7

DOMAINS OF DEVELOPMENT

Development of children is a complex and a continuous process. It takes place in many areas or domains which together influences their holistic development.

In the previous lesson, you have learnt about growth and development of children and the principles of development. In this lesson, you will study in details the different domains of development namely, physical and motor, socio- emotional, moral, cognitive and language development.

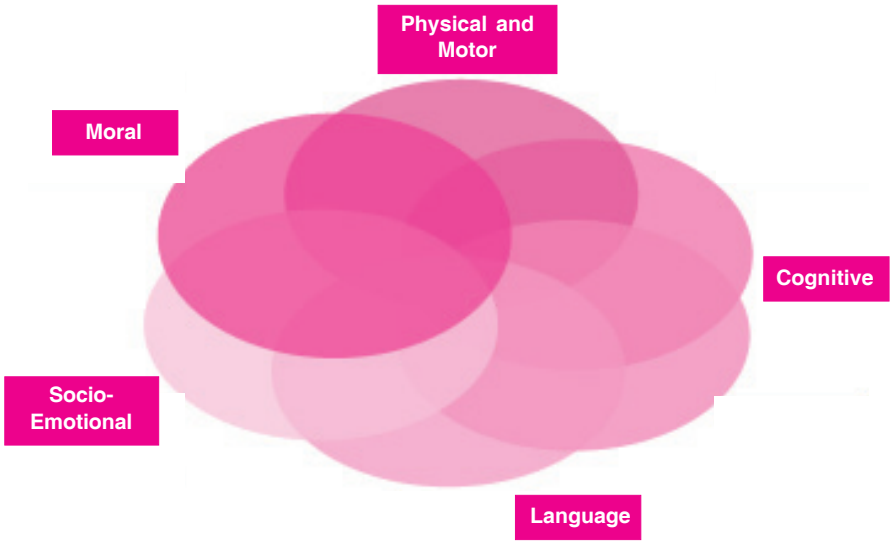


Fig. 7.1 Domains of Development

LEARNING OUTCOMES

After studying this lesson, you will be able to:

- discuss the features of each of the many domains of development; and
- discuss the significance of developmental milestones.

Notes

7.1 DOMAINS OF DEVELOPMENT

Domains of development refer to different areas or aspects in which children's development takes place. The various domains of development are:

1. Physical and motor development including gross and fine motor skills.
2. Socio-emotional development refers to an understanding of self and the social environment, managing and expressing emotions in a socially desirable manner.
3. Moral development refers to the sense of right and wrong.
4. Cognitive development refers to thinking and understanding of various concepts and phenomenon.
5. Language development, communication, emergent and early literacy focusing on listening, comprehension, oral/speaking skills and writing.

Let us study about each of these domains of development in detail.

7.1.1 Physical and Motor Development

Physical growth and development includes increase in height, weight and changes in the proportions of the body structure. It includes the development of bones. The entire structure of the body depends on the bones, i.e. on their size, proportion and density. They give an overall configuration and look to the body. You have read in the previous lesson that physical development takes place in two ways, proximodistal and cephalocaudal. Physical development includes not only changes happening externally but also what happens internally in the body. It also includes changes and maturation of internal organs. As children grow physically, the internal organs including the brain and the central nervous system also develop.

Physical development can be understood better in terms of fine and gross motor skills. Motor skills are physical abilities that children develop, which help them control the movements of their bodies. In a relatively short period of time, they begin to develop simple motor skills.

Children develop two broad kinds of motor skills–gross motor skills and fine motor skills. Gross motor skills involve large muscles and help control actions of children such as crawling, standing, walking, climbing, running and so forth. Fine motor skills involves mall muscles and affects the ability to use hands and fingers effectively. Fine-motor skill development usually involves eye-hand co-ordination, which is the ability to match the movements of the hands with what the eyes see. Developing fine motor skills help children in holding things like a cup or a crayon, turning the pages of a book, buttoning and zipping, drawing and writing, etc. In simple words, fine motor skills help children grasp, hold, move and handle different objects. Most of the activities of children, as well as ours, require a combination of gross and fine motor skills.

