

## PSYCH05X: DEVELOPMENTAL PSYCHOLOGY

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### TOPIC 1: HUMAN DEVELOPMENT, AN EVOLVING FIELD

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**Human Development** is a field that explores how and why people change over time; from the moment they are conceived until the very end of their lives. It is multi-faceted and requires multiple domains.

**Thanatology**, on the other hand, is the study of death.

#### HOW CAN WE SAY THAT A PERSON IS FULLY DEVELOPED?

- lumalaki
- nagiging matalino
- nagiging friendly
  - **egocentrism** – posited by Jean Piaget, the innate characteristic of children to think only of themselves
- nagiging responsible
- develops self-control

#### DEVELOPMENT IS LIFELONG

- Human development is a continuous process
- Development does not stop at childhood' it continues as we age.
- Physical, mental, and emotional changes happen throughout our lifetime.

#### DEVELOPMENT IS ALSO:

- Development is **predictable**, because it follows a pattern.
- Development is **complex** and **interdisciplinary** because human development is so complex, it is influenced by many different factors.
  1. Psychology
  2. Biology & Genetics
  3. Sociology & Anthropology
  4. Education
  5. Medicine & Psychiatry

#### DIRECTIONAL TRENDS OR PATTERNS OF DEVELOPMENT

1. Cephalocaudal Development
2. Proximodistal Development

#### CEPHALOCAUDAL DEVELOPMENT

Head-to-Tail Development

- **Etymology:** Cephalo (head) + Caudal (tail)
- a baby gains control over their head and neck long before they can sit up or walk.
- the brain and head grow more rapidly in the womb compared to the lower limbs.
- **example:** an infant can hold their head up and track objects with their eyes before they can use their arms to push up.

#### PROXIMODISTAL DEVELOPMENT

Near-to-Far Development

- **Etymology:** Proximo (near / proximal) + Distal (distant)
- gross motor skills (big actions)—starts before fine motor skills (small actions)
- from inner to outward
- the torso and "core" develop strength and coordination before the hands and fingers do
- the internal organs and spine develop before the arms and legs in a fetus.
- **example:** a baby can wave their whole arm (gross motor) before they can pick up a cereal puff with their thumb and forefinger (fine motor/pincer grasp).

## STUDYING THE LIFE SPAN: WOMB TO TOMB

- Human development is studied from conception to death—this is what we call a **life-span perspective**.
- Development can be both **positive** and **negative**.
  1. **Positive Changes:** a child learning to speak
  2. **Negative Changes:** an older adult becoming socially isolated after retirement
- Grow > Atrophy / Decline
- Stimulation towards growth

#### RESEARCH STUDIES RELATED TO DEVELOPMENTAL PSYCHOLOGY

- effects of parenthood
- career choices
- marriage
- aging

#### GOALS OF DEVELOPMENTAL PSYCHOLOGY

1. Describe

Noah Chomsky

2. Explain
3. Predict
4. Intervene – therapy, counseling

#### REMEMBER ME!

- **Human Development** is the scientific study of processes of change and stability throughout human life span.
- **Life-span Development** is the concept of human development as a lifelong process, which can be started scientifically.

### TOPIC 2: NATURE VS. NURTURE

March 05, 2026

NATURE	NURTURE
hereditary characteristics	environment
maturation	learning
genes	experience
biological predisposition	culture

#### THREE DOMAINS OF DEVELOPMENTAL PSYCHOLOGY

- Physical Development** – organs, brain, aging, motor abilities, somatic changes
- Cognitive Development** – interpretation, perception, language development, problem-solving (adaptive)
  1. **Language Development** is secondary to cognition, as delayed speech has always been tested alongside intelligence
- Psychosocial Development** (*internal, psychological, social*) – personal changes, motivation
  2. **motivation among children** is often egocentric, and seeks self-pleasure
  3. **motivation among adults:** considers people around them, rules. Kohlberg's moral development)

#### STAGES OF DEVELOPMENT

STAGE	RANGE
Prenatal Period	Conception to Birth
	before natal / infancy phase
Infancy	0 – 2 years old
	sensory motor
Preschool Period	2 – 5 or 6 years old
	individualized exploration basic social skills
Middle Childhood	6 – 12 years old
	competition
Adolescence	approx. 12 – 20 years old
Adulthood (early, middle, late)	20 years old & above

### CASE: WHAT MADE HIM FEEL DIFFERENT?

- Perf, 17, Male
- came from a broken family, his dad had other women, and his mom has other same-sex lover
- he thought being “different” among others because of his special attraction towards same sex
- his dad’s cousin, Rob, got engaged with Dominic last 4 years
- he grew up with his Titos and Titas—with harmonious family members
- he loved to join his girl barkadas

Perf’s case suggests a **genetic predisposition** toward homosexuality, potentially inherited through both his maternal and paternal lines. This biological leaning was likely reinforced by his **social environment**, where witnessing Rob’s same-sex engagement provided a positive developmental model for his own identity. His preference for female peer groups further reflects a **gender-nonconforming socialization** pattern common in the development of non-heteronormative identities.

