UNIT 7 : DEVELOPMENT THROUGH THE FIRST YEAR

UNIT STRUCTURE

7.1 Learning Objectives

7.2 Introduction

7.3 Basic Dimensions of Child's Development

7.4 Concept of Infancy

7.5 Principles of Physical Development

7.6 Concept of Imitation and Cognition

7.7 Concept of Social Development

7.7.1 Structure of Social Development in Infancy

7.8 Attachment and Separation

7.9 Let Us Sum Up

7.10 Further Reading

7.11 Answers To Check Your Progress

7.12 Possible Questions

7.1 LEARNING OBJECTIVES

After studying this unit, you will be able to:

- understand the concept of development of a child through the first year
- explain the principles of physical development
- describe the development of imitation and cognition of a child in the first year
- explain the social development through the first year
- describe the concept of attachment and separation.

7.2 INTRODUCTION

Development is the process that creates growth, process or new information or an event. Development refers to a progressive increase in skill and capacity of function. It is a qualitative change in the child functioning.

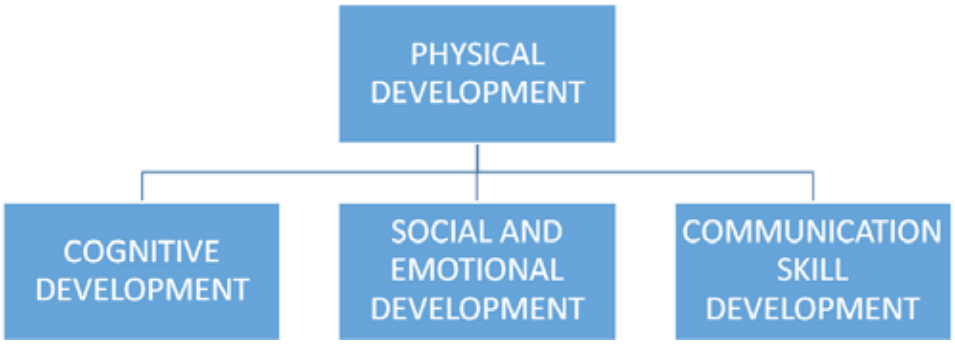
It can be measured through observation. A child is a living organism with biological foundations and he grows up in a social environment. This 'growing up' is the process of development that results from the interaction of the biological foundations with the social environment.

According to E. Hurlock, The term 'development' means a progressive series of changes that occur as a result of maturation and experiences. Development implies qualitative change. This change does not mean only physical changes like height or improving ones abilities but a complex process of integrating many structures and functions. A very significant fact about development is that establishment of behaviour early in life greatly determine how individuals adjust in later life.

The developmental process in a human being is never static. From conception to death changes take place constantly both in the physical and psychological dimensions. The process of development is continuous and cyclic. From the very start of the pre-natal stage in the mother's womb, changes start in the physical and mental structure of the individual. Gradually, these changes become perceptible.

7.3 BASIC DIMENSIONS OF CHILD'S DEVELOPMENT

There are four basic dimensions in which an individual's development occurs-



1. **Physical development**: It includes development of the external and internal body parts. The height and weight increase with age and the internal organs like the heart, lungs, stomach etc. also grow and develop as an individual grows. This development also involves large motor skills and fine motor skills.

2. **Cognitive development**: This is centered on a child's ability to learn and solve problems. An infant learning to respond to another person's facial expression or gestures and a child learning the alphabets are both examples of cognitive development.
3. **Social and Emotional development**: These are centered on a child gaining a better understanding of his own emotions and the emotions of others. This involves learning how to interact and play with other people.
4. **Communication skill development**: This involves both language and non-verbal communication. Communication skills development helps a person to express his ideas and opinion in front of others.

7.4 CONCEPT OF INFANCY

The first stage of an individual's life after birth is infancy. The developmental period of the newborn infant or 'neonate' is from birth to fourteen days, which is already discussed in the previous unit. Infancy is regarded as the 'foundation age' as at this period many behavior patterns, many attitudes and many patterns of emotional expression are being established.

Characteristics of infancy:

The characteristics of infancy are of particular importance because only in understanding they will help the parents and others to guide proper development in the infant.

