PS 241 Lecture Goals (Prof C. Harris, Fall 2002)

Lecture topics are listed chronological order; see syllabus for exact dates. This is not a summary of each lecture, but the motivation for my choice of lecture topics. This lets you know why this topic is studied.

Basic Issues, Theoretical perspectives: "Finally over Freud"

In prior decades, developmental psychology was similar to general psychology in focusing on broad, sweeping theories of the early definers of our field (e.g., Freud, Erickson, Maslow, Skinner, Piaget, Bandura). This era is behind us. Theoretical approaches are not determined by single individuals, but by research frameworks developed over decades by hundreds (if not thousands) of scientists. The central concern of developmental psychology is to develop new ways of thinking about how to integrate the multiple sources of information which constrain human development. The primary job of students in this class is not to learn specific theoretical approaches (although we hope you do become familiar with some), but to learn examples of phenomenon and research findings which can be used to think in a more complex way about the interactive chain of events in human development.

Correlation is not causation; multicausality: "Be on the lookout for third variables and spurious correlations; Rein in the human leap to infer single causation"

If you only learn one thing in this class, I hope it is increased skill at thinking of multiple explanations for correlational statements. I challenge you to stump me! Bring me your correlation/causation conundrums. I hope that an improved ability to avoid faulty reasoning in your every day life is the reward for learning how to conceive of alternatives to inferring causality. In addition, be forewarned that questions of this may appear on tests. The end-of-the-semester test in spring 02 concerned an "illusion of causality." (See courseinfo site from spring 02, documents page, for a description of the question.) Only half of the students realized that causality had not been established.

Historical Foundations: "Swaddled babies don't cry"

Is developmental psychology common sense? Maybe yes: But a Connecticut Yankee would fare better in King Arthur's court than in a 21st century Developmental Psychology Class.

Prenatal Development: "No Turning Back; Crisis and Opportunity"

Freud took embryogenesis as his model for developmental in the post-natal period. As a metaphorical borrowing, this may or may not have been helpful to the fledgling science of psychology -- but the prenatal period is illuminating just understood on its own terms.

Teratogens: "You will never again be so susceptible to environmental toxins"

Learning about the myriad of outside agents which can damage the fetus is useful not just for expectant parents, but for scientists interested in the interaction between genetic instructions and environmental influences -- but we're talking chemical/biological, not social, environment.

Infants' survival skills: "What does cuteness get you?"

In contemporary industrialized societies, most infants are keenly desired by their parents. But an infant is determined to survive, wanted or not, and is born equipped for a worst-case scenario.

Brain Development: "Neurons that fire together wire together"

The brain works in mysterious ways: It proliferates far more neurons and synapses than it will ever use, then massively prunes them. New systems take behavioral control by inhibiting "lower level" systems. What are the implications for understanding children's development?

Sudden Infant Death Syndrome: "No known cause or many known causes?"

It is not hard to find a newspaper or magazine article which claims that the cause of SIDS is unknown. I will argue that this is an impoverished view of causality and that SIDS is an example of the "final common pathway" phenomenon. Final common pathway refers to a situation in which diverse types of injury have a common

(meaning similar) effect. Diverse types of injury may all have the same effect because they all impact a system which is a weak link in the chain; when this link is broken, the same effect occurs. For infants between 2 and 6 months of age, this weak link is the respiratory system. Infants easily suffer breathing blockage. The result: sudden death. There are specific causes of breathing blockage, and an infant who dies of SIDS may have one of them or several.

The Sensorimotor Stage: "The fragility of early mental representations"

Is it easier to tie your shoes or verbalize how to tie them? The former is sensorimotor. Throughout our lives, the distinction between knowing how (procedural knowledge) and knowing that (declarative knowledge) matters. Procedural is the earliest type of knowledge. Knowledge that is supported by perception, motor actions, and sensory feedback, is stronger than knowledge which exists completely in the mind as an abstract representation. So what? This is the new way that psychologists understand the old observation that for children, out of sight appears to be out of mind. Contemporary psychologists would say that Piaget was wrong: children *do* have the concept of objects' continued existence in the first year of life, but it is a weak, fragile concept.

