

Play and Movement in Early Childhood: Setting the Early O&M Stage for Success

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Knowing What to Know: Body of research on brain development, developmental norms We know that babies are much smarter and more capable than we used to think. Body of research on the effects of early onset blindness/visual impairment ... We know that babies with blindness/visual impairment are much smarter and more capable than we used to think. This is especially true of their motor development.

What Has Changed? Babies or Us? When we know better, we do better. When we do better, our children do better. One thing that is still in vogue and gaining more and more respect is the power of social emotional development and the respect for play in the developing child's life. Where to start? The beginning, of course!

General Infancy Guidelines: Set up a rich variety and uncluttered environment with new things ... set up a sense-able routine." Follow child's lead – avoid temptation to “teach special lessons.” Watch the child - so you can facilitate. Let child's activity go on longer – see his or her efforts at problem solving. Scaffold level of assistance. Use routines – get your cues from the family.

The Vehicle of Play (Linder 2008): Play has long been thought of as the “work” of the young child.” Early-childhood experts agree that play is a both a vehicle to support ongoing developmental growth and a window to interpret a young child's knowledge and skills

Seven Types of Play: (1) Interpersonal Play; (2) Exploratory / Sensorimotor Play; (3) Functional / Relational Play; (4) Constructive Play; (5) Symbolic / Dramatic Play; (6) Rough and Tumble Play; and (7) Games with Rules

Interpersonal Play: The social-emotional exchange between infant and caregiver marks the beginning of a lifetime of interpersonal relationships and the infant's sense of self. The baby engages with her caregivers through touching, looking, vocalizing, and early movements. Caregivers in turn, touch, look, and vocalize back to the child. These reciprocal exchanges, along with predictable care routines, foster an attachment or a security base for movement. **Face-to-Face Play** helps to support early sensory skills and social-emotional reciprocity.

Interpersonal Play: Relationships Matter: The social-emotional exchange between infant and caregiver. Reciprocal exchange / predictable care routines = attachment or a security base for the developing infant. This early security base is critical in the infant's growing ability to interact with others and for self-initiated movement within an ever-expanding world. Secure attachment is related to the willingness of all infants to venture out into the environment to explore and experience it (Warren & Hatton, 2003).

Body-On-Body Contact: Increases the intimacy of the play. Provides the baby with direct feedback of the adult's movements on her body. Serves as a human resonance board.

Supports the baby's important work in prone to strengthen his upper extremity and prepare for hand use. Because the parent is the child's first teacher, it has been said, "the mother's lap is the first classroom." (Cutter, 2007, p. 6). Both security and early spatial awareness / body mapping occur in this wonderful setting.

Fraiberg 1975 Study: Tactile Language: Discrimination and Preference Early weeks = tactile-seeking that closely parallels sighted development (brief pursuit of mother's hands that have been withdrawn from contact). When the mother of the blind child does not manifest through touch or voice, the baby is not "in contact." The hands seek a "tactile encounter" – "are you there?" By five months = more intentionality. 5-8 months = face exploration by blind infant

Interpersonal Play: Seen as early as the first two weeks of life. The child will expand her understanding of cause-effect (*I do something and something happens*) of physical activity, employing deliberate signals for the other person to continue a fun activity such as reaching out to her daddy's hand to continue a tickling or bouncing game. Rhythm Games; Peek-a-Boo; Pat-a-Cake

Exploratory / Sensorimotor: Play activities are completed for the enjoyment of the sensory input gained from the task. The child is learning to gear up with motor movements to interact with objects in a progressively more deliberate manner. **Sensory Play:** Play with messy materials (shaving cream, pudding, mud) support fine motor skills used later for AMD or cane use).

Our Work: The Three Ps: Determine and Attend to Sensory Preferences. Provide Safe Proximity to Objects. Ensure Opportunities for Repetition / Ppractice

Auditory Localization: Auditory localization develops first in a horizontal plane. Infants who are blind are less likely to localize by turning their heads / eyes than sighted infants. Implications of developmental sequence of auditory localization.

Cycle of Cognition and Motor Ties: "As children who are blind begin to master the environment and adequately move within it, they often grow cognitively and physically, their motivation to move and explore further increases; their greater motivation, in turn, ensures the continued expansion of their learning, control, and independence." (Galloway, 1981)

Object Schemes: Deliberate actions that involve objects are called *object schemes*. Examples of object schemes include: bringing a ring to mouth, playing with paper, banging objects / CANES putting on a shoe, and peeling a banana.

Object-Learning Strategies Should: Reflect the symbolism level of the learner. Should reflect the interests of the learner. Be built into the daily routines of the child Be used consistently across team members, peers, and co-workers. Be tied to self discoveries, social interactions, movement incentives, learning, and literacy.

Transitional Movement: Movement transitions refer to movement from one position to another. Simple transitional movement sequences can be incorporated into daily routines.

Functional / Relational: Building upon sensory exploration and simple manipulation of objects, the child begins to recognize the functional use of objects through observation of these objects in daily routines or, more importantly, through hands-on opportunities to act upon these objects within daily routines.

Manipulative Play: interactions with small manipulative toys help prepare the small muscles that will be used in holding objects and navigating mobility tools.