1. **A foundation age:** Infancy is a true foundation age because at this time, many behaviour patterns, attitudes or emotional expression are established and they continue to the later life. The period of infancy is very important in setting a pattern for personal and social adjustments.
2. **Rapid growth and change**: Infants grow very rapidly, both physically and psychologically and with this rapid growth comes a change not only in appearance but also in capacities. During this period there is a gradual but very prominent decrease in helplessness after every week or month. The baby develops the ability to recognize and respond to people and objects in the environment.

3. **Age of decreasing dependency**: The gradual decrease in depending on others results from the rapid physical and intellectual development and body control which enables babies to sit, stand and walk and also to manipulate objects. The random movements of the neonate are gradually replaced by coordinated movements.
4. **Age of increased individuality**: Signs of increased individuality shows during infancy itself. Infants develop according to their interests and abilities. It must therefore be remembered that as individuality increases, so does the necessity for treating each infant as an individual.
5. **Beginning of socialization**: The infant also show willingness to become a part of the social group. One of the way in which an infant shows his interest in becoming social is by attachment behavior.



CHECK YOUR PROGRESS

Q 1: What do you mean by Development?

.....

.....

Q 2: What are the basic dimensions of a child's development?

.....

.....

Q 3: Write one characteristic of Infancy.

.....

.....

7.5 PRINCIPLES OF PHYSICAL DEVELOPMENT THROUGH THE FIRST YEAR

In this unit, you will also be able to understand the principles of physical development through the first year.

1. **Cephalocaudal principle**: The cephalocaudal principle states that growth follows a direction and pattern that begins with the head and upper body parts and then proceeds to the rest of the body. According to this principle, a child develop visual abilities (located in the head)

well before they master the ability to walk (closer to the end of the body).

2. **Proximodistal principles**: The proximodistal principles states that development proceeds from the center of the body outward. With this principle the trunk of the body grows before the extremities of the arms and legs. Development of the ability to use various body parts of the body also follows the proximodistal principles. For instance, effective use of the arms precedes the ability to use the hands.
3. **Hierarchical integration**: The principle of hierarchical integration states that simple skills typically develop separately and independently, but that these simple skills are integrated into more complex ones. Thus, the relatively complex skill of grasping something in the hand cannot be mastered until the developing infant learns how to control and integrate the movements of the individual fingers.
4. **Independence of systems**: The principle of the independence of systems suggests that different body systems grow at different rates. For instance the patterns of growth for body size, the nervous system and sexual maturation are quite different

7.6 DEVELOPMENT OF IMITATION AND COGNITION

Concept of imitation:

Imitation is a crucial aspect of skill development because it allows a child to learn new things quickly and efficiently by watching. Imitation involves a child's ability to copy others.

Meltzoff (2007a, 2007b; Meltzoff and Moore, 1997) has proposed that new born infants possess a mechanism that automatically matches visual input from the behaviour of others to mental representations of the infant's own behaviour to produce imitation. The first association to affect the infant's behaviour is centrally between the sounds made by the infant and the imitating parent. Thus, the strong tendency of infants' social partners to imitate the infant's behavour is likely to contribute substantially to the development of cognitive representations of the appearance and locations of infants own body parts. Imitation of the infants is central to the development

of two crucial components of a dynamic imitation system – the infant's knowledge of her own body parts and actions and the infants ability to map that knowledge onto her knowledge of the body parts and actions of others.

Concept of Cognition:

It is a term referring to the mental processes involved in gaining knowledge and comprehension. It encompasses many aspects of intellectual functions and processes such as perception, attention, thought, the formation of knowledge, memory, etc. Piaget's theory of cognitive development is a comprehensive theory about the nature and development of human intelligence. The basic four principles to Piaget's infant cognitive development are schemas, assumption, accommodation and adaption. Schemas are defined as build blocks of knowledge. Assimilation is using an existing schema to deal with a new object or situation. Accommodation happens when the existing schema does not work and needs to be changed to deal with a new object or situation. Adaption occurs when assimilation and accommodation are achieved and it permits the transition from one stage to another.

