
UNIT 12 EARLY STIMULATION AND PLAY ACTIVITIES DURING THE FIRST SIX MONTHS

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12.1 INTRODUCTION

All of us interact with children and observe others relating/interacting/communicating with them. One learns how to pick up infants, play with them and talk to them and in fact, it seems we know this almost naturally. We usually change our style of talking when conversing with children. We bring ourselves to their eye level and speak in simple sentences. While many of our ways of interacting with young children emerge from our common sense, yet we need to understand that caregiving is a complex task and one must have the appropriate knowledge and skills to be able to foster the child's development from the earliest months. One must know the milestones of development, (i.e., the abilities of children at different ages), and the theoretical frameworks that can guide interaction with young children so that one can plan age-appropriate play activities for them. Such knowledge is helpful for the parents as well as for the educator in a crèche or preschool. The educator in a crèche is substituting home care for a large part during the day and has a responsibility to both children and parents. If some aspects of care and stimulating experiences are neglected at home, then the caregiver in the crèche must compensate for them. If the worker is an informed and

sensitive person, the parents will feel confident about leaving their child with her. Further, the caregiver in the crèche and the educator in the preschool can guide the parents about how they can interact and play with the child to stimulate development.

Objectives

After studying this Unit, you should be able to:

- understand how through interaction, stimulation and play we can support children's learning and development during the first six months;
- differentiate between interaction, stimulation and play and understand how we can support an infant's development through these processes;
- identify the theoretical bases for planning early stimulation and play activities for young children to understand the concept of educating;
- initiate meaningful interactions, plan and conduct stimulation and play activities for infants below six months; and
- select play material for infants.

12.2 UNDERSTANDING THE INTER-RELATIONSHIP BETWEEN INTERACTION EARLY STIMULATION AND PLAY

You have read about the meaning of three terms — interaction, stimulation and play in Unit 8. Let us recapitulate the difference as well as the linkages between them. We will also understand how the role of the caregiver changes in providing stimulation and play experiences to child from infancy to toddlerhood to preschool years.

Let us begin by understanding the meaning of the term 'early stimulation'. You know that anything which causes the child to respond is a stimulus and provides stimulation to the child. This stimulation prompts the child to try and understand the experience and make sense of it. In this way, learning and development take place. All children need stimulation to learn and develop. When speaking of stimulation with reference to infants and toddlers, we use the concept of '**Early Stimulation**'. The concept of 'early stimulation' refers specifically to planned activities that the caregiver carries out to arouse or stimulate the infant's sense of sight, touch, taste, sound, smell or movement. When the sense organs are stimulated and motor abilities encouraged, the child learns and all-round development takes place. Since the infant learns about her world through the use of her senses and her motor activities; this stage has been named by Piaget as the 'sensori-motor' period of development, as you would recall from your reading of Piaget's stages of cognitive development in MCD-001. During the preschool age, stimulation is to be provided through preschool education. Preschool education goes beyond providing stimulation to the senses and encouraging motor abilities. It seeks to develop the child's conceptual understanding and reasoning abilities, as the child's thinking abilities expand during the preschool years. Recall Piaget's description of the pre-operational period that you read in

MCD-001.

It is important to understand that during the day, the young child has a lot of experiences and all of these are sources of stimulation and learning. But when we talk about 'early stimulation' or 'preschool education', we mean specifically planned organized activities and experiences to enable learning and development.

The role of the caregiver in providing stimulation also changes from one stage to the next in early childhood. Can you think about how the caregiver's role changes from infancy to toddlerhood to the preschool stage?

The infant is not able to seek out stimulation by herself in the first year of life because she is not physically mobile. If something comes within the range of her senses, she pays attention to it. During toddlerhood (1 year to 3 years), the child's range of movement increases as she can walk and run. Yet her area of movement is restricted largely to the house. Therefore, during infancy and toddlerhood, the role of the caregiver is critical to stimulate the child. The caregiver must bring the world to the child, so to say, for the infant and the toddler to learn about it. During preschool years, as the child's physical and motor capabilities develop, the child's area of exploration expands, she can move around, go to the immediate neighbourhood, and reach for objects that interest her. Thus, she can seek out stimulation and becomes a more active participant in creating learning experiences. Of course, the role of the caregiver or preschool educator is critical even at this stage in planning learning experiences. Through this, we intend to highlight that the difference between infants, toddlers and preschool children, is the near total dependence of the child in the birth-to-three- years of age on the adult for stimulating experiences.



During infancy and toddlerhood, the role of the caregiver is critical to stimulate the child, as the child cannot reach many places on her own

Let us now reflect on the term 'interaction'. Apart from specific early stimulation activities that the caregiver carries out to stimulate the child's

senses or the preschool education experiences that the educator organizes during the 3-6 year period, the caregivers and educators interact with the child during caregiving routines throughout the day. Interaction means two-way communication and here it refers to the communication between the caregiver/educator and the child. While feeding the infant, changing her clothes, or bathing her, the caregiver, smiles, touches and talks to the child. This interaction is not a planned activity like providing early stimulation (or preschool education in the case of the older child). Nonetheless, the very act of interaction provides stimulation to the infant. Holding the baby and caressing her stimulates the infant's sense of touch; talking and singing to her stimulates the sense of sound; smiling and looking at her stimulate her sense of sight. So we see that stimulation is not only provided through specifically planned activities of 'early stimulation'; it is provided through spontaneous daily interaction as well. This means that caregivers and educators need to be aware of how their daily spontaneous interactions can influence the young child's development.



