



## Sensory Integration: Not Just For Kids

**Monica Iammatteo-Crep, PTA**  
**Physical Therapist Assistant**  
**Ham Lake Physical Therapy**

Sensory Integration is a treatment strategy that states that the patient has some hyper or hypo sensitivity involving their senses. Sensory Integration is a practice that is mainly in the realm of Occupational Therapists, but the facility in which I had my clinical utilized SI in OT, PT, and Speech. We worked together and sometimes our duties blurred.

Kids with hypo sensitivity would seek out more stimulation, sometimes this was destructive behavior, such as hurting ones self on purpose, or trying to start confrontations to get attention. These kids learned that negative attention was still attention, nonetheless. These kids benefited from doing “heavy work”. This included activities like jumping on the trampoline, or pillow fights with large pillow where the therapist would (carefully) “squish” the child. This was serious fun to these kids! These activities would actually help the child to focus afterward, since they could process (integrate) the world around them if for only a short time after the activity. This often allowed the child to go on and successfully improve in a speech therapy session afterward. Some kids would avoid stimulation, such as loud noises, bright lights or textures. These kids would try to hide or cover their eyes, or ears. We would work with these kids in low light rooms that were quiet or had soothing music. (Speech therapy and Occupational therapy had their own tricks as well.)

These things made me wonder if adults with addictive personalities or mental illness are simply looking to either dull or intensify their senses, or “regulate” them by abusing substances, such as alcohol or cigarettes.

How does Physical Therapy play into sensory integration, or behavior issues for that matter? Physical Therapy utilizes various types of exercise to improve functional capacity. Increased neural (brain) activity is a great side effect.

Any activity, that challenges coordination, such as learning a new dance step, causes a person to have to think about what they are doing. In PT we call this “motor planning”. This process starts in the brain and must translate into moving the body, which challenges cognition and concentration. Activity also stimulates the vestibular system (inner ear that regulates balance and motion), which has also been tied to increasing brain activity in individuals with Traumatic Brain Injuries.

Exercise is a great sensory regulator. Lifting weights, for example, puts deep pressure on the nervous system, which can relax an anxious individual or improve concentration. Running or other cardiovascular activities increase blood flow to the brain and expand the rib cage, which stimulates brain activity and has recently been proven to improve cognition. Any physical activity that is varied on a regular basis, such as a lifting program that gets switched up every 4-6 weeks will cause the nervous system and muscular system to work harder to adapt. This means the person has to work harder to concentrate on the activity, which improves cognition. Improved cognition translates into better concentration in the active individual. Exercise makes a great sensory input for individuals who need to decrease anxiety or depression. The structure of an exercise program would benefit an individual who is trying to overcome substance abuse by giving that person sensory input in a more healthy lifestyle choice.

To learn more about SI, here are some excellent books to read:

*Sensory Integration & The Child*, 25th Anniversary Edition  
Author: A. Jane Ayres

*Too Loud, Too Bright, Too Fast, Too Tight: What to do if you are Sensory Defensive in an Overstimulating World.*  
Author: Sharon Heller

*The Out-Of-Sync Child: Recognizing & Coping with Sensory Processing Disorder*  
Author: Carol Stock Kranowitz & Lucy Jane Miller