



328en268



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## 26

# DEVELOPMENTAL PATTERNS IN EARLY CHILDHOOD

*D*evelopment of a human being from a conception to a full grown adult is a subject that has fascinated people over generations. Not only is this knowledge useful as a tool for understanding self, but also for guiding the development of children.



## OBJECTIVES

After studying this lesson, you will be able to:

- list the stages of the human life span;
- outline the various processes of development;
- describe the patterns of growth and development;
- name the common factors influencing development; and
- enumerate the characteristics of the early childhood child.

## 26.1 STAGES IN THE LIFE SPAN

Human development can be better understood if we focus on its different stages while relating to the entire life span. The human life span can be divided into the following stages:

1. Prenatal period – Conception to birth
2. Period of the newborn– Birth to one month



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3. Infancy – 1 month to 2 years
4. Early childhood – 2 to 6 years
5. Middle childhood – 6 to 11 years
6. Adolescence – 11/12 to 18/19 years
7. Early Adulthood – 18/19 to 40 years
8. Middle age – 40 to 60 years
9. Old age – 60 and above

## 26.2 PATTERNS OF DEVELOPMENT

Development, which essentially means change is the result of the complex interactions between many processes – biological, social and cognitive.

1. **Biological processes:** The changes in appearances are natural. These processes involve physical changes. Our genetic heritage, growth of body organs, acquisition of motor skills, like cycling, driving, writing etc.; hormonal changes such as moustach, gaining weight at puberty; all reflect the role of biological processes in development.
2. **Cognitive processes:** These processes involve changes in thinking, intelligence and language of the child. Perception, attention, forgetting, knowing, understanding, problem solving, reasoning, memorizing, imagining, all reflect cognitive processes.
3. **Social processes:** These processes involve the changes in the child's relationship with other people, emotions and personality. These are also termed as Psycho-social processes of behavior. The first smile of an infant, the development of attachment between the mother and child, children learning to share, to assert, to take turn, to play with others; all reflect social processes. Love affection, liking-disliking, bellow- feeling all are social processes.

**Try it yourself:** List 10 examples of cognitive, social and biological process in children.



### INTEXT QUESTIONS 26.1

Match the following:

#### I

- (i) newborn
- (ii) adolescence
- (iii) early adulthood
- (iv) early childhood

#### II

- (a) increase in height
- (b) 2 – 6 years
- (c) 18/19 years – 40 years
- (d) making friends

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- |                          |                                    |
|--------------------------|------------------------------------|
| (v) cognitive process    | (e) Birth-1 Month                  |
| (vi) social process      | (f) watching and swinging mobile   |
| (vii) biological process | (g) 11 – 12 years to 18 – 19 years |

### **26.3 GROWTH AND DEVELOPMENT IN EARLY CHILDHOOD**

Growth and development are complementary processes. Growth indicates the quantitative changes in the body such as height and weight. In contrast, development refers to both the qualitative and quantitative changes, (e.g. language acquisition). Development can be defined as a 'progressive series of orderly coherent changes.'

The various types of developmental changes follow certain principles. Some of these principles are as follows:

1. Growth and development follow an orderly sequence.
2. Each child normally passes through a number of stages, each with its own essential characteristics.
3. There are individual differences in rate and pattern of development.
4. Though the human being develops as a unified whole, yet each part of the body develops at a different rate. Basically there are two sequences in the rate of development:
  - (a) **Cephalocaudal** i.e. development proceeds from head to toe. Thus the head and brain will develop first, then the neck, then toe etc.
  - (b) **Proximodistal** i.e. development proceeds from center to extremities (sidelines). Thus, the child first gains control over his spine, then arms, then fingers etc.
5. Development is essentially the result of the interaction between maturation and learning. While maturation is the 'unfolding of characteristics potentially present in the individual's genetic endowment', learning refers to the relatively enduring 'changes that come about as a result of experience and practise.'

#### **Try it Yourself:**

Observe two and four years old children for gross motor skills (e.g. running, jumping, climbing stairs, hopping) and fine motor skills (grasping, pasting, eating with spoon, tying a string, combing hair, buttoning, unbuttoning etc.). Identify the sequence of the development of that skill. Identify the comparative role of maturation and learning in development in each of these skills.