Piaget's theory of Cognitive development:

Jean Piaget, the famous psychologist formulated a famous theory of intellectual development in children, which helps to understand how thinking in a child develops. According to him two intellectual traits characterize children's thoughts- "realism" and "animism". The small infant cannot distinguish clearly between himself and the other things. In early infancy the child also is not able to distinguish much between the physical things and psychological feelings and therefore tends to get confused with reality. According to Piaget, realism is the tendency of the child to treat thoughts and dreams as physical events and the tendency of the child to give psychological attributes to physical objects is called animism. The child believes that the button, shirt, furniture etc. all have feelings of pleasure and pain as he considers them to be animate. On the basis of his studies Piaget suggested four stages in the development process of the child's thoughts-

(a) Any object can be conscious and if is moved, it can feel.

(b) Anything which possesses some kind of movement, like a bicycle, or even the wind, may feel.

(c) Any object that can spontaneously move like the sun or moon are conscious.

(d) Finally, only people or animal can be conscious. This happen mainly during childhood.

According to Piaget, the basis of behaviour starts through sensation and this stage is therefore called by him as the sensory-motor stage. He emphasized that the sensory-motor experiences have significant and probably irreversible effects on his later life.

Piaget describe that between one and half years to 2 years an infant starts understanding that objects have substance, occupy space and are permanent. He gradually can find difference between himself and other people and things in the environment. The child will also become aware of the relationship between different objects and can understand about mass, weight and volume of things. All these capabilities depend on the mental age rather than the chronological age. In other words, the cognitive development determines the infant's the ability to think, understand and manipulate things in his surroundings.



CHECK YOUR PROGRESS

Q 4: Mention the Principles of physical development through the first year.

.....

.....

Q 5: Write the concept of Imitation and Cognition.

.....

.....

7.7 SOCIAL DEVELOPMENT THROUGH THE FIRST YEAR

Concept of social development:

Development is essential aspect for the individual as well as the process of socialization. Social development is a process that result in the transformation of social structures to improve the capacity of a society in order to fulfil its objectives.

Social development can be defined by E.B. Hurlock as "Social development is the attainment of maturity in social relationship. Garret regards social development as the process whereby the biological individual is connected into a human person. Babies are born social creatures from their earliest days, they begin to connect to and collect information from caregivers. Newborn are capable of imitating facial expressions, demonstrating and understanding of how another actions relate to their own.

Children grow and develop rapidly in their first five years across the four main areas of development. These areas are motor, communication and language, cognitive and social and emotional. Positive social development is important. This development influence a child's self-confidence and empathy.

7.7.1 Structure of social development in Infancy (first year)

The social development in infancy through the first year is discussed under the following age headings-

A. 0-2 months old: From birth, babies are beginning to collect information about their world as they connect with their caregivers through each interaction. Newborn begin to recognize and respond to their caregivers with smiling, cooing and giggling which indicates their understanding of their actions with others. The first months lay the foundation for the baby's sense of security and safety leading to their ability to trust

those around them, which is a crucial part of social development.

B. **3-6 months old**: At three months old, baby's interaction provides an opportunity to form a deeper bond with their caregivers, deepening their sense of security that will allow to feel safe to explore and grow.

C. **6-9 months old**: The social development is infancy skyrockets at six months. At this point we begin to see the baby's temperament and personality. The baby begin to pronounce consonants and strings their babbles together. The baby starts recognising his/her own name and even begin to express emotion, such as anger, frustration or happiness. Babies may also begin to experience separation anxiety during this period as they develop object permanence. Their understanding that an object or person exist when out of sight.

D. **10-12 months old**: During 10 to 12 months babies begin to mimic certain actions, such as waving, talking on the phone. They also understand simple concepts such as "give" or "no". During this period, babies are responsive and eager to play with their caregivers but they may be fearful of new faces and spaces. They also tend to get cling on greatly to their mothers or to the family members they recognize when in new situations.

7.8 ATTACHMENT AND SEPERATION

Concept of Attachment:

According to Ainsworth and Bowlby, attachment is defined as a strong emotional bond that seeks to bind one person to another and is characterized by a tendency to seek and maintain a closeness- both physically and emotionally to that specific figure of which the bond to has been developed.

Infants are very social. They seek comfort and show a wide range of emotion from birth. The emotion allows the infant to form emotional attachments with their caregivers. Infants progress through stages when

they form these emotional attachments. For the healthy development of infant it is necessary that there is a cordial relationship between the father, mother and other members of the family who are likely to influence the personality development of the infant. Cordial relationship between the various members of the family gives a sense of self-security and affection to the infant. At this time of birth the human infant is physically helpless. It is true that newborn baby can make a number of responses, but he is completely dependent upon others for his survival. From the very start, some of his responses elicit behaviours from people who happen to be in the immediate environment. As a result, others try to meet his physical needs and there develops a sense of attachment.

