

HUMAN DEVELOPMENT



1. MEANING OF DEVELOPMENT

- Development is the pattern of progressive, orderly and predictable changes that begin at conception and continue throughout life.
- Development is not limited to physical changes. It includes changes in biological, cognitive and socio-emotional aspects of a person.



Biological processes → changes in body, brain and physical abilities.



Cognitive processes → changes in thinking, perception, attention, language and problem-solving.



Socio-emotional processes → changes in relationships, emotions, personality and interaction with others.

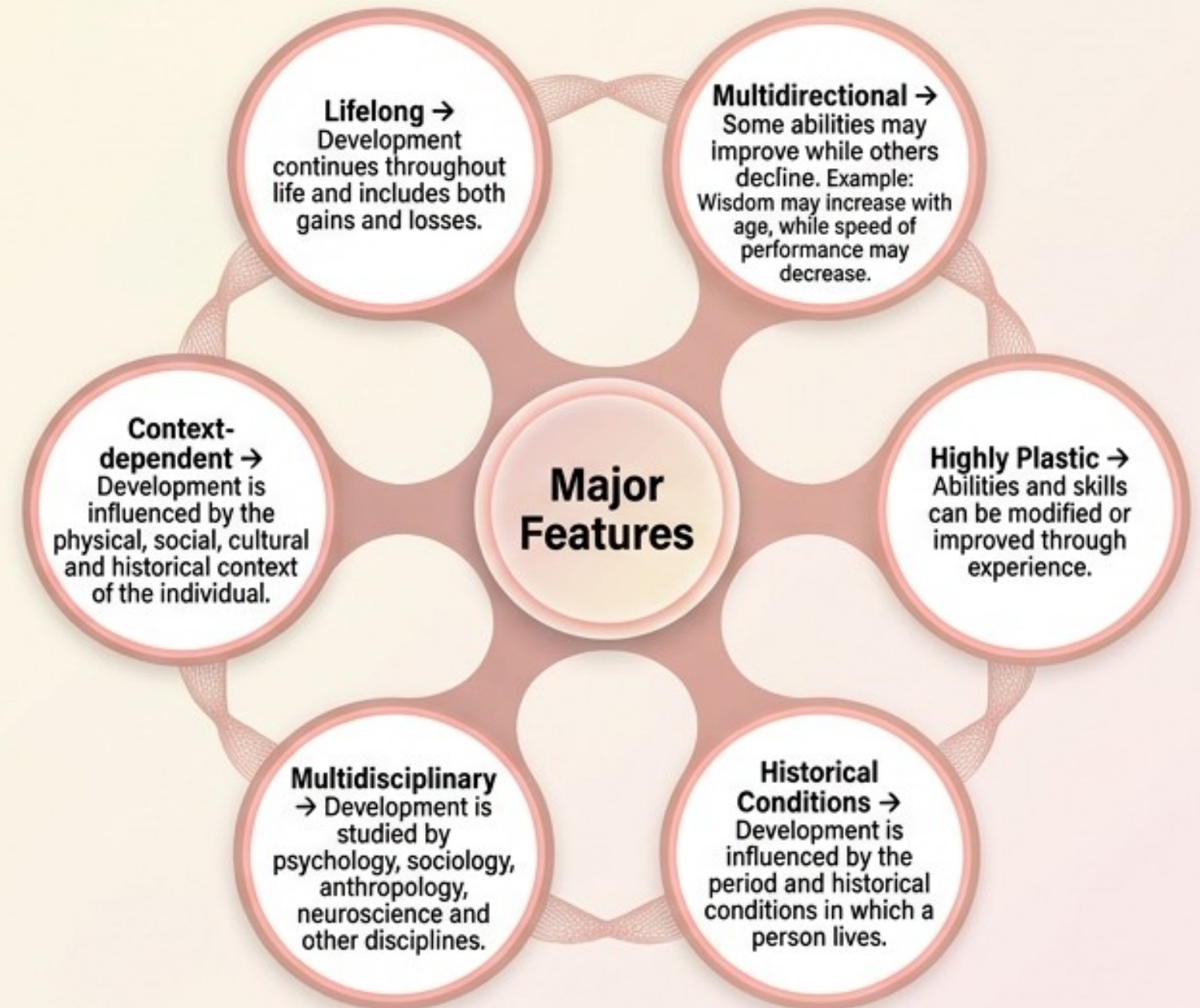
These processes are interwoven and influence the development of the individual as a whole.