## 26.4 FACTORS AFFECTING GROWTH AND DEVELOPMENT

- (1) **Heredity:** This means what we get from our ancestors. This determine how tall or heavy we can be. In this way heredity determines our body-built and intellectual capacity, as well as many other physical, mental and psycho-social behavior traits.
- (2) **Prenatal environment:** The environment of the pregnancy is an important factor in its later growth. If the mother is getting poor nutrition or is emotionally upset or smokes, drinks, or takes some medicine or suffers from certain diseases; the growth of the child can be adversely affected.
- (3) **Nutrition:** Proper nutrition is essential for the healthy development of a child. A malnourished child's growth is either stunted or loopsided.
- (4) **Mental Level:** Higher intelligence is associated with faster development while lower intelligence is associated with retardation in various aspects of development. Body and brain are associated as said "healthy mind in a healthy body".
- (5) **Emotional climate of home:** If there is a lot of discord/fight at home or the child is not given enough love and attention or there is physical/mental abuse of the child, then the child's development is adversely affected. The affectionate, tolerant or respectful attitude towards others in the family have a positive impact on children.
- (6) **Health of the child:** If the child frequently falls sick, or suffers from some disorder, or is disabled or has disturbed endocrine functioning, his development is likely to suffer. Any inner physiological disorder affects the development.
- (7) **Level of stimulation:** The amount of stimulation an environment provides, the opportunities for exploration of environment, opportunities of interaction with other people—all influence the rate of development. Stimulation means anything which compels the person to act. We may say something which keeps a person busy.
- (8) **Socio-economic status:** It determines the kind of nutrition, stimulation, facilities and opportunities the child gets and therefore, affect the rate of his development. It also means the social reputation and the financial conditions of the family.
- (9) **Sex:** All children follow the same sequence of development. However, certain skills develop faster in girls and vice-versa. Sex is also a factor that sometime decides the potential of the child in some aspects of development.

**INTEXT QUESTIONS 26.2**

State whether the following statements are True or False:

- |   |            |
|---|------------|
| (1) Development always proceeds at the same rate.   | True/False |
| (2) Development is affected only by the environment.                                      | True/False |
| (3) Growth and development mean the same thing.   | True/False |
| (4) Development usually follows the same sequence.  | True/False |
| (5) Health of a pregnant woman will affect the development of her child.                  | True/False |
| (6) Marital discord can affect the development of the child.                              | True/False |
| (7) The more the child is allowed to explore the environment, the slower the development. | True/False |
| (8) Our learning potential is decided by our heredity.                                    | True/False |



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## 26.5 CHARACTERISTICS OF DEVELOPMENT IN EARLY CHILDHOOD

Early childhood as stated earlier is the period from 2 to 6 years of age. This period is sometimes referred to as **preschool period**. In this stage children become more self-sufficient, begin to take care of themselves, acquire language, become a part of the group, become more coordinated, develop school readiness skills (following instructions, identifying letter etc.) and obtain a higher degree of self-control.

### (A) Features of Cognitive Development

- Realises that the world exists even if he/she cannot see it (object permanence)
- Unable to see the perspective of other (egocentric)
- Absence of logical thinking
- Believes that all things (living and non-living) possess life and feelings.
- Indulges in fantasy and make-believe play
- Easily confused by surface appearances
- Uneven attention
- Limited memory
- Confused about causal relationships



- Acquires basic concepts of colour, shape, size, number, days etc.
- High level of curiosity
- Language changes from two word utterances to full sentences and grammatical usage.

### **(B) Features of Physical Development**

At 2 years: A child

- is 23-30 pounds in weight, 32-35 inches in height
- capable of bowel and bladder control
- can run, kick a ball, build a 3 cube tower

At 2-3 years: A child

- is 32-33 pounds in weight and 37-38 inches in height
- can jump of a step, ride a tricycle, use crayons, build a 8 cube tower etc.

At 3-4 years: A child

- is 38-40 pounds in weight and 40-41 inches in height
- self-sufficient in many routines in house e.g. dressing.
- Can stand on one leg, jump up and down, draw a circle and a cross etc.

At 4-5 years: A child

- is 42-43 pounds in weight, 43-44 inches in height
- has mature motor control, skips, dresses on his/her self, do long jump, copy a square and a triangle.

### **(C) Features of Emotional Development**

At 2 years: A child

- throws temper tantrums
- resents new baby (if present)
- has negativism

At 2-3 years: A child

- fear separation from others
- is negativistic
- differentiates facial expressions of anger, sorrow and joy
- has sense of humour



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At 3-4 years: A child

- displays affection towards parent
- pleasure in genital manipulation
- imaginary fears of dark, monsters, injury etc.

At 4-5 years: A child

- experiences feelings of responsibility and guilt
- feels pride in accomplishment

### **(D) Features of Social Development**

At 2 years: A child

- does opposite of what he is told

At 2-3 years: A child

- copies parent's action
- is dependent, clinging
- is possessive
- enjoys playing alongside a child

At 3-4 years: A child

- learns to share
- has cooperative play with other children
- may enter nursery school
- begins to identify with same 'sex parent'.
- imaginary friends
- interest in human body
- practises sex role activities

At 4-5 years: A child

- prefers to play with other children
- becomes competitive
- prefers sex appropriate activities.

