

The Effectiveness of Sensory Intensive Occupational Therapy for Children with Sensory Processing Disorder

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BACKGROUND

Sensory Processing Disorder (SPD) is a neurological disorder that impacts how sensory information is detected or interpreted and causes atypical adaptive responses which impact occupational performance in daily life (STAR Institute, 2020).

A child with SPD has difficulty completing everyday tasks, which may present as unusual reactions to tactile stimuli, clumsiness, difficulty with coordination, behavioral issues, anxiety, poor social skills, and/or difficulty in school (STAR Institute, 2020).

There are three categories of SPD (Sensory Modulation Disorder, Sensory-Based Motor Disorder, and Sensory Discrimination Disorder) with subtypes under each category (STAR Institute, 2020).

There are a total of eight sensory systems: visual, auditory, olfactory, gustatory, tactile, vestibular, proprioception, and interoception.

About 5-16% of children in the United States present with symptoms of SPD (Schaaf, Dumont, Arbesman, May-Benson, 2018).

PROGRAM DETAILS

The Sensory Intensive Program is a short-term intensive intervention for children with sensory processing challenges modeled after the sensory intensive program at STAR Institute.

Designed to be catered to each individual child to meet their specific sensory needs, as there is no one-size-fits-all approach for treating SPD.

Program meets three times per week for one hour for a total of 20-30 sessions (6-10 weeks).

Caregivers are heavily involved to learn strategies and techniques to utilize with their child at home and in the community.

Interventions include strategies for sensory integration, self-regulation, and building relationships.

Goals of program include generalization of sensory strategies to be used across all environments, increase child's ability to stay regulated to increase occupational participation, and provide caregivers education to learn how to identify types of sensory input their child needs and when their child needs it.

FOCUSED QUESTION

What is the effectiveness of sensory intensive occupational therapy on improving occupational participation for children with sensory processing disorder?

METHODS/PROCESS

1. Designed a sensory gym at ChildServe to utilize for the program. Researched ideas, took measurements, and presented plan to administration for approval.

2. Determined inclusion criteria for future participants.

Inclusion Criteria includes:

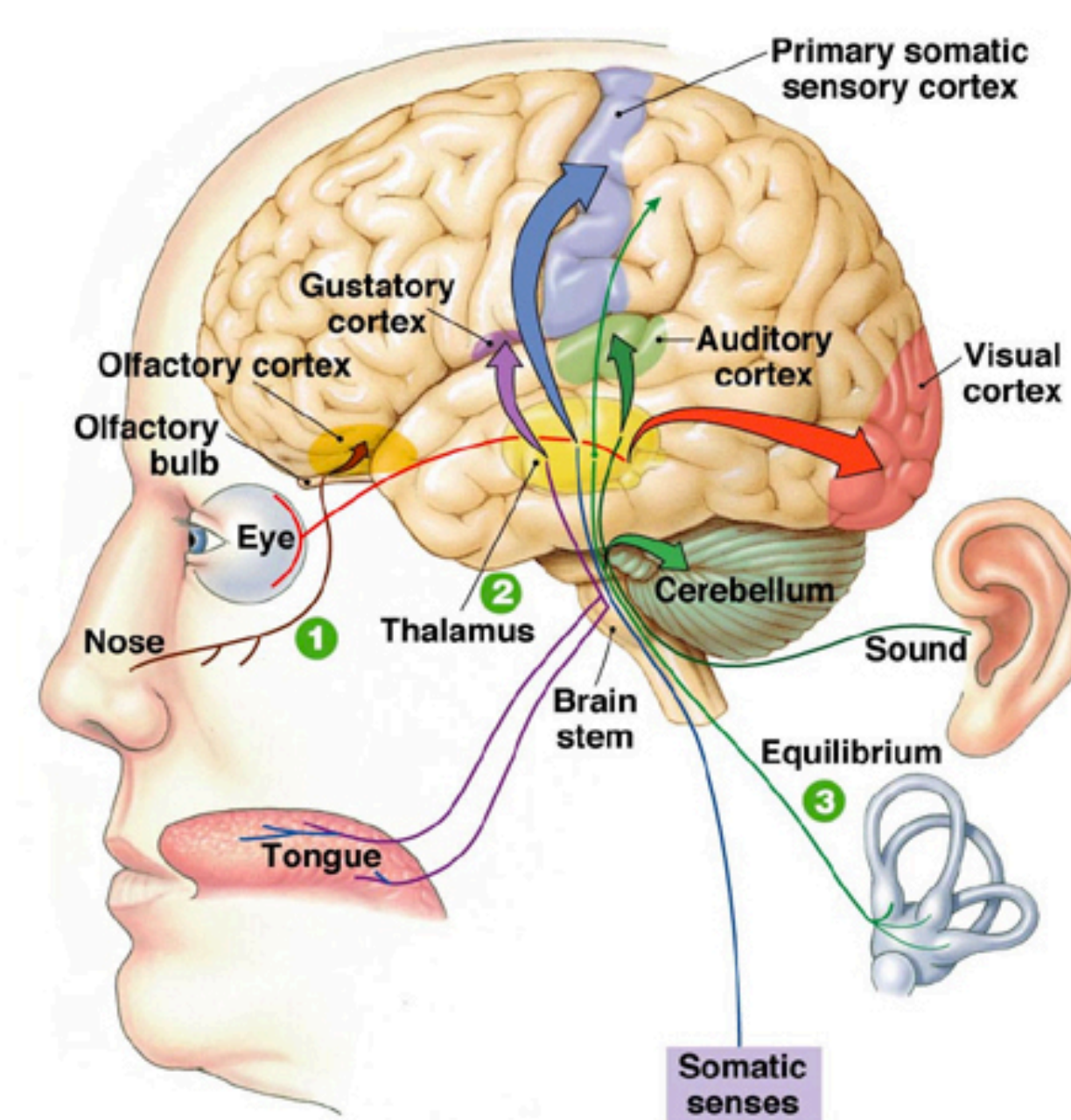
- Child is between ages of 3-14 years old
- Score "much more than/much less than others" on Sensory Profile in 2/6 sensory areas and in 1/4 areas of quadrant raw score areas
- Must demonstrate dysfunction with sensory modulation, sensory discrimination and/or sensory-based motor function based on therapist observation or parent report
- Caregivers must sign contract to actively participate in treatment sessions, agree to implement strategies at home, and complete pre, and post paperwork