### DIFFERENT AREAS OF A PERSON’S DEVELOPMENT

- **Physical** – nutrition, sleep, exercise, stress management
- **Social** – interaction with people, maintaining a good relationship, adapting to others
- **Psychological** – self-image, potentials, motivation
- **Spiritual** – spiritual awareness, purpose, inner peace

### TOPIC 3: PRINCIPLES OF DEVELOPMENT

by Elizabeth Hurlock

- roles / govern
- guide in creating judgments

1. **Early foundations are critical** – difficulty in the earlier years will lead to later difficulties.
  1. **things to consider in early years:** communication, gross motor, fine motor, problem solving skills, personal-social
2. **Maturation and learning are responsible for development.** Maturation is the spontaneous unfolding of the individual’s inherent traits.
  2. **Phylogenetic Functions** – came from maturation
  3. **Ontogenetic Functions** – learning from training
3. **Development follows a definite and predictable pattern.** It is development in terms of physiological, cognitive, and social; cephalocaudal, proximodistal.
4. **All individuals are different**—in genetics and biologically.
  4. **Differences:** physiological, cognitive (intelligence), sexual (women vs men)
  5. **Common attributable causes:** genetics, environment, influences, age
5. **Each phase of development has characteristic behavior**—phases such as early changes, school life, changes at work, love and belongingness, and family life.
  6. **Equilibrium** – balance, individuals can adapt without difficulties amidst changes, successes
  7. **Disequilibrium** – decline, with difficulties
6. **Each phase of development has hazards.** For instance, hazards to heredity, physiological, family, cultural, socioeconomic, and nutrition.
7. **Development is aided by stimulation.**
8. **Development is affected by cultural changes.**
9. **There are social expectations for every stage of development**—we have to survive these stages.
10. **There are traditional beliefs about individuals at all ages.**

### TOPIC 4: THEORIES ON DEVELOPMENT

by Elizabeth Hurlock

### HOW DO THEORIES AND RESEARCH WORK TOGETHER?

- both are closely connected
- testing
- if research supports the theory → it strengthens our understanding

- if research does NOT support the theory → the theory must be revised or re-evaluated

### LAW, THEORY, HYPOTHESIS, TAXONOMY

Differences and Similarities

#### LAW

- **Law** is a well-established, universal principle describing what happens (a consistent pattern in nature or behavior)
  1. backed by repeated evidence, often no known exceptions. In Psychology, laws are more like very reliable rules of thumb.
  2. e.g. Cephalocaudal Law / Principle – infants develop control from head to toe → a consistent developmental pattern

#### THEORY

- **Theory** is a broad explanation of phenomena that answers “why” or “how”
  1. organizes facts and observations; supported by evidence (but open to new evidence)
  2. theories generate hypotheses and can evolve
  3. Psychoanalytic Theory (Freud): Mind is structured into Id, Ego, Superego (with constant interplay)

#### HYPOTHESIS

#### TAXONOMY

### PSYCHOANALYTIC PERSPECTIVE

1. Psychosexual Development
2. Psychoanalytic Development
3. Psychosocial Development

### PSYCHOSEXUAL DEVELOPMENT

by Sigmund Freud

- **Freud**, a Viennese physician, introduced the psychoanalytic perspective. He believes that:
  1. people are born with biological drives (e.g. hunger, aggression, sex)
  2. as we grow, these drives must be controlled and redirected so we can function in society
  3. childhood experiences shape our personality and unconscious conflicts that influence behavior
- Personality develops through five stages, each focused on a different pleasure source.

Stage	Age	Focus of Pleasure	Possible Fixation in Adulthood
Oral Stage	0-1 year	Mouth (sucking, feeding)	Nail-biting, overeating, smoking
Anal Stage	1-3 years	Bowel control (toilet training)	Obsessive cleanliness (if strict training) or messiness (if lax training)
Phallic Stage	3-6 years	Awareness of gender and genitals	Unresolved Oedipus/Electra complex, relationship issues
Latency Stage	6-12 years	Focus on school, friendships, hobbies	No major fixations
Genital Stage	12+ years	Sexual maturity and relationships	Difficulties with intimacy if previous conflicts were unresolved

- **Criticisms of Freud:**
  1. His theory is hard to test scientifically.
  2. His ideas about sexual development in children are controversial.
  3. He focused too much on biological drives, and too little on social and cultural factors.

### PSYCHOANALYTIC DEVELOPMENT

by Sigmund Freud

- **The Three Parts of Personality:**
  1. **Id** (born with it) → the “pleasure-seeker”; wants instant gratification (food, comfort, pleasure)
  2. **Ego** (develops around age 1) → the “problem-solver”; follows the reality principle—it finds ways to satisfy the Id’s desires in acceptable ways

- 3. **Superego** (develops around age 5-6) → the “rule-keeper”; represents morality and social rules (what is right and wrong)

**PSYCHOSOCIAL DEVELOPMENT**  
by Erik Erikson

- expanded psychoanalytic theory by focusing on:
  1. social and cultural influences on development
  2. development as a lifelong process (not stopping at adolescence like Freud believed)
  3. the idea that at every stage of life, we face a psychosocial challenge (crisis)
  4. each stage involves a conflict between a positive and negative outcome—successfully resolving the conflict helps build a key virtue (strength) that supports future growth.

**ERIKSON'S EIGHT PSYCHOSOCIAL STAGES**

Stage	Period	Virtue(merit)	Events	Significant Relationship
Trust vs Mistrust	0 – 1.5 year	Hope( Desire)	Feeding, Abandonment	Mother , Caregiver
Autonomy vs Shame and doubt	1.5- 3 year	Will( Ability to control yourself)	Toilet Training, Clothing themselves	Parents
Initiative vs Guilt	3 -5	Purpose	Family	Exploring , Making art
Industry vs inferiority	5-12	Competence	Sports, School	Neighbor, School
Identity vs Confusion	12-18	Fidelity	School Relationship	Peers, Role Model
Intimacy vs Isolation	18-40	Love	Romantic Relationship	Friends, Partners
Generativity vs stagnation	40-65	Care	Work , Parenthood	Household, Workmates
Integrity vs despair	65 and above	Wisdom	Reflection on life	Mankind

- Key Takeaways from Erikson's Theory:**
  1. each stage builds on the previous one
  2. development does not stop in childhood
  3. even if you struggle at one stage, you can improve later
- Importance of Erikson's Theory:
  1. highlights the role of social and cultural influences in shaping personality
  2. shows that development is lifelong
  3. presents a more positive view of human development compared to Freud

**TOPIC 5: LEARNING PERSPECTIVE**

- development is continuous (gradual and ongoing)
- people are passive / reactive → they respond to external influences rather than shaping their own development
- behavior should be studied scientifically by observing what people do, not what they think or feel—because thoughts and emotions are harder to measure