Physical development takes place continuously throughout our entire life. However, the nature and rate of growth may vary depending upon the stage of development. Every child develops at her/ his own pace. Some children grow faster while some are not that fast but it does not mean that they are physically immature or less developed. Every child is different, therefore, individual differences can be seen among children sharing similar genomes and environmental conditions. In addition to that, gender differences in physical development can also be observed.

Fig. 7.2 Development of Fine Motor Skills

INTEXT QUESTIONS 7.1

(a) What is meant by gross and fine motor skills?

(b) Suggest two activities that parents can organise at home to promote gross and fine mot or development of their children.

7.1.2 Socio-Emotional Development

Do you talk to a child and an adult differently? Do you talk to your teacher and your friend differently? How did you learn to behave differently with different people, depending upon your relationship with that person? Do you behave similarly in all situations or do you behave differently in different situations? When children enter this complex world, they do not know any rules and regulations of society. They gradually learn to interact with others, relate with others and obey social rules. How we relate to others in different social situations and learn to act according to the established social rules and regulations of society comes under social development. It also includes participation and involvement in social activities and understanding the meaning of being part of social groups. A child is a social being and needs to connect with people around for a fulfilling life.

Emotional development refers to the development of emotions and feelings in children. Some emotions such as happiness, fear and anger can be termed as basic emotions as they can be inferred directly from a person's facial expressions. Certain emotions such as shame, guilt and envy can be classified as complex emotions as they cannot be simply inferred from facial expressions. Children are born with basic emotions and they develop complex emotions overtime.

Have you experienced any changes in the way you express the following emotions? Please write the changes.

Anger: .....

.....

Fear: .....

.....

Sadness:.....

.....

.....

Do you recall how you used to show your love or anger towards your parents when you were five years old ? How do you express the same feelings now? Can you notice any transition in expressing the same emotions towards your parents? This brings us to the point that expression of emotions and behaviours related to them evolve over time. Some of these changes may be a result of our own emotional maturity and exposure to the surroundings.

Cultural differences in the expression of emotions may also exist as each culture teaches its children to show their emotions in a different manner. Gender differences in expression of different emotions might also vary.

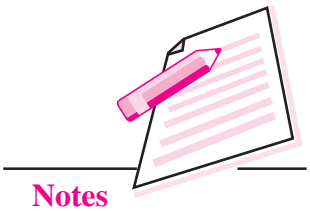
7.1.2.1 Socio-emotional development at different stages

- **Infancy**

Infants interact with people around them by smiling, crying, babbling and cooing. All these initiate and sustain the infant's interaction with others. When an infant receives positive response and stimulation from others in the environment, s/he is encouraged to develop socially. By the age of six to eight months, infants learn to develop a sense of belongingness and begin to develop attachment with parents and other familiar persons in their world. It is seen that infants feel stranger anxiety, i.e., fear of being separated from their primary caregiver when they complete the first year of their life. This anxiety decreases gradually and children develop special attachments. By the age of two years, children begin to detach a little from their parents and learn to show autonomy by saying 'no' to what they do not want to do.

- **Early Childhood**

Children develop self-awareness by the age of two to five years. They develop attitudes, likes and dislikes and ways of acting. Socialisation is the process by which children acquire skills to become responsible adults in their society. Children are socialised primarily by parents who make children understand and



realise the difference between right and wrong and help in developing a code of conduct in them. A strong identification process helps in socialisation as children observe and imitate their parents who become role models for their children.

The social world of preschool children expands and includes their peer group in school and in the neighbourhood. They begin to engage in cooperative play and games with them. These provide a ground to relate with others and understand social situations better. They also begin to develop a psychological identity as members of either one or the other gender and insist on following gender appropriate behaviour. Gender role identity arises from a number of factors-from biological differences between the sexes and from the way parents and others socialise boys and girls.