Growth	Development
Mainly refers to increase in size	Refers to broader changes in the individual
Can be measured quantitatively	Includes qualitative and quantitative changes
Mainly physical	Physical, cognitive and socio-emotional
Example: increase in height and weight	Example: learning language, developing reasoning and social relationships

Important: Development includes growth as one of its aspects, but development is broader than growth.

2. LIFE-SPAN PERSPECTIVE

The Life-Span Perspective (LSP) views development as a process that continues from conception to old age.

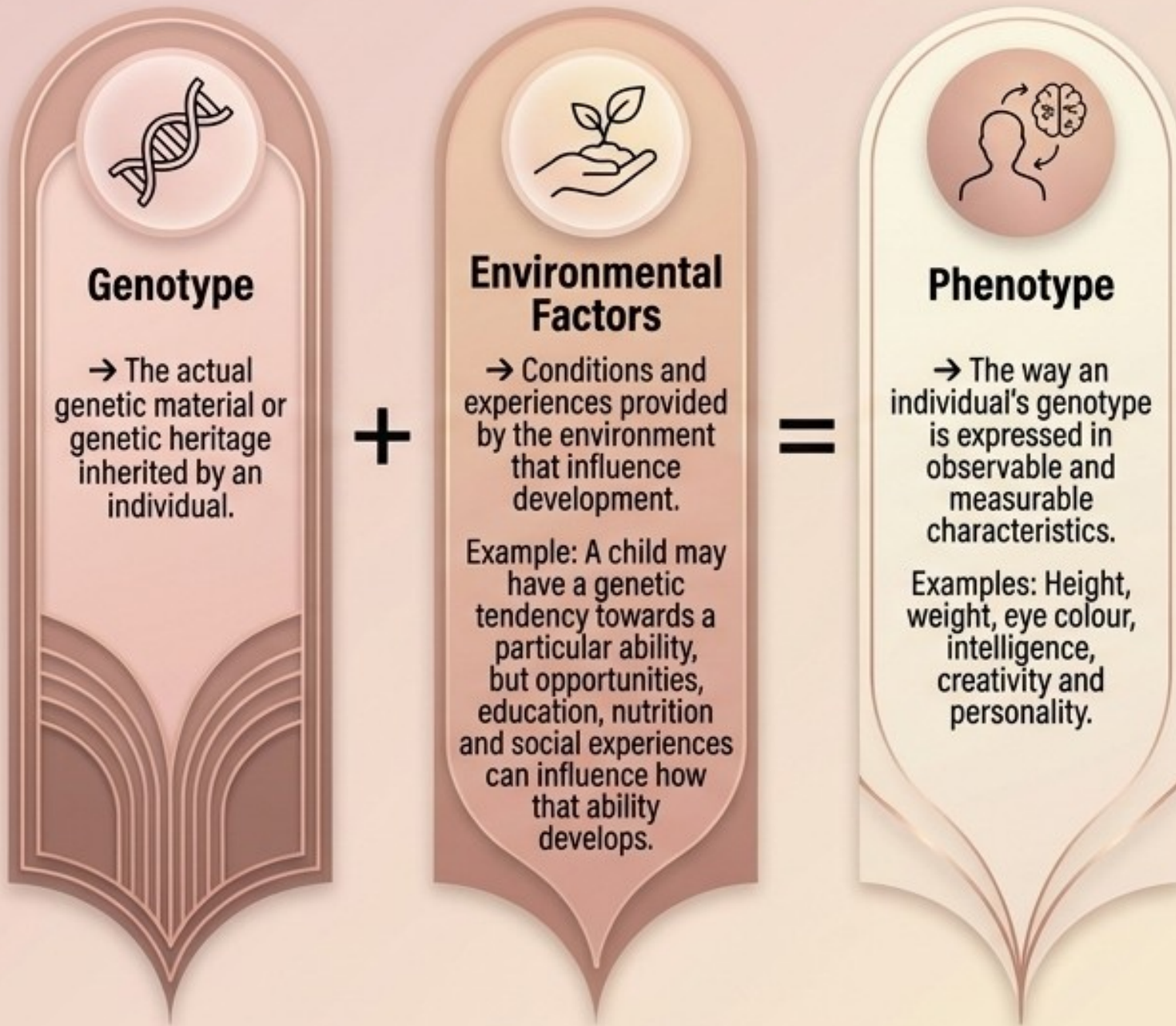


Important

Biological, cognitive and socio-emotional processes remain interrelated throughout the life-span.