**Note:** It must be remembered that these listed activities are just examples of some things that happen. Development has many other expressions and each is related with the other.



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### INTEXT QUESTIONS 26.3

State under which area of development each occurs:

1. cooperative play
2. guilt
3. object permanence
4. learning sex roles
5. fear of darkness
6. imaginary friends
7. jumping and hopping
8. cutting and pasting



### WHAT YOU HAVE LEARNT

Prenatal

Newnate

Infancy

Early childhood

Middle childhood

Adolescence

Adulthood

Middle adulthood

Old age

=

**LIFE SPAN STAGES**

**PROCESSES OF DEVELOPMENT**

Biological

= Cognitive

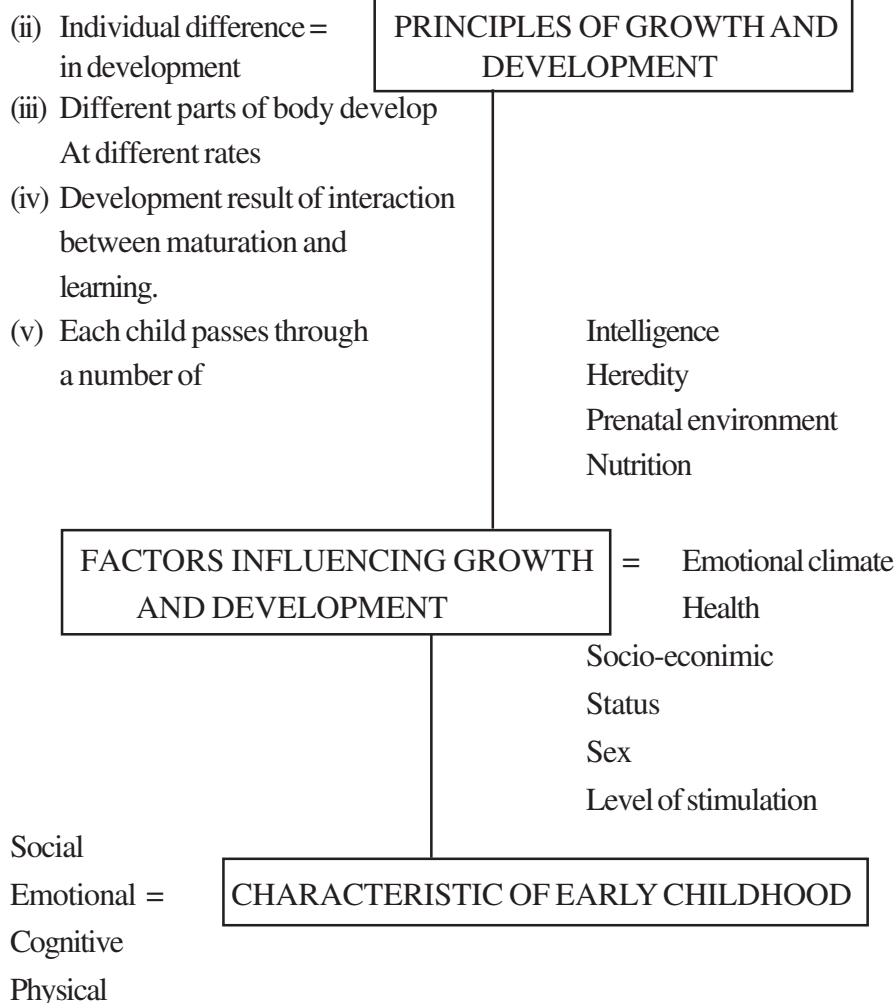
Social

- (i) All development follows orderly sequence





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### TERMINAL EXERCISE

- (1) List the principles of growth and development.
- (2) Pick out a child who is big for his age and another who is small for his age and identify factors influencing their development.
- (3) Observe a 3 years old over a period of week and list his state of social, emotional, physical and cognitive development.



### ANSWER TO INTEXT QUESTIONS

**26.1** (i) (e) (ii) (g) (iii) (c)



- (iv) (b)                      (v) (f)                      (vi) (d)  
(vii) (a)

**26.2**    (1) F    (2) F    (3) F    (4) T    (5) T    (6) T    (7) F    (8) T

**26.3**

- (1)    Social development
- (2)    Emotional development
- (3)    Cognitive development
- (4)    Social development
- (5)    Emotional development
- (6)    Social development
- (7)    Physical development
- (8)    Physical development