INTEXT QUESTIONS 7.2

1. Find as many words as you can related to emotions in the following grid:

W	X	Y	Z	J	E	A	L	O	U	S	Y	K	L	M
A	B	C	D	O	F	S	H	O	C	K	N	N	O	P
H	A	P	P	Y	O	U	Q	H	O	P	E	S	Y	F
O	B	A	N	G	E	R	R	L	T	P	R	I	D	E
P	W	I	H	J	U	P	S	E	T	K	V	M	B	A
E	O	N	S	Y	C	R	A	G	E	P	O	L	Y	R
F	R	D	F	G	H	I	N	O	K	T	U	S	Z	O
U	R	H	J	B	D	S	A	D	O	B	S	K	J	C
L	Y	F	L	O	V	E	Q	Z	T	U	W	V	B	A
S	C	A	R	E	D	F	J	R	M	O	K	S	T	L
E	M	B	A	R	R	A	S	S	M	E	N	T	F	M

7.1.3 Moral Development

The word *moral* has been taken from the word *mores* which means manners and customs. In the simplest terms, it is a sense of right and wrong. It includes moral behaviour, moral reasoning and judgment. Moral behavior entails acting in a morally right manner. Moral reasoning refers to weighing options as right or wrong. This is based on whether or not we are able to understand multiple perspectives related to the problem.

Let us read about development of moral reasoning in children.

7.1.3.1 Development of moral reasoning in children

A number of psychologists have described moral development among children.

Let us briefly study the stages of moral development as proposed by psychologists Jean Piaget and Lawrence Kohlberg.

According to Piaget, children's moral development can be understood by observing their understanding of rules during play. He described children moral development through two stages namely heteronomous and autonomous morality.

Heteronomous Stage	Children believe that rules are universal, fixed and handed down by any external authority. They believe that rules cannot be changed and anyone who breaks the rules will be punished. Since children in this stage see rules as unchangeable, they seldom show any flexibility towards changing rules.
Autonomous Stage	As children grow older, their sense of morality moves towards more flexibility and they start believing in everyone's good. Children believe that rules are for the benefit of all and if any rule does not benefit all, it can be changed by common consensus.

According to Lawrence Kohlberg, moral development takes place at three levels:

- The pre-moral level
- The level of conventional morality
- Post-conventional morality

At the pre-moral stage, children learn right and wrong from the people around them. Their conduct is determined by external factors like approval and disapproval by authority figures or rewards and punishment. Thus, a child's behavior is oriented towards obedience and punishment. As the child approaches middle childhood, the capacity to understand relationships and moral codes expand and it continues to grow in adolescence.

At the level of conventional morality, children tend to believe that rules can be changed if they do not serve the common good of the society.

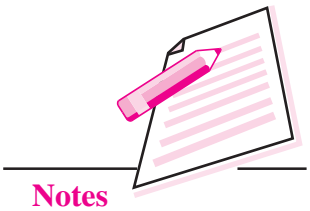
In the post-conventional stage of moral development, the sense of right and wrong is decided by one's own conscience and nothing can be imposed from outside. One may keep certain universals like value for life at the highest order of values and may also break a law for the same.

INTEXT QUESTIONS 7.3

1. Choose the correct option:

   (a) Theory of Moral Development (three levels) is given by:

   ☐ Kohlberg



☐ Piaget

☐ Erickson

(b) Stage when child involves own sense of right and wrong before accepting societal norms of morality:

☐ Post-conventional morality

☐ Conventional morality

☐ Pre-moral stage

2. Fill in the blanks.

(a) Piaget described morality through _____ and _____ morality.

(b) During heteronomous stage, children believe rules as being _____ ____ and _____.

7.1.4 Cognitive Development

It involves cognitive processes such as knowing, thinking, remembering, recognising, categorising, imagining, reasoning, decision-making and so forth. According to Piaget, children's understanding of the world expands as they experience new ideas and challenges. Children construct their own knowledge through interaction with the surroundings. Cognitive development proceeds as children mature.

Piaget divided cognitive development into four stages. These stages appear in the same order in all individuals and no stage can be skipped. However, individual differences in the pace with which children pass through these stages may differ within certain limits.

