## <u>Treatment of Motor Issues in Children</u> <u>with Sensory Dysfunction</u>

#### **COURSE DESCRIPTION**

Children with sensory dysfunction are frequently referred to physical therapy with family concerns of poor coordination, weakness, hypo/hypertonia, impaired balance and difficulty with motor skills. They are often labeled as awkward, lazy or clumsy, and have difficulty physically keeping up with their peers, or performing basic tasks such as running, jumping, & stairs.

Therapists are aware that the difficulty with these skills is related to sensory dysfunction, but the sensory-based element of movement is an area that often eludes physical therapists, resulting in frustrating interactions and inferior outcomes. However, synthesizing gross motor function with a sensory system foundation can improve outcomes for this population.

This course provides practical insight into therapeutic interaction with children with both sensory system & gross motor dysfunction. Intervention strategies are provided, with the purpose of utilizing the sensory systems to effect change in gross motor performance.

This course does NOT aim to teach sensory processing integration therapy. Rather, it proposes how various essential components of "sensory-aware" intervention may be combined to facilitate purposeful effective results in the context of physical therapy treatment sessions.

The practical application of didactic information by way of simple techniques address the following obstacles to efficient gross motor performance:

- Sensory dysfunction
- Insufficient postural control
- Foundational weakness
- Instability & related poor mobility & incoordination
- Poor motor planning

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#### <u>COURSE AGENDA:</u> <u>Day 1</u>

8:30 - 10:30:

# The significance of the vestibular, visual & proprioceptive systems to gross motor function

- Vestibular functioning & muscle tone
- Visual dysfunction & its effects on postural control
- Proprioception & movement coordination

Break: 10:30 - 10:45

10:45 - 12:45:

#### Sensory based physical challenges

- Dyspraxia & Postural Disorder
- Gait abnormalities
- Common comorbidities

Lunch: 12:45 - 1:30

1:30 - 3:30:

### Assessment of vestibular, visual & proprioceptive performance

- Post rotary nystagmus
- Prone extension & supine flexion
- Modified Clinical Test of Sensory Interaction in Balance
- The Kaplan Non-Verbal Battery (test of vision)
- Comprehensive Observations of Proprioception
- Direct measurements of proprioception & clinical procedure

### <u>COURSE AGENDA:</u> <u>Day 2</u>

9:00 - 11:00:

Video case analysis & Interactive group discussion

11:00 - 12:00:

# Improved sensory function & subsequent gross motor ability

- Foundational sensory competence
- Development of sensorimotor function

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Lunch: 12:00 - 12:45

#### 12:45 - 2:15:

# <u>Utilization of each sensory system to support motor skills in therapy sessions. Formulating & implementing treatment</u>

- Vestibular contributions during physical activity
- Vision activities
- Proprioception & motor development
- Balance as a multi-system outcome
- Video activity examples

Break: 2:15 - 2:30

#### 2:30 - 4:00:

#### Strategies to increase gross motor skill

- Postural control & Coordination
- Strength & Motor planning
- Stability & Mobility