


## Lecture 1: WHAT IS DEVELOPMENTAL PSYCHOLOGY?

06/03

Developmental psychology is the study of *consistency and changes* that occur in people *across the lifespan*. The goal is to identify and describe those factors that influence consistency and changes that occur.

### Development Domains:

- Physical
  - Cognitive
  - Emotional
  - Social
- 
- INTERRELATED

### Periods of Development:

- Prenatal: conception → birth
- Infancy/toddler: birth → 2 years
  - Notice problems in play, speech
- Early childhood: 2 → 6 years
  - Social and intellectual skills develop
- Middle childhood: 6 → 11 years
  - Notice problems in learning, reading, writing
- Adolescence: 11 → 18 years
  - Independence, freedom, responsibility

### Developmental Psychologists are interested in:

- Normative development:
  - *Typical sequence* of developmental change for a group of people
  - *Are they meeting this 'normal' timeframe*
- Individual differences:
  - *Why* individuals differ from the typical sequence
- Outcomes of development:
  - What develops & when does it develop?
- Processes underlying development:
  - How and why does it develop? Under what circumstances does it develop? What are the necessary prerequisites?
  - *Are some things needed before others? Sequential? Eg. walk before run*

### Scientific Theories:

Theories describe, explain & predict behaviour. They:

- Guide & give meaning to observations
- Aid understanding
- Depend on scientific verification

A good theory must....

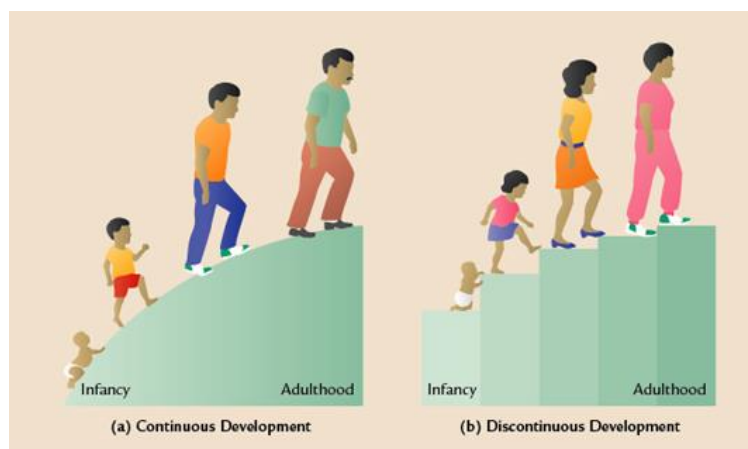
- Be testable (falsifiable)

### Classifying Theories: Active vs. Passive learners

- **Organismic (active learner):** child is an; *inherent psychological structures* underlie development
  - Nature of organism determines what is possible (eg. human → capacity language development)
- **Mechanistic (passive):** child reacts passively to environmental stimulation
  - Child reacts and responds to stimulation

### Qualitative and Discontinuous Development OR Quantitative and Continuous Development?

- Qualitative & discontinuous: new skills or levels of understanding acquired in a stage-like fashion children change rapidly as they step up to a new level of development and then change very little for a while.
  - With each step the child interprets and responds to the world in a qualitatively different way.
  - They achieve this step \_\_\_ which allows them to do these things \_\_\_
- Quantitative & continuous: smooth continuous process where skills are continually added & expanded



### Nature vs. Nurture:

- Nature: genes determine development. Maturation of psychological structures unfolds in an orderly sequence. (Nativism: Rousseau's noble savage)
- Nurture: environmental factors determine development. Child learns through experience. (Empiricism: Locke's tabula rasa)

### One or many courses of Development?

- Children grow up in distinct contexts (combination of personal and environmental) that can result in different changes of paths.

- Is the sequence of development the same for every child or do children differ when they achieve a skill or knowledge?
- Are the processes underlying development the same for all children or can they differ?
- Do children progress in all domains at the same rate or is this rate variable?
- Different depending on environment

### Stability vs. Change:

- Do early characteristics predict later ones regardless of the developmental context?
  - Disorder/disease/disability → won't achieve the same as a 'normal' child
- Can early characteristics change when the context changes?

### Most Developmental Psychologists Believe that:

- The child participates actively in the environment
- Development is *both* continuous & discontinuous depending on the domain or characteristic
- Both biological (genetic+ maturation) & experience are important
- There are many courses of development
- Some characteristics are stable & others can change

## Major Theories of Development:

**Psychoanalytic Perspective:** children move through a series of stages in which they confront conflicts between biological drives and social expectations. How these conflicts are resolved determines the person's ability to learn, get along with others and to cope with anxiety.