3. FACTORS INFLUENCING DEVELOPMENT

Development results from the interaction of heredity and environment.



Remember

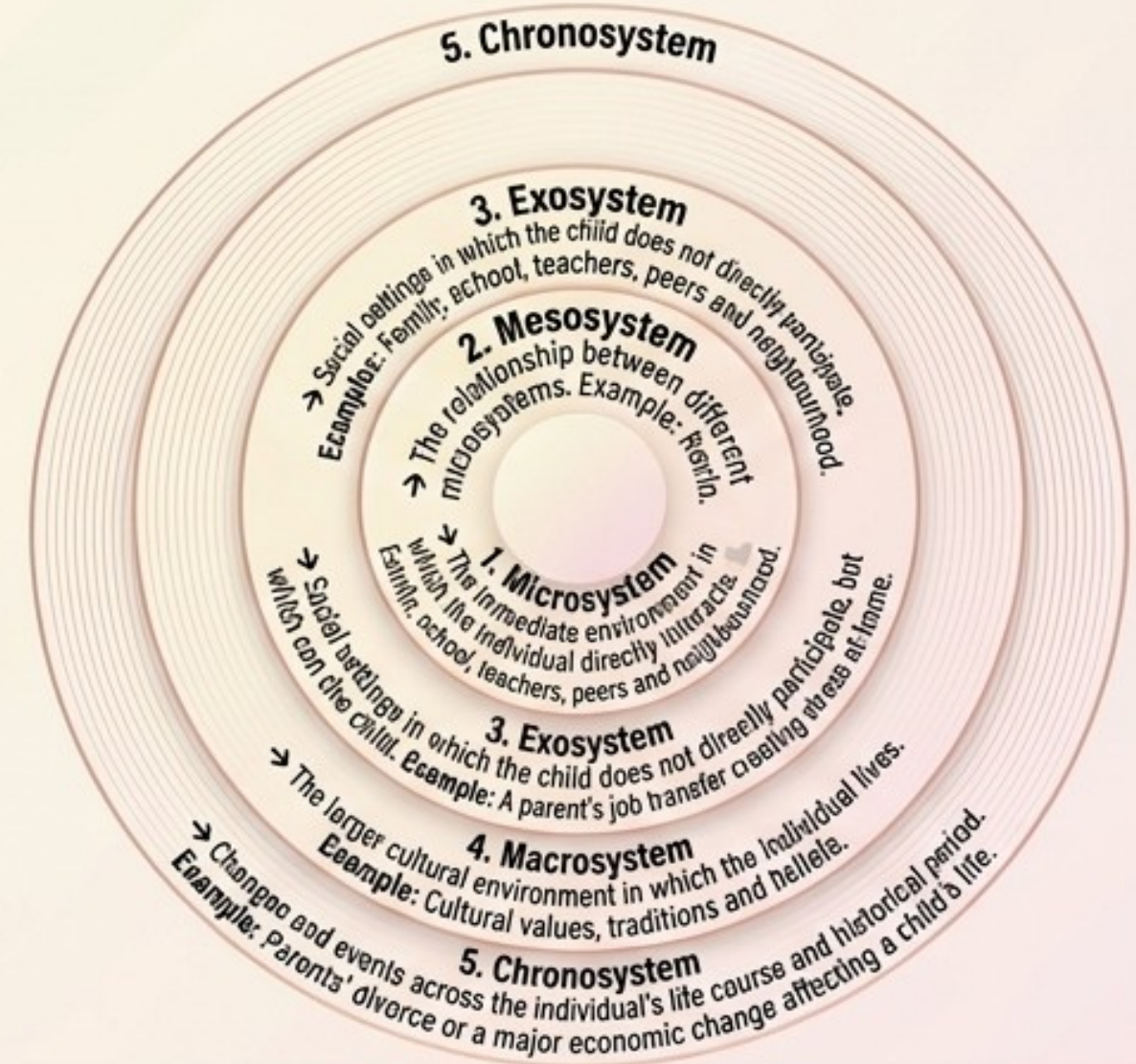
Genotype + Environment → Phenotypic expression
Genes provide a blueprint and limits, while environment in those limits.

