UNIT 1 – TEXTBOOK NOTES

The science of human development: seeks to understand how and why people of all ages and circumstances change of remain the same over time
- Growth is multidirectional, multicontextual, multidisciplinary, multicultural, and plastic

The Scientific Method:

1. Begin w/ curiosity: pose a question
2. Develop a hypothesis: shape the question so that specific predictions can be tested
3. Test the hypothesis: design and conduct research to gather empirical evidence
4. Draw conclusions: use evidence to support/refute hypothesis
5. Report results: share the data, conclusions, alternative explanations

- *Replication:* the repetition of a study, using different participants

The Nature-Nurture Controversy:

- *Nature*: a general term for the traits, capacities, and limitations that each individual inherits genetically from his or her parents at the moment of conception

- *Nurture*: a general term for all the environmental influences that affect development after an individual is conceived

- How much of any characteristic, behaviour, or emotion is the result of genes and how much is the result of specific experiences?

- Neither. Both genes and the environment affect growth
- *Epigenetics*: explores the ways environmental forces alter genetic expression

The Life-Span Perspective:

- Takes into account all phases of life, not just childhood or adulthood

- Infancy (0-2), Early childhood (2-6), middle childhood (6-11), adolescence (11-18), emerging adulthood (18-25), adulthood (25-65), late adulthood (65+)

Development is Multidirectional:

- Multiple changes, in every direction
- Traits appear/disappear, w/ increases, decreases, zigzags
- *Discontinuity*: change can occur rapidly and dramatically
- *Continuity*: growth can be gradual

- *Critical period*: a time when a particular type of developmental growth (in body or behaviour) must happen if it is ever going to happen

- E.g. when the embryo should grow hands and feet

- *Sensitive period:* a time when a certain type of development is most likely to happen or happens most easily, although it may still happen later w/ more difficulty
    - E.g. language is thought to be learned in early childhood

Development is Multicontextual:

- Takes place within many contexts, including physical surroundings (climate, noise, population density) and family configurations (married couple, single parent)

- *Ecological Systems Approach*: the view that in the study of human development, the person should be considered in all the contexts and interactions that constitute a life
    - People are affected by:
        a) Microsystems – each person's immediate surroundings
        b) Exosystems – local institutions like school, church
        c) Macrosystems – larger social setting including cultural values, economic policies, political processes
        d) Chronosystem – the role of historical conditions (time system)
        e) Mesosystem – the connections among other systems

- *The Historical Context*: cohorts travel thr life together
    - *Cohort*: a group defined by the shared age of its members, who, b/c they were born at about the same time, move thr life together, experiencing the same historical events and cultural shifts

- *The Socioeconomic Context*: reflected by a person's socioeconomic status
    - *Socioeconomic Status (SES)*: a person's position in society as determined by income, wealth, occupation, education, and place of residence
    - *E*.g. how poverty vs. financial assets affect a child's learning

Development is Multicultural:

- *Culture*: a system of shared beliefs, norms, behaviors, and expectations that persist over time and prescribe social behaviour and assumptions
    - Note: culture invites stereotyping and prejudice

- *Social Construction*: an idea that is based on shared perceptions, not on objective reality.
    - E.g. age-related terms such as childhood, adolescence, yuppie, senior citizen are social constructions

- *Difference-equals-deficit Error*: the mistaken belief that a deviation from some norm is necessarily inferior to behaviour or characteristics that meet the standard
    - I.e. humans tend to believe that they, their nation, and their culture are a little better than others

- Multicultural perspective helps researchers realize that whether a difference is an asset or not depends partly on the cultural context

- Learning within a culture: children are taught the beliefs and habits they are thought to need as adults based on what is need in the culture
  - E.g. book reading is a more valuable skill in some cultures than others

- Ethnic and racial groups:
  - *Ethnic group*: people whose ancestors were born in the same region and who often share a language, culture, and religion
  - People from the same ethnic group may differ in culture (e.g. a Muslim living in Canada vs. a Muslim living in Afganistan)
  - Note: ethnicity is part of nurture

Development is Multidisciplinary:

- Multidisciplinary in the sense that we need research from multiple scientists (multiple disciplines) in order to get a full understanding about human life
  - I.e. a researcher studies 3-month-old infants vs. a researcher that studies puberty in adolescents

- Genetics and epigenetics: featuring the Human Genome project
  - Genes affect every aspect of behaviour, but even identical twins with identical genes differ biologically, psychologically, socially
  - Epigenetics: takes into account the environmental factors on genes (why identical twins can still be different)
    - Methylation (a type of environmental influence on genes): a biochemical process in the body that silences genes, the degree of which changes over the lifespan
    - Other epigenetic influences impeding development: injury, temperature extremes, drug abuse, active play, nourishing food)
    - Epigenetics are important for treating diseases (i.e. how the body will react to environmental sources)

- Multidisciplinary research and depression:
  - Depression is partly genetic and partly neurological (i.e. certain brain chemicals)
  - Depression increases and decreases thr.out the lifespan (therefore developmental)
    - B/c it changes over the lifespan, we need multiple disciplines
    - A researcher who studies mother-infant interactions, a researcher who studies heart and brain activity, a researcher who studies adults w/ depression, etc..
    - Disciplines: neuroscience, psychopathology, biology, nutrition, anthropology, medicine, sociology, psychology, family studies, genetics, etc..
    - Recall: depression can still be influenced by culture, populations, etc..
    - Summary: no single factor determines any outcome

Development is Plastic:

- Plasticity: human traits can be molded and yet people maintain a certain durability of identity
    - Hope and realism – hope b/c change is possible, realism b/c development builds on what has come before