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accessed on 18th November, 2022

The very act of interaction provides stimulation to the infant

Let us now focus on the word '**play**'. As the infant grows, she also begins to play. How is play different from planned early stimulation activities carried out by the caregiver? As you have read, play is the activity of the child which is initiated and directed by the child herself and provides joy to the

child so that the child continues with it for its own sake, without needing any external prompt or external motivation to engage in it. In play, the child is actively involved — mentally, physically and emotionally. Play is initiated by the child. In contrast, early stimulation activities are initiated by an adult. However, note that the play of the child provides stimulation to her and this stimulation reinforces the play. During play, the child’s sense organs are aroused, the motor skills are used and this provides engagement and stimulation to the child. While infants and toddlers do initiate play, it is during preschool years that play becomes prominent. Preschool education must be planned around children’s play and nurture it. Thus, we see that the concepts of interaction, early stimulation and play, though distinct, are interlinked. Also, while play is initiated by the child, the child needs the support and the involvement of the adult to sustain it. In fact, often the adult will be needed to structure and plan the child’s environment in the way that the child initiates play.

What do we mean by the above statement that ‘often the adult is needed to structure and plan the child’s encouragement in a way that the child initiates play?’ For example, placing age-appropriate toys where the child can reach for them will provide an opportunity for the child to initiate play. Similarly, creating a safe environment for the child to be mobile will encourage the child to move around and initiate play. So the adult has created the context (situation) and the play has been initiated by the child. In terms of Vygotsky’s theory, the adult has provided the scaffold and generated a possible experience that is within the child’s zone of proximal development. Do you recall this concept from your reading in MCD-001?

12.3 PLANNING OF EARLY STIMULATION AND PLAY ACTIVITIES: LINKING THEORY TO PRACTICE

You have read the theoretical frameworks in MCD-001 that help us to understand the process of children’s learning and development. We are specifically referring to the theoretical constructs of Piaget, Vygotsky, Erikson and Bruner. Can you recall some constructs of learning from these frameworks and the implications of these for planning early stimulation and play activities for young children? Write your answer in the space below and then compare it with ours further.

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Let us revisit Piaget’s, Vygotsky’s, Erikson’s and Bruner’s theories which provide the theoretical bases for planning early stimulation and play activities for infants, toddlers and preschoolers.

12.3.1 Constructs from Piaget's Theory and their Implications for Planning Activities

- a) The child is an active learner and learns by doing. When the child gets opportunities to explore objects and spaces in the environment, the child creates knowledge for her own self, through her own actions. She has to either incorporate the new experience/ knowledge into her existing knowledge by the process of assimilation or modify her existing knowledge to accommodate new knowledge. This process of assimilation and accommodation leads to learning.

Implication: Give the child freedom to play, explore and experience objects and the environment in a safe way.

- b) The child learns through her senses and by carrying out actions on objects.

Implication: Give the child a variety of objects and experiences that stimulate her five senses and which she can move and manipulate. Give her freedom to act.

12.3.2 Constructs from Vygotsky's Theory and their Implications for Planning Activities

- a) Firstly, Vygotsky lays critical importance on social interactions for learning and development (in other words, on adult mediation) and this is true from the earliest days of the child's learning. The child is stimulated by many objects and experiences during the day, but this stimulation becomes meaningful only when it is mediated by adult interaction so that the child can make sense of her experience. What do we mean by 'mediated by adult interaction'? It is what the adult says and does when the child receives a stimulus, which makes the experience meaningful for the child. It is the narrative provided by the adult which helps the child to understand the stimulus and link it up with previous experience or stimuli. For example, when a six-month-old baby hears the bark of a dog, it stimulates her senses of vision and hearing. However, only when the adult provides the narrative (description), "*Oh! That was a loud bark by the dog!*" does the stimulation become meaningful for the child and helps the child to form ideas, in this case, the idea of a dog, its sound and appearance. In the absence of adult interaction, the child will not be able to derive the concepts through which to link up the various stimuli.

Implication: Adults and older peers need to be present and active to help the child understand her experiences.

- b) The child learns through experiences that are within her zone of proximal development. What do we mean by creating an experience within the child's zone of proximal development? This means that the adult has created an experience that is neither so easy that the child is already able to do it nor so difficult that the child cannot do it at all and gets disheartened, not trying any further. If the experience is easy, there is no use of the experience as the child has already acquired the developmental milestone. If the experience is too difficult, the child does not try to learn as the experience is beyond the child's abilities — so an opportunity to learn is wasted. When the experience is just at the right level of difficulty, learning takes place and development occurs. As you would

recall, this is at the heart of Vygotsky's theory — that learning leads to development and, to initiate learning, children need to be provided with experiences to acquire abilities that they have not yet acquired but which they can acquire if they are supported by the adult to do so by providing scaffold.

Implication: Plan learning experiences keeping in mind the milestones of development, what the child can do presently and what she can do when supported by the adult (scaffolding).

12.3.3 Constructs from Erikson's Theory and their Implications for Planning Activities

Let us now read about the implications of Erikson's stages of psycho-social development for organizing care, and early stimulation and play experiences for infants and toddlers.

- a) For the infant, the first year is the process of developing attachment with the primary caregiver, which helps her to develop a sense of trust.

Implication: Holding the baby many times during the day, immediately responding to her cries and needs, and being consistent in caregiving is of critical importance. Therefore, infant and toddler programmes need to have such a caregiver-child ratio so that one caregiver looks after 2 -3 children at the most. By doing so, the infants get due attention, love and care. For consistency in care, there must be low staff turnover so that there is stability in the experience of the infant.