4. CONTEXT OF DEVELOPMENT

Development does not take place in isolation. It is always influenced by the social, cultural, physical and historical context surrounding an individual.

Urie Bronfenbrenner's Contextual View

Bronfenbrenner explained development through different environmental systems surrounding the individual.

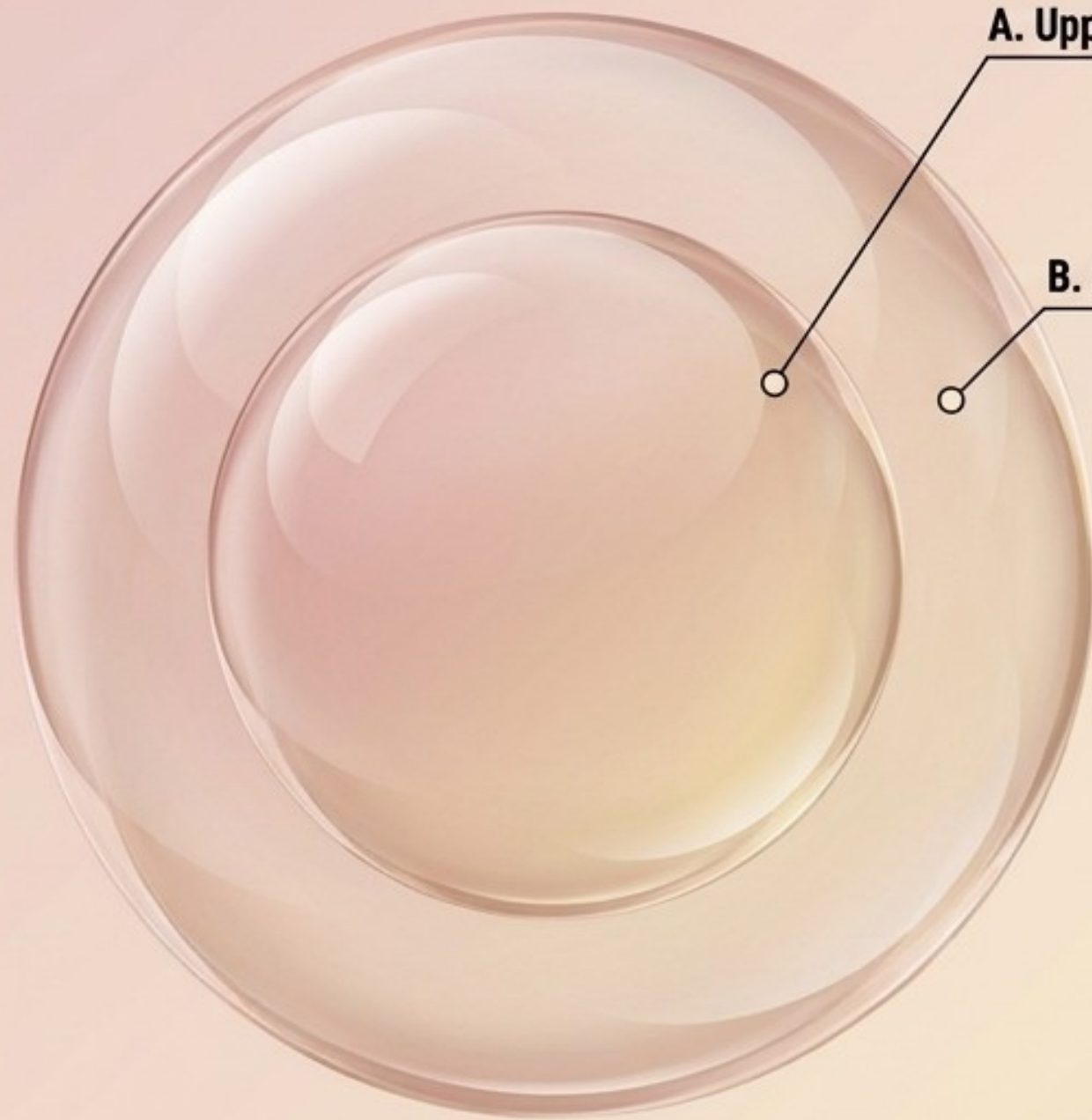


Key Idea

Child's development = Individual + Immediate environment +
Wider social/cultural/historical context

5. DURGANAND SINHA'S MODEL OF DEVELOPMENT

Durganand Sinha (1977) presented an ecological model for understanding child development in the Indian context. The child's ecology can be understood through two concentric layers as concentric layers:



A. Upper / Visible Layer

These are the more directly visible factors:

- **Home** → space, overcrowding, facilities, toys, technology, etc.
- **School** → quality of schooling and facilities.
- **Peer Group** → interactions and activities with peers.

