THE EVIDENCE BASED PRACTICE FOR
THE EFFECTIVENESS OF SENSORY INTEGRATION FOR CHILDREN WITH ASD
BY: HANNAH ROMANS, OTS
THE FACTS

- At least 1 in 20 children’s daily lives are affected by SPD. (Ahn, Miller, Milberger, McIntosh, 2004)
- 1 in 6 children experience sensory challenges sufficient to disrupt their academic, social, and/or emotional development. (Ben-Sasson, Carter, Briggs-Gowen, 2009)
- Children with ASD were reported to have higher rates of sensory processing dysfunction than the children without autism. (Ermer & Dunn, 1998; Kientz & Dunn, 1997)
- Studies found that initial appearances of sensory processing disorder is often found before the onset diagnosis of ASD. (Tomchek, S. D., & Dunn, W. 2007).
SENSORY INTEGRATION THERAPY

Sensory integration therapy’s purpose is:

• Balance the three basic senses

• Improve sensory processing
SENSORY INTEGRATION THERAPY

The three basic senses are....

Tactile system

Proprioceptive system

Vestibular system
WHY THIS POPULATION?

• Children with ASD demonstrate some degree of sensory processing dysfunction. (Tomchek, S. D., & Dunn, W. 2007).

• Sensory integration therapy is based on the assumption that the child is either hyper (over) stimulated or hypo (under) stimulated by their environment.

• Develop an appropriate adaptive response

• Adapt and Express their response
SENSORY INTEGRATION THERAPY

Sensory integration therapy is driven by four principles:

• Just Right Challenge

• Adaptive Responses

• Active Engagement

• The WANT’S of the child
WHY ADDRESS THIS?

• The Deficits are Challenged

• The Developmental Outcomes Needed

• Presenting a Different Response
THE THEORY BEHIND IT

• Activating the Brain

• The earlier the treatment occurs the greater chance of a positive outcome.
WHAT IS THE EVIDENCE?

- Statistics show when sensory integration was implemented there was substantial improvement in behavior, interaction with peers, increased attention, better communication, increased eye contact, increased hand writing skills, improved sleep patterns, more consistency. (Hail, L., & Case-Smith, J., 2007).

WHAT IS THE EVIDENCE?

• Sensory integration intervention appears to enhance the child’s ability to modulate behavior and participate in social interaction. (Baranek, 2002)

• Sensory-based interventions, such as those that provide therapeutic touch, can decrease maladaptive behaviors, reduce hyperactivity, inhibit self-stimulation and stereotypic movements, and improve attention and focus. (Escalona, Field, Singer-Strunck, Cullen, & Hartshorn, 2001)

• Subjective reports noted undesired behaviors and engagement were demonstrated and observed from all participants during SI phase. (Watling, R. L., & Dietz, J, 2007).
WHERE IS THE EVIDENCE?

Database Sources:

- PubMed
- AOTA member Website
- American journal for occupational therapy
- OT Search
- Academic Search Premier
- SPD Foundation
WHERE TO GO IN THE FUTURE?

Summary:

• There is evidence to support the effectiveness of sensory integration for children with ASD.

• Given the prevalence of these findings and their early onset, sensory processing disorders may represent another core diagnostic criterion for autism, which can be found through the sensory integration treatments. (DSM-5 2013 changes for Autism)

• Implications for further study.
**REFERENCE**


