

# [Psy 364 human development lecture notes assignment](https://assignbuster.com/psy-364-human-development-lecture-notes-assignment/)

Development: (+) or (-) changes in life Patterns of continuities and change (includes growth and decline) 3 ways we develop: Partly like most individuals (biologically) Partly like others (small group experience) Ex: death ofa parent Partly like no others Ex: certain childhood experience BROAD DOMAINS OF DEVELOPMENT: Physical Cognitive (glass of water) Psychosocial (how we deal with emotions) Definitions of development: Growth: physical changes from birth to maturity (biological changes) Aging: (+) and (-) changes in the mature organism Maturation: biological unfolding of individual genetic plan

Learning: relatively permanent changes due to environmental experiences. Age grades: socially defined age groups Ex: children, infants, elderly etc.. Each comes with its own privilege/responsibility Very gradual process Age norms: behavioral expectations of age groups Ex: expect children to attend school Social clock: when things SHOULD be done Ex: having children by a certain age. “ Off-time” experiences are more difficult not expecting (parent death, teen pregnancy) Traditional approach: extensive change from birth to adolescence, little to no change in adulthood. Decline in old age.

Modern life-span approach: developmental change in childhood as well as adulthood. Gerontology: study of old age and aging. Before 1600: children viewed as mini adults Modern view: innocent/need protection Average life expectancy 1900’s: 47 years Average life expectancy 2000: 77. 5 years Greater in whites by about 5 years Don’t really know why the mind changes: BOTH!!! Nature vs. nurture debate Nature: heredity maturation and genes (biology) Nurture: learning, experience, cultural influence and environment (world experiences) GENETICS AND ENVIRONMENT INTERACT: Tyron (1942) Experiment on maze running in rats

Selectively bred 2 lines of rats 1. Dull – on how well they could run the maze 2. Bright kept environment the same Raised offspring in a rich or less enriched environment (wasn’t much opportunity to learn how mazes worked – less) Genetics idea: thought those from dull genetics line would simply do worse RESULTS: dull line did Just as well in enriched environment (now performed like bright rats) ECOLOGY OF HUMAN DEVELOPMENT: Bronfenbrenner: bioecological model (interactionist model) How nature and nurture interact to produce development 1 . Microsystem: immediate environment Ex: classes you attend etc.. 2.

Mesosystem: relationships between Microsystems Ex: divorce parents might affect how you do in school. 3. Exosystem: Social systems – NOT DIRECT Ex: dad had a bad day at work, and child feels this at home 4. Macrosystem: culture Chronosystem: changes occur in a time frame 3 goals of developmental psychology: 1. Description: Understanding what happens during development Individual differences 2. Explanation: Typical and individually different development 3. Optimization: How we can improve development Early Beginnings: Charles Darwin (1809-1882) Theory of evolution Use of baby biographies Kept records of how infants act

Systematically understanding difference in children Stanley Hall (1844-1924) Questionnaire methodology with children 1st to coin that adolescence is a period of storm and stress. Alfred Binet 1st IQ tests (Halls work to the next level) attempt to get a stable estimate of child’s intelligence jean Piaget (1896-1980) Focused on cognitive theories of development Modern life span perspective: saltes (1987): 7 key assumptions of modern-life span perspectives Life long (always undergoing change) Gain and loss and lifelong plasticity Historical/cultural contests, multiple influence Multidisciplinary studies Scientific approach:

Theory: set of concepts and propositions that describe and explain some aspect of behavior. Hypothesis: theoretical predictions that can be tested by collecting data. Random sample (vs. convenience): identify all members of the larger population and select by random means. Ex: theoretically correct way: List of all people from ages 70 in the entire world then select random people to study. Ex: convenient: Wars to do random sampling but much easier Political poles Data collection: (3 methods) 1 .

Verbal-reports: interview, questionnaires, tests Strengths: Gathers large amounts of data Simple Direct answers Limitations: Interpretation of questions (age differences) Issues of honesty and accuracy Ability to read/comprehend speech Ex: cant give interview to infant or young children m e a ities to describe what they are thinking. 2. Behavioral Observations: Naturalistic: Advantage: natural setting Disadvantage: conditions are not controlled Ex: raining when studying in playgrounds Structured (Lab) Advantage: conditions controlled Disadvantage: difficult to generalize to natural settings 3.

Psychophysiological methods: examine relationship between physiological responses and behavior Functional Magnetic Resonance Imaging (fMRI): measure rain activity during cognitive tasks Ex: what does the brain do when you tell a story Heart rate: compared to baseline, decrease may indicate interest. EEG: brain wave activity, showing arousal states; stimulus detection. Cortisol: “ Stress hormone” STRENGTHS: most responses are hard to fake (brain activity, cortisol levels) WEAKNESS: some responses are hard to interpret Ex: high interest is associated with a slower heartbeat, but so is a state of calm.

Need multiple converging measures: Verbal reports and physiological measures Unique challenges in developmental research: Infants and young children: Attention, instruction, answering questions may be difficult Elderly Adults: Possible sensory impairments Discomfort being studied, tested Adult aging research problem: Want to study reading comprehension in older adults and compare it to younger adults Consider for experiment: Vision impairments Slower What would you do to “ equate” younger and older?