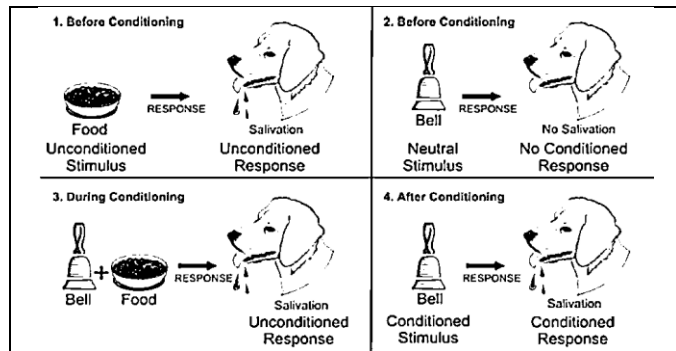
**BEHAVIORISM**

Learning Through Experience

**CLASSICAL CONDITIONING**

by Ivan Pavlov (1849 – 1936)

- learning through associations
- Ivan Pavlov (1849 – 1936) discovered this while studying dogs' digestion
- he noticed that dogs started salivating before food even arrived—they had learned to associate a bell with food
- he tested this by ringing a bells before feeding the dogs—eventually, the dogs salivated just from hearing the bell, even without food.

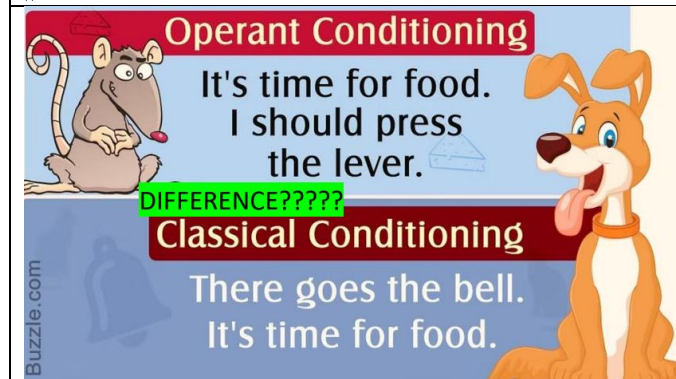


**OPERANT CONDITIONING**

by B.F. Skinner (1904 – 1990)

- learning through consequences
- B.F. Skinner (1904 – 1990) introduced this idea
- behavior is shaped by consequences—whether actions are rewarded or punished
- this is different from classical conditioning because here, the person actively engages in behavior and then learns from the outcome
- reinforcement increases behavior
- punishment decreases behavior
- if reinforcement stops, behavior might disappear over time (extinction)
- behavior modification is widely used in schools, parenting, and therapy to shape behavior

Type	Definition	Example
<b>Positive Reinforcement</b>	Adding something pleasant to increase behavior	Giving a child candy for doing homework
<b>Negative Reinforcement</b>	Removing something unpleasant to increase behavior	Seatbelt alarm stops when you buckle up
<b>Positive Punishment</b>	Adding something unpleasant to decrease behavior	Giving extra chores for misbehaving
<b>Negative Punishment</b>	Removing something pleasant to decrease behavior	Taking away a child's phone for bad grades



**SOCIAL LEARNING THEORY**

Learning Through Imitation

- posited by Albert Bandura (1925 – 2021): We also learn by watching others (Observational Learning) (Modeling)
- understanding aggression → goo goo dolls experiment
- Reciprocal Determinism** highlights that learning is not one way.
  1. People influence their environment
  2. The environment influences people
  3. Behavior is shaped by both
- learning is an active process: learner + stimulus
  1. role model, exposure, pro-social behavior, people and their environment

**SOCIAL COGNITIVE THEORY**

by Albert Bandura (1925 – 2021)

- **Bandura** later expanded social learning theory into social cognitive theory, emphasizing that:
  1. People don't just copy everything—they choose who to imitate.
  2. People are not passive, but are actively storming their cognitive process (decision making, self-efficacy into motivation, growth, development)
  3. Cognitive processes (thinking, reasoning) play a role in learning
  4. A key part of development is self-efficacy → a person's belief in their own abilities

### BEHAVIORISM VS SOCIAL LEARNING

Theory	Key Idea	Example
Behaviorism (Pavlov, Watson, Skinner)	Learning happens through experience (associations, rewards, punishments)	A child touches fire, gets burned, and avoids fire in the future.
Social Learning (Bandura)	Learning happens through watching and imitating others	A child sees their sibling washing dishes and does the same.

- **Behaviorism** → used in therapy, parenting, education, animal training
- **Social Learning** → explains how culture, media, and role models shape behavior
  1. **Mechanistic** – learning from observation
  2. **Organismic** – changes are in experience and history

### TOPIC 6: COGNITIVE PERSPECTIVE

- Focuses on how people think, learn, synthesize, and process information as they develop. Three major approaches include:
  1. **Jean Piaget's** Theory of Cognitive Development
  2. **Lev Vygotsky's** Sociocultural Theory
  3. **The Information-Processing Approach**

### JEAN PIAGET'S THEORY OF COGNITIVE DEVELOPMENT

#### Four Stages of Development

- Sensorimotor Period
- Preoperational Period
- Concrete Operations Period
- Formal Operations Period

#### Research Roots

- Observations
- Interviews
- Experimentation

#### Four Major Assumptions

- **Assumption 1:** Children are organically inspired to think, learn, and comprehend.
  1. They are curious, are active learners, and are explorative.
- **Assumption 2:** Children see the world differently than adults.
  1. They have limited understanding, need experience, and are being shaped.
- **Assumption 3:** Children's knowledge is ordered into mental structures called schemas.
  1. Children must develop cognitive flexibility.
- **Assumption 4:** All learning consists of assimilation and accommodation.
  1. They need more experience to adapt.