3. Weekly meetings with the team implementing the pilot program to discuss updates and develop necessary forms.

4. Created multiple handouts to explain what SPD is and the various categories and subtypes of SPD.

5. Identified a child to participate in pilot sensory intensive program and discussed program with caregivers.

6. The child's family will fill out a Sensory Profile to identify the child's sensory processing needs and complete all necessary forms.



<https://app.emaze.com/@ALWQQLOR/the-sensory-system#1>

RESULTS

This pilot program has not officially been implemented yet at ChildServe. The tentative start date is now May 2020 but is likely to be extended farther out due to COVID-19.

Children with SPD showed significant improvement in adaptive behavior and emotional functioning after implementation of the STAR model of intensive, short-term occupational therapy (STAR Institute, 2020).

After 30 therapy sessions for 3-5x/week, children ages 2-13 showed significantly fewer behavioral issues (STAR Institute, 2020).

A treatment approach with emphasis on parent involvement in a multisensory environment shows promise in remediating sensory processing deficits (Schoen, Miller, Flanagan, 2018).

After implementation of the STAR Institute Model for treating SPD, there were gains observed in functional communication, self-direction, self-care, leisure and social skills, and a decrease in sensory symptoms (Schoen, Miller, Flanagan, 2018).

There is preliminary support for the STAR treatment approach that combines intensive, short-term occupational therapy using principles of sensory integration, DIR/Floortime with extensive parent education and coaching (Schoen, Miller, Flanagan, 2018).



BOTTOM LINE FOR OT

Children with SPD have difficulty with emotional regulation, motor skills, and social interaction skills making it difficult to participate in daily life.

The goal of sensory integration therapy (SIT) is to retrain the senses to make functioning in everyday life easier through repetitive exposure in a structured way.

Occupational therapists evaluate a child's sensory needs to develop treatment interventions to target the child's unique sensory needs.

The role of occupational therapists when providing SIT include providing sensory opportunities, providing the just-right-challenge, collaborating with the child on activity choices, guiding self-organization, maximizing the child's success, and maintaining optimal arousal (Parham, et al., 2007).