Example: A child's learning may be influenced by the quality of schooling and interaction with classmates.

B. Surrounding Layer

These are wider environmental factors:

- **Geographical environment** → locality, space and facilities for activities.
- **Institutional setting** → caste, class and other social factors.
- **General amenities** → drinking water, electricity, entertainment, etc.

These surrounding factors influence the upper/visible layer, and both layers interact with each other.

6. OVERVIEW OF DEVELOPMENTAL STAGES

Human development is commonly studied through different stages. Each stage has certain dominant characteristics and developmental tasks.

Prenatal	Infancy	Childhood	Adolescence	Adulthood	Old Age
Conception → Birth	Birth → about 2 years	About 3–10 years	Puberty → Adulthood	About 20+ years	Later adulthood, generally 60+
Growth and development before birth	Reflexes, motor skills, attachment, object permanence	Motor skills, language, symbolic and logical thinking, social development	Sexual maturity, abstract thinking, identity formation	Career, relationships, family and responsibilities	Retirement, health, changing roles and adjustment

Key idea:

To understand a child's development, we must consider the child within the context of their experiences and environment.

Note:

Developmental stages are approximate; individuals differ in the timing and rate of development.

7. PRENATAL STAGE

The prenatal stage is the period from conception to birth, usually lasting about 40 weeks.

Development during this stage is influenced by both genetic and environmental factors.

Factors Affecting Prenatal Development



Teratogens are environmental agents that can cause deviations from normal development, serious abnormalities or even death.

Examples: Certain drugs, infections, radiation and pollutants.

Important:

The prenatal environment can have a significant effect on the developing foetus.

8. INFANCY

Infancy refers approximately to the first two years of life.

The brain develops rapidly during this period, and major changes occur in motor, cognitive and socio-emotional development.

A. Motor Development

Newborns possess reflexes, which are automatic and built-in responses to stimuli.

Some **basic motor abilities** gradually develop:

Grasping → Sitting → Crawling → Walking → Running

Some reflexes, such as blinking and coughing, continue throughout life, while others disappear as voluntary control develops.

B. Cognitive Development

According to Jean Piaget, infancy corresponds to the **sensorimotor stage**. The infant learns mainly through senses and interaction with objects.

Object Permanence

→ Understanding that an object continues to exist even when it cannot be seen.

Example: If a toy is hidden under a cloth, an older infant searches for the toy because the child understands that it still exists.

C. Socio-Emotional Development

Infants gradually develop preferences for familiar people and respond to caregivers.

Attachment

→ The close emotional bond of affection between an infant and parents/caregivers.

Sensitive and responsive caregiving helps the child develop a sense of trust and security.

9. CHILDHOOD

Childhood is a period of continued physical, motor, cognitive and socio-emotional development.

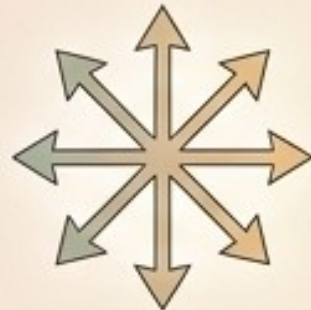
A. Physical & Motor Development

- Height, weight and physical strength increase.
- Gross motor skills improve → running, jumping, playing.
- Fine motor skills improve → finger control and eye-hand coordination.
- Hand preference may develop.

Two Important Trends



Cephalocaudal trend → Development proceeds from head to lower body.
Example: Control over the upper body develops before control over the legs.



Proximodistal trend → Development proceeds from the centre of the body towards the extremities.
Example: A child gains control over the torso before precise control of fingers.

10. COGNITIVE DEVELOPMENT IN CHILDHOOD

According to Piaget, important changes occur in thinking during childhood.