#### Four Stages of Development

2. **Stage 1 – Sensorimotor Period: Infancy (0-2 yo)**
  - Infants mentally organize and perceive the world through their sensory systems (what they touch, see, feel, hear, smell, etc.)
  - **Object Permanence** refers to an infant's accomplishment of understanding that objects (or people) continue to exist even when they cannot directly be seen, heard, or touched
  - Reflexes, playing symbolically, and motor skills are evident
3. **Stage 2 – Preoperational Period: Early Childhood (2-7 yo)**

- the preoperational child cannot yet perform operations, meaning, he lacks conservation
  - children begin to ask "why" questions at age 5
  - loves to hear stories, sing songs, and recite nursery rhymes
  - **Animism** refers to the child's belief that all things are capable of intentions, consciousness, and feelings
  - egocentric thinking, centration (focus on a certain detail), difficulty with reversibility
4. **Stage 3 – Concrete Operations Period: Middle Childhood (7-11 yo)**
    - The stage of concrete operations is marked by the child's ability to solve simple problems while thinking about multiple dimensions of information.
    - This elementary-age child now has a clear sense of and conservation.
    - They can arrange and classify.
  5. **Stage 4 – Formal Operations Period: Adolescence (12 – Adult)**
    - The mental transformations experienced during adolescence are logical and continue to progress beyond the skills developed during childhood
    - They now have the ability to perform: hypothetical, deductive reasoning, and can integrate what they have learned in the past to consider many future possibilities
      - abstraction
      - problem solving skills
      - metacognitive ability
      - inference
      - self-identity

### The Implications of Piaget's Stages of Cognitive Development

1. Piaget's theory of cognitive development provides an alternate to behavior theorists' belief that children are merely passive learners
2. Piaget quantified the conceptual learning process suggesting that there are predictable and orderly developmental accomplishments
3. Piaget suggests that a child's mind seeks a state of equilibrium
4. By understanding Piaget's Stages of Cognitive Development, teachers can avoid presenting material in the classroom that is beyond the child's cognitive ability

### TOPIC 7: PIAGET AND MORAL DEVELOPMENT

#### Piaget and Moral Development

- **Morality of Constraint**
- **Morality of Cooperation**

#### Morality of Constraint

- heteronomous, 4 – 7 years old, rules / justice
- based on external authority figures
- **situation:** Cassie, 7 years old, accidentally knocks over a vase while playing in her neighbor's house. The vase breaks into pieces, and Cassie immediately feels guilty and worried about the consequences.

#### Morality of Cooperation

- autonomous, 10 year olds, consequences before making a moral decision
- rules are not fixed—consequences matter, with concept of harmony
- **situation:** a group of children is playing a game together, and they need to divide a limited number of snacks equally among themselves—each child is responsible for distributing the snacks to the others

### TOPIC 8: LEV VYGOTSKY'S SOCIOCULTURAL THEORY

#### LEV VYGOTSKY'S SOCIOCULTURAL THEORY

Social Interaction and Cultural Factors

#### Lev Vygotsky's Sociocultural Theory

- **Lev Vygotsky** (1896 – 1934) posits that cognitive development is shaped by culture and social interactions

- social interactions and cultural factors; studies with children through research, observations, and theoretical analysis

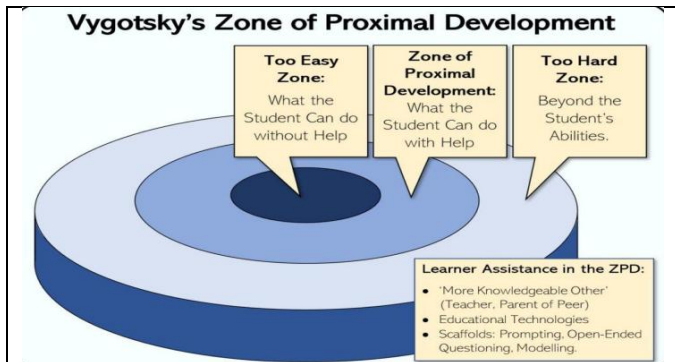
### View of Human Development

- central role of social interaction and cultural factors
- development occurs through a process of social interaction

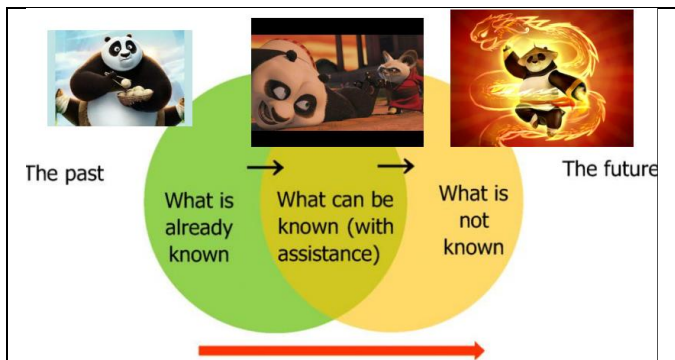
### Key Ideas in Vygotsky's Theory

- Children learn best through social interaction
- Culture and language shape development, such as, children from different backgrounds develop differently
- Children learn with help from others, aka scaffolding

### Zone of Proximal Development



- The ZPD is the gap between what a child can do alone and what they can do with help
- The best learning happens within this zone



### Scaffolding

- **Scaffolding** is the support given to a child until they can do tasks independently
- **Steps in Scaffolding:**
  1. complex to smaller units
  2. support
  3. adjusting support
  4. fading assistance

### Private Speech

- private speech refers to the verbalization of thoughts, instructions, and strategies that individuals engage in while solving problems or performing tasks. It can be either audible (spoken out loud) or subvocal (spoken silently to oneself).