Too vague to be tested empirically and failed to consider other methods.

- Freud's psychosexual theory emphasizes how parents manage their child's sexual and aggressive drives in the first few years.
  - During childhood sexual impulses shift their focus from the oral to anal to genital regions.
  - Considered the role of early parent-child relationship on development
  - Overemphasizes the role of sexual feelings in development, did **not apply across cultures** and he did not study children directly.
- Erikson's psychosocial theory: ego makes a positive contribution to development, acquiring attitudes and skills that make the individual an active, contributing member of society.
  - Included adult **stages** in his theory recognising the role of development across the lifespan and recognised the importance of culture.
- Organismic, **discontinuous**, nature & nurture, one course, **stability**

### Behaviourism and Social Learning Theory:

- Watson's classical conditioning: Little Albert
  - Nature: environment is the supreme force in development
  - Continuous: associations *gradually* increase in strength and number
- Hull's drive reduction
- Skinner's operant conditioning
  - Can increase/decrease the frequency of a behaviour by following it with reinforcers/punishment
- Bandura's social learning: how children and adults acquire responses
- **Mechanistic, continuous, nurture, many courses, change**

### Cognitive-Developmental Theory:

Children **ACTIVELY** construct knowledge as they manipulate and explore their worlds

- Piaget
  - Move through stages as the brain develops and experiences expand
- **Organismic, discontinuous, nature & nurture, one course, change**

### Information Processing Theory:

Human mind viewed as a symbol manipulating system through which information flows

- **Continuous**: is not divided into stages thought processes are regarded to be similar at all ages and merely present at either a greater or lesser extent
- **Organismic & mechanistic, continuous, nature & nurture, one course, change**

### Ethology and Evolutionary Developmental Psychology

- Bowlby
- Ethology: concerned with the adaptive value of behaviour and its evolutionary history
- Evolutionary: seeks to understand the adaptive values of species-wide emotional and social competencies as those competencies change with age.
- Want to understand the entire organism-environment system.
- **Organismic, continuous & discontinuous, nature & nurture, one course, change**

### Sociocultural Theory

- Vygotsky
- Focuses on how culture (values, beliefs customs and skills) are transmitted to the next generation
  - Adults are the most influential in this process
  - Children depend on assistance from adults as they tackle new challenges
- organismic, continuous, nature & nurture, many courses, change

### Ecological Systems Theory

- Bronfenbrenner
- **organismic, ?, nature & nurture, many courses, change**
- **Bioecological model**: Child's biologically influenced dispositions join with environment to influence development

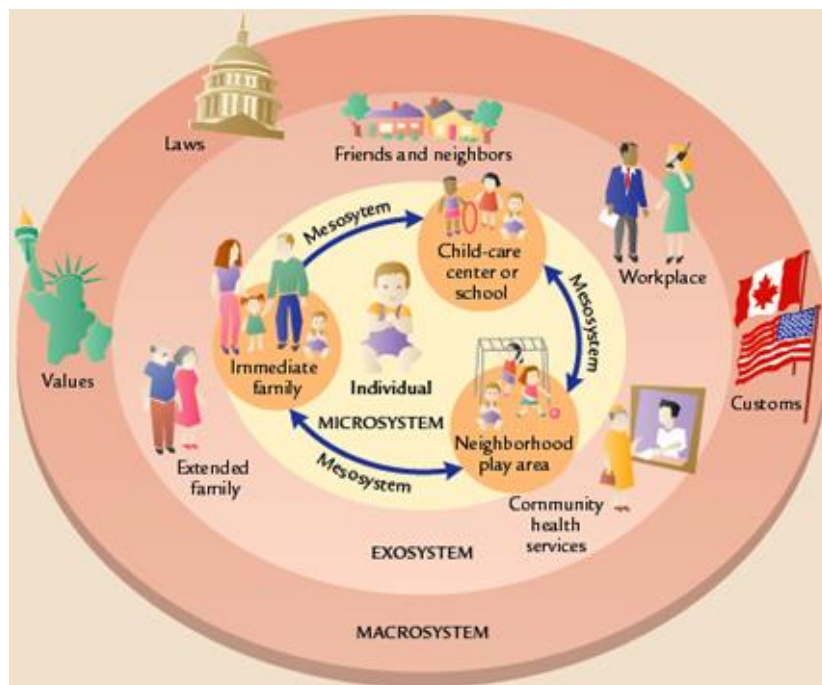
○

Incorporates biology (genetic makeup) with environmental factors

### Components of an Ecological System

- **Microsystem**: interactions in child's immediate surroundings in various settings (family, kindergarten, school, peer group, extended family) in which the child participates directly.
  - **Bidirectional**: adults affect children's behaviour and children influence adults behaviour
- **Mesosystem**: interactions among different microsystems, "a system of microsystems" eg. interaction of parents with school, influences academic activities in home
- **Exosystem**: interactions between microsystems in which the child does not participate but which indirectly affect child (parents' workplace [eg. flexible work hours, maternity leave] and social networks, local government facilities and services).
- **Macrosystem**: values, laws and customs of the culture and society in which child lives
- **Chronosystem**: environment is not a static force that affects children in a uniform way
  - these changes can be imposed on the child or arise from within the child → (products and producers)