- b) In the case of toddlers, consistent care and following routines remain important, but by this time, the child is also mobile, wants to explore. According to Erikson's theory, the child is in the second stage of psychosocial development developing a sense of autonomy which is of critical importance. The child needs to try out things for herself. Even simple activities like washing hands may take time as the child may want to do these things herself.

Implication: One needs to allow for a lot of movement and exploration. The routines of eating, bathing dressing have to be flexible, permitting experimentation and activity of the toddler. The adult has to be prepared for disorder and disruption.

12.3.4 Constructs from Bruner's Theory and their Implications for Planning Activities

- a) Learning builds from simple to complex and from known to unknown and from concrete to abstract. We use our earlier experiences to acquire new knowledge. The child is not an empty mind into whom you need to pour knowledge. Instead, we need to take into account what the child knows (prior knowledge) and use it to help a child acquire new knowledge.

Implication: Find out what the child knows and build upon that. Use actual objects and events in the local environment to initiate learning experiences. Talk about the child's local environment and strengthen her thinking and reasoning abilities using the objects, people, and occurrences in her day-to-day life.

Check Your Progress Exercise 1

- 1) What is the role of a caregiver in the given stages?

Infancy

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Toddlerhood

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Preschool Years

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- 2) Following are some of the activities undertaken by an adult with her child. Each of the activities is based upon a theory/idea of a famous psychologist. Identify and write down the name of the theorist/psychologist whose ideas inform each of the activities.

	Activity	Psychologist/Theorist
	a) The adult left the child in a room as he was asleep. However, within a few minutes child woke up and started crying. The moment the adult heard the child crying, he immediately reached out to the child, held her, and softly patted him to comfort him.	
	b) The adult places different types of objects, such as ball, leaves, blocks, etc. around the child. The child reaches out to each of these objects — touching, looking intently, holding and dropping these.	
	c) The adult gave the child 3 blocks to make a tower and as soon as she did that, the adult gives more blocks to her so that she could make a higher tower.	
	d) The adult stands at a distance from the child and calls her towards him. As the child crawls up to him, the adult stands a little further and encourages the child to move toward him.	

12.4 EDUCARING: ADULT'S ROLE DURING INFANCY AND TODDLERHOOD

Though it may seem surprising to many of us, babies begin to learn and develop from the time they are born. Physical growth and development are obvious to all and we focus on this the most. However, right from the initial days, babies attempt to understand their world, make sense of what they are experiencing and develop relationships. All this happens as adults interact with children, stimulate them and play with them. Many of us tend to think that all that the infant needs is physical care — if the child is fed, clothed, bathed and her clothes changed when she is wet, then the infant's

development is ensured. However, for the infant's optimal development to take place, physical care has to be accompanied by intellectual stimulation and emotional security. While physical care of the infant takes up a large part of the day when the infant is awake, the challenge is to find ways to use these daily routines to interact with the child, provide learning opportunities and enable her to be emotionally secure. These common daily activities have to be used to promote the optimal development of the infant. This unique role of the adult during the child's infancy has been described as 'educaring' — a term coined by Magda Gerber in 1979, who was a pioneer in infant care.

Educaring involves observing, listening to and reading the baby's cues so that the adult establishes communication with the infant during caregiving routines. Caregiving is not a mechanical act of feeding the baby and changing her clothes. If the component of intellectual stimulation and emotional security is lacking, then the child's development will not be optimal. Focused one-to-one communication between the baby and the adult is the key to educaring. This communication can take place through daily interactions, as well as through planned early stimulation and play activities.



A sensitive caregiver is responsive to the cues from the child

As you read the activities in this Unit and the next two you may think that there are some common activities that many of us carry out intuitively with infants and young children. Why then are we describing these in such detail here? There are three reasons.

- a) **Firstly**, through our detailed description of these activities we want to convey to you how educaring is to be practiced in everyday life. Probably, in the course of our routine, we see the infants engaging in these activities but we do not notice their importance in the development of children. These seem commonplace, routine, or just fun to us. They are indeed fun for children. However, in addition, we need to understand their importance and be aware of the link between the activities and the child's development, so that we carry them out more consciously and also do not take the activities for granted. Often being aware of the importance of the contribution of activity to development is the first step in carrying it out in a way that the child's active involvement is

promoted and our guidance is appropriately directed.

Often we curtail the infant's exploration and activities because we are not able to cope with the infant's energy or feel scared that the child will hurt herself. Once we realize how these various games and activities contribute to the infant's development in various domains, we will consciously encourage the child to engage in these activities.

- b) The **second** reason why we have given a detailed description of these activities is that while physical and motor development takes place without much effort on part of the adults, provided the child gets adequate nutrition; cognitive and language development will lag behind if adequate stimulation is not provided to the infant. Educaring is important for optimal language and cognitive development, particularly since critical periods for the development of language and symbolic functions fall during this stage of life. The adults need to spend time playing, interacting and talking with the child to promote cognitive and language development. Such interactions will help in the development of synapses between brain cells. As you have read in MCD-001, the early years are critical for the development of synaptic connections. These simple and everyday activities hold the key to brain development, which then has a multiplier effect. A child whose brain has been stimulated in the early years will take more interest in activities in the preschool and will benefit more from them. Such a child will benefit from learning experiences in the early years of primary school, and this cycle will continue in all the later years of schooling.
- c) The **third** reason why we have listed the activities in detail is to give you a sense that a lot can be done with infants. Many of us tend to think that till the child walks or talks in sentences, we cannot engage with the child. But that is not true. What you need is the attitude, the awareness and the inclination. And we hope that reading through these units will sensitize you towards this.

