

## LESSON 9

# NATURE AND DETERMINANTS OF DEVELOPMENT

### SUMMARY

Several changes happen each day in our bodies and psychological functioning. Some changes are noticeable while some cannot be immediately or clearly observed. Some of these changes are determined more by hereditary or genetic factors, while some depend more on environmental and cultural factors.

### Nature of Development

#### A. Concept of Development-

Development is referred to as the dynamic process by which an individual grows and changes throughout its life-span. It is qualitative in nature and includes all areas - physical, motor, cognitive, physiological, social, emotional and personality. The development in all these areas is inter-related.

The changes take place in an orderly manner and are not always incremental or evolutionary. They may also involve a decline in the functioning called "**involution**". It is a gain-loss relationship in which newer and different kinds of changes take place. Older behaviour patterns may lose their salience while new ones may emerge.

Development is shaped by the joint influences of both nature (genes and heredity) and nurture

(physical and social ecology, environment) in a cultural context.

#### B. Key Developmental concepts

"**Growth**" generally refers to the quantitative additions or changes in the organic structure.

"**Development**" is a broader term which includes growth and it is also used to refer to functional and qualitative changes in cognitive ability, perceptual ability, personality and emotional development and so on.

"**Maturation**" is a term that refers to the natural unfolding of changes with increasing age. It refers to the changes which are primarily biological in nature and occur due to our genetic programme.

*Changes in behaviour also occur due to "**learning**". Learning takes place as a result of a person's interaction with the environment. Maturation provides the raw material and sets the stage for learning to occur. Maturation and learning jointly bring about changes in a person's behaviour.*

**Evolutionary changes** (Species-specific changes) happen very gradually and are passed on from one generation to the other so that the species is better equipped for survival.

#### C. Characteristics of Development

### Characteristics of Development

- life-long process
- systematic, progressive and orderly
- multi-directional
- quantitative and qualitative
- continuous and discontinuous
- multi-dimensional and inter-related
- plastic in nature
- contextual
- individual differences

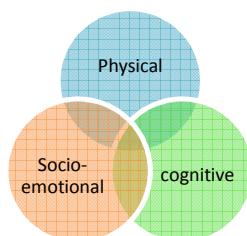
## Domains of Development

**Physical and Motor development:** It refers to changes in body-size and structure, functioning of various body systems, brain development, perceptual and motor development.

**Cognitive development:** It refers to the development of cognitive and intellectual processes, including memory, language, attention, intelligence, academic knowledge, problem solving, imagination and creativity.

**Socio-emotional development:** It refers to how we develop relationships with other people, and how our emotions emerge and change as we grow older.

These domains or areas are inter-related and combine in a holistic manner to make a person's developmental pattern unique.



## Stages of Development

### A. Developmental Stages: lifespan perspective

**Prenatal Period** (conception to birth) -single-celled organism changes into a human baby within the womb.

**Infancy and Toddlerhood** (birth to 2 year)-Rapid changes in the body and brain.

**Early childhood** (2 to 6 year)-Motor skills are refined, language develops, ties are formed with peers, and the child learns through play.

**Middle childhood** (6 to 11 year) – acquires literacy skills, thought processes are refined, friendships emerge and self-concept is formed.

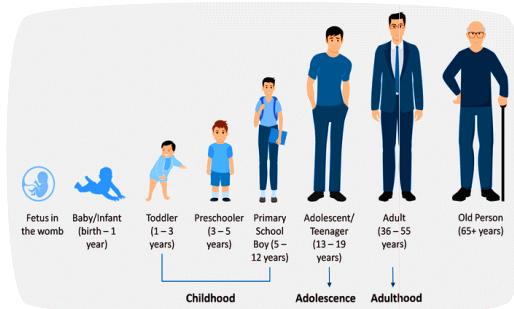
**Adolescence** (11-20 year) – period of puberty, onset of rapid physical and hormonal changes, emergence of abstract thinking, sexual maturity, stronger peer ties, sense of self and autonomy from parental control.

