

Sensory Processing Disorders and Autism

"Studies by the SPD foundation suggest that more than three-quarters of children with autism spectrum disorder have significant symptoms of sensory processing disorder....."

Most children with SPD do not have an autistic spectrum disorder! Research suggests that the two conditions are distinct disorders just as SPD and ADHD are different disorders."

SPD foundation web site

Sensory Integration

'Sensory Integration sorts, orders and eventually puts all the sensory inputs together into whole brain function.' Jean Ayres 1979. What emerges from this process is increasingly complex behaviour, the adaptive response and occupational engagement

Sinetwork web site

SPD and DSI

For some people, sensory integration does not develop fully. This is known as sensory processing disorder (SPD) or dysfunction in sensory integration (DSI). DSI and SPD both describe the difficulty some people's nervous systems have with taking in, integrating and making use of sensory information

SPD can

influence self-regulation, movement, learning and interaction with others (Allen and Smith 2011)

interfere with skills that support performance, such as engagement and attention, as well as skills that enable the learning of new motor skills (Cosby, 2010; Jasmin, 2009)

Intervention and diagnosis

Appropriate intervention relies upon accurate diagnosis. Pursuing an evaluation for SPD by a qualified occupational therapist with sensory integration training facilitates diagnosis that distinguishes autistic spectrum issues from sensory issues. This distinction increases the likelihood that your child will receive the appropriate treatment for his or her neurological conditions.

Vestibular
Proprioception
Tactile

Auditory
Olfactory
Visual

Internal organs
Temperature regulation

Other words to understand

- Sensory Modulation/ Self-Regulation
- Arousal
- Praxis and Motor Coordination

Impact of Sensory Integration problems in Autism

- Quality of Life
- Social-emotional - anxiety and frustration
- Apparent non-compliance
- Maladaptive behaviors
- Decreased independent function
- Safety
- Flexibility
- Social Relations / Intimacy
- Task Performance
- Sleep
- Eating
- Academic / Job performance and participation

Types of Sensory Integration-Based Interventions

- Classical Sensory Integration
- Sensory Techniques
- Sensory Stimulation
- Sensory Motor Activities
- Sensory Diets

Sensory Diets

A “**sensory diet**” (coined by OT Patricia Wilbarger) is a carefully designed, personalized activity plan that provides the **sensory** input a person needs to stay focused and organized throughout the day.

Where to find more information

- www.sensoryintegration.org.uk/
- <http://www.spdfoundation.net>

- Please remember that any ideas discussed in this session cannot be taken as individual therapeutic advice
- In order to advise you and provide appropriate individual programs an occupational therapist would need to undertake a full assessment

EVIDENCE?

Effectiveness of SI for children with ASD
Schaaf, et al., (2014)

In a randomized trial of 32 children with autism, the group who received OT-SI for 10 weeks, 3 X per week showed statistically significant improvements in primary measure of Goal Attainment, as well as secondary outcome measures showing statistically significant decreases in caregiver assistance needed for self-care and social activities.