With this background, let us read how we can foster the learning and development of children from birth to six months.

12.5 INTERACTION, EARLY STIMULATION AND PLAY ACTIVITIES FOR INFANTS UP TO SIX MONTHS

The first year is a period of rapid development in all domains. You know that the first two years of life are the sensorimotor stage of cognitive development, according to Piaget, when the infant explores her environment using her sensory abilities and motor skills and learns. **The early stimulation activities during this period must focus on the development of sensory capacities and strengthening of motor skills.** For example, as an infant tries to reach for a toy, she will be better able to coordinate her eye and hand movements. Through such activities, the infant becomes more able to focus her eyes and differentiate between objects. These activities also provide the infant opportunities to explore objects and interact with people in their environment and promote development in the other domains as well. The

child will find out about the objects around her and know what she can do. She will feel the objects and move them in different ways as she explores them. This will help to develop an idea about objects and stimulate cognitive development. The playful interactions with the caregiver during the activities will help her to form relationships and foster social and emotional development. **Being with others, seeing and hearing them helps the infant to learn.**

The early stimulation and play activities for infants are based on their abilities, which increase and become more complex as they grow. The early stimulation and play activities described in this Unit, therefore, progress from simpler ones to more complex ones. Recalling the milestones of development during the first six months will be helpful as these will tell you what the child can do at different ages. You can then organize early stimulation activities so that they are within the child's zone of proximal development. The early stimulation should give the infant opportunities to practice the abilities she has and acquire new ones.

The early stimulation activities you will read in this Unit are simple examples of what can be organized for infants. Using these activities as guidelines, you can plan other activities as well. These activities are not intended to test the infant's abilities. These are stimulating activities aimed at fostering their development. They will be fun for the infant only when the caregiver also enjoys them. When the caregiver is tense, she is not a good playmate. When carrying out these activities with different children, do not label one infant as 'cleverer than' or 'slower than' another one. Each child develops at her own pace and the aim is to foster the child's development. Of course, you must always be conscious whether or not the child is achieving the milestones of development. If there is a delay of two to three months in achieving a milestone, you need to consult the doctor or the health worker.

The activities described in this Unit will help the infant to develop her sensory and motor abilities.

12.5.1 Care and Stimulation Activities for the Neonate

As you know, 'neonate' is the term used for the infant in the first month after birth. After birth, the neonate has to adjust and adapt to her new environment and she sleeps most of the time. Hunger, pain and being wet are uncomfortable to her. The most important need of the neonate is comfort. Cradling, patting, cuddling, swaying, gently rocking and bouncing the baby give her pleasure and comfort and stimulate her. In fact, physical contact with the infant is necessary to help the infant build trust and develop an attachment with the caregiver. Physical contact also stimulates the production of the growth hormone. Newborns should be held often during the time they are awake. When holding a neonate, make sure that you support her neck and head as the child cannot do so by herself. Also, soothe her by talking and singing softly to the baby. When we hold the baby, gaze and smile at her, she receives a message of warmth and caring.

The response to the baby's cries must be prompt so that she develops a sense of trust in the surroundings and people around her. If possible, ensure that the baby is nearby when you are doing some work, so that you can respond to her promptly. Do not ignore the child if she is crying. Pick her up and try to understand why she is crying. Many mothers tie a string to the baby's cradle and pull it from time to time as they work.

In the first month, the infant does not need toys and games. After the first month or two, she spends more time awake and is active. This time onwards, you can now plan some specific stimulation activities for her.

12.5.2 Stimulation Activities during One Month to Six Months

We have presented the activities in this section under different developmental domains to highlight the area of development most promoted by an activity. However, you will find that many activities promote development in more than one domain. Furthermore, you will find that some actions like talking to the infant, smiling and physically holding her are repeatedly stated across numerous activities. This is because these basic acts need to be constantly carried out with the infant. To help you to remember, we have given a name to each activity based on what it is that you have to do with the infant during the activity.

Other than describing specific stimulation activities, we have also explained how daily routine activities can be used as an opportunity for interacting with the infant and stimulating her.

While most of the time, the caregiver will have to initiate a stimulation activity, as the infant becomes more able and active, she may initiate play with some objects and toys around her. At such times, the caregiver will need to join in to sustain the play activity. Many of us tend to think that because the infant does not talk or walk, there is no point in talking to her or playing with her. Nothing could be more erroneous. It is only when the people around the infant talk, play and interact with the child that she will learn and develop.

a) Stimulation Activities for Promoting Physical and Motor Development (Gross and Fine)

- **Massage**

Massaging infants with oil is a traditional practice in almost all parts of our country. You have read in MCD-001 that massaging stimulates the growth hormone. This also promotes tactile sensory development, physical development and provides an opportunity for interaction. While massaging, the caregiver often sings to the infant, bounces her gently, and moves her hands and legs in a cyclical motion. The infant responds by expressing delight. Gradually, the infant looks forward to the massage time.

Infant's Massage

The following are some points you need to keep in mind during the baby's massage:

Time for Massage

There is no fixed time for the massage. The child should be alert and active. The caregiver has to take cues from the child to understand when she is ready for the massage. Do not wake her up, especially for the massage. Avoid massage immediately after the meal.