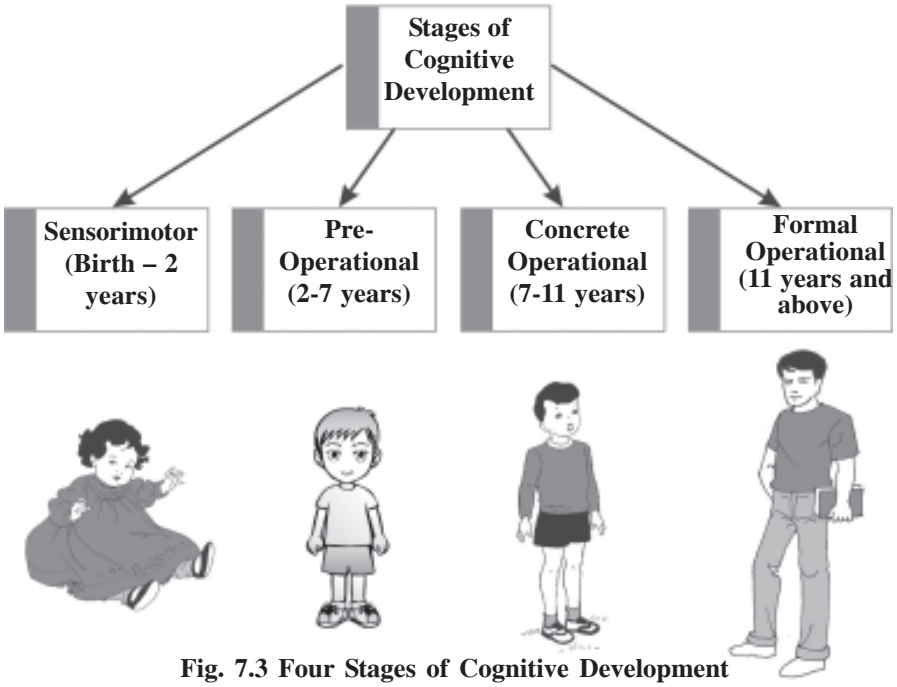


Fig. 7.3 Four Stages of Cognitive Development

Notes

- **The Sensorimotor Stage (0-2 years)**

The first stage of cognitive development as proposed by Piaget is known as the sensorimotor stage. It extends from birth to two years of age. Piaget believed that infants are active learners who are responsive to stimulation in their environment. They learn quickly and distinguish between various features of the immediate environment. For example, an infant learns to distinguish between a spoon and mother's milk and opens his mouth differently for the two.

Reflex actions such as sucking, grasping inherited by the infant become the building blocks for cognitive learning. With time, they learn to act intentionally. Infants learn to imitate others in their environment. As they grow, they can also imitate a person who is not present in the immediate environment. This is called 'deferred imitation.'

Gradually, infants develop object permanence i.e. the understanding that objects continue to exist even when out of sight. For example, a four month old child does not look out for a ball with which she/he was playing if went out of sight but a child about 15 months old will definitely do.

- **The Pre-Operational Stage (2-7 years)**

This is the second stage of cognitive development which is basically a pre-logical stage as logic has not yet fully developed. It extends from two to seven years of age. There are a few cognitive limitations that characterise children's cognition at this stage. They are:

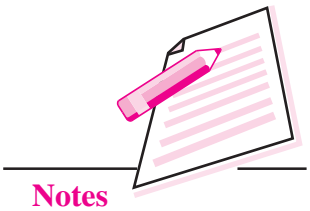
Animistic and illogical thinking: At this stage, children think that non-living objects also possess life like qualities. For example, children may reason that if an object is moving, it is alive; if it is not moving, it is not alive. Thus, to a child at this stage, clouds are living thing.

Egocentrism: Children think that everyone thinks the same way as they do and fail to recognize another person's perspective.

Reversibility: Children do not understand that for any activity, the events can be traced back to the original starting point. For example, if water from a tall glass is poured in a wide empty glass, the water can be poured back into the tall glass to bring it to the original state.

Conservation: Children lack the ability to conserve at this stage which means they fail to understand that the external appearance of an object changes but the physical properties of that object remain the same. For example, if we pour equal amount of water into two glasses, one tall and one wide and if we ask children which glass has more water, children intuitively point to the glass that they perceive has more water.

Children also fail to understand multiple perspectives and categorise objects into sub-categories based on more than one characteristic feature of the object.



• Concrete Operational Stage (7-11 years)

The concrete operational stage starts from seven years of age and continues till 11 years. The limitations of the pre-operational stage come to an end at this stage. Children develop logical thinking but they still find difficulty in applying logic to hypothetical situations. Their logic is limited to concrete observable characteristics of the objects and situations. Children are now capable of understanding others' viewpoints.

