HUMAN DEVELOPMENT

A. PHYSICAL DEVELOPMENT
1. Nature vs. nurture – is a person’s development determined by heredity or by environment?
   a. Chromosomes – are made up of genes which are made up of DNA
   b. Two sex cells exist – X and Y
2. Genotype – an individual’s genetic makeup
3. Phenotype – how a given genotype is expressed
4. Genes
   a. Dominant – expressed in phenotype whenever present in genotype
   b. Recessive – expressed in phenotype only when paired with a similar recessive gene

B. PRENATAL DEVELOPMENT
1. Stages of development
   a. Orum or germinal – 1st two weeks after conception, a mass of multiplying cells
   b. Embryo – 2nd-8th week, vital organs begin to form
   c. Fetus – 2 months-birth, completing development
2. Critical period – time when things must begin development or will never develop – The critical period exists during the embryonic stage.
3. Perceptual development
   a. The five senses are functional at birth
   b. Certain reflexes exist at birth
      1) Moro – extension of arms when infant feels loss of support
      2) Palmar – hand grasping
      3) Rooting – turns toward object brushing cheek and attempts to suck
   c. Neonates can utilize sight, prefer to focus about nine inches away on objects with contour, contrast, complexity, and movement
4. Motor development
   a. Proximodistal principle – center outward direction of motor development
   b. Cephalocaudal principle – head to foot direction of motor development
   c. Developmental stages
      1) 1 month – can lift head when on stomach
      2) 2 months – can hold chest up when on stomach, can roll from side to back
      3) 3 months – can roll over, will reach for objects
      4) 6-7 months – sits without support, stands holding on to objects
      5) 8-10 months – crawls
      6) 10-12 months – pulls self up to stand
      7) 11-12 months – cruises, walks by holding on to objects
      8) 12-18 months – walks alone

C. SOCIAL DEVELOPMENT
1. Temperament – a child’s characteristic mood and activity level, labeled by the New York Longitudinal Study as follows:
   a. Easy infants – 40% – adaptable to new situations, predictable in their rhythmicity or schedule, positive in mood
   b. Difficult infants – 10% – intense in their reactions, not very adaptable to new situations, slightly negative mood, irregular body rhythms
   c. Slow-to-warm-up infants – 15% – initially withdrawn when approached, but may later warm up
   d. Average infants – 35% – do not fit completely into any of the above categories

D. GENDER ROLE DEVELOPMENT
1. Social learning theory – learn gender roles through observation and imitation – rewarded for appropriate behavior and punished for inappropriate behavior
2. Cognitive theory – proposed by Kohlberg, children acquire gender identity, classify others, engage in gender typed behavior
3. Psychoanalytic theory – establish identification with their same-sex parent

E. COGNITIVE DEVELOPMENT
1. Piaget’s stage theory
   a. Sensorimotor stage
      1) Intelligence is nonverbal or nonsymbolic
      2) Begins with no object permanence
   b. Preoperational stage
      1) Symbolization possible
      2) Rapid development of language
      3) Several limitations – irreversibility, centration, egocentrism
   c. Concrete operations
      1) De-center their attention
      2) Understand reversibility
      3) Mathematical operations develop
   d. Formal operations
      1) Can handle hypothetical problems
      2) Use scientific reasoning

2. Key terms
   a. Schema – basic thought structure
   b. Organization – combining and integrating simple schemas
   c. Adaptation – modifying existing schemas to fit new experiences
   d. Assimilation – interpreting event based on current schema
   e. Accommodation – changing or adjusting a schema based on experience

F. ERIKSON’S PSYCHOSOCIAL STAGES OF DEVELOPMENT
1. Proposed development continues throughout life
2. The stages are
   a. Trust vs. mistrust – first year of life – infant’s needs must be met for trust to develop
   b. Autonomy vs. shame and doubt – 1-3 years – children begin to express self-control needed to feel autonomous
   c. Initiative vs. guilt – 3-5 years – children assume more responsibility
d. Industry vs. inferiority – 6-12 years – learned skills are valued, success is important to future growth  
e. Identity vs. role confusion – adolescence – development of identity through experimentation  
f. Intimacy vs. isolation – young adulthood – a person prepares to form deep, intimate relationships  
g. Generativity vs. stagnation – middle adulthood – interest in guiding the next generation  
h. Integrity vs. despair – late adulthood – time of looking back at our lives  

G. KOLHBERG’S THEORY OF MORAL DEVELOPMENT  
1. Level I – preconventional morality  
a. Stage 1 – punishment orientation – a person complies with rules during this stage in order to avoid punishment  
b. Stage 2 – reward orientation – an action is determined by one’s own needs  
2. Level II – conventional morality  
a. Stage 3 – good girl/good boy orientation – good behavior is that which pleases others and gets their approval  
b. Stage 4 – authority orientation – emphasis is on upholding the law, order, and authority and doing one’s duty by following societal rules  
3. Level III – postconventional morality  
a. Stage 5 – social contract orientation – flexible understanding that people obey rules because they are necessary for the social order but that rules can change if there are good reasons and better alternatives  
b. Stage 6 – the morality of individual principles orientation – behavior is directed by self-chosen ethical principles  

H. MATURITY FROM ADOLESCENCE  
1. Physical changes – puberty begins  
2. Social concerns – to establish an identity, may enter a psychosocial moratorium where a person can feel free to experiment with responsibilities  
3. Cognitive skills – adolescent egocentrism is popular  