Preparation for the Massage

- Ensure that the caregiver has clean hands which are washed with soap. The nails should be cut and jewellery like rings removed so that the child is not cut by anything sharp during the massage.
- The oil used for the massage should be safe for the child. Take care that the oil temperature should be neither too hot nor too cold but just slightly warm.
- Select a soft and clean surface. Spread a clean cloth on it on which the child would be lying down during the massage.
- Make sure that the room or space you are using for massage is of a suitable temperature for the child.

During the Massage

- Use smooth gentle strokes while massaging. You can use a circular motion. The massage should not be hard.
- It is important to talk to the child and maintain eye contact during the massage. The caregiver can also sing to the child. Remember that massaging the child gives the infant a chance to build a bond with the caregiver.
- Be sensitive to the child's mood. If the child starts crying or is not enjoying it, stop massaging and cuddling her. Wait for the child to stop crying and only when she gets calm resume the massage. Massage should not be forced on the child; rather it should be a time for mutual enjoyment for the caregiver and the infant.

After the Massage

- Many children fall asleep immediately after the massage. Dress or cover the child with a blanket so that she does not catch a cold.
- You can also give a bath to children after a gap of 15-20 minutes. Make sure that the child is covered during this time so that her temperature is regulated.

- **Opening and Closing Fist**

Infants younger than three months of age often keep their hands closed in a fist. You can play with the child by opening her fist, holding her fingers, and allowing the child to grasp your fingers. While doing this, you should talk to the infant. This activity promotes the infant's fine motor development.



- **Changing Baby's Position**

Being in different positions fosters the child's gross motor development. For instance, around two-and-half months of age, let the baby lie on her stomach for five to ten minutes. She will try to raise her head and this fosters head control. The next milestone of development is rolling over— first from her side to her back at 3 months of age; then later during 4-6 months, she can roll over from her stomach to the back, and later, from back to stomach. You can stimulate this gross motor development by putting a toy on one side. As the child reaches for the toy, she will get an opportunity to practice rolling over.

Since the baby can now turn over easily, watch out as she lies on the cot. She may fall. When leaving the baby alone for a while, leave her in the cradle or on the floor.

Around six months, the infant can balance herself better and sit with support. Help her to sit, supporting her with pillows and cushions. Have toys around her so that she can reach for them. This will stimulate and motivate her to sit.

- **Grasping Toys**

You know that the infant begins to reach for objects placed near her by around three months of age. She grasps the pillow or her brother's shirt when he holds her or her mother's hair and then releases them. She reaches for the toy hanging from the cradle and may pull it hard. To stimulate the infant, toys should be suspended from the bed within her reach easily using a semi-rigid material so that she can pull them easily. They should be strongly tied so that they do not come off in her grasp and should be made of soft material so that they do not hurt her.

You can make the action of grasping into a game — bring a colourful toy close to the child, and as she tries to grasp it, you move it a little further away. She will try to extend her body/ arm to reach for it. Allow the child to touch the toy from time to time. As the infant grasps objects, her fine motor skills develop and her eye-hand coordination improves.

- **Kicking an Object**

Around five months, the infant begins to kick with greater strength. Her leg muscles are stronger now. If you hold her legs together and prevent them from moving, the baby will protest and kick hard to release them. This can become a game - the infant will enjoy pushing your hands away.

Another simple game for the five-month-old infant can be played this way. Put a soft toy near her feet. When she feels the toy, she will kick it again and again, enjoying herself. This activity can be repeated and becomes a game and promotes gross motor development.

b) Stimulation Activities for Promoting Language Development

- **Talk and Respond**

Let the infant be with others and see and hear them from the earliest days. Talk, laugh, play with and sing to her often. Do not think that since the infant does not talk, there is no point in talking to her. Only when the child hears talk, will she learn to talk. It is also important to respond to the earliest sounds that the infant makes. Around two months of age, infants start making gurgling and cooing sounds. You will find that when you imitate these sounds, the baby produces more of these. If you make a funny face or an unusual sound while looking at her, she will smile back and gurgle.

Between 6-10 months of age, the infant starts to babble and makes sounds like *ba-ba-ba-* or *ma-ma-ma*. Respond to these vocalizations and talk to the child while making eye contact and lightly touching her. Talking to the infant and responding to her vocalizations helps to foster her language development. Ensure that you do not talk very loudly to her. She will look at you intently when you talk, which shows she is paying attention to you.



Let the infant be with others and see and interact with them.

- **Music, Lullabies and Rhymes**

The infant enjoys soothing music and listening to gentle lullabies. There is a variety of lullabies and rhymes that are sung to children in all parts of our country. Are you aware of some of the rhymes and songs that are sung to infants in your part of the country? Lullabies help the infant to perceive sounds and rhythms and help in developing language. You can play soothing music on tape/music player.

- **Musical Toys and Instruments**

By the time the child is 5-6 months old, you can recite a poem or a rhyme to the child while softly playing the drum or a tambourine. If you have toys that make pleasant sounds, like rattles, the child will enjoy reaching for them and shaking them.

c) Stimulation Activities for Promoting Sensory and Cognitive Development

The infant learns about the world and by acting on objects by seeing, touching, smelling, tasting and feeling objects. Activities that stimulate the child's sense organs and give her opportunities to perform actions promote cognitive development. The infant learns about people and objects. The followings are some specific stimulation activities you can plan to develop the infant's senses of vision, hearing and touch. You will also need to plan activities that give her opportunities to perform actions on objects and explore her surroundings.

- **Different Views**

When you bring the child into different positions — such as lying her down on her back, or on her stomach, whether making her sit by holding her across your waist or seating her in your lap, ensure that her view changes. This not only provides entertainment to the child (for whom, 'looking' is a form of

play) but also contributes to her visual sensory development and cognitive development as she sees people and objects from different perspectives. Gradually, over some time, she will develop the understanding that this object which looks different from different positions (angles) is actually the same object.

