

GENERAL PSYCHOLOGY (PSYC 210)
Study Guide: Developmental Psychology
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CHILD DEVELOPMENT (conception--→ adolescence)

--Na x Nu--→ Be

Heredity

--Humans have 46 chromosomes (23 pairs; 1 pair determines sex: sperm & ova)

--Chromosomes comprised of alleles (alternate forms of genes). Alleles occur at particular positions on a chromosome. These positions are called loci (one position= locus).

--Genes comprised of DNA, the chemical code for genetic information comprised of nucleotides (A,C,G,T) occurring in triplets (one nucleotide is always “silent”)

--There are about 50,000 – 100,000 genes in every human cell.

--Genes may be DOMINANT or RECESSIVE (deleterious genes generally recessive):

<u>A</u>	<u>A</u>	<u>a</u>
AA	Aa	aa
<u>a</u>	aA	aa

--See this tutorial for basics of human genetics:

<http://anthro.palomar.edu/tutorials/physical.htm>

--Some human traits determined by a single gene (e.g., eye color, sex).

--“Complex” (i.e., multifactorial, non-additive, non-linear) traits are thought to be

polygenetic (determined by more than one loci). Look up “epistasis” on Google.

--Genes can have more than one effect (“pleiotropy”).

--Some human traits determined by genetic abnormalities (e.g., Down’s syndrome= three #21 chromosomes instead of two)

--Who determines sex in mammals?

♂♂: XY

♀♀: XX

--Some human traits are “sex-linked” (e.g., color blindness). What does this mean? See this tutorial:

http://anthro.palomar.edu/biobasis/bio_3b.htm

--Hereditary instructions influence development, including behavioral, cognitive, and emotional development. Most human traits (including behavior, cognition, and emotions) are thought to be a function of **epigenetics** [the interaction of endogenous (including genes) and exogenous (environmental) factors: Na x Nu--→ Be]. Rules governing epigenetics are poorly understood for most species.

THE NEWBORN (NEONATE) is born with unique complement of genes (unless identical)

- The neonate can see, hear, smell, taste, and respond to pain and touch (thus, the newborn is capable of learning)
- Neonates respond to stimulation, showing preferences for mother's face within hours after birth
- Neonates come equipped with several reflexes that are thought to be derived from humans' evolutionary past for the function of survival [e.g., grasping reflex, rooting reflex, Moro reflex (startle response)]
- Neonates appear to be quite intelligent—can remember speech sounds up to a day after first learning them
- Neonates prefer complex patterns to simple ones. How do developmental psychologists study this? N.B. Fantz's "looking chamber"
- Temperament (e.g., activity level) is thought to be the basis of personality and to be strongly influenced by genes.
 - 40% of infants are "easy"
 - 10% of infants are "difficult"
 - 15% of infants are "slow to warm up"

--Study of maturation: physical growth and development is an orderly sequence of unfolding of basic physical and other abilities that does not vary much in sequence/order across individuals of the same species (although timing/rate may vary).

--concept of "readiness" (principle of motor primacy): minimum levels of motor, muscular, and physical development must precede the learning of certain skills (e.g., development, coordination, and control of tongue must occur before speech is possible and these variables are dependent upon brain development)

--How important are environmental influences?

- Early environment
 - Prenatal influences [nutrition, disease (e.g., German measles), X-rays (--
→ mutations), drugs (including alcohol, tobacco), teratogens (substances capable of causing birth defects)]
- Define "congenital" vs. "genetic" (look up on Google)

CHILDBIRTH

- Conditions can vary and will affect attitudes of mothers and fathers as well as "caregiving styles" (all of these are components of the neonate)
 - optimal caregiving characterized by proactive maternal (or primary caregiver) involvement (i.e., warm, educational interactions)

N.B. The neonate is not passive—not a "blob"! Neonates are active learners, and parents are teachers.

--How important is the "goodness of fit" between parents and child? (e.g., environment of neonate/child and temperamental fit between parent(s) and offspring)

Social Development in infancy lays foundation for later social relationships

--self-awareness: e.g., 9-24 mos (example: Kenneth Clark)

--social referencing by 12 mos (example)

--imprinting and critical periods (Konrad Lorenz)

--Humans appear to have “sensitive periods” (e.g., for language learning) rather than “critical periods.”

--Attachment (John Bowlby, Alice Miller)

--Mary Ainsworth:

(1) secure attachment (toddler upset by mother’s departure, seek to be near her upon her return). Ainsworth claimed that “secure attachment” occurs when mother accepting and sensitive to baby’s signals and rhythms.

(2) insecure-avoidant attachment (toddler turns away when mother returns)

(3) insecure-ambivalent (toddler clings to mother and angrily resists her)

--These patterns were once thought to be universals; however, further research has demonstrated a significant degree of variability in patterns of mother/toddler or primary caretaker/toddler attachment. The area of attachment remains one of the most active areas of research in developmental psychology, but this line of research is controversial.