One of the most important characteristics of the concrete operational stage children is decentering. At this stage, children's thinking is not centered on one aspect of an object only. They can take into account more than one aspect when categorizing objects. They also have reversibility of thought where they can carry a thought or operation backward and forward.

They can now arrange objects in a serial order depending on the object's defining features. This is called seriation. For example, they can arrange a set of pencils of different sizes in ascending or descending order.

All these characteristics make them better problem solvers than children in the pre-operational stage of cognitive development.

• The Formal Operational Stage (11 years and above)

The formal operational stage begins around 11 years of age.

Here, children are able to perform higher order mental operations. Their thought is flexible and they can deal effectively with the complex problems involving reasoning. One of the defining characteristics of formal thought is the ability to perform hypothetic co-deductive reasoning**.** Adolescents can make hypothesis and find all the possible solutions to any abstract problem and then apply the best suited to solve.

INTEXT QUESTIONS 7.4

1. Match Column A and Column B.

Column A	Column B
(a) If something is moving, it is alive	(i) Infancy
(b) Grasping, sucking, blinking	(ii) Animistic thinking
(c) Hypothetic co-deductive reasoning	(iii) Piaget
(d) Deferred imitation	(iv) Adolescence
(e) Cognitive theory	(v) Reflex action

Notes

2. Fill in the blanks.

   (a) Cognitive development has been divided into four stages, namely .....,.....,....., ...and..... .

   (b) The ability to understand that even when outer appearance changes, physical properties remain the same is called ..... .

   (c) I am thinking and I know everyone is thinking the same thing, refers to ..... .

   (d) Imitating someone in their absence is termed as ..... .

   (e) Deducing the best solution out of every possible solution for a hypothetically framed problem is known as ..... .

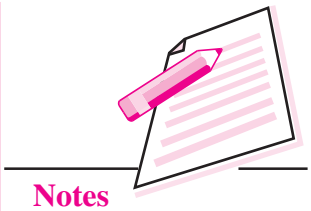
7.1.5 Language Development, Communication and Emergent Literacy

Language is the ability that separates humans from animals. As humans in society, we use our language ability continuously to communicate our ideas, share our feelings, understand each other and build social relationships. Language is an essential key for thinking, learning and making sense of the world around. Language also equips us to revisit events in the past and plan for the future. It also helps us to evaluate our strategies of work and manipulate our own ideas. Most importantly, language serves as a tool to support cognition and vice-versa.

Language is crucial the development of young children. Language development goes hand in hand with growth and maturation of the brain. The early years of life are considered critical periods for language development. From birth up to the age of six years, children develop language at a very rapid pace. Any stimulation given at this age for language development significantly impacts children. Ordinarily, language development takes place in all human beings but the age and the pace at which children reach each milestone varies. In general, girls develop language at a faster rate than boys, although both achieve the same language complexities later. Language occurs both receptively and expressively through listening, speaking, reading and writing.

7.1.5.1 Development of language

Soon after birth, infants begin communication by laughing, crying and making vowel-like cooing sounds. They also communicate through gestures and try to communicate their comfort and discomfort. By about four months of age, the nature of these sounds change and infants begin to manipulate their vocal apparatus during vocal play. Starting around six or seven months of age, cooing develops into real language like sounds called babbling (e.g. baba, mama etc).



I Pre-Speech Form of Communication

(i) Crying

(ii) Cooing and babbling

(iii) Gestures

II Speech Form of Communication

(iv) Comprehension

(v) Pronunciation

(vi) Vocabulary

(vii) Sentence formation

Children learn to comprehend language before they can themselves produce it. You may have noticed that in the early years of life, children's speech is not clear but soon, their pronunciation becomes clear. Children's vocabulary increases with age. In the early years of life, the number of words that children add to their vocabulary is tremendous. They acquire new words rather quickly and become

Good at generalising newly acquired words. Initially, children combine two to three words to make meaningful phrases (for eg. 'give me food') and later they combine more than three words to make short sentences. Gradually, the child develops language competencies sufficient enough for forming complex sentences. Along with these, in middle childhood, they also acquire social rules of language usage. They understand that language used with different persons can be different and the language used in different places can also differ. They become skilled at using certain kind of language with their parents, teachers and adults and use another kind of language within their peer groups.