I. ADULTHOOD  
1. Early adulthood  
a. Physical changes – reaction time and strength peak, signs of aging begin to show  
b. Social concerns – forming intimate relationships  
c. Cognitive skills – intellectual abilities and speed of information processing are stable  
2. Middle adulthood  
a. Physical changes – number of active brain cells declines, vision decreases, menopause begins in women  
b. Social concerns – more aware of own mortality and the passage of time, are often caught between needs of their children and those of their aging parents  
c. Cognitive skills – retrieval from long-term memory begins to slow, intelligence remains stable  

STATES OF CONSCIOUSNESS  

A. STAGES OF SLEEP  
1. Alpha wave period – drowsy but awake state when eyes are closed and relaxed  
2. Stage 1 sleep – transition between wakefulness and sleep, theta waves appear  
3. Stage 2 sleep – sleep spindles occur, muscles less tense, eyes rest, half of all sleep is in this stage  
4. Stage 3 sleep – delta waves appear  
5. Stage 4 sleep – deepest part of sleep  
6. REM – Rapid Eye Movement – part of sleep where stages reverse themselves  
a. Physical state is similar to wakefulness  
b. Most dreaming occurs here  

B. THEORIES OF SLEEP  
1. Adaptive theory – species need this time to keep out of trouble  
2. Conserving theory – sleep is a save to sleep energy  
3. Restorative theory – time to replenish the body’s systems  

C. SLEEP DISORDERS  
1. Insomnia – inability to fall asleep  
2. Narcolepsy – sudden onset of sleep  
3. Sleep apnea – stoppages of breathing during sleep  
4. Night terror – sudden awakening with feeling of terror  
5. Hypersomnia – excessive sleep  

D. DREAMING THEORIES  
1. Psychoanalytic theory – dreams are repressed desires and a look at suppressed feelings  
2. Activation-synthesis model – attempts to make sense of random electrical activity, dreams have no meaning  
3. Housekeeping hypothesis – clearing out of unneeded neural connections  
4. Off-line hypothesis – integrating old and new information  

E. DRUGS  
1. Depressants – depress function of nervous system; examples – alcohol, barbiturates  
2. Stimulants – increase central nervous system activity; examples – nicotine, caffeine, amphetamines, cocaine  
3. Hallucinogens – alter perceptions of reality and may cause other perceptual distortions; examples – LSD, PCP, marijuana  
4. Narcotics – used to relieve pain and induce sleep; examples – opium, morphine, heroin  

F. PSYCHOTHERAPY  

A. THERAPY  
1. Insight therapy – any psychotherapy where the goal is to help clients better understand themselves, their situation, or their problems  
2. Action therapy – therapy focusing on directly changing a troubling habit or behavior  
3. Directive therapy – any approach in which the therapist provides strong guidance during therapy sessions  
4. Non-directive therapy – technique in which clients assume responsibility for solving their own problems supported by a good atmosphere  
5. Individual therapy – therapy session involving one client and one therapist  
6. Group therapy – session that includes several clients at one time and one or more therapists; one particular problem is usually the focus  
7. Family therapy – focuses on the family as a whole unit, avoiding blaming any one member as the focus of therapy  
8. Outpatient therapy – clients receive psychotherapy while they live in the community  
9. Inpatient therapy – clients receive psychotherapy while in a hospital or other residential institution  

B. INSIGHT THERAPIES  
– goal is for clients to gain increased understanding of themselves in order to promote changes in personality and behavior  

1. Psychoanalysis – the understanding of unconscious conflicts, motives, and defense mechanisms based on the ideas of Sigmund Freud  
a. Free association – patients do not censor their thoughts or words  
b. Dream analysis – to see what the id is revealing  
1) Manifest content of dreams – what the patient is actually remembering  
2) Latent content – what the dream symbolizes  

C. HUMANIST THERAPIES  
1. Client-centered or person-centered therapy – called phenomenological  
a. Terms used  
1) Unconditional positive regard – client is accepted totally by the therapist  
2) Empathy – the therapist attempts to see the world through the client’s eyes  
3) Congruence – therapist does not maintain a formal attitude, strives for authentic feelings  
4) Reflection – the therapist serves as a mirror by communicating back to the client a summary of what was said  
5) Active listening – therapist attempts to understand both the content and emotion of a client’s statements  

D. COGNITIVE THERAPIES  
1. Cognitive-behavior therapy – blending of behavioral and cognitive therapy  
2. Rational-emotive therapy – encourages people to examine their beliefs carefully and rationally, to make positive statements about themselves, and to solve problems effectively  

E. BEHAVIORAL THERAPIES  
– also known as behavior modification  
1. Types of therapies  
2. Operant conditioning  
1) Token economies – desired behaviors are rewarded with tokens that can later be exchanged for desired objects or privileges  
2) Contingency contracting – written agreement is drawn up between the therapist and client that states behavioral objectives the client hopes to attain, providing positive consequences for meeting objectives and negative consequences if goals are not met  
3) Time-out – used to eliminate undesirable behavior, usually with children, it involves moving the individual away from all reinforcement for a period of time  
4) Extinction – when a maladaptive behavior is not followed by reinforcers  
5) Punishment – when behavior is followed by aversive stimulus  

F. BIOLOGICAL TREATMENTS  
1. Drug treatments  
a. Antipsychotics – gradually reduce psychotic symptoms  
examples – Haldol, Mellaril, Thorazine, and Chlorpromazine  
b. Antidepressants – relieve symptoms of depression  
examples – Prozac, Anafranil, Nardil  
c. Antianxiety drugs – tranquilizers  
examples – Librium, Valium, Xanix  
d. Anticonvulsant therapy – used to change the brain’s chemical balance (if only temporarily)  
2. Electroconvulsive therapy – used to change the brain’s chemical balance (if only temporarily)  
3. Psychosurgery – prefrontal lobotomy – rarely performed today