SENSORY HEALTH ACROSS OCCUPATIONAL THERAPY PRACTICE

Sensory Overview

Sensory Processing and Integration: how individuals respond to the sensory messages received from our bodies and the world around us.

- Organizing and selecting useful sensory information
- Regulating the state of alertness and emotions
- Incorporating experiences from the past to attach meaning
- Producing a response to information from the environment that is functional and successful for the individual (adaptive response)

Sensory processing is a critical aspect of well-being throughout the lifespan and the bridge between physical and mental health.

Sensory Across the Lifespan

How we process sensory information from our external and internal environments impacts all aspects of life, including our interpersonal interactions and understanding of the world. Sensory is everything, from sounds heard in clinics or hospitals, to smells that radiate from the kitchen as dinner cooks, to the emotions felt when embraced in a warm hug.

How clients can benefit from a sensory lens:

- Creating a safe and regulating environment
- Integrating sensory systems that may be offline due to accident, injury, or trauma
- Providing sensory rich and meaningful experiences to help understand the environment and world around them
- Building foundational skills necessary for participation in daily life (i.e. executive function, functional movement, and self-esteem)
- Establish a meaningful connection and relationship

dream

• Offering positive and emotionally supportive strategies aligned with mental health needs

Regulation

Regulation: the body and brain's ability to be in-sync with the environment and respond adaptively to demands

• Regulation is a process and NOT a static state

Dysregulation: the body and brain cannot put their resources toward growth and learning

- Muscles are tense or limp
- Shallow breathing
- Distracted
- Hyper-vigilant
- Disengaged, not emotionally connected
- Out-of-sync with context

Supporting Clients with Dysregulation:

- Quiet space
- Low lightingCo-regulate
- Deep pressure Breathing exercises
- Big body movements

When to Consult or Refer to a Sensory-Based Therapist

- Sensory differences are impacting participation in daily life activities
- Sensory differences are beyond one's knowledge of the topic
- Sensory education would be supportive to the client and family

Resources

<u>bit.ly/star-ot-resources</u>

"If you want to be happier, healthier, joyful, more productive, more loving, you owe it to yourself to start noticing your sensory needs" Virginia Spielmann, PhD, OTR/L

THANK YOU TO OUR COMMUNITY PARTNERS











Sensory Health & Wellness

www.sensoryhealth.org

THE NEUROSCIENCE OF SENSORY

SENSORY PROCESSING IS THE NEUROSCIENCE OF HOW WE FEEL

Sensory Modulation: The ability to adaptively grade responses relative to the