Give older adults more time to read the test Seeing the text: increase the font or let participants choose fonts Does your method of equating influence your interpretation? Going to seem artificial and created age effects to equate for these different things Made reading situation very strange The scientific (experimental method) 3 critical features! 1 . Manipulation of independent variable – change things and see how this change effects behavior ex: 2 diff detergents, tide or other (change situation) to see the difference. Diff. study techniques, better grade? . Random assignment of individuals to treatment conditions ex: medicine helps people get better from colds quicker, placebo and medicine are assigned to Sep. Experimental control control how much tutoring and when. Rather than Just asking how do you study? Come up with a pile of random methods, this way you can control what is happening in study. Quasi-Experiment: No random assignment – cant tell if there is a causal relationship between, only compare between the groups. Ex: cannot experimentally manipulate race, gender, handedness, morning vs. ight person. Race cannot cause difference in IQ Older adults have worse verbal memory than younger adults 7 year olds read more slowly than 12 year olds. Experience with language, and less education than 12 year olds. Assign 7 year olds to lots of tutoring in language to get them both at the same level to make no differences CAUSAL EFFECT IS EXPOSURE TO LANGUAGE The correlational Method (systematic relationship) – differences = correlation Determine if 2 or more variables are related. Correlation: a measure of a relationship Can range from +1. to -1. 0 Positive: variables move in the same direction Negative: variables move in opposite direction (as one goes up the other goes down) No relationship correlation is O. Cannot establish a causal relationship. Age, cohort and time of measurement effects: Age effects: changes which occur due to age (biology) – grey hair Cohort effects: Born in one historical context Changes due to differences in society Disadvantage of cross-sectional design. Time of measurement effects: historical Take place at time of data collection

Disadvantage of longitudinal design Developmental research designs (CLS) 1 . Cross-sectional designs: +1 cohorts or age-groups studied 1 time of testing Studying age differences at any one time Cohort effects! (cohort and age effects are confounded) Provides no data on individual development 2. Longitudinal designs: – 1 cohort +1 time of testing study changes across time in one cohort Costly and time consuming Practice ettects and selective attrition Age effects and time or measurement are confounded.

Sequential designs: A combination of cross-sectional and longitudinal designs Advantages of both designs: Gives information about: Which age-related trends are age effects? Which age-related trends are truly cohort effects? Which age-related trends are a result of historical events? Have initial group and track them across time: 30, 40, 50 then later select a new group from a different cohort then keep going. End up with diff. ohorts to show different cohorts (time periods) – cohort effect Gender beliefs will change in 2000 than in 1950’s etc.. LIMITATION: hard to do Cultural and sub cultural sensitivity in research: Variety of contexts considered- cohort effects Culturally sensitive methods and measurements – data needs to generalize what opulation you are interested in. SES particularly important Ethnocentrism: not designing studies only relevant to their ethnicity Research Ethics: Must protect participants from any physical or psychological harm.

Prisoner/guard study Everyone got really into it, guards started to become very brutal. Came up with all sorts of punishments. Science must be ethical Informed consent: participants need to know all risks and benefits upfront. Debriefing: tell participants about the study afterward. Ex: milgrim, it was an actor screaming. Protection from harm If experiment does cause temporary discomfort or distress, safeguards must be given o monitor participants and intervene against long term effects.

Ex: hubbard et al (2002) Children provoked to become angry after another child cheats at a game Parents observe through mirror Children played a second game that was rigged for them to win Debriefed Children got to know the actor All data always kept confidential Ensured by: pre-research approved by the internal review board Health insurance portability and accountability act of 1996 (HIPPA) WYNN (1992) – outside reading – dolls added and removed in case Purpose: Whether infants have arithmetical knowledge Goal is to test between 2 hypotheses: .

Infants can do addition and subtraction using individuated numerical representations 2. Intants can make comparisons ot numbers using general perceptual impressions of amount or quantity (more plausible) Task: Looking time procedure Infants look longer at unexpected events Pre-Test: Showed final displays rather than both Just to see if infants like looking at one or two objects more.

Predictions: If infants can do addition and subtraction, infants would look at the incorrect answer longer, surprising, should be one rather than 2 or vice versa Difference at the 2 doll s 1 doll display should be larger in the “ 2-1” group than the “ 1+1” group Results: Infants notice differences but still can’t tell if this is because of mathematical skill or just noticing differences Experiment 3: Maybe infants know that an arithmetical operation results in numerical change, but cannot compute the exact result Know 1+1 equals “ more” but not 2 Same as “ 1+1” condition and land 2 but Result scenes either have 2 or 3 dolls If infants do arithmetic, they will look longer at 3 doll compared to 2 doll condition. If they Just use perceptual impressions to determent the new amount is different, then looking times should be equal. RESULTS: Pretest: really no difference in looking time Test: look longer at 3 doll display Infants are doing math – don’t believe this May know objects but numerically might not know – meee CONCLUSION: Infants count items in the display and perform arithmetic Infants born with innate ability to do simple addition and subtraction Introduction: Purpose of the study: Problem statement: Should identify what aspect of human cognition is being studied.

Provide a general description and indicate why it is important Goal statement: Identify and explicitly state the specific goals of the study Theory/hypotheses and predictions: Most articles focus on one or more theories that are being tested Identify and describe these theories and hypotheses Identify and list any predictions that the authors make about results of the study Experiment: Describe the procedure and design of the study including the following information. The task Critical independent variables Dependent measures Results and conclusion: State the effects and pattern of data State significant effects Explain the effects Describe authors conclusions Explain implications ot the study References page: APA format Include paper you are reviewing as well as any other papers you cite.