

Sensory Integration for Children in Occupational Therapy
Meghan Treanor & Shannon Wolfe

Introduction: Sensory processing issues are common in many children, the disorder can present in a multitude of ways including behavioral problems, avoidance of triggers, and over or under reaction to environmental stimuli. Sensory integration is a theoretical perspective and a type of intervention used by occupational therapists to help children learn to cope with challenging sensory input. This presentation explores why sensory integration is used, how it is used, and the outcome in children both with and without other developmental disorders.

Methodology: We, in addition to three other classmates, performed an in depth review of peer-reviewed research articles on the effects of sensory integration in occupational therapy. The articles populations included participants with and without outside developmental or attention disorders. The articles were found through health-science based databases such as EBSCO and through the Ithaca College library site. The articles measured the success of sensory integration therapy through educational success, performance of activities of daily living, and personal growth towards individualized goals.

Results: Through the articles we can determine that the sensory integration is a beneficial intervention for sensory processing disorders. In one study, Schaaf et al. (2014) reported that there was a significant difference with a p-value of 0.003 on the goal attainment measurement scale demonstrating that sensory based intervention helped children with autism spectrum disorder to attain their goals significantly more than the participants that did not receive sensory based intervention. Nesayan et al. (2018) also did research that suggested that sensory processing patterns are related to behavioral patterns. In this study there were significant relationships between sensory processing patterns and hyperactivity with sensation seeking ($r = -0.60$), inattentive/passive with low registration ($r = -0.39$), and conduct problem with sensory sensitivity ($r = -0.45$) (Nesayan et al., 2018). Positive behavioral outcomes were also found from Schoen et. al, (2018) who discovered that “significant correlations were found between Sensory Craving symptoms prior to treatment and changes in externalizing problems ($\rho = -0.23$, $p = 0.02$) following treatment as well as between Sensory Craving symptoms and changes in the behavioral index composite ($\rho = -0.20$, $p = 0.04$).” They also found statistically significant improvements in fine motor and gross motor functions (Schoen, 2018). Children with autism spectrum disorder who received sensory intervention therapy were shown to need less assistance from caregivers (Schaaf et al., 2014). Children with special needs such as ADHD after participating in brain gym treatment and bead stringing activities showed improvement in counting skills and an overall positive result from sensory integration (Huda & Agustyaningrum, 2019).

Another article presented information that revealed that sensory integration could improve ADL's and IADL's through counting activities in children (Huda, Agustyaningrum 2019).

Discussion: Results of this review indicate that there is positive evidence for incorporating sensory intervention based treatment into occupational therapy intervention.