



Attention Disorder and the Sensory Integration Connection

Nature has designed the brain so that it would develop itself through normal physical activities. These normal physical activities begin in utero. As the mother moves about, the child's body must adapt to the changes brought about by the mother's movement. Sensory integration difficulties can be as the result of genetic/familial influence, in utero insults through infection, drugs or other environmental influences or during the first few years of life. If one's senses are unable to connect or become integrated, the person will have difficulty paying attention to the various elements of their environment. Difficulty attending to elements of the environment, will lead to difficulty remembering and learning. The problem is a cyclical one that can be better understood through an awareness of brain sensory and attention development.

- It is important to remember that our environment provides opportunity for sight, sound, smell, flavor, gravity and touch sensations.
- It is all of these sensations and responses to them that cause the brain to develop
- Some specific behaviors seen in people are almost entirely the result of the way the nervous system is designed and others result from conditioning.
- The brain of a child with sensory integrated dysfunction has not developed the process for adapting to the environment and learning from the environment satisfactorily.
- The brain stem is the core of the attention regulating system of the brain. 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, vestibular nuclei and cerebellum are early developing parts of the brain involved in perception and learning.
- The higher "cortex" depends upon the sensory integration at the lower levels of the brain. As we develop, cortical areas then influence subcortical areas.
- Symptoms of cortical difficulties may indicate problems in the deeper parts of the brain.
- Sensory Disorders can be helped. Multisensory brain-training programs can result in increased brain connections of sensory networks positively affecting sensory-motor development throughout the body