According to **Bowlby,** there are four phases of attachment during infancy:-

(1) Pre-attachment phase

(2) Attachment in-making phase

(3) Clear-cut attachment phase

(4) Formation of reciprocal relationships phase

1. Pre-attachment phase: In the pre-attachment phase, which spans from birth to about age of 6 weeks, babies automatic reflexes and activities such as grasping, crying and rooting will cause caregivers to want to attach to babies. Caregivers will feel needed and want to meet all their babies' needs. However, at this time, babies are not yet attached to any one caregiver, and they do not care if they are held or cared for by stranger. During this phase, babies sometimes respond to social interaction from caregivers.This interaction help increase their mental, emotional and social growth and learning.

2. Attachment in the making phase: During the attachment in making phase, which spans from about age 6 weeks to about 6 to 8 months, babies begin to react differently and more quickly to primary caregivers than strangers and they starts building trust in caregivers to fulfil needs. They slowly start to count on their caregivers to take care of them. However, infants at this stage are still not distressed at being separated from particular caregivers. During this stage, they continue to make gestures and actions that help encourage caregivers to bond with

them. Babies begin making eye contact around age 2 months and can smile intentionally between ages 3 to 5 months and start reaching for familiar people and caregivers

3. **Clear-cut attachment phase**: During the clear-cut attachment phase from about 6 to 8 months to age 18 to 24 months, babies become solidly attached to their caregivers and separation anxiety emerges. Babies want to maintain contact with main caregivers and they expresses their displeasure in ways such as clinging to mom, following grandma around the door or crying when father leaves. During this phase, babies also begin to develop social skills and interactions than attachment alone. They also like to participate in social rituals like saying hello and goodbye. Babies during this period also begin social referencing, looking for social cues from other people's emotional and physical reactions to new stimulate in order to know how they should respond.
4. **The foundation of reciprocal attachment**: The final phase of attachment, the formation of reciprocal relationships, spans from about age 18 months to 24 months, is a time when babies starts negotiating with caregivers to meet their needs and to keep them feeling safe and attached. They start expressing their needs and desires in order to keep feeling satisfied. Also during this time, babies starts to understand "no"and others boundaries that make certain objects and activities off-limits. Social interaction continue to mature as they observe family routine and start to participate in them

Concept of Separation:

Separation implies the physical removal of children from the caregivers whom they are attached. Focus is made on separation between birth and age two because during that period children rely on physical proximity as the primary indicator of their mother availability. In the early weeks babies develop emotionally and physically from having all their needs closely met. Babies gradually have to learn to tolerate being part of a wider community where the needs of other children and mother herself also have to be met.

Parents feel happy when they find that the infant gradually gets conscious of his 'self'. The development of this consciousness talks sometime and there are individual differences in this respect, because all the children donot language and understanding enables him to acquire a wider control over his environment in the family.

As the infant grows he acquires greater control over his environment. Gradually, he is able to sit, crawl, stand and walk and reach the place he wants to go. He grows in height and weight according to his developing age. This growth also enables him to show wider physical and mental activities characteristic of his age.



7.9 LET US SUM UP

After going through the unit, it can be summarized as –

- Development is the process that creates growth, process or new information or an event. Development refers to a progressive increase in skill and capacity of function.
- The developmental process in a human being is never static. From conception to death changes take place constantly both in the physical and psychological dimensions. The process of development is continuous and cyclic.
- There are four basic dimensions in which an individual's development occurs: Physical development: It includes development of the external and internal body parts. The height and weight increase with age and the internal organs like the heart, lungs, stomach etc. also grow and develop as an individual grows. This development also involves large motor skills and fine motor skills.
- Cognitive development: This is centered on a child's ability to learn and solve problems. An infant learning to respond to another person's facial expression or gestures and a child learning the alphabets are both examples of cognitive development.