### Impact of Vygotsky's Theory

- Modern education emphasizes group learning, discussions

### Sociocultural Themes

- importance of social interaction—the more we interactive, the more knowledge and skills we gain
- feedbacking and collaboration matters
- internalization—deepening

### Cultural Tools

- language
- symbols
- artifacts

### Cultural Differences

- cultural practices
- beliefs
- values

### INFORMATION-PROCESSING APPROACH

- **information-processing approach** does not propose stages, instead it:
  - Compares the human mind to a computer
  - Focuses on memory, problem-solving, and attention.
  - Views development as continuous

### How Does the Brain Process Information

1. **Encoding** – taking in new information
2. **Storage** – keeping information in memory
3. **Retrieval** – accessing stored information when needed

### Key Findings from Information-Processing Research

- As children grow, they process information faster and use better memory strategies.
- Early cognitive skills can predict later intelligence
- Helps identify learning difficulties

### Criticisms of the Information-Processing Approach

- Focuses too much on logical thinking and ignores creativity and emotions.

### COMPARING THREE COGNITIVE THEORIES

Theory	Key Idea	Example
Piaget (Cognitive Development Theory)	Development happens in <b>stages</b> , through active exploration	A child moves from thinking concretely to thinking abstractly in adolescence.
Vygotsky (Sociocultural Theory)	Learning happens through <b>social interaction</b> and culture	A child learns to solve problems with help from a teacher or parent.
Information-Processing Approach	The brain is like a <b>computer</b> , processing information continuously	A student uses memory techniques to improve learning.

- **Piaget's** theory helps us understand how children think at different ages
- **Vygotsky's** theory highlights the importance of culture and social learning
- **The Information-Process Approach** shows how memory, attention, and problem-solving improves with age

### TOPIC 9: CONTEXTUAL PERSPECTIVE

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- Focuses on how a person's development is shaped by their environment and social interactions.
- Sees individuals as deeply embedded in their surroundings.
- To understand development, we cannot look at a person in isolation— we have to consider the multiple environments they interact with daily.
- Urie Bronfenbrenner's Bioecological Model-explains how different levels of the environment shape development.

### ECOLOGICAL SYSTEMS THEORY

By Urie Bronfenbrenner

- Bronfenbrenner's Bioecological Theory Human development as being influenced by five environmental systems that interact with each other
- Imagine a set of rings (like a target), with the child in the center. The closer the system is to the child, the more direct its impact. The farther away, the more indirect its influence.
- complex interactions between individuals and their environments
- are influenced by multiple systems that interact with one another
- contextual influences in development—highlights that development is not purely biological and psychological, but also social and contextual—discrimination, prejudice, history, etc.
- we are all interconnected—your decisions will create an effect in another person's behavior → proxemics theory

- It consists of workplaces, government policies, mass media, healthcare systems, and extended family

### MACROSYSTEM

Cultural and Societal Influences

- broader cultural, social, economic, and political context → most outer layer
- values, beliefs, laws, customs, and ideologies
- e.g. mental health law helps professionals practice freely
- Includes the overall culture, beliefs, values, laws, and economic systems that shape development.
- Affects entire communities rather than individuals.

### CHRONOSYSTEM

Changes Over Time

- recognizes the importance of historical events (pandemics, war, etc.), transitions (moving, divorce, etc.), technology, and changes development
- Represents the dimension of time and how it influences development
- Refers to the impact of time on development.
- Includes both personal life changes and larger historical events.

### Comparing the Contextual Perspective to Other Theories

Theory	Key Idea	Example
Piaget (Cognitive Development)	Children actively learn through stages.	A child moves from basic to advanced thinking over time.
Vygotsky (Sociocultural Theory)	Children learn best through social interactions and guidance.	A teacher helps a student with math until they can do it alone.
Bronfenbrenner (Contextual Theory)	Development is shaped by multiple layers of environment.	A child's success in school is influenced by family, school policies, and culture.

- Unlike Piaget, who focused on internal cognitive growth, Bronfenbrenner emphasized the role of external influences in shaping development.
- Unlike Vygotsky, who focused on social learning, Bronfenbrenner looked at how culture, government, and time shape development.

### TOPIC 10: RESEARCH CHARACTERISTICS

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- find something
- **RESEARCH:**
  1. **Systematic** – follows steps
  2. **Controlled** – systematic – problem; methodology; instrument; precise findings; conclusions
  3. **Empirical** – scientific (statistics; inquiry; observation)
  4. **Critical Observation** – pieces of evidences / in-depth analysis of "why" & "how"
- **RESEARCH:**
  1. directed towards the solution of a problem
  2. goes beyond individuals—target population
  3. based on observable experience / empirical evidence
  4. careful designed procedures with accurate analysis
  5. objective and logical
  6. requires focus, patience, humility, and passion
  7. carefully records and reports
  8. data should be available for inquiry

### QUANTITATIVE AND QUALITATIVE RESEARCH

#### Quantitative Research

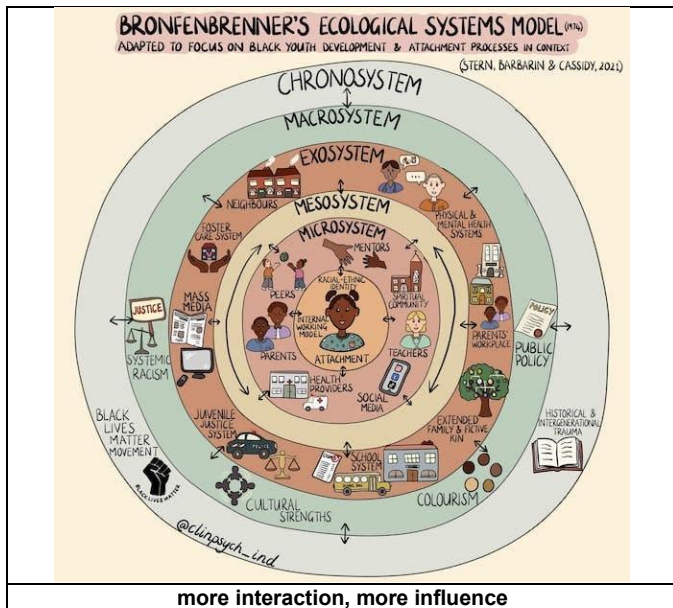
Measuring and Analyzing Data

- focuses on numbers and measurements
- type of research that collects numerical data to answer questions like "how much" and "how many"
- **goal:** to find patterns, relationships, and differences using statistics