The transition to concrete operations: "The fragility of early mental representations"

The same story we saw in discussing cognition in infancy is told at the preschool age: Piaget's experiments are replicated, but contemporary researchers draw different conclusions. Young children have "islands of competence." They are far more similar to adults than Piaget believed, indeed, many researchers believe children differ quantitatively, not qualitatively. Then why do young children appear to reason bizarrely?

Children accusing adults: "Lessons from the child abuse witch hunts of the 1980s"

Even two decades ago psychologists and social workers had incorrect beliefs about children's suggestibility -- AND a passionate desire to stop ignoring childhood sexual abuse.

Attention Deficit Disorder: Brain Dysfunction, Normal Variation... or *Better than Normal*??

There is little consensus about whether children with ADD are normal or abnormal; whether prevalence of the disorder is really increasing, and what parents, educators and health professionals should do.

Language development (3 classes): "The pinnacle of human development"

What are the language milestones? A microcosm of issues in developmental psychology (Biology, Learning, Society). Critical periods effects, bilingualism, Williams Syndrome.

IQ, **Intelligence**: "IQ scores skyrocketed across the 20th century: Are we really smarter today?"

The questions in IQ tests are modified every few years to ensure the tests have constant psychometric properties (a mean of 100, standard deviation of 15). If today's test show you to have an average IQ, you would be of superior intelligence according to the tests from the 1930s. What is going on?

Attachment: "The pinnacle of mammalian development"

Attachment is a technical term. What is it, how do we measure it, what does it predict? If natural selection has programmed individuals to enact behaviors which increase copies of their genes, under what circumstances would it be necessary for parents to resist attachment? What helps the attachment system function optimally?

Temperament: "Infants' physiologically-based preferences are the prelude to personality." Is an "easy" temperament the best? When is "difficult" the best? Infants who show demonstrate a fear response to novelty at 4-8 months are on the path to becoming reticent, behaiorally inhibited, shy youngsters (at 4 years old) and introverts as adults. They are also at risk for having an anxiety disorder... What factors can intervene between 4 months and 4 years to avert a child from the path to shyness and difficulty in peer social situations?

Goodness of Fit: "When the characteristics of the individual match environmental demands."

Become familiar with the smattering of empirical work which supports the powerful idea that outcome is most optimal when a good fit exists between an individual's characteristics and environmental demands.

Theory of mind: What is children's theory about the contents of consciousness?

This lecture has been trouble in past years. Let's start by thinking about your college-student *theories* of the natural world. Your theories about the physical world. Gravity, momentum, the speed of light. Your theories about the biological world. The concepts of species, reproduction, natural selection. Some of these theories are influenced by formal learning, most are influenced by observations over your decades of living. Your theories about human behavior come both from school and from observation also. Previously rewarded behaviors will be increased. People act to maximize personal gain. People can have incorrect beliefs about what other people are thinking. People's incorrect beliefs cause them to do the wrong thing ... *Hold on!* People can have incorrect beliefs about what other people are thinking? Sounds like you have a theory of what a mind is. When/how did you develop this?

Perspective taking: "Perspective taking is hard for 3 year-olds... 13 year-olds ... 30 year-olds..."

Preschoolers fail Piaget's 3 mountain perspective-taking task. And the Palestinians and Israelis fail to reach an agreement at every peace summit...

Aggression: "Can you say multiple causality?"

How do you code a social situation? How easily do you infer hostile intent by others? How large is your repertoire of social problem solving skills? Is danger exciting or crippling? Can you self-medicate a weak endogenous pleasure-delivery system with sensation seeking behavior?