- **Auditory Attention and Tracking**

This activity helps in developing the child's auditory (hearing) sensory skills. You know that infants track (locate) the source of the sound. Try the given activity with the infant. Make a sound using a spoon and a bowl or a rattle or bangles to attract the infant's attention. You can also clap or call out to her. The baby will turn towards the sound and look at you attentively. Now move to a different position and produce the sound again. The child will turn again in the direction of the sound. These activities delight the infant and she responds by smiling and gurgling.

- **Visual Attention and Tracking**

By the second month, the infants also track (follow) a brightly coloured object that moves slowly in their line of vision. If you move an object slowly in front of the infant, she will follow it with her eyes. This helps in developing the infant's visual sensory skills.

'Looking' is one of the interests of this age. The child's hands become one of the first objects that the baby explores. She stares at her hands, first for short periods and then for longer. If you hang toys from her cradle, she will look at them as they move. Toys that make pleasant sounds attract the baby's attention. Shake the toy from time to time to create a sound. These will stimulate both visual as well as auditory sensory development. In fact, not just hanging toys but any brightly coloured and safe object can be placed where the child can see it and reach for it.

You know that in the early months toys are best placed at a distance of "8-12" from the infant's face because this is the distance where the child can see objects most clearly. While hanging toys over the infant's cradle, do not hang them directly overhead when the infant is below three months of age, since she cannot hold her head in the midline yet. Lying on her back, the baby tends to look to her right or left most of the time and the toys should be hung or placed accordingly. However, by three months, the child can balance her head and hold it in the midline. Since she can now look overhead, the hanging toys must be moved to the centre of the crib.

- **Feeling and Touching Objects**

Between the third and the fourth months, the child begins to reach for objects. She enjoys touching and feeling them. Provide her a variety of things with different textures that can be picked, held, squeezed and moved. These do not have to be expensive toys from the market. You can make these play materials yourself from commonly available things at home. Things commonly available in the house such as containers, cardboard boxes are also interesting for the child. Just remember the aspect of safety when giving play material to the child. Children enjoy exploring objects like empty cardboard boxes, plastic or steel cups, etc. By six months, the child may begin to put objects in her mouth. You will have to be careful not to give her small objects to play with where there is a danger of the child swallowing them.

- **Grasping and Kicking Games**

We described these games under physical and motor development. These foster cognitive development, as well as, allow the infant to perform actions and so help her to develop an idea of what she can do and also help her to form an idea about objects. Do you remember sub-stage 3 of the sensorimotor stage from four months to eight months? This is the stage when the child accidentally initiates a movement and then continues with it because she has now understood the link between her actions and their result. So her actions become intentional and purposeful. The kicking and grasping games that we have described earlier, are based on this emerging understanding of the infant. Such activities allow her to know how she can act upon objects and what effect her actions have. The understanding of cause and effect emerges from such activities. These games give her enjoyment.

- **Exploring the Surroundings**

Carry the infant and walk with her around the room and the house so that she can see the things around her. Draw the infant's attention to objects, people or pets around.



Exploring the objects in the surroundings under the watchful eye of the older sibling

While showing her various things, talk to the child, name the object and point to some specific feature. Encourage her to touch the objects. Furthermore, this activity should be carried out not only indoors, but also outdoors where she can see natural objects like trees, plants, birds, etc. The infant will see different sights, hear a variety of sounds, and experience events, all of which will contribute to her sensory and cognitive development. You will find that children have a great interest in exploring nature.

d) Stimulation Activities for Promoting Social and Emotional Development

- **Regular Physical Contact**

Regular physical contact by holding hugging and caressing the infant builds attachment with the caregiver, gives the infant a sense of security and fosters socio-emotional development. Physical contact also fosters tactile sensory development. In fact, the younger the infants are, the more they need to be held. Hold the baby close to you often, stroke and pat her during play. The infant may respond by cooing and/or moving her arms and legs. An interesting development around four months is the baby's response to tickling. It brings forth chuckles from the baby and delights the caregiver as well.

- **Regular Interaction**

Talk, smile and play with the infant often — this makes the infant feel loved. She also hears language and learns about objects and things, which helps in cognitive development.

- **Call the Child by her Name**

Call the child by her name so that she slowly starts associating herself with the sound of her name. At around 4-6 months, infants start to recognize their names. This is one of the first experiences that help the child to understand that she is distinct from others and it is the first step in developing her self-concept.

- **Involving Family Members**

Encourage all family members to interact with the infant. This will help her to develop bonds with them and she will learn something different from each one of them.

- **Turn Taking**

When the infant learns to sit independently, or with the support of cushions, etc., you can play a game in which you give the child an object and then ask her to return it to you. This develops in the child the idea of taking turns, which is the basis of our social interactions. Knowing how to take turns is also a part of developing conversation skills. So this activity also fosters language development.

e) Care and Stimulation during Daily Routine

- **Ensuring Safety**

The caregiver needs to ensure the child's safety. Adult supervision is an important part of child safety. Also ensure that the infant is protected from dangers in the environment like pollution, insects, sharp objects, etc.

- **Maintaining Hygiene**

The caregiver has to ensure the child's hygiene. This is done by giving the infant her daily bath, ensuring that the child's surroundings are clean, changing the child's clothes/nappies, whenever they are soiled, and making sure that the caregiver herself maintains hygiene and cleans her hands before handling the child and that the infant's clothes, nappies, toys, feeding bottles, and any material the child comes in contact with, are clean.