Predictable Storage: “Play is facilitated by an environment where toys and materials are visible and accessible to children” (Linder, 1993, p. 29). Predictable storage places and defined play environments are helpful for the child who is blind/visually impaired (Shier Lowry, 2004). With experience, the child also learns that toys belong in a toy box, dishes to a kitchen cupboard, and clothes to a dresser in the bedroom. With the advent of object permanence, early orientation and mobility routes within the home setting involve asking the child to retrieve a familiar object from a familiar storage setting (Anthony et. al, 2002).

Constructive Play: By 18-24 months, the toddler is capable of thinking before acting and inventing a solution to a play situation (Parks, Furono, O’Reilly, Inatusuka, Hosaka, & Zeisloft-Falbey, 1992). This early problem solving of how to use materials to build a product becomes a more dominant play skill after three years of age. Motor skills are strengthened during this type of play. First constructions often involve stacking cans or blocks by age one. Floor play such as building with shoe boxes, couch cushions, or other construction materials gives the child practice opportunities to move from one position to another as the structure grows taller and wider (Bundy, 2008).

Symbolic / Dramatic: Often called pretend play, dramatic play is a time when objects are used first as if they were something else. By 18 months, the child’s play shows evidence of more imagination. Early representational/ symbolic play emerges just before the second year and continues through six years. **Dramatic Play:** Language and communication skills are expanded as children play with props in scenarios that involve movement, climbing, etc.

Symbolic Play and Gross Motor: Pretend play involves characters who dance, chase, run, drive vehicle-toys, and make a quick escape to the couch-cushion fortress (Bundy, 2008). Using her arms and legs in a prone position, the child can propel a scooter board across the gym floor pretending with the other kids to be driving a car. “Stop, it is a red light. Go it is a green light.” Acting out stories can lead to physical activity, as the child climbs in and out of the baby bear’s chair, the mama bear’s chair, and the papa bear’s chair in the tail of the three bears, and so on (Anthony, 1999). The props for acting out the story can involve a host of items that invite climbing, crawling, and jumping activities.

Rough and Tumble Play: Play can serve to build a child’s physical endurance, strength, and balance. The child will initiate her own physical activity for the sake of feeling her body movements, and also participate in activity at the hands of another person or with other children.

Physical Activity and Rough-and-Tumble Play: Play can serve to build a child’s physical endurance, strength, and balance. The young child will initiate her own physical activity for the sake of feeling her body movements and as a way to participate in activity at the hands of another person or with other children. In the first months of life, the infant will kick her legs repeatedly in happy pleasure of this self-initiated-action. Later in a four-point posture (on hands and knees in a crawling stance), the child will rock back-and-forth to feel the movement of her body in this new weight-bearing position.

Games with Rules: Children, ages five years and older, recognize the importance of games with accepted rules or limits. Preschool children will have exposure to games-with-rules in early motor games such as Duck-Duck-Goose. Such games require some element of shared expectations and a need to comply with the understood procedures of the game (Garvey, 1977). Turn-taking is a common feature of games-with-rules.

Games-with-Rules Play: Children, ages five years and older, recognize that some games have rules that have to be followed in order to play the game with others. Preschool children will have exposure to games-with-rules in early motor games such as Duck-Duck-Goose or hide or hide-and-seek. Listening and Applying “Simon Says” is a great way for children to practice listening and applying specific and varied directions: “walk slow / walk fast; turn in a circle, put your hand on the floor – now in the air,” and so on.

Recommendations

1. ***Capitalize on the Child’s Motivation to Move.*** The goal is for the child to self-initiate her movements as an active learner. The motivation stems from the desire to want to explore or do a specific task. Knowing a child’s preferences will help family members and professionals know how to situate tasks. If a child loves water play, there are many ways to encourage movement with the reward of water: independent travel to the bathtub, dumping toys into the tub; standing and shifting weight from one leg to another to stay involved in the activities of a water-play table in a preschool classroom, running through a lawn sprinkler, puddle splashing on a rainy day, and swimming lessons at the neighborhood pool.
2. ***Understanding the Child’s Play Level:*** Knowing where the child is developmentally with the play categories will allow adults to situate movement opportunities that are reinforcing to the child. The adult can begin at the play level of the child as a way to invite play, social interaction, and physical activity. For example, the child who is learning relational play can be enticed to move to more than one location to gather two objects that can be used together or apply one object to the other to create a designed result such as using a stick to bat at a beeper ball.
3. ***Expand Play to Higher Levels of Thinking and Movement:*** Once the child is engaged in play activity, actions, props, and/or verbal suggestions can be offered to expand the play routine. The adult can bump up the play level over time by modeling something new with the objects at hand. The cup that was used as a container a moment before may turn into a stacking task as the cup is turned over and new cups are added to “go higher and higher.” The task has moved from relational play to constructive play. As more cups are added, the child will need to adjust her body position to accommodate for the growing tower of cups.
4. ***Provide Opportunities to Expand and Challenge Motor Skills:*** Encourage problem solving that requires moving her body such as encouraging her to squeeze behind the couch and the chair in the living room to retrieve a ball that has rolled to this location. Change up the location of an activity that the child enjoys. Container play such as dropping pennies into a metal can be done on the floor in a sitting position or at a lower table in a kneeling position or at a higher table in a standing position.