Key movement:
Symbolic thought →
Egocentrism/Intuitive thought →
Concrete logical thought

- 1. Symbolic Thought**
→ Ability to use mental symbols to represent objects or events.
Example: A child uses a drawing of a house to represent a real house.
- 2. Egocentrism**
→ Difficulty in understanding another person's point of view.
Example: A child may assume that others see and know exactly what the child sees and knows.
- 3. Animism**
→ Believing that inanimate objects are alive.
Example: A child says, "The road hurt me" after falling.
- 4. Intuitive Thought**
→ Children, especially around 4–7 years, ask many "why" questions and try to understand how and why things happen.
Example: "Why is the sky blue?"
- 5. Concrete Operational Thought**
→ Around 7–11 years, thinking becomes more logical and reversible, especially with concrete objects and situations.
Example: A child understands that the same amount of water remains the same even when poured into a taller, thinner glass.

11. SOCIAL-EMOTIONAL DEVELOPMENT IN CHILDHOOD

Important areas include:

Self

→ Children develop a clearer understanding of who they are and gradually become more independent.

Social Comparison

→ Children compare their abilities and achievements with others.

Example: “I scored more marks than my friend.”

Moral Development

→ Children gradually learn to distinguish between right and wrong.

According to Kohlberg, children’s understanding of morality changes with age and becomes increasingly based on rules and personal moral reasoning.

12. ADOLESCENCE

Adolescence is the transitional period between childhood and adulthood.

It begins with the onset of puberty and involves rapid biological and psychological changes.

A. Physical Development

Primary Sexual Characteristics

→ Changes directly related to reproduction.

Example: Development of reproductive organs and onset of menstruation.



Secondary Sexual Characteristics

→ Physical features indicating sexual maturity but not directly involved in reproduction.

Examples: Facial hair and change in voice in boys; development of breasts in girls.



13. COGNITIVE DEVELOPMENT IN ADOLESCENCE

According to Piaget, adolescence is associated with **formal operational thought**.

Major Features

Abstract thinking

Logical thinking

Idealistic thinking

More systematic problem-solving

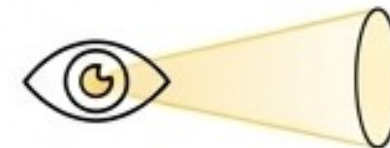
Ability to consider possibilities and alternatives

Hypothetical-deductive reasoning

Example: An adolescent can think about hypothetical situations rather than only things that can be directly observed.

14. ADOLESCENT EGOCENTRISM – DAVID ELKIND

David Elkind identified two important components of adolescent egocentrism:



1. Imaginary Audience

→ Belief that others are constantly watching and noticing them.

Example: A student thinks everyone in class will notice a small stain on their shirt.



2. Personal Fable

→ Belief in one's uniqueness and that others cannot fully understand one's experiences or feelings.

Example: "Nobody can understand what I am going through."

Remember: Imaginary Audience → Everyone is watching me.
Personal Fable → Nobody understands me

15. FORMING AN IDENTITY

Identity refers to understanding who you are and what your values, commitments and beliefs are.

The major developmental task of adolescence is to establish an identity separate from parents.

Identity Formation is influenced by:



Failure to cope with identity-related conflicts may lead to identity confusion.

16. CHALLENGES OF ADOLESCENCE

Adolescence may involve peer pressure, uncertainty, loneliness, self-doubt, anxiety and concern about the future.

Three Major Concerns

1. Delinquency

→ Behaviour ranging from socially unacceptable behaviour and legal offences to criminal acts.

Examples: Truancy, stealing, vandalism or running away from home.

2. Substance Abuse

→ Harmful or excessive use of substances such as tobacco, alcohol or drugs.

Major influences: Peer pressure, Desire for acceptance, Stress, Desire to appear mature, Escape from academic or social pressure.

Continued use may result in physiological dependence/addiction.

3. Eating Disorders

Anorexia Nervosa → Persistent pursuit of thinness through severe restriction/starvation.

Bulimia → Repeated binge-and-purge pattern of eating.

Remember: Anorexia → Starvation / pursuit of thinness;

Bulimia → Binge + Purge

17. ADULthood

An adult is generally characterised as mature, responsible, self-supporting and integrated into society.