Furthermore, remember that the infant's immunity is not yet fully developed, so the caregiver needs to be alert for any health problems the child may develop. Regularly monitor the child's growth (you will read more about this in MCD-005). Consult the doctor whenever needed and ensure that the child receives all the appropriate immunizations.

- **Regulating Temperature**

The caregiver also needs to ensure that the temperature of the child's environment is appropriate for her. The child needs to be kept warm. The infant's clothes should be appropriate for the season. They need to be made of soft material and different colours.

- **Setting a Routine**

Routine is when certain things are carried out at a particular time in the daily schedule of the child. For example, every day in an orderly sequence, the child will be fed after she wakes up, then the caregiver may play with her for some time, then massage her, bathe her, and so on. The caregiver should try to ensure that infants have some routine in their daily schedule. This not only ensures that the infant gets a sense of comfort, consistency and security but also helps the caregiver to effectively meet all the needs of the infant. However, it should be noted that routines are not for newborns and very young infants, for whom caregiving activities like feeding and sleeping generally happen on the demand of the child. However, as the child grows, she starts to appreciate predictable activities at certain times of the day, though one should remember not to be extremely rigid and inflexible while setting the routine. You need to also take cues from the infant.

At around 3-4 months, infants understand and anticipate basic routines. For example, when you always sing a lullaby while gently patting the child before sleep time, eventually the lullaby and patting action become a signal for the child that it is time to sleep. This feels familiar and comforting to the child. It is a good idea to talk to the infant about the routine events as they happen. For instance, you may use sentences such as, "Ah haa... Aru will now take her bath. Then Aru will drink milk..."

- **Waking up Ritual**

When the infant wakes up, actively interact with her. You can talk/ sing to her and pick her up in your arms. After playing with her, you can feed her.

- **Feeding**

For the first four to six months, the child should be exclusively breastfed. Only at four months does complementary feeding begin while continuing breastfeeding. You will read in detail about feeding the infant in MCD-005. In case breastfeeding is not possible, the child can be fed milk through a bottle. The mother needs to make eye contact with the infant during feeding time. Feeding time offers the caregiver and the infant an opportunity to develop an attachment with one another. After feeding, remember to help the child burp by putting her in a vertical position on your shoulder and stroking her back in an up to down motion.

Check Your Progress Exercise 2

1) Explain the concept of ‘educaring’.

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2) Following are some of the activities which strengthen different developmental domains of a 5-6-month-old child. Match each of the activities with the developmental domain it is most likely to strengthen.

Activity	Developmental Domain
a) The adult places a toy on the bed and the child attempts to reach out and grasp the toy.	i) Social and Emotional Development
b) The adult taps his hand on the table in a rhythmic manner. Every time the adult does it, the child looks up to the adult and laughs.	ii) Language Development
c). Canbe ii	iii) Motor Development
d). Every evening, the adult sings out different rhymes to his child. The child also begins to make humming sounds after the adult	iv) Sensory and Cognitive Development

12.6 SELECTING PLAY MATERIALS FOR CHILDREN

Let us read about the considerations that have to be kept in mind when buying play materials for a child or group of children in an early childhood centre.

a) **The foremost consideration is that the play material should be appropriate to the age of the child.** If this is done, the play activity becomes meaningful for the child as it suits her abilities. For example, for a one-year-old, the ball needs to be soft and fairly big as the child cannot hold small objects. By two and a half years, the child can hold smaller objects fairly well. Now a smaller ball will be appropriate as it will challenge the child to refine her grasping abilities. For the one-year-old, picture cards should have only one large picture. For a child who is two and a half-years-old, two or three figures depicting a scene will be interesting and challenging. The caregiver and educator need to be aware of what sensory or motor abilities would be promoted in children of

different ages while playing with a particular toy/play material. One needs to keep in mind the goals of one's programme and see how the play materials can help them reach those goals.

Children show individual differences in their play preferences. Consequently, a play material can be more meaningful for one child in the crèche, but not very meaningful for the other. You need to ensure that the materials in the centre meet the needs of all the children.

- b) **While buying or making play materials one must ensure that they are safe for children.** The following criteria must be given special attention while selecting the play material.
- The toys should be big enough so that the child does not swallow them or put them in her nose or ears.
 - The play objects should have rounded and smooth edges instead of being sharp.
 - Since infants tend to mouth objects, the material used for making the toys should not be poisonous. The paints used for colouring the toys should be non-toxic. In the case of cloth toys, the colour of the cloth should be fast. Toys made of metal should not be given to younger children.
 - The toys should not break easily. They should be sturdy to stand banging, chewing and squeezing.
- c) **The toys and play materials should be attractive.** They should be bright and should have contrast. They should be easy to manipulate and handle. Toys that can be inflated with air, balls made of cloth and paper or wooden toys with strings so that they can be pulled, puppets and dolls made from colourful rags are examples of things children find attractive.
- d) **There should be variety in the play materials.** There would be no point in having more of one kind of material and none for a different developmental domain. Including variety will help to ensure that there is play material catering to different developmental domains.

Children should be able to play with:

- Toys are made of different materials, having different textures, colours, hardness, etc;
- Play materials that allow them to sit in one place (blocks, stringing beads) as well as those which require them to move around (tricycle, ball, toy car);
- Flexible and open-ended play materials that the child can play with in multiple ways (blocks, clay, balls, etc.), as well as toys that can be played with in singular ways (like puzzles, zippers, etc.); and
- Materials with different levels of complexity.