**Early adulthood** (20-40 year): get involved in higher education, or finds a career, forms intimate relationships leading to marriage and having children.

**Middle adulthood** (40-60 year) – in this stage the person is at the peak of career. There is a need to help children begin independent lives, and to look after own parents who are aging.

**Late adulthood** (60 year till death) - retirement from work, decrease in

stamina and physical health, bonding with grand-children, and dealing with impending old age and death of self and spouse.



## B. Life Stages: An Indigenous View

Ancient texts viewed life-span in four stages called ‘Ashramas’. These stages or ashramas are based on the principle that a human being should grow, participate and discharge worldly duties and contribute to the progress and welfare of society and move towards liberation and spiritual growth. The stages are as follows:

-  Brahmacharya - student life
-  Grihastha - work and raise family
-  Vanaprastha - period of seclusion
-  Sanyasa - detachment from worldly objects

## C. Developmental tasks

Each developmental stage is characterized by a dominant feature or a leading characteristic which determines its uniqueness. People learn certain behaviour patterns and skills more easily and

successfully at certain stages and this becomes a social expectation. Such social expectations of a particular age common to all persons constitute “developmental tasks”.

## Influences of Development

**Genetic Influences** - Different genes are transferred from each child of the same set of parents. Due to this reason each child bears greater similarity to his or her blood relatives than to anyone else. At the same time there are also many differences amongst blood relatives.

**Genotypes and Phenotypes** - The genes form pairs. Genes can be dominant or recessive. If both genes in a pair are dominant, the individual will display the specific trait (e.g., colour blindness). If one gene is dominant and the other recessive, the dominant will prevail. The recessive gene will be passed on and may show up in a later generation. **Genotype** refers to the actual genetic material or a person's genetic heritage while **Phenotype** refers to the individual's physical and behavioural characteristics which are determined by both genetic and environmental factors.

**Environmental Influences** - are important both at the prenatal and postnatal stages of human development. Prenatal influences involve teratogens, pollutants, drugs etc. After birth, several types of environmental factors operate to

influence the development of the child. The **Ecological systems theory of development** views environmental factors organized as concentric circles of systems.

**Micro-system-** it is the immediate environment at home and interactions between them and the child's own characteristics.

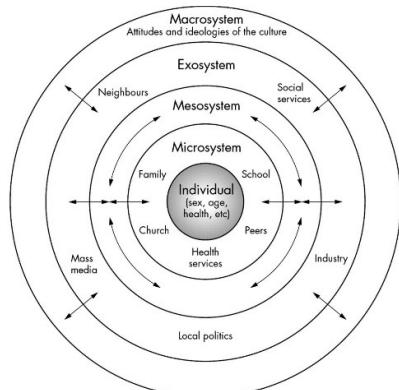
**Meso-system-** consists of the relationships between family members and school and neighbourhood.

**Exo-system-** refers to the influences of indirect agencies such as work-place of the parents or community services.

**Macro-system-** it is the outermost layer which includes cultural values, laws and customs. The systems are ever-changing and dynamic.

There is also a **chronosystem** which refers to the time dimension.

As the child grows, there are changes within each system, and also changes due to the child's interaction with the environment.



An understanding of the principles and determinants of development helps us in several ways:

- It helps us to know what to expect of the individual's capability at a particular age.
- It gives information on when to provide opportunities and stimulation for optimal development.
- It helps to parents, teachers and others who work with children, to prepare them for the physical and psychological changes that are to take place.
- It helps us to be prepared for changes in our bodies and personalities as we grow older.
- It helps us to understand that it is possible to facilitate the process of development by providing an enriched environment.

### Evaluate yourself

1. Describe briefly any four life stages as suggested by indigenous view.
2. What are factors that influence the development? Explain.
3. Discuss the major characteristics of development.