- Social and Emotional development: These are centered on a child gaining a better understanding of his own emotions and the emotions of others. This involves learning how to interact and play with other people.
- Communication skill development: This involves both language and non-verbal communication. Communication skills development helps a person to express his ideas and opinion infront of others.
- Infancy is regarded as the 'foundation age' as at this period many behaviour patterns, many attitudes and many patterns of emotional expression are being established.
- Principles of physical development through the first year are- Cephalocaudal principle, Proximodistal principles, Hierarchical integration, Independence of systems.
- Imitation is a crucial aspect of skill development because it allows a child to learn new things quickly and efficiently by watching. Imitation involves a child's ability to copy others.
- Cognition is a term referring to the mental processes involved in gaining knowledge and comprehension. It encompasses many aspects of intellectual functions and processes such as perception, attention, thought, the formation of knowledge, memory, etc.
- Jean Piaget, the famous psychologist formulated a famous theory of intellectual development in children, which helps to understand how thinking in a child develops. According to him two intellectual traits characterize children's thoughts- "realism" and "animism".
- Social development can be defined by E.B. Hurlock as "Social development is the attainment of maturity in social relationship. Garret regards social development as the process whereby the biological individual is connected into a human person.
- Attachment is defined as a strong emotional bond that seeks to bind one person to another and is characterized by a tendency to seek and maintain a closeness- both physically and emotionally to that specific figure of which the bond to has been developed.
- Focus is made on separation between birth and age two because

during that period children rely on physical proximity as the primary indicator of their mother availability.



7.10 FURTHER READING

1) Crow, A and Crow, A(1973):*Educational psychology,* Eurasia Publishing House
2) Das Sarma, Goswami(2014): *Developmental Psychology,* Shanti Prakasshan: Guwahati
3) Hurlock, E.B.(1978):*Child development,*Mc Graw Hill,Tokyo
4) Jersild, A.T.,Telford, C.W. and Sawrey, JM(1975): *Child psychology, Englewood Clifts,*N.J.Prentice Hall
5) Chaube.S.P.(2007): *Developmental Psychology,*NeelKamal Publications, Hyderabad
6) Conger,J.J(1977):*Adolescence and Youth,*N.Y.,Harper and Row

Web reference-

1) Educerecentre.com
2) https://www.virtuallabschool.org
3) https://www.scholastic.com
4) https://www.cadence-education.com



7.11 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: Development is the process that creates growth, process or new information or an event. Development refers to a progressive increase in skill and capacity of function. It is a qualitative change in the child functioning. It can be measured through observation.

Ans to Q No 2: Physical development, Cognitive development, Social and

Emotional development and Communication skill development.

Ans to Q No 3: One characteristic of infancy is **Rapid growth and change**: Infants grow very rapidly, both physically and psychologically and with this rapid growth comes a change not only in appearance but also in capacities. During this period there is a gradual but very prominent decrease in helplessness after every week or month. The baby develops the ability to recognize and respond to people and objects in the environment.

Ans to Q No 4: Principles of physical development through the first year are as follows: Cephalocaudal principle, Proximodistal principles, Hierarchical integration, Independence of systems.

Ans to Q No 5: Imitation is a crucial aspect of skill development because it allows a child to learn new things quickly and efficiently by watching. Imitation involves a child's ability to copy others.

Cognition is a term referring to the mental processes involved in gaining knowledge and comprehension. It encompasses many aspects of intellectual functions and processes such as perception, attention, thought, the formation of knowledge, memory, etc.



7.12 POSSIBLE QUESTIONS

A. Short Questions (Answer each questions in about 150 words)

Q 1: Define Development.

Q 2: Mention the basic dimensions in which an individual's development occurs.

Q 3: Write two characteristics of Infancy.

Q 4: Mention the principles of physical development through the first year.

Q 5: What do you mean by Imitation?

Q 6: What do you mean by Cognition?

Q 7: Who developed the theory of cognitive development?

Q 8: What do you mean by Social development?

B. Long Questions (Answer each questions in about 300-500 words)

Q 1: Discuss the dimensions of physical development of an infancy.

Q 2: Explain the characteristics of infancy.

Q 3: Discuss the principles of physical development in infancy period.

Q 4: Briefly discuss the concept of Imitation and Cognition.

Q 5: What is social development? Discuss the social development in infancy timeline.

Q 6: Explain the concept of Attachment and Separation in infancy stage.

Q 7: Discuss the four phases of attachment during infancy.

*** ***** ***