*Represents change that will effect development (eg. divorce, changing schools)*



### Dynamic Systems Perspective

- Thelen

- Child’s mind, body and physical and social worlds from a DYNAMIC integrated system that guides mastery of new skills.
  - A change in this disrupts the current organism-environment relationship.
  - A child actively recognizes her behaviour so the components of the system work together in a more complex, effective way.
- **organismic, continuous & discontinuous, nature & nurture, many courses, change**

## Common Methods Used to Study Children

- Systematic observation
  - naturalistic
  - structured
  - Sampling methods: specimen record, event sampling, time sampling
- Self-reports
- Psychophysical procedures
- Clinical method or case study
- Ethnography

## Common Research Designs

- Correlational design
- Experimental designs
  - **Manipulate and control factors (IV/DV)**
- Field experiments
- Natural experiments
  - quasi experiments - cannot use random assignment
- Longitudinal design

ADVANTAGES	PROBLEMS
<ul style="list-style-type: none"> <li>○ Allows study of individual differences and identify common patterns</li> <li>○ Compare timing of changes in different aspects of development - insight into processes</li> <li>○ Examine relationships between earlier and later events.</li> </ul>	<ul style="list-style-type: none"> <li>○ Biased sampling-selective dropout</li> <li>○ Practice effects</li> <li>○ Cohort effects</li> <li>○ Outdated theories and methods</li> <li>○ Practical problems- time and money.</li> </ul>

- Cross-sectional design:

ADVANTAGES	PROBLEMS
<ul style="list-style-type: none"> <li>○ Can get information quickly on how behaviour in general changes with age.</li> <li>○ Problems of <u>biased sample</u> and</li> </ul>	<ul style="list-style-type: none"> <li>○ Information about how individuals change with time lost- cannot see different patterns of development.</li> <li>○ Cohort effects- changes across age-</li> </ul>

<p><u>practice effects</u> minimized.</p> <ul style="list-style-type: none"> <li>○ Problems of theories, methods becoming out of date overcome.</li> </ul>	<p>groups may not be true developmental changes but due to other factors.</p>
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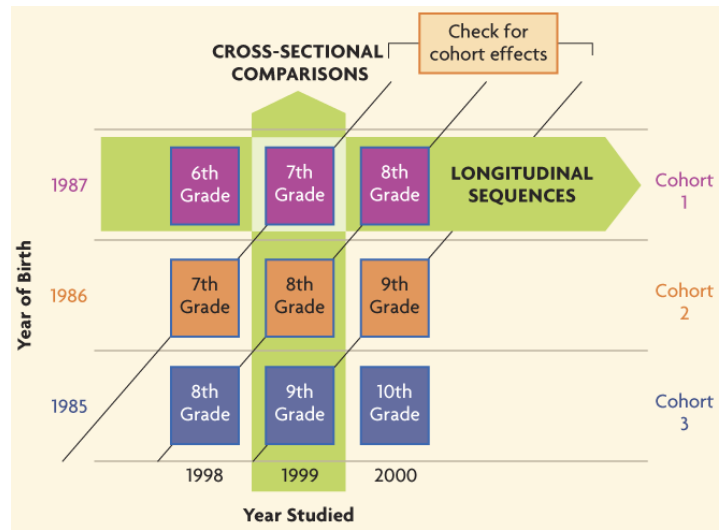
- Longitudinal-sequential design:

**ADVANTAGES:**

- Can estimate cohort effects
- Can make both longitudinal and cross-sectional comparisons
- Design is time efficient

- Microgenetic design

- Looks at fine-grained developmental process over short period of time.



**ADVANTAGES:**

- Actually studies how development occurs, processes involved.

**DISADVANTAGES:**

- Time consuming, practice effects may alter developmental trend.

**Children and Research Ethics – Risks vs. Benefits**

- Protection from harm
- Informed consent
- Privacy/confidentiality
- Knowledge of results
- Beneficial treatments