OVERVIEW

- Prenatal Development and the Newborn
- Infancy and Childhood
- Adolescence
- Adulthood
NATURE AND NURTURE

- What Makes You, You?
- Genetic Factors – cellular components that influence our traits
  - Chromosomes – humans have 23 pairs of chromosomes housed in the nucleus of our cells
  - Deoxyribonucleic Acid (DNA) – twisting molecules that contain our genetic information
  - Genes – sequential components of DNA that determine our “heredity” inherited traits
- Environmental Factors – external influences that influence our traits
- Epigenetics – studying the interaction of environment on genetics
PRENATAL DEVELOPMENT AND THE NEWBORN

- **Conception** – 200+ million sperm compete to fertilize one egg
- **Zygote** – fertilized egg that rapidly divides into hundreds of cells
- **Embryo** – two week – two month period of development after attaching to the uterine wall (heart beat)
- **Fetus** – nine weeks until birth
- **Teratogens** – chemical and viral agents that harm the developing embryo and fetus
NEWBORNS

- **Reflexes** - newborns are genetically programed to act *reflexively*
- Newborns responds to sights, sounds, smells
- **Temperament** – genetically programed emotional responses and *reactions*
INFANCY AND CHILDHOOD – PHYSICAL DEVELOPMENT

- **Brain Development** – children experience massive growth in brain tissue
- **Epigenetic Effects** – environmental stimulation influences neural growth
- **Critical Periods** – times in childhood when exposure is necessary to unlock cognitive potential (neural pruning)
- **Infantile Amnesia** – generally can’t recall events prior to the age of 4
INFANCY AND CHILDHOOD – COGNITIVE DEVELOPMENT

- **Cognition** – the mental processes involved in knowledge acquisition, processing, memory, and communication
- **Schemas** – the mental templates we create to help organize and interpret information
- **Assimilation** – interpreting new information based on current schemas
- **Accommodation** – changing schemas to incorporate new information
Jean Piaget’s Theory of Cognitive Development – children progress through four stages of development

1. Sensorimotor Stage (Birth – 2) - infants learn skills through sensory stimulation
   A. Object Permanence Develops – understanding that objects still exist when they are not visible
   B. Stranger Anxiety Develops – infants develop a fear of unfamiliar others around 8 months
INFANCY AND CHILDHOOD – COGNITIVE DEVELOPMENT

2. Preoperational Stage (2 – 6/7) – children acquire language but lack some logic and reasoning skills

A. Egocentric Thinking Develops – difficult taking different perspectives or points of view

B. Theory of the Mind Develops – egocentric thinking changes into the understanding of others’ mental states

C. Symbolic Thinking Develops (Revised Piaget) – understanding one object can represent another

![Image of children behind a curtain]

![Image of a dog with toilet paper on its head]
INFANCY AND CHILDHOOD – COGNITIVE DEVELOPMENT

3. Concrete Operational Stage (6/7 – 11) – children develop concrete (physical) logic and math abilities
   A. Principle of Conservation Develops – understanding that changes in shape don’t affect mass, volume, or number

4. Formal Operational Stage (12 – Adult) – develop the ability to think abstractly
   A. Moral Reasoning develops

- Contemporary Models of Development – development occurs more continuously and earlier than Piaget detected
Attachment – motivation to form close emotional bond to parent/caregiver

- Is attachment due to food or comfort?
- Harry Harlow found that infant monkey’s attach to comforting rather than nourishing “mothers”
Attachment Styles – infants differ in the way that they form emotional bonds.

- **Secure Attachment (60%)** – relaxed in presence of caregiver, distressed when absent, and comforted when they return
  - **Basic Trust** – sense that the world is safe and predictable
- **Anxious Insecure Attachment (15%)** – anxious in new situations, highly distressed when caregiver absent, may not be comforted upon return
- **Avoidant Insecure Attachment (20%)** – show little emotion towards caregiver when present or when they leave
Parenting styles can influence child development

- **Authoritarian** – strict rule-based parenting
  - Children have lower social skills and self-esteem
- **Permissive** – relaxed child-centric style of parenting
  - Children are more immature and prone to aggressions
- **Authoritative** – rule-based but flexible style of parenting
  - Children tend to have higher self-esteem, competence, and self-reliance

**Culture** influences parenting styles and practices
CHILDHOOD SOCIAL DEVELOPMENT - ATTACHMENT

- Caregivers’ attention and responsiveness can influence attachment
- Temperament and parenting style can influence attachment
- Attachment and Adult Relationship – parent/child attachment can influence adult relationships styles
- Insecure attachment can lead to anxious adult relationships or avoidance of close relationships
STABLE DEVELOPMENT AND CHANGES

- Are our traits and behaviors stable across our lives or do we change and evolve into different people?
  - Who is least likely to get divorced?
  - Traits like temperament are fairly stable
  - Environment and learning can lead to trait and behavioral change