--Deprivation and Enrichment (Abnormal Development)

--René Spitz: hospitalism (syndrome)

--attachment disorders

--perceptual stimulation (e.g., as induced by poverty)

--Harry Harlow: contact comfort, need for affection

--worked with monkeys in laboratory (Rhesus macaques)

--What is result of deprivation of contact comfort?

--Enrichment (e.g., Head Start)

--DO THE ABOVE VIEWS STEREOTYPE MINORITIES AND THE POOR?

--Day Care

--Influence/outcome(s) depend upon quality

--Facility should have small group size (12 – 15 children)

--Facility should have caregivers trained in child development

--Problematic if child at facility >20 h/wk

--Day care attendance can accelerate social development (Is this desirable? Is there a tradeoff?)

--Day care attendance can accelerate language development (Is this desirable? Is there a tradeoff?)

Language Development: There are “universals” in language development.

--Language acquisition is tied to maturation

- by 1 mo, infant uses crying as attention-getting device, and parents can discriminate needs from crying
- by 6 – 8 weeks, babies “coo” (repetition of vowel sounds)
- by 6 mos, babbling begins (consonant sounds added to vowels to produce continuous repetition of language sounds)
- by 1 year, child can respond to words such as “No.” and “Hi.”
- soon after, child can say, “Mama.” And “Dada” (thus, child can associate words with objects)
- by 11/2 – 2 yrs, child has vocabulary of 24 – 200 words (N.B. production vs. comprehension)
- soon after, 2 word sentences [N.B. Generative, telegraphic speech (“Go by by.”)]

--Roots of language are universal (i.e., capacity for language a quality of all human brains)

- Biological basis of language (Chomsky, Lenneberg)
- the “language acquisition device” (LAD: Chomsky). Does it exist?
- “sensitive period” for language acquisition and “fast mapping”

Environment

--“Rhythm” between caregivers and children is important. Development of shared system of signals and patterns of “turn-taking”—like a primitive conversation.

- the more parents interact with children, the faster they learn to talk
- however, it is important for parents to accommodate to infant’s timing

--“Parentese” [caretaker speech (a universal—occurring within and between all cultures)]

- intonation of “parentese” short, simple sentences, repetition—has musical quality
- also characterized by expansion and prompting (examples)

Cognitive Development (learning to think)

- child’s thinking less abstract; use fewer generalizations or principles (e.g., transformations)
- begin to think more abstractly after about age 7

--Jean Piaget’s Cognitive Theory of Intellectual Development

--Stage theory based on two processes: assimilation (define and give examples) and accommodation (define and give examples). Assimilation and accommodation are adaptive mechanisms (what does this mean?).

I. Sensorimotor State (0 – 2 years old)

- circular reactions
- “separation anxiety” (about 7 – 9 mos)
- object permanence (by about 11/2 years old)
- by 2 years old child can anticipate movement of object behind a screen
- child’s view of the world becomes more stable

II. Preoperational Stage (2-7)

- beginning to use symbols including language
- child's thinking concrete and intuitive, not "thinking things through"
- "egocentric" thinking (this and several other of Piaget's ideas are controversial)

III. Concrete Operational Stage (7 – 11)

- child masters conservation (example)
- can reverse operations

IV. Formal Operational Stage (11+)

- thinking based more on abstract principles and generalizations
- brain designed to do this (sorts and stores information by categories)

--Piaget today?

--Lawrence Kohlberg's Stage Theory of Moral Development

- I. Preconventional Stage: doing the right thing depends upon punishment and/or reward, exchange of favors (reciprocity)
 - II. Conventional Stage: actions directed by desire to conform to the expectations of others or to socially accepted rules and values (norms)
 - III. Postconventional State: behavior directed by moral principles (you do the right thing because it's the right thing to do); Kohlberg estimated that 20% of US population is at "postconventional" stage
- Are there sex differences? This is controversial.

--Carole Gilligan: Justice (♂♂: Who is right?) and caring (♀♀: How to minimize conflict?)