#### The Scientific Method in Quantitative Research

1. **Identify a Problem** – choose a topic based on theory or previous studies
2. **Formulate a Hypothesis** – a testable prediction

### Factors Operating at Different Levels



### MICROSYSTEM

Immediate Environment

- represents immediate environment and social settings such as family, peers, school, friends (most influential contextual factor that creates change) –presence, interaction
- the individual actively contributes to, rather than just receives, experiences in this setting, such as parent-child interactions.
- Closest layer to the child—it includes the everyday environments they interact with directly. (Family, school, friends, teachers, and the neighborhood.)
- Development is influenced by face-to-face interactions in these settings

### MESOSYSTEM

Connections Between Microsystems

- interactions between different microsystems—there is no direct interactions with you but rather the interactions between different systems that surround you
- e.g. the relationship between a child's family and their school is part of the mesosystem
- About how different parts of a child's microsystem interact.
- Looks at how relationships between family, school, and friends influence development.

### EXOSYSTEM

Indirect Influences

- e.g. parent's workplace, community resources, extended family
- For example, a parent's promotion or stress from work affects their behavior at home.
- Includes institutions and decisions that affect the child, even if they are not directly involved.

- Collect Data** – use surveys, experiments, or observations to gather numerical data
- Analyze the Data** – use statistics to check if the hypothesis is supported
- Draw Conclusions** – summarize the findings based on the results
- Share Findings** – publish or present the research so others can verify and build on it

### Qualitative Research

- Qualitative Research** – focuses on experiences and meanings

### Four Types of Questions in Qualitative Research

- Case Study** – in-depth probing; Bakit Nangyari?
- Exploratory** – grounded theory, Paano Nangyari?
- Phenomenology** – essence, Ano Nga Talaga?
- Chronological Questions** – for narrative or historical study, Ano Ang Nangyari?
- Ethnographic Research** – culture, beliefs, and traditions

### SAMPLING

- a smaller group selected from a population (the entire group of people the research applies to)
- if the sample represents the population well, the results can be applied to the entire population
- the goal is to pick a sample that truly represents all teenagers, not just a specific group

### Types of Sampling Methods

- Random Sampling**
  - best for quantitative research
  - every person in the population has an equal chance of being selected
  - this helps ensure the sample is representative
  - important if:**
    - a random sample gives unbiased results
    - larger random samples are more likely to be representative of the whole population
  - e.g.: simple random, systematic, stratified, cluster
- Convenience Sampling**
  - common but less reliable
  - instead of selecting participants randomly, researchers choose people who are easy to access
  - faster and cheaper but can be less representative of the whole population
  - e.g.: quota, snowball, purposive, judgmental

### Sampling in Qualitative Research

- qualitative research doesn't focus on numbers but on understanding experiences
- instead of choosing a random group, researchers select participants who can provide deep insights

### Key Takeaways

- in **quantitative research**, we try to get a sample that represents the whole population
- in **qualitative research**, we focus on getting rich, detailed information from selected participants

### FORMS OF DATA COLLECTION

#### Self-Reports

- give insights into people's experiences, but responses may not always be accurate
- verbal or written accounts on thoughts, feelings, or behaviors
- relies on participants to describe their own experiences
- Types of Self-Reports:**
  - Diaries or Logs** – participants keep a daily record of their activities, emotions, or behaviors

- Interviews** – asks participants about their thoughts, feelings, or experiences
  - Structured Interview** – every participant gets the same set of questions
  - Open-Ended Interview** – the researcher can adjust questions based on responses
- Questionnaires / Surveys** – participants answer written questions, either on paper or online; useful for collecting data from many people at once

#### Pros and Cons of Self-Reports

- Advantages:**
  - easy to collect large amounts of data
  - participants can describe personal thoughts and emotions
- Disadvantages:**
  - people may not remember things accurately
  - some may lie or exaggerate to give "socially acceptable" answers

### Observation

- researchers watch and record behavior instead of asking people to describe it
- Two Types of Observation:**
  - Naturalistic Observation (Real-Life Settings)**
    - researchers observe people in their natural environments without interfering
  - Laboratory Observation (Controlled Settings)**
    - researchers study behavior in a controlled environment; allows then to control outside influences

### Behavioral or Performance Measures

- instead of asking or watching, researchers can test behaviors or skills directly
- these can include: reaction time tests, memory tests, IQ tests

### CHOOSING THE RIGHT DATA COLLECTION METHOD

the method to be used depends on the research questions—sometimes, researchers use multiple methods to get a complete picture.

- Self-reports** → best for understanding thoughts and emotions, but responses may not be accurate
- Observation** → best for watching natural behavior, but people may act differently if they know they're being observed
- Behavioral / Performance Measures** → best for testing skills and abilities, but results can be affected by external factors

Type	Main Characteristics	Advantages	Disadvantages
<b>Self-report: diary, visual reports, interview, or questionnaire</b>	Participants are asked about some aspect of their lives; questioning may be highly structured or more flexible; self-report may be verbal or visual.	Can provide firsthand information about a person's life, attitudes, or opinions Visual techniques (e.g., drawing, mapping, graphing) avoid need for verbal skills.	Participant may not remember information accurately or may distort responses in a socially desirable way; how question is asked or by whom may affect answer.
<b>Naturalistic observation</b>	People are observed in their normal setting, with no attempt to manipulate behavior.	Provides good description of behavior; does not subject people to unnatural settings that may distort behavior	Lack of control; observer bias
<b>Laboratory observation</b>	Participants are observed in the laboratory, with no attempt to manipulate behavior.	Provides good descriptions; offers greater control than naturalistic observation because all participants are observed under same controlled conditions	Observer bias; controlled situation can be artificial
<b>Behavioral and performance measures</b>	Participants are tested on abilities, skills, knowledge, competencies, or physical responses.	Provides objectively measurable information; avoids subjective distortions	Cannot measure attitudes or other nonbehavioral phenomena; results may be affected by extraneous factors

