

CHAPTER 11—DEVELOPMENT

I. Prenatality: A Womb With a View

A. Prenatal Development

1. Zygote – Germinal stage – Embryonic stage – Fetal stage
 - a. Zygote – a single cell with chromosomes from both sperm and egg
 - b. Germinal – two week period that begins at conception when cell division takes place
 - c. Embryonic – second to eighth week of development when zygote continues to divide and cells differentiate forming the embryo
 - d. Fetal – ninth week until birth when embryo becomes a fetus
 - i. Brain cells are manufactured
 - ii. Myelination – the formation of a fatty sheath around the axons of a neuron – takes place

B. Prenatal Environment

1. Teratogens are agents that can harm the process of development
 - a. Smoking, drinking, drug use, etc.
 - i. Fetal alcohol syndrome stems from heavy alcohol use during pregnancy.

II. Infancy and Childhood: Becoming a Person

A. Perceptual and Motor Development

1. Infants are attuned to social stimuli
 - a. Example: Attentiveness to faces; mimic facial expressions
2. Infants are born with reflexes and develop motor skills
 - a. Example: Rooting reflex, sucking reflex
 - b. Motor development follows the cephalocaudal rule and the proximodistal rule
 - i. “Top-to-bottom” and “inside-to-outside”

B. Cognitive Development

1. Discovering the World
 - a. Sensorimotor Stage – stage of development from birth through infancy
 - i. Infants construct schemas of how the world works
 - ii. Assimilation and accommodation take place
 - iii. Object permanence is a challenge
2. Discovering the Mind
 - a. Preoperational Stage – stage of development that begins at about two years to six years of age
 - b. Concrete Operational Stage – stage of development that begins at about six years to eleven years of age
 - i. Understanding of conservation of properties takes place during shift from preoperational to concrete operational
 - c. Formal Operational Stage – stage of development that begins at about eleven years of age to adulthood
 - i. Growing sophistication of thought, abstraction, imagination
3. Discovering Other Minds
 - a. Egocentrism – failure to appreciate the viewpoints of others
 - b. Theory of Mind – idea that human behavior is guided by mental representations
 - i. People with autism have difficulties with these and other cognitive and social tasks
4. Discovering Our Cultures
 - a. Vygotsky believed that children develop within a social and cultural context, drawing on the social and cultural wisdom of others.

C. Social Development

1. Becoming Attached

- a. Studies by Harlow, driven by theories of Bowlby, highlighted the importance of social contact in development
- b. Studies show that infants' reactions fit four attachment styles such as being secure, avoidant, ambivalent, or disorganized
 - i. "Strange situation" is used to test attachment style

2. Working Models

- a. Internal Working Model of Relationships – a set of beliefs about the self, the primary caregiver, and the relationship between them
- b. Temperaments – characteristic patterns of emotional reactivity

D. Moral Development

1. Knowing What's Right

- a. Children move from realism to relativism in moral thinking
- b. Children move from prescriptions to principles in moral reasoning
- c. Children move from consequences to intentions in moral reasoning
- d. Kohlberg believed moral reasoning proceeds in 3 stages, a shift from preconventional to conventional to postconventional

2. Feeling What's Right

- a. Moral intuitions may be derived from a person's emotional reactions to events

III. Adolescence: Minding the Gap

A. The Protraction of Adolescence

1. Adolescence is a period that begins with the onset of sexual maturity
 - a. Puberty – bodily changes associated with sexual maturity
 - i. Primary Sex Characteristics – directly involved with reproduction
 - ii. Secondary Sex Characteristics – bodily functions that are not involved with reproduction
2. There are differences between girls and boys, races, industrial versus agrarian communities, etc. during the onset of puberty
 - a. Puberty is occurring earlier, meaning that the period between childhood and adulthood has become protracted

B. Sexuality

1. Sexual Awakening

- a. American adolescents are not more sexually active than the Western World adolescents
 - i. However, Americans are less informed about the causes and consequences of sexual activity
 - (a) Sketchy sex education programs and abstinence-only guidelines hamper education about sexuality

2. Sexual Orientation

- a. Biology plays a key role in determining sexual orientation
- b. Sexual orientation is not a simple matter of choice

C. Parents and Peers

1. Erikson suggested eight stages of human development
 - a. These stages often have to do with choice and conflict in a social context
2. Adolescents seek to form adult identities, first through single-sex cliques, then through mixed-sex cliques, proceeding to coupling

IV. Adulthood: Going Happily Downhill

A. Changing Abilities

1. Older adults show declines in working memory, episodic memory, and retrieval tasks

B. Changing Goals

1. According to the socio-emotional selectivity theory, younger people tend to remember useful information, whereas older people tend to remember positive information.
 - a. A long future ahead suggests a strategy of encoding things that might be of potential value later
 - b. A shorter future ahead suggests a strategy of encoding things that bring satisfaction in the present

C. Changing Roles

1. Marriage typically makes people happier
2. Having children and the responsibilities of parenthood produce mixed emotional outcomes