



## The Attention Sensation Connection

**As the brain begins its development in utero, it does not have specifically defined areas.**

- Individual sensory areas (sight, sound, touch, spatial awareness, pressure, etc.) begin to develop as the fetus adjusts to its mother's movements and becomes aware of (attends to) sensations from the outside world.
- Nature has designed the brain to develop itself through the natural flow of daily experiences.

**Rapid sensory development occurs as the child is born and begins its life in the world of people and things.**

- Visual, auditory, smell, touch, motor, etc., brain areas build their individual network of experiences.
- As the child nears the first year, sensory experiences begin to be connected between the senses so visual + auditory, visual + tactile, movement + touch, etc. may communicate with one another while enriching the child's awareness of his world.

**The brain stem is the core of the brain's attention regulating system.**

- It contains fibers that connect it to every sensory system, to many motor neurons and to most other parts of the brain.
- The brain stem, cerebellum and other "deep" brain areas are actually the most important brain areas involved in perception and learning.

**Higher learning activities, such as reading, math and writing depend on sensory integration at the lower levels of the brain.**

- Learning problems are SYMPTOMS of connection difficulties in the deeper parts of the brain and/or left to right brain communication difficulties.
- The child must be able to attend to her environment and its sensory impressions for brain connections to be made in the deeper levels of the brain. This allows better connections to be made in the "higher" parts of the brain.

**If the child is unable to focus attention on life's experiences and/or normal brain development is unable to occur, the sensory areas and brain stem will not form according to nature's plan.**

- Lowered attention = lowered sensory development and lowered sensory development = lowered attention. They have a circular influence upon one another.
- Interruption of normal sensory connection can be the result of genetic/familial influence, in utero assaults through infection or environmental influences or assaults that occur during the early years of life.

**Assistance for sensory integration and attention difficulties can be accomplished through careful stimulation and repetition.**

- An enriched environment causes stronger brain connections to evolve, that causes more brain-healthy chemicals to be made. More brain-healthy chemicals allow stronger brain connections to occur. (This is why appropriate medication/environmental wellness supplements can be of assistance.)
- The type of environment that is "enriching" varies from child to child.
- Sensory integration difficulties can cause a child to be extra sensitive or under sensitive to world experiences. A child may pull away from noises or sights that are overwhelming or too "busy" for her attention to focus. A child may not even notice a touch or sound if it is too soft for his brain to process.

**The environment must be adapted to allow the child to notice and respond.**

- Too much coming in too fast is overwhelming and counter productive.
- The brain stem must be activated and sensory experience adjusted to the child's ability to perceive.

**Stronger Connections and Interconnections =  
Stronger Attention**

**Stronger Attention =  
Stronger and more numerous Connections and Interconnections**