### EVALUATING RESEARCH METHODOLOGIES

#### Qualitative Research

#### Strengths of Qualitative Research

- can deeply examine a topic that might be hard to measure with numbers
- researchers can adjust their methods as they gather new insights
- provides detailed and personal insights into emotions, attitudes, and behavior

- the interactive nature of interviews and observations can help uncover hidden details

### Limitations of Qualitative Research

- results can be influenced by the researcher's own biases
- studies often focus on a few people, making it harder to apply findings to a larger population
- because each study is unique, it's harder to repeat and confirm results
- analyzing interviews, videos, and notes takes a long time

### Quantitative Research

#### Strengths of Quantitative Research

- uses numbers and statistics, making results more precise and reliable
- can study hundreds or thousands of participants, increasing generalizability
- studies can be repeated to check for consistency
- computers can quickly process large amounts of data

#### Limitations of Quantitative Research

- doesn't explain the reasons behind behaviors or emotions
- surveys and experiments don't allow flexibility in responses
- numbers can't always capture emotions or personal experiences

## TOPIC 11: BASIC RESEARCH DESIGNS

Type	Main Characteristics	Advantages	Disadvantages
Case study	In-depth study of single individual	Provides detailed picture of one person's behavior and development; can generate hypotheses	May not generalize to others; conclusions not directly testable; cannot establish cause and effect
Ethnographic study	In-depth study of a culture or subculture	Can help overcome culturally based biases in theory and research; can test universality of developmental phenomena	Subject to observer bias
Correlational study	Attempt to find positive or negative relationship between variables	Enables prediction of one variable on basis of another; can suggest hypotheses about causal relationships	Cannot establish cause and effect
Experiment	Controlled procedure conducted in a laboratory or the field in which an independent variable is manipulated to determine its effect on a dependent variable	Establishes cause-and-effect relationships; is highly controlled and can be repeated by another investigator	Findings, especially when derived from laboratory experiments, may not generalize to situations outside the laboratory

### Case Studies

#### Studying Individuals In Depth—Bakit Nangyari?

- focuses on a single person or a small group to understand their experiences, behavior, and development
- interviews, medical records, observations, and personal documents
- researchers need to identify their case or cases—this case may involve an individual, several individuals, a program, and event, or an activity through documents, archival records, and interviews
- Parts:**
  - Presenting issue
  - Case history
  - Treatment
  - Outcomes of treatment
  - Follow-up
- Advantages:** detailed and in-depth, for rare conditions, suggest new ideas for future research
- Disadvantages:** not generalizable, not for causation

### Ethnographic Studies

#### Studying Cultures and Social Groups

- studies how people live, think, and observe within their cultural or social environment
- participant observation, meaning they live among and interact with the group they are studying
- gives deep cultural insights, but findings may not be universally applicable

- Advantages:** in-depth understanding of cultures, provides rich, detailed descriptions of behavior in real-world settings
- Disadvantages:** time-consuming, susceptible to researcher's own biases, hard to replicate

### Correlational Studies

#### Finding Relationships Between Variables

- examines relatedness between two things—causation not proven
- can identify relationships, but cannot prove cause and effect
- correlations can be positive, negative, or zero:

Type of Correlation	Meaning	Example
Positive Correlation	Both variables increase together.	More social media use → More anxiety.
Negative Correlation	One variable increases, the other decreases.	More exercise → Less depression.
Zero Correlation	No relationship between the variables.	Shoe size and intelligence.

- Advantages:** predict relationships between variables, can be done on large populations
- Disadvantages:** correlation does not mean causation, confounding (third variables) may be involved

### Experimental Studies

#### Testing Cause and Effect

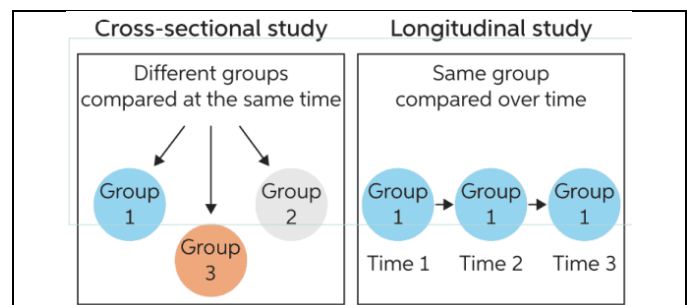
- best way to determine causation by manipulating variables in a controlled setting
- How Experiments Work:**
  - Researchers divide participants into two groups:
    - Experimental Group** – receives treatment
    - Control Group** – does not receive treatment
- researchers manipulate the **independent variable (IV)** and measure its effect on the **dependent variable (DV)**

Term	Definition	Example
Independent Variable (IV)	The factor that is changed or controlled by the researcher.	The type of training given to babies.
Dependent Variable (DV)	The outcome being measured.	Babies' attention span.
Random Assignment	Participants are randomly placed in groups.	Ensures groups are similar before the study.
Operational Definition	Clearly defining what is being measured.	"Improved attention" = longer focus time.