--Gilligan's schema is controversial

LIFE-SPAN DEVELOPMENT

--Life viewed as a cycle by some researchers

--universal life stages with each stage presenting set of developmental tasks to be mastered; for example:

--Erikson's Psychosocial Stage Theory of Development: suggests that we face particular psychosocial dilemma or "crisis" at each stage and that resolving each dilemma creates a new balance between the individual and society ("integration")

--Stage 1: year 1: trust vs. mistrust

--Stage 2: 1-3: autonomy vs. shame and doubt

--Stage 3: 3-5: initiative vs. guilt

--Stage 4: 6-12: industry vs. inferiority

--Stage 5: adolescence (Who am I?): identity vs. role confusion

--Stage 6: young adulthood: intimacy vs. isolation

--Stage 7: middle adulthood: generativity vs. stagnation

--Stage 8: late adulthood: integrity vs. despair

--Erikson's schema is clinical; see his book, *Childhood and Society*

Problems of Childhood

--Parenting styles (Diana Baumrind)

--Authoritarian: children have few rights but adult-like responsibilities; children obedient, self-controlled, but withdrawn and lacking in curiosity

--Overly permissive: Children have few responsibilities but rights similar to adults; children dependent, immature, but misbehaving

--Authoritative: Parents balance own rights with rights of children; children competent, self-controlled, and responsible

--Haim Ginott: parents should communicate to children that while all emotions/feelings are OK/appropriate, but only certain behaviors are acceptable.

--Thomas Gordon: stressed importance of "I-messages." [rather than "you-messages" force children to accept responsibility for their own behavior (e.g., I don't think that's a good idea.)]

--Overprotection is unhealthy ("smother love"); however, stress is a normal part of life

--Normal Childhood Problems (e.g., sleep disturbances, clinging, sibling rivalry, rebellion during adolescence)

--Serious Childhood Problems

--Toilet-training disturbances: enuresis and encopresis

--Feeding disturbances [overeating, anorexia nervosa (AN), pica (e.g., eating plaster, paint)]

--Speech disturbances: delayed speech; stuttering (probably biological in origin)

--Learning disorders

--Dyslexia: inability to read with understanding (more common in boys)

--ADHD (attention deficit hyperactivity disorder: more common in boys): child constantly in motion and cannot concentrate; a brain disorder treated often with drugs (e.g., Ritalin)

--Childhood autism (more common in boys): can be very severe; child appears stiff and averse to contact, is isolated, exhibits repetitive behavior, as echolalia [circular behavior]; disorder of nervous system; only 25% approach normalcy with professional help; sometimes treated with operant shaping based on reward and punishment)

--Child abuse: Parents often young and poor

--abusive parents likely to think that their children intentionally misbehave

--1/3 of abusive parents were abused as children

--abused children tend to become abusive parents

--there is help in the community for abusive parents

--one approach to child abuse would be to change attitudes in US about physical punishment which is widely accepted in this country

Adolescence: refers to period of time when individual moves from childhood to adulthood

--Puberty refers to rapid physical growth coupled with hormonal changes that bring sexual maturity

--growth spurt occurs earlier in girls (11 – 14) than in boys (13 – 16)

--Early and late maturation

--for boys, early maturation generally beneficial

--for girls, not as clear (e.g., early maturing girls more often in trouble)

--early maturity may force premature identity-formation (“foreclosure”) which may be a particular risk for lower-income and very obedient adolescents

--cultural differences in addition to class differences: discuss

Adulthood: cycles of stability and change

--Roger Gould: “midlife crisis” (challenges, struggles, & crises; not universal)

N.B. Behavioral variables usually more variable than physical variables.

--Levinson: investigated “transition period” in midlife (males); males report midlife crisis between 37-41 (similar to Gould’s “crisis of urgency”): recent data contradict this

--♀♀ vs. ♂♂: ♀♀ less likely to enter adult hood with clearly stated “goals” (this may have changed as a result of women’s movement); it is generally thought that ♀♀ place more emphasis upon personal identity

Middle Age (40’s and 50’s)

--♀♀: menopause (Mean= 51 in US; drop in level of estrogen; also, physical changes; most women adjust well)

--♂♂: climacteric in 40’s – 60’s (hormonal changes but fertility remains)

Aging: by the yr 2020, 1/5 of the persons in US will be 65 or older; fastest-growing segment of society

--Biological aging begins early

--peak functioning in most physical capacities occurs in late 20’s--→ early 30’s, but peak abilities occur at different ages for different activities and professions (e.g., math vs. literature)

--Most elderly persons (only 5%) are not infirm but becoming infirm is a major fear of the young

--Biological aging

--maximum life span about 110 – 120 yrs

--life expectancy in US: ♂♂: 73; ♀♀: 81 (differs by race, class, region of country)

--Health Psychology: many behavioral factors influence morbidity and mortality (e.g., smoking, diet, drugs/alcohol; sex and other high risk behaviors)

--while there is prejudice against the elderly (ageism), most stereotypes are myths

Death and Dying

--Individuals are less afraid of death than might be supposed; more afraid of possible pain and helplessness than of death itself

--Elizabeth Kübler-Ross has proposed stages of dying; these are not universal; see her book, *On Death and Dying*

--Stages of Grief or Bereavement (not universal)

- (1) shock (numbness)
- (2) pangs of grief (intense loss and anger)
- (3) apathy, dejection, depression
- (4) resolution