Sociobiological approaches to moral reasoning. "Altruism is self-interest"

Dr. Kohlberg is Out. The Selfish Gene is In. Humans, like other social mammals, engage in reciprocal altruism and kin-selection. But humans rachet this up another level. In a benign environment and affluent culture which hundreds of years of admiring selflessness, one route to maximizing personal gain is to really, genuinely care about other people.

Psychobiological Studies of Gender: "Learning matters, hormones matter, culture matters." **Children with ambiguous genitals:** "Hermaphrodites unite"

The activist group which desires freedom from the tyranny of gender claims that there are not two genders (male and female) but just a continuum of biological and psychological traits. Society chooses to make categorizes convenient for it (the "social construction" of gender). Other activists say gender, schmender, but please, doctors, don't destroy genital tissue until children are old enough to provide informed consent for surgery -- and if hermaphrodites choose to be transgendered, then respect that choice.

Are gender roles oppressive for men? "Why men are the way they are."

The men's movement, including many psychologists, says its time to do for men what the women's movement did for women (or aspired at some points to do): give men the space to be whoever they want.

Theories of homosexuality: "Why are some people gay?"

I'll be pushing multiple causality, but be warned that many people think homosexuality is very tightly controlled by genes.

Gay and Lesbian parents: "Queer like your folks"

You already know (from Psych 101 or see our textbook) that the authoritative parenting style is the "best" Does this depend on culture? What about gay parents?

Divorce, transitions, single-parenthood: "What story are the children learning about the divorce?"

Divorce is bad for kids. When, why; when not, why not, and how big is your effect size? Is it the fighting? Is it the loss of income when bread-winning father leaves? Is is the stress of single-parenthood? Is it the story that gets told? Are parents who divorce more likely to have "difficult" temperaments which they pass on via both genes and environment to their children?

Sibling conflict and birth order. "No child is ever born into the same family twice"

If my brother (sister) weren't around I'd have *all* the parental resources. We'll evaluate Frank Sulluway's contention that birth-order based strategies for competing for parental resources are a strong influence on personality.

Children, advertising, TV: "Catching Them Young"

The ills of violence and consumer culture. But I watched a lot of TV and I'm okay. (You are?) As in prior lectures, the main point here is going to be what factors protect you from the negative effect of TV and consumer culture, and what factors make you vulnerable to them.

Development psychology and motivation. "Are rewards punishments?" Alfie Kahn says so.

Educators agree that intrinsic motivation is "better" than extrinsic. But a wealth of disagreement follows, including our attitudes to the Fathers of Reinforcement Learning, Watson and Skinner. Let me throw in my two cents: Do disagreements diminish when we take into account Goodness of Fit?

Schooling (2 lectures): "Multiple pathways to achievement"

In human development, there isn't one right way to be. Nor is there one right way for a school to be. Or a student to be. Or a teacher to be.

Puberty: What is it? Must adolescence be stressful?

G. Stanley Hall, the psychologist who first struggled to define a stage of adolescence 100 years ago, argued that adolescence is programmed genetically to be a time of storm and stress. But must it? (You should have a gut instinctive answer to this type of question by now, and should be able to rain forth a slew of risk factors and protective factors, both at the level of culture and family.)

Teen Delinquency; Substance abuse:

More on vulnerability vs.resilence. For example: The teen years can be years of crisis -- but one negative event isn't likely to have along-term effect if everything else is going okay.

Sexuality in the era of AIDS: "Knowledge doesn't equal behavior"

There is no main point here, other than to appreciate the list of stressors, and of course, vulnerability/ resilience. Planned Parenthood says that the best contraceptive is a future... Research shows that the more teens talk with their parents about sex, the less risky is their behavior. Psychologists note that dating in the teen year appears to be a process in which boys and girls train each other in their respective interests/commitments -- for boys, sexual intimacy, for girls, emotional intimacy. In spring 02 lecture I probably went on a bit too long talking about how the genders will never be so different again sexually as in the teen years -- one student raised her hand to point out, "But yet it sometimes works, doesn't it?"