## DEVELOPMENTAL RESEARCH DESIGNS

### Cross-Sectional Studies

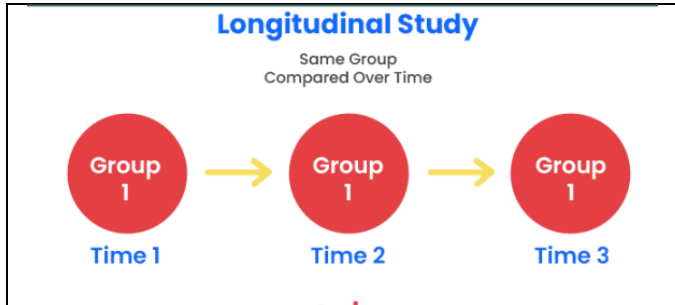
- examines different groups at the same time to see how they differ
- compare how people at different life stages think, feel, or behave
- great for quick comparisons, but they cannot tell us how individuals change over time
- Advantages:** **faster**—you don't have to wait for years to collect data; and **cheaper**—required less time and resources; and no participant dropout because data is collected all at once
- Disadvantages:** cannot track individual changes over time, **cohort effects**—differences between groups may not be due to age but to life experiences



### Longitudinal Studies

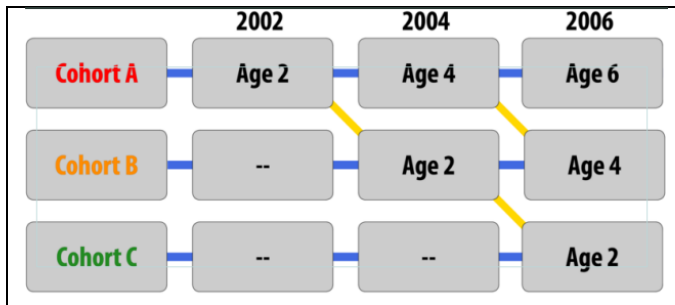
#### Tracking the Same People Over Time

- Follows the same group of people for months, years, or even decades to track changes as they grow older.
- To understand how individuals develop over time
- Best way to track personal development, but they take a lot of time, effort, and money.
- **Advantages:** shows how individuals change over time; helps researchers understand long-term, effects of experiences
- **Disadvantages:** takes a long time (some studies last decades); expensive—requires ongoing funding and research personnel; participant dropout (attrition)—people may move away, lose interest, or stop participating



**Sequential Studies**  
Combining Cross-Sectional and Longitudinal Approaches

- mixed cross-sectional and longitudinal designs to get a more complete picture of development.
- to separate age-related changes from generational (cohort) effects.
- gives best of both worlds, but they require a lot of resources to conduct
- **Advantages:** provides the most complete information on development; helps separate true age effects from generational differences
- **Disadvantages:** most complex and expensive research method; requires large numbers of participants and long-term commitment



**Comparing the Three Research Designs**

TABLE 5 Cross-Sectional, Longitudinal, and Sequential Research: Pros and Cons			
Type of Study	Procedure	Advantages	Disadvantages
Cross-sectional	Data are collected on people of different ages at the same time.	Can show similarities and differences among age groups; speedy, economical, presents no problem of attrition or repeated testing	Cannot establish age effects; masks individual differences; can be confounded by cohort effects
Longitudinal	Data are collected on same person or persons over a period of time.	Can show age-related change or continuity; avoids confounding age with cohort effects	Is time-consuming, expensive; presents problems of attrition, bias in sample, and effects of repeated testing; results may be valid only for cohort tested or sample studied
Sequential	Data are collected on successive cross-sectional or longitudinal samples.	Can avoid drawbacks of both cross-sectional and longitudinal designs	Requires large amount of time and effort and analysis of very complex data

**TOPIC 12: RESEARCH ETHICS IN DEVELOPMENTAL PSYCHOLOGY**

**Why do Research Ethics Matter?**

- Psychological research can provide valuable insights into human behavior, but it must be conducted responsibly.
- Harmful research can lead to mental, emotional, or physical distress for participants.

- Ethical guidelines help researchers balance scientific benefits with the protection of individuals

**The Role of Institutional Review Boards (IRBs)**

- To protect participants, most research must be approved by an Institutional Review Board (IRB).
- IRBs review studies to ensure they meet ethical standards set by the American Psychological Association (APA) and other organizations.
- The IRB checks for:
  - Potential risks to participants.
  - Whether consent is properly obtained.
  - How private information is protected.

**THREE MAIN PRINCIPLES IN RESEARCH**

**Beneficence**  
Maximizing Benefits and Minimizing Them

- Researchers must maximize potential benefits and reduce any risks to participants.
- **Key Question:** Are the potential benefits of the study worth any possible harm to participants?

**Respect for Participants' Autonomy**  
Right to Make Their Own Choices

- Participants must freely choose whether to participate.
- Informed consent must be obtained, meaning participants are told:
  - What the study is about.
  - Any risks or discomfort they may experience.
  - That they can withdraw at any time without consequences.
- **Key Takeaway:** Participants must be fully informed and have the right to say no or withdraw from the study at any time.

**Justice**  
Fairness in Who Participates and How They are Treated

- Research should include diverse groups and avoid excluding or exploiting certain populations.
- Studies should consider cultural differences and ensure that methods are appropriate for all participants.
- **Key Takeaway:** Studies should include a diverse population and be fair to all participants

**SPECIAL ETHICAL CONSIDERATIONS FOR RESEARCH WITH CHILDREN**

- Developmental psychologists often work with infants and children, who are considered vulnerable participants. Because children may not fully understand research, special protections are needed.
- **Key Ethical Guidelines for Research with Children**
  - Avoid Physical or Psychological Harm
  - Get Parental Consent and Child Assent
  - Provide a Safe and Familiar Environment
- **Key Takeaway:** Children must be protected from harm, given a choice, and studied in a safe, comfortable environment

**AVOIDING DECEPTION AND PROTECTING PRIVACY**

- Deception (hiding the true purpose of a study) should be avoided unless necessary.
- If deception is used, researchers must debrief participants afterward, explaining the real purpose of the study.
- Privacy and confidentiality must be maintained—participants' names and personal information should be kept anonymous.
- **Key Takeaway:** Deception should only be used when absolutely necessary, and participants must be debriefed afterward.