Foundations of Child Development – PSYC2500
Lecture 1, September 6/13

- 1 midterm – Oct 26 from 4-6:30 (M/C), 1 10-pg essay due Mon, Nov 18 by noon submitted on cuLearn – upload and then submit for grading (Ted Talks – analyze one talk in light of what we discuss in class), 1 final exam (M/C)

Historical Overview

- Plato and Aristotle pondered the nature of childhood
- Plato (438-348 BC) vs Aristotle (384-322 BC)
- Plato: when we are born, we have preexisting knowledge of the world; our brain structure is such that when we perceive things in the environment because our structures are such that there is already a pairing. **Preexisting structures are waiting for that experience to be activated.**
- His student Aristotle disagreed; said we need experience. The mind requires experience and it is through experience that we learn. All is learning accoring to A.

John Locke (1632-1704) **Jean Jacques Rousseau** (1712-1778)
- John Locke said that the child is a blank slate; born w/no knowledge. All we learn and get to know is from learning and experience (like Aristotle)
- JJ Rousseau argued that the child is born as a moral being (more w/Plato); what you have is a natural nature that is good. The child is a moral being; what you need is society around the child, including the parents, that will alter the nature of the child. Argued that the child is inherently good.

A New Science
- Industrial Revolution (late 1700s to early 1800s) and Reformers
- w/the industrial revolution came about the fact that children were put to work; all thru the middle-ages, kids were seen as representations of adults – expected to learn the skills of adulthood and if a peasant's child, then expected to work in the field (ages 5-7)
- reformers in response to industrial revolution and what they were seeing happening to many of the children started urging to change the laws (poor families having their kids work brings food and money to the family. What will they do if the kids don't work? This was the societal debate of the time.)
- reformers needed information to change society (transfer kids from factories to school); needed evidence

Darwin (1809-1882)
- published his book on the origin of the species; sparked the interest in the development of children
- as a society, people started being interested in the origin of their adult lives
- Darwin started writing baby biographies – published exerpts of the diary
- used his observational skills he used on animals on his own children

Promoting Healthy Development
- in order to convince and how to understand how to promote wellbeing in children, needed more findings on how best to educate children
- to this date, children's wellbeing is key to child development

2. **Foundational Theories**

"Theory – an organized set of ideas that is designed to explain and make predictions"

The Biological Perspective

Biological forces

- ex: Plato – we're born with a system that will mature over time and experience is only necessary to activate that system
- ethological theory: interested in biological forces; is a comparison approach. In ethology, say that we can compare other species to look at same phenomenon (ex: aggression – look at in human beings as well as other species)
- ethology as a field came about in the 1930s
  - One of the major forces of ethology was Konrad Lorenz (1903-1989)
  - Started doing observations of birds
  - looked at how important it was for a species to recognize other members of that species
  - saw w/in goslings and chicks, w/in a few hrs of being hatched, started to be able to recognize their mother from other geese and chickens.
    - Preexisting structure in the brain?

Two important concepts from Konrad's observations:

1) Imprinting – bonding that occurs w/in a few hours of birth; for safety and wellbeing, better to keep following that individual because that will improve your chances of survival. This occurs w/in a certain period; after that period, it does not occur.

2) Critical period – when learning must occur otherwise the trajectory of development will be off/delayed

Psychodynamic Perspective

- Development is determined by how a child resolves conflicts at different ages
  - adults are a result of their development (they will have gone through stages in that development – each stage characterized by conflict)
  - if conflicts adequately resolved, then likely to be a mature adult. If not, maybe experience problems w/emotional development

Two major theories:

Freud's psychosexual theory

Erikson's psychosocial thoery

Freud (1856-1939)

- argued that there are 3 components to personality:
  - id (basic instincts and impulses; cravings and needs; unconscious); ego (structure called the rational ego; want ego to control those urges in a reasonable manner); superego (moral being; preconscious)
  - according to F, we balance the impulses of id and the morality of the superego (what the ego does)
  - 5 stages of development
    - undercurrents of sexuality; body is a source of pleasure in how it experiences the world

Erikson (1902-1994)

- did not agree that sexuality is the primary force in driving instincts

- says there are basic instincts but also society influences & forces
  - there are conflicts between these two and we need to resolve them
- why stop stages in adolescents? Should go on throughout one's life; development occurs all throughout life

- Erikson's psychosocial theory:
- 8 stages

The Learning Perspective

- maturation and instincts are not important: what makes you what you are today are the experiences you've had and how you've learned from them. Pure learning perspective.