When variety is ensured, development in various domains becomes possible.

- e) **The play material needs to be durable.** As the play materials at the centre are going to be used by many children over the years, they should be sturdy and made from durable materials. Durable toys are also more cost-effective. For instance, an *Anganwadi* worker found that wooden blocks costing Rs.100 lasted for 5 years at her centre, whereas the plastic blocks which she bought for Rs. 50 lasted for only two years. The durability of a toy can also be increased if it is properly maintained — kept clean and repaired whenever broken.
- f) **The amount of play material should be calculated.** The caregiver or the educator needs to also think about the number of play materials and toys she needs to buy so that no child is left without a play material. What toys can be shared among children? How many children can share a play material at one time? The answers to these questions will also guide the childcare worker in selecting the play materials.
- g) **Not the least cost alone should be a major factor when selecting play materials for the centre.** You would like to have toys which are not expensive, but at the same time are attractive and catch the interest of children in the centre. The first thing to understand is that children do not prefer expensive toys over less expensive ones. Dolls, rattles, masks or puppets can be easily made from materials available at home with little effort and children enjoy playing with them as much. **Bottle caps, boxes, shells, things considered waste, are equally interesting for children.** We need to realize that it is we adults who influence children's taste for toys by buying expensive toys for them in the first place. You will read more about how to make play material from materials easily available at home, often considered 'waste' in the next Unit.

A second way to cut the cost is to look for play materials that are open-ended in their use compared to toys that can be played with in only one way. Such open-ended toys can be enjoyed by children of different ages. The usefulness of the play material increases if it can be used with children of different ages. To illustrate, big-sized plastic bottle caps of different colours can initially be used for the two-year-old as material to pick up, hold and manipulate. Four-year-olds would enjoy sorting these caps into groups based on colour and shape. Similarly, wooden blocks can be used to make a tower, build a house, or be arranged as a railway track. They can also be used to impart concepts of shape, size, number and colour. Other play materials which can be used in multiple ways are beads, stones, ropes, tyres and balls.

Check Your Progress Exercise 3

1) Look at the pictures of toys given below. Based on the visuals, identify the toys which are suitable/not suitable for the children aged 0-6 months old. Also, give your reasons.



(a)



(b)



(c)



(d)

a)

b)

c)

d)

12.7 SUMMING UP

In this Unit, you have read how we can foster the development of the infant in the first six months of life through our daily interactions with her and by specifically carrying out early stimulation activities which stimulate her sense organs. Gradually, as the infant begins to play, the caregiver can interact with the infant to help the child continue her play. You have understood that while interaction, early stimulation and play are distinct concepts, they are also interlinked.

You have read how the concepts from Piaget’s and Vygotsky’s theories help us to plan learning experiences for the infant. In the Unit, we have described various activities to stimulate the child’s senses and foster development in various domains. The activities described in this Unit are based on the abilities of the infant at a particular age. This Unit also describes the kind of play material and activities appropriate for infants. The play material must be attractive, safe, appropriate for the age of the ‘child and economical.

12.8 REFERENCES AND FURTHER READINGS

1. Friedman, S., Masterson, M.L., Wright, B.L., Bredekamp, S., & Willer, B.A. (2021). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8*. Washington, DC: National Association for the Education of Young Children.
2. Holt, J. (2017). *How children learn*. Da Capo Lifelong Books.
3. Joshi, P., & Shukla, S. (2019). Learning in early childhood. In P. Joshi, & S. Shukla, *Child development and education in the twenty-first century* (pp. 63-81). Springer
4. Pennsylvania Office of Child Development and Early Learning (1st Ed.) (n.d.). *Everyday I learn through play: Activities to do with your infant and toddler*.
https://www.gov.nl.ca/education/files/earlychildhood_everyday_i_learn_through_play.pdf
5. Smith, A. B. (1996). *Early Childhood Educare: Quality Programmes which Care and Educate*.

12.9 ANSWERS TO CHECK YOUR PROGRESS EXERCICES

Check Your Progress Exercise 1

1) The role of the caregiver across given stages is:

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|------------------------|---|
| Infancy | To bring things closer to the child so that she can interact with them which is not possible due to limited physical and motor development. |
| Toddlerhood | To bring things closer to the child so that she can interact with them which is not possible due to limited physical and motor development. |
| Preschool Years | To encourage and plan activities for the child so that she can interact with the environment keeping the growing physical and motor development of the child. |

2) a) Erikson: It is because, in this instance, the child is developing developing attachment with the caregiver, and being taken care of develops a sense of trust in the child.

b) Piaget: It is because the parent has provided a variety of materials to the child for exploration.

c) Bruner: It is because the adult is increasing the level of task – simple to complex.

d) Vygotsky: It is because the adult is encouraging the child to walk more and more with his assistance; learning as per ZPD seems to be taking place.

Check Your Progress Exercise 2

- 1) As an adult making use of daily routine activities such as bathing, feeding the child to also provide learning opportunities and enable infant's optimal development – this is 'educaring'. It involves observing, listening to and reading the baby's cues so that the adult establishes communication with the infant during caregiving routines.
- 2) a) - iii) ; b) - i) ; c) - iv) ; d) - ii)

Check Your Progress Exercise 3

- 1) a) Not suitable — the toy is too heavy to be picked up by the infant.
b) Not suitable — the toy has sharp edges.
c) Suitable — the toy has soft edges and the child can easily hold, kick the toy.
d) Not suitable — the toy has sharp edges.