Major Developments / Tasks

- Movement towards independence
- Career and work
- Choosing an occupation
- Developing a stable life structure
- Marriage and relationships
- Parenthood
- Family responsibilities
- Becoming a responsible member of society

Career & Work

Choosing an occupation and developing a career become important developmental tasks.

Marriage & Parenthood

Adults may need to adjust to new relationships, shared responsibilities and parenting.

Important: The timing and experience of adult roles can vary according to social and cultural context.

18. OLD AGE

Old age involves adjustment to several physical, social and psychological changes.

Common Changes / Challenges

✓ Retirement	✓ Widowhood or loss of spouse
✓ Changes in health	✓ Parenthood
✓ Decline in some physical abilities	✓ Financial concerns
✓ Changes in family roles	✓ Greater dependence on others for some individuals

Cognitive Changes

Some cognitive abilities may decline with age, while others may remain stable or improve.

Example: Memory may decline in some areas, while wisdom may increase with experience.

Important

Not every older person becomes dependent. Many older adults remain active, energetic, creative and socially productive. Successful ageing is influenced by health, relationships, social support, cognitive fitness and socio-economic conditions.

EXAM-ORIENTED QUESTION BANK

SECTION A — MCQs

- 1. A child's height increases, but development also involves changes in thinking, emotions and social relationships. This shows that:**
 - A. Development is limited to physical growth
 - B. Growth and development are exactly the same
 - C. Development is broader than physical growth
 - D. Development stops after physical maturity
- 2. A person improves some abilities with age while experiencing a decline in others. Which characteristic of the life-span perspective does this illustrate?**
 - A. Multidirectional development
 - B. Unidirectional development
 - C. Development as a fixed process
 - D. Development independent of context
- 3. A child behaves differently because of the interaction between inherited characteristics and environmental experiences. Which concept best explains this?**
 - A. Object permanence
 - B. Genotype-phenotype interaction
 - C. Imaginary audience
 - D. Concrete operational thought
- 4. A child's parents regularly communicate with the child's teacher, and this relationship influences the child's development. According to Bronfenbrenner, this interaction belongs to the:**
 - A. Microsystem
 - B. Mesosystem
 - C. Exosystem
 - D. Macrosystem
- 5. An infant searches for a toy after it has been hidden under a cloth. This behaviour demonstrates:**
 - A. Egocentrism
 - B. Symbolic thought
 - C. Object permanence
 - D. Formal operational thought
- 6. An adolescent believes that everyone in the classroom is noticing their appearance. According to David Elkind, this is an example of:**
- 7. Which of the following correctly distinguishes**
 - A. Anorexia involves binge eating, while bulimia involves starvation
 - B. Anorexia involves pursuit of thinness through restriction, while bulimia involves binge-and-purge behaviour
 - C. Both involve exactly the same eating pattern
 - D. Neither is considered a concern during adolescence

ANSWERS — MCQs

1. C | 2. A | 3. B | 4. B | 5. C | 6. B | 7. B

SECTION B — LONG-ANSWER QUESTIONS

1. What is meant by development? How is development different from growth?

OR

"Development is a broader concept than growth." Explain the statement with suitable examples.

OR

A child gains height and weight, learns to speak, develops reasoning abilities and forms relationships with others. Which of these changes represent growth and which represent development? Explain.

Answer

Development refers to the progressive, orderly and predictable changes that begin at conception and continue throughout the life-span. It includes changes in biological, cognitive and socio-emotional processes.

Growth, in comparison, mainly refers to quantitative changes such as an increase in height, weight or body size.

Development is broader because it includes physical changes as well as changes in thinking, language, emotions, personality and social relationships.

For example, an increase in height is a form of growth, whereas learning language, developing logical thinking and forming friendships are aspects of development.

Thus, growth is one aspect of development, but development is much broader than growth.

2. Explain the contextual approach to human development with reference to Urie Bronfenbrenner's model.

OR

How does the environment surrounding an individual influence development? Explain Bronfenbrenner's ecological model.

OR

A child's development is affected not only by the family but also by school, parents' workplace, culture and historical events. Explain this statement using Bronfenbrenner's model.

Answer

Development does not occur in isolation. It is influenced by the social, cultural, physical and historical context in which an individual lives.

Urie Bronfenbrenner explained development through different environmental systems:

Microsystem — Immediate settings in which the child directly interacts, such as family, school and peers.