Pavlov (1849-1936)

- physiologist looking at salivation in dogs when presented w/food and when tube inserted
- *classical conditioning:* basic unconditioned response, basic conditioned response

B.F. Skinner (1904-1990)

- *operant conditioning:* pairing any behaviour w/rewards and punishment
- if we reinforce behaviours, we will increase the probability of that behaviour recurring
- if we punish behaviours, decrease likelihood of it happening again
- positive reinforcement – providing incentive
- negative reinforcement – have to do behaviour for the negative thing to stop
- Skinner adamant that there is no such thing as preexisting structures or maturation – only learning

Albert Bandura (1927-)

- *Observational learning*
- said that you don't need a reinforcer; if that behaviour is of sufficient interest to you, you might be able to have an internal representation of that behaviour
- interested in aggression in kids and adults
- Bobo doll experiment (evidence of children who saw the aggressive behaviour being more aggressive to the doll w/o having any reinforcement)

The Cognitive-Developmental Perspective

Jean Piaget

- development reflects children's efforts to understand the world
- have reflexes when born; children are budding scientists since birth
- Piaget interested in cognitive development – how do we think and how does thinking develop over time
- assumption: you cannot consciously imitate until you are 9 months old, but Piaget did a study on newborns that showed otherwise
- argued experiential learning – allow children opportunities to learn how objects work by interacting w/them
- more the physical world he was interested in
- the world view of a child is not the same as an adult
- Piaget argued that prior to 9 months we don't have the concept of symbolic representation

Piaget – 4 stages of development (in text book): each one w/a specific hallmark
1) sensor monitor

2) pre-operational
3) concrete operational
4) formal operational

Language, words and symbols help to represent the world. But until age 6, you're very egocentric; reason by what you see. By age 7-11, move away from own perspective and use operations to test outside world, but still not able to use abstract reason (which starts around 12/13.)

Piaget argues that, like the psychodynamic perspective, if you master each stage, it's a necessary prerequisite for the next stage.

The Contextual Perspective
- development is determined by immediate and more distant environments, which typically influence each other
- cultures raise their children differently – ex: Western world: question asking is encouraged; not so much in some Eastern countries

Lev Vygotsky (1896-1934)
- interactions w/the learned other are key sources of knowledge acquisition
- need to see cultural and contextual experiences; school, neighbourhood and culture

4 Themes in Developmental Psychology, Philosophy
1) Continuity-Discontinuity Issue – can we develop from conception onwards as a continuous development, or do these stages have a predetermined order? Is it continuous and gradual or discontinuous – marked, demarked as they move from one stage to another?
2) Nature-Nurture Debate – not all nature or all nurture.
3) Active-Passive Child – what is your worldview of childhood?
4) Domains of development – perceptual development, cognitive, social, emotional, personality, motor developments – we see them as separate domains of development, but they all interact and feed on each other constantly.

Methods:
Doing the research
- if child development research is a science, then must have methodology
Two types of systematic observation:
- *naturalistic* observation – observing kids systematically in their natural environment; think ahead about what you're looking at and what you want to observe; systematic in what you want to observe
- *structured* observation – used when you don't have a natural environment; might bring children into structured environment and see how they behave in it; observational measure
Sampling behaviour with tasks:
- when direct observation is difficult
Self reports
- tell the researcher; ex: work on self-esteem – questionnaires; asked to reflect on own behaviour
Physiological measures
- measuring the level of cortisol by taking samples of saliva

Whatever measure you're using, there are two factors that you should ensure:
1) Validity – the measure is measuring what it's supposed to measure
2) Reliability – if used over time, would it produce the same effect? One way to increase reliability is

to increase the sample size.

Samples of children who participate in research should be representative of the **population** of interest. In most experimental work, have small samples; that's why you need to have larger sample sizes so that it's truly representative of the general population – want to replicate findings and use different methodology.

General Designs for Research
Correlational studies – positive association; negative association
perfect correlation is 1
- average size of correlation in social sciences = .30; shows small association
- correlations do not speak to cause and effect; if want to measure cause and effect, have to do intervention studies or experimental studies

Experiments

Studying Age-Related Changes
- as you age, you experience more
- longitudinal studies: following same individual until your study is finished; very difficult to do and very time-consuming. Danger: sample size becomes smaller and smaller in time.

Cross-Sectional Study
- testing all children in study @ the same time, however selecting children of different ages which allows you to say whether children of different ages use different types of memory strategies
- if results are showing that you're finding age-related differences, could it be that children of different ages have different levels of intelligence?

Longitudinal-Sequential Study (text)
- longitudinal mixed w/cross-sectional

Most longitudinal studies are short term studies (ex: 2 years); studies that are 20+ years are much rarer.

Microgenetic Study (text)

Meta-analysis – using all the research reports on the same subject, combining them to talk about whether phenomena exists, and if so, under what circumstances. Only as good in quality as the research itself.

- Read ch 2 for next class