- Dynamic systems: a view of human development as an ongoing, ever-changing interaction b/n a person's physical and emotional being and b/n the person and every aspect of his or her environment, including family and society
    - Physical and emotional influences, time, each person, and every aspect of the environment are always interacting
    - Urges us to consider all the interrelated aspects, over days or years

- Differential sensitivity: the idea that some people are more vulnerable than others are to certain experiences, usually b/c of genetic differences
    - E.g. a comment that you remember from your childhood could mean more to you than to the person who actually said it, or to someone else who heard the same comment

Theories of Human Development:

- Developmental theory: a group of ideas, assumptions, and generalizations that interpret and illuminate the thousands of observations that have been made about human growth.
    - Helps us describe and explain developmental changes by organizing and giving meaning to facts and by guiding future research
    - Theories connect facts w/ patterns

- Psychoanalytic theory: a theory of human development that holds that irrational, unconscious drives and motives, often originating in childhood, underlie human behaviour
    - Freud's stages: development in the first 6 years occurs in 3 stages (psychosexual)
        - Suggested that stimulation of whatever sense is linked to developmental needs
        1) Oral stage (birth-1) – lips, tongue, gums are focus of pleasurable sensations/most stimulating
        2) Anal stage (1-3) – the anus is the focus of pleasurable sensations, toilet training the most important activity
        3) Phallic stage (3-6) – the phallus, or penis, is most important body part, and pleasure is derived from genital stimulation
        4) Latency (6-11) – interlude during which sexual needs are quiet and children put psychic energy into conventional activities (e.g. school)
        5) Genital stage (adolescence – adulthood) – the genitals are the focus of pleasurable sensations, young person seeks sexual stimulation
    - Erikson's stages: 8 developmental stages characterized by a challenging developmental crisis (psychosocial)

1) Trust vs. Mistrust (birth-1) – babies trust their caregivers or mistrust about the care of others
2) Autonomy vs. Shame and doubt (1-3) – children become self-sufficient in many activities or doubt their own abilities (e.g. with walking, toilet training, etc..)
3) Initiative vs. Guilt (3-6) – children want to undertake adultlike activities or realize the limits and prohibitions set by parents
4) Industry vs. Inferiority (6-11) – children learn to be competent and productive or feel like they are unable to do anything as well as they wish they could
5) Identity vs. Role confusion (adolescence) – adolescents try to figure out who they are; they establish their role or are confused about it
6) Intimacy vs. Isolation (young adults) – seem companionship and love or become isolated from others b/c they fear rejection
7) Generativity vs. Stagnation (middle-aged) – contribute to the next generation thr meaningful work, raising a family or they stagnate
8) Integrity vs. Despair (older adults) – try to make sense out of their lives as meaningful or despair at goals never reached

- Behaviourism: a theory of human development that studies observable behaviour; describes the laws and processes by which behaviour is learned

- I.e. NOT hidden urges like psychoanalytic, but rather things that you can observe and measure
- *Conditioning*: the processes by which responses become linked to particular stimuli and learning takes place
    - Used to emphasize repeated practice
    - 2 types
        1. Classical – a learning process in which a meaningful stimulus (such as the smell of food to a hungry animal) gradually comes to be connected w/ a neutral stimulus (such as a particular sound) that had no special meaning before the learning process began
        2. Operant – a learning process in which a particular action is followed either by something desired (which makes the person or animal more likely to repeat the action) or by something unwanted (which makes the action less likely to be repeated)
            - Operant looks at rewards vs. punishments
            - Reinforcement: a technique for conditioning a certain behaviour in which that behaviour is followed by something desired, such as food or a smile
- Social learning theory: an extension of behaviourism that emphasizes that other people influences each person's behaviour. The theory's basic principle is that even w/o specific reinforcement, every individual learns many things thr observation and imitation of others

        - B/c humans are social beings, they learn from observing others w/o receiving personal reinforcement
        - "Modelling" b/c we learn by role models
        - E.g. children witnessing domestic violence are influenced by it and might do it later on in life

- Cognitive Theory: a theory of human development that focuses on changes in how people think over time. Our thoughts shape our attitudes, beliefs, and behaviours
    - Piaget's periods: sensorimotor, preoperational, concrete operational, formal operational
        - Each period describes how people learn to think w/ time and experience
        - Humans seek "cognitive equilibrium" – a state of mental balance
    - Cognitive disequilibrium – a new, jarring experience that causes an imbalance that initially creates confusion
        - Assimilation: new experiences are interpreted to fit into, or assimilate, with old ideas
        - Accommodation: old ideas are restructured to include new experiences
    - Information processing – provides a detailed description of the steps of cognition, w/ attention to perceptual and neurological processes
    - Main point for cognitive theory: thoughts can influence emotions and actions

- Humanism: a theory that stresses the potential of all human beings for good and the belief that all people have the same basic needs, regardless of culture, gender, or background
    - Maslow: derived a hierarchy describing human basic needs
        1) Physiological: needing food, water, warmth, air
        2) Safety: feeling protected from injury and death
        3) Love and belonging: having loving friends, family, community
        4) Esteem: being respected by the wider community as well as by oneself
        5) Self-actualization: becoming truly oneself, fulfilling one's unique potential
            - Contended that everyone must satisfy the lower levels before moving higher
            - E.g. a starving man might risk his life to get food (1 precedes 2)
            - Implies that satisfying childhood needs is crucial for later self-acceptance

- Evolutionary Theory: nature works to ensure that each species survives and reproduces
    - Understand it happens over thousands of years
    - Suggests certain human qualities (cooperation, spirituality, etc..) originated thousands of years ago