Mesosystem — Relationships between different microsystems, such as the relationship between parents and teachers.

Exosystem — Settings in which the child does not directly participate but which can still influence development, such as a parent's workplace.

Macrosystem — Wider cultural values, traditions, beliefs and social conditions.

Chronosystem — Changes and events occurring across the person's life and historical period.

Therefore, development is shaped by the interaction between the individual and multiple layers of the environment.

SECTION B — LONG-ANSWER QUESTIONS

3. Explain Durganand Sinha's model of development in the Indian context.

OR

Why is it important to study child development within its social and cultural context? Explain with reference to Durganand Sinha's model.

OR

Explain how different layers of the environment can influence the development of an Indian child according to Durganand Sinha.

Answer

Durganand Sinha presented an ecological model of development for understanding development in the Indian context.

The model considers the child's development within different environmental layers.

The upper or visible layer includes relatively immediate settings such as the home, school and peer group. These directly influence the child's everyday experiences.

The surrounding layer includes wider factors such as the geographical environment, institutional settings, caste and class conditions, and general amenities.

These different environmental conditions interact with one another and influence the opportunities and experiences available to the child.

Thus, Sinha's model highlights that child development should be understood within the specific social, cultural and environmental context in which the child grows.

4. Explain the major areas of development during infancy and childhood.

OR

Discuss the important cognitive and socio-emotional developments that take place during childhood.

OR

An infant develops object permanence, while an older child begins to think logically about concrete situations. Explain these changes with reference to cognitive development.

Answer

Infancy and childhood involve major changes in motor, cognitive and socio-emotional development.

During infancy, motor abilities gradually develop from basic reflexes towards activities such as sitting, crawling and walking. Cognitively, infants learn through their senses and interactions with objects.

Object permanence develops when the infant understands that an object continues to exist even when it is not visible.

During childhood, motor skills become more refined and children develop better coordination. Cognitive development includes symbolic thought, egocentrism, intuitive thought and concrete operational thought. In the concrete operational period, children become capable of more logical and reversible thinking about concrete situations.

Socio-emotional development also progresses as children develop a clearer sense of self, compare themselves with others and gradually understand social and moral rules.

Thus, infancy and childhood involve significant development across physical, cognitive and socio-emotional domains.

SECTION B — LONG-ANSWER QUESTIONS

5. Explain cognitive development during adolescence. Discuss adolescent egocentrism and identity formation.

OR

What are the major cognitive and socio-emotional changes associated with adolescence? Explain.

OR

An adolescent feels that everyone is watching them and also believes that nobody can understand their experiences. Identify and explain these two characteristics. Also discuss identity formation during adolescence.

Answer

Adolescence is the transitional period between childhood and adulthood and is associated with important biological, cognitive and socio-emotional changes.

According to Piaget, adolescents develop formal operational thought, which allows them to think abstractly, logically and hypothetically.

David Elkind described two components of adolescent egocentrism:

Imaginary audience — the belief that others are constantly watching and noticing the adolescent.

Personal fable — the belief that one's experiences are unique and that others cannot fully understand them.

Another major developmental task is identity formation. Adolescents begin to understand who they are and develop their own values, beliefs and commitments. Family, peers, culture and career choices can influence this process.

Thus, adolescence involves increasing abstract thinking, self-awareness and development of a personal identity.

6. Discuss the major challenges faced during adolescence.

OR

Explain any three important concerns associated with adolescence.

OR

How can eating disorders, substance abuse and delinquency affect adolescents? Explain these major concerns.

Answer

Adolescence is a period of rapid biological, psychological and social change. Along with development, adolescents may face several challenges.

Eating disorders involve unhealthy patterns of eating. Anorexia nervosa is associated with severe restriction of food and pursuit of thinness, while bulimia involves repeated binge-and-purge behaviour.

Substance abuse refers to harmful or excessive use of substances such as tobacco, alcohol or drugs. Peer pressure, stress and the desire for acceptance may contribute to such behaviour.

Delinquency refers to behaviour ranging from socially unacceptable acts and legal offences to criminal behaviour.

Adolescents may also experience peer pressure, self-doubt, loneliness, anxiety and uncertainty about the future.

Therefore, adolescence is not only a period of physical and cognitive growth but also a stage in which appropriate social support and healthy coping mechanisms are important.