INTEXT QUESTIONS 7.5

1. Fill in the blanks.

   (a) ..... develops before the children use words.

   (b) Children's interaction with people starts with ..... .

   (c) Early years of life are considered ..... periods for language development.

   (d) Language occurs both ..... and ....

2. State whether the following statements are true or false.

   (a) Comprehension develops before use of words by children.

(b) Early stimulation is not necessary for later language development.

(c) Babbling starts before cooing.

ACTIVITY 7.1

Draw a poster/layout/pamphlet to bring awareness in your community on the theme 'Importance of all domains of development to bring out holistic development in children'.

WHAT YOU HAVE LEARNT

In this lesson, you have learnt:

- Domains of development are different areas or aspects in which children's development takes place.
- Physical and motor development includes bodily growth and development of gross and fine motor skills.
- Socio-emotional development encompasses understanding of self and others; understanding and management of emotions.
- Moral development refers to the sense of right and wrong. It also includes moral behavior and reasoning.
- Cognitive development refers to thinking, understanding and concept formation.
- Language development, communication, emergent and early literacy are built upon skills of listening, comprehension, oral/speaking skills and writing.

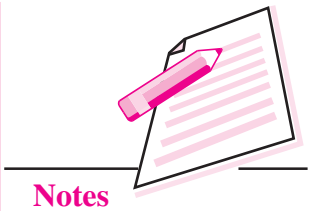
TERMINAL EXERCISE

1. What do you mean by domains of development? Discuss any two domains in detail.
2. How does physical development proceed in children?
3. Explain the stages of moral development as proposed by Piaget and Kohlberg.
4. Briefly explain the stages of cognitive development in children.
5. Discuss the importance of language for humans.

ANSWER TO INTEXT QUESTIONS

7.1

(a) Gross motor skills involve large muscles and help control actions of children



such as crawling, standing, walking, climbing, running and jumping. Fine motor skills involve small muscles and the ability to use hands and fingers effectively to colour, draw, etc.

(b) For gross motor development,-climbing, running, catching, jumping, hopping, swinging.

For fine motor development, drawing, colouring, threading beads, tearing, pasting, paper folding, clay work.

7.2

W	X	Y	Z	J	E	A	L	O	U	S	Y	K	L	M
A	B	C	D	O	F	S	H	O	C	K	N	N	O	P
H	A	P	P	Y	O	U	Q	H	O	P	E	S	Y	F
O	B	A	N	G	E	R	R	L	T	P	R	I	D	E
P	W	I	H	J	U	P	S	E	T	K	V	M	B	A
E	O	N	S	Y	C	R	A	G	E	P	O	L	Y	R
F	R	D	F	G	H	I	N	O	K	T	U	S	Z	O
U	R	H	J	B	D	S	A	D	O	B	S	K	J	C
L	Y	F	L	O	V	E	Q	Z	T	U	W	V	B	A
S	C	A	R	E	D	F	J	R	M	O	K	S	T	L
E	M	B	A	R	R	A	S	S	M	E	N	T	F	M

7.3

1. (a) Kohlberg

   (b) post-conventional morality

2. (a) heteronomous, autonomous

   (b) universal, fixed

7.4

1. (a) ii

   (b) v

   (c) iv

   (d) i

   (e) iii

2. (a) Sensorimotor, pre-operational, concrete, formal operational
   (b) conservation
   (c) egocentrism
   (d) deferred imitation
   (e) hypothetic-deductive reasoning

7.5

1. (a) comprehension
   (b) crying
   (c) critical
   (d) receptively and expressively
2. (a) True
   (b) False
   (c) False

REFERENCES

- Berk, L. (2012). *Child Development (9thEdition).* Prentice Hall of India.
- Hurlock, E.B. (2007*). Developmental Psychology: A life –span approach*. New Delhi: Tata Mc Graw-Hill.
- Santrock, J.W. (2011).*Child Development (13th Ed.).*New Delhi: Mc Graw Hill.
- Santrock, J. W. (2012). *Life Span Development (13th Ed.).* New Delhi: Mc Graw Hill.
- Singh, A. (Ed). (2015). *Foundations of Human Development*. New Delhi: Orient Blackswan.
- Srivastava, A.K. (1997). *Child Development: An Indian Perspective*. New Delhi: NCERT.