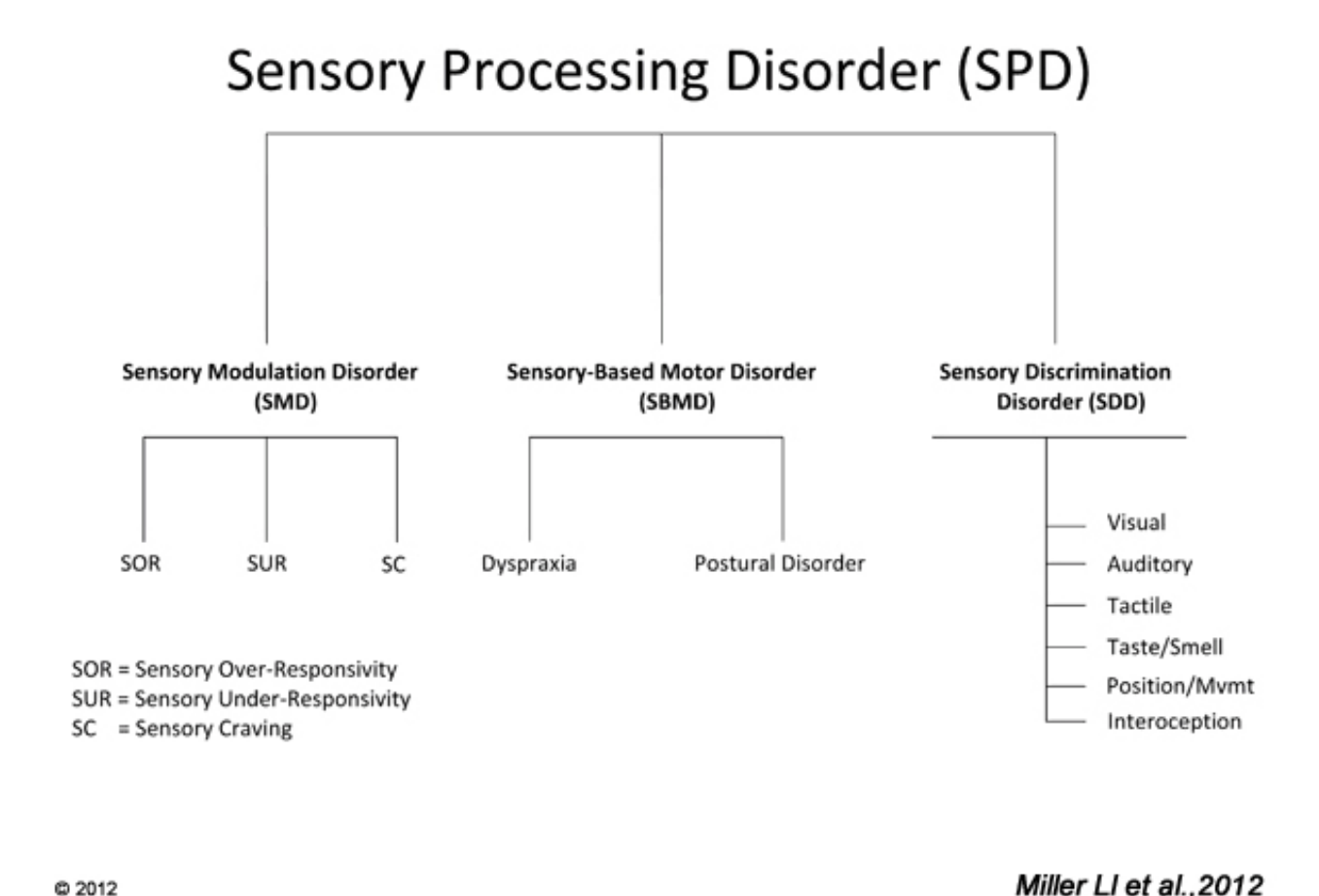
Research shows occupational therapy is an effective treatment for children with sensory processing disorder (Schaaf, Dumont, Arbesman, May-Benson, 2018; Miller, Coll & Schoen, 2007).

The best evidence for SIT outcomes focus on function and participation that is meaningful to the client and their family (Schaaf, Dumont, Arbesman, May-Benson, 2018).

SIT can be effective in improving communication skills, emotion regulation, motor skills, and ultimately increased occupational performance (Schaaf, Dumont, Arbesman, May-Benson, 2018).

Further research is needed to develop a manualized protocol for research and fidelity to treatment for SIT (Schaaf, Dumont, Arbesman, May-Benson, 2018; Parham et al., 2007; Miller, Coll & Schoen, 2007).

There are discrepancies in the language used to describe sensory processing disorder. Consistent language is needed to validate the effectiveness of SIT across settings (Schaaf, Dumont, Arbesman, May-Benson, 2018; Olson).



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