

Developmental Milestones Summary

Understanding Developmental Domains

Developmental tasks are typically divided into four primary categories, referred to as "domains." The four primary domains are *physical, cognitive, social, and emotional*.

- * ***Physical development*** consists of the development of the body structure, including muscles, bones, and organ systems. Physical development is generally comprised of *sensory* development, dealing with the organ systems underlying the senses and perception; *motor* development, dealing with the actions of the muscles; and the nervous system's coordination of both perception and movement.

Motor activity depends upon muscle strength and coordination. Gross motor activities such as standing, sitting, walking, and running, involve the large muscles of the body. Fine motor activities, including speech, vision, and the use of hands and fingers, involve the small muscles of the body. Both large and small muscle activities are controlled and coordinated by the central nervous system.

Sensory development includes the development of vision, hearing, taste, touch, and smell, and the coordination and integration of perceptual input from these systems by the central nervous system.

Note that vision has both motor and sensory components. Muscles regulate the physical structures of the eye to permit focusing; neurological pathways transmit visual input to the brain.

- * ***Cognitive development*** is sometimes referred to as "intellectual" or "mental" development. Cognitive is the proper term. Cognitive activities include thinking, perception, memory, reasoning, concept development, problem-solving ability, and abstract thinking. Language, with its requirements of symbolization and memory, is one of the most important and complicated cognitive activities.

Differentiating language and speech is important. Understanding and formulating language is a complex cognitive activity. Speaking, however, is a motor activity. Language and speech are controlled by different parts of the brain.

- * ***Social development*** includes the child's interactions with other people, and the child's involvement in social groups. The earliest social task is attachment. The development of relationships with adults and peers, the

assumption of a moral system, and eventually assuming a productive role in society are all social tasks.

- * ***Emotional development*** includes the development of personal traits and characteristics, including a personal identity, self-esteem, the ability to enter into reciprocal emotional relationships, and mood and affect (feelings and emotions) that are appropriate for one's age and for the situation.

While each of these four developmental domains can be examined individually, it is misleading to suggest that development occurs separately in each of the four domains. ***Development in any domain affects, and is affected by, development in all of the other domains.***

Summary of Normal Developmental Milestones

Infancy and Toddler (Birth to 3 Years)

Physical Development

(Birth - 1 year) - The development of control and mastery over one's own body in both gross and fine motor skills is the infant's primary physical task, culminating toward the end of the first year in walking.

(Age 1-2 years) - The infant perfects the gross and fine motor skills that emerged during the first year by developing balance, coordination, stability, and an improved ability to manipulate objects.

(Age 2-3 years) - The child develops increased strength and uses motor skills to master challenges in the environment, such as bicycles, stairs, balls, playground equipment, eating utensils, crayons, and other objects. The child is developmentally ready to master toilet training.

Cognitive Development

(Birth - 1 year) - Cognition begins with alertness, awareness, recognition, and interest in visual, auditory, and tactile (touch) stimuli. As motor development improves, the infant begins to explore and manipulate objects and develops a rudimentary understanding of their properties. Infants develop ***object permanence*** toward the end of the first year.

(Age 1-2 years) - The emergence of symbolic thought is central to cognitive development. This results in the ability to understand and produce language.

(Age 2-3 years) - Perfection of language skills and the use of language to communicate with others is the principle cognitive task.

Social Development

(Birth - 1 year) - The most important social task is the development of attachment to the primary caretaker, most often the child's mother.

(Age 1-2 years) - The child develops affectionate and trusting relationships with other family members and with adults outside the family. The child can also be engaged in simple games and play.

(Age 2-3 years) - The child develops rudimentary relationships with other children, which are usually characterized by "parallel play," that is play in the presence of, rather than in interaction with, other children. Children also begin to imitate social roles at this time. Toilet training represents a significant internalization of social rules and expectations.

Emotional Development

(Birth - 1 year) - The development of basic trust, a derivative of the positive attachment between the infant and the primary caretaker, occurs during the first year. This is a cornerstone of emotional development.

(Age 1-3 years) - The primary developmental task involves the development of autonomy, which includes mastery and control over oneself and one's environment. Children develop a rudimentary self-concept, experiencing pride and pleasure at being "good" and embarrassment, shame, and distress at being "bad."

Preschool (3-5 Years)

Physical Development

Most basic gross motor abilities have emerged. Existing skills are practiced and perfected, and the child develops mastery in applying motor skills to increasingly challenging and complex situations.

Cognitive Development

Language develops rapidly. Grammar and syntax are refined, and vocabulary increases geometrically. The child uses language as a communication tool. Thinking is concrete and egocentric in nature. Problem solving is illogical, and magical thinking and fantasies are prevalent.

Social Development

The child expands social relationships outside the family and develops interactive

and cooperative play skills with peers.

The child begins to understand, explore, imitate, and practice social roles.

The child learns concepts of "right" and "wrong" and begins to understand the nature of rules. He experiences guilt when he has done something wrong.

Emotional Development

The preschool child has been described as "on the make." Erikson refers to the child's primary mode of operation during this stage as initiative. The child is intrusive, takes charge, is very curious and continually tries new things, actively manipulates the environment, and is self-directed in many activities.

The child's ability to understand "right" and "wrong" leads to self-assessments and affects the development of self-esteem.

School Age (6-11 Years)

Physical Development

The child practices, refines, and masters complex gross and fine motor and perceptual-motor skills.

Cognitive Development

Concrete operational thinking replaces egocentric cognition. The child's thinking becomes more logical and rational.

The child develops the ability to understand others' perspectives.

Social Development

Relationships outside the family increase in importance, including the development of friendships and participation in a peer group.

The child imitates, learns, and adopts age appropriate social roles, including those that are gender-specific.

The child develops an understanding of rules. Rules are relied upon to dictate proper social behavior and to govern social relationships and activities.

Emotional Development

The child is industrious, purposeful, and goal directed in her activities. She is confident and self-directed.

The child is developing a better sense of herself as an individual, with likes and dislikes and special areas of skill. She is capable of introspection.

The child evaluates her worth by her ability to perform. Self-esteem is largely derived from one's perceived abilities.

Adolescence (12-17 Years)

Physical Development

Physiological changes at puberty promote rapid growth, the maturity of sexual organs, and development of secondary sex characteristics. The youth must become accustomed

Cognitive Development

During early adolescence, precursors to formal operational thinking appear, including a limited ability to think hypothetically and to take multiple perspectives.

During middle and late adolescence formal operational thinking becomes well developed and integrated in a significant percentage of adolescents.

Social Development

Social relationships in early adolescence are centered in the peer group. Group values guide individual behavior. Acceptance by peers is critical to self-esteem. Most peer relationships are still same-sex.

Young adolescents become interested in sexual relationships, but most contact is through groups. Some youth may begin to experiment with sexual behavior, but many early adolescents are not sexually active with other youth.

Social roles are still largely defined by external sources.

During middle and late adolescence, values become individualized and internalized after careful consideration and independent thought.

Friends are more often selected on personal characteristics and mutual interests. The peer group declines in importance, individual friendships are strengthened, and more youth "date" in one-on-one relationships.

The youth experiments with social roles and explores options for career choice.

Emotional Development

The early adolescent is strongly identified with the peer group. Youth depend upon their peers for emotional stability and support and to help mold the youth's emerging identity. Self-esteem is greatly affected by acceptance of peers.

Early adolescents are emotionally labile with exaggerated affect and frequent mood swings. They are very vulnerable to emotional stress.

During middle and late adolescence, identity is more individualized, and a sense of self develops and stabilizes that is separate from either family or peer group.

Self esteem is influenced by the youth's ability to live up to internalized standards for behavior. Self-assessment and introspection are common.