES OF PHYSICAL DEVELOPMENT

1. Germinal Period
   - From conception to implantation in uterine wall (0-2 weeks)
   - Zygote divides and doubles, forming **blastocyst**
2. Embryonic period
   - From implantation (2-8 weeks)
   - **Sexual differentiation** begins XX or XY
   - Limbs, facial features, major organs begin development
3. Fetal period
   - 9 weeks to birth
   - Heart begins to beat

BRAIN DEVELOPMENT

- Between day 18 and the 6th month, neurons grow at an incredible rate.
- Up to 250,000 neurons per minute at times.

OBSTACLES TO DEVELOPMENT

- **Teratogens** are environmental factors that can exert a negative impact on prenatal development
  - ex. smoking, drugs, chicken pox
- Alcohol consumption can lead to **fetal alcohol syndrome**
- Genetic disruptions can be from disorders or random errors in cell division
- Prematurity, being born prior to 36 weeks, can result in numerous problems
- The less time in utero, the greater chance of serious complications.

MOTOR DEVELOPMENT

- Infants are born with a large set of automatic motor behaviors (*reflexes*)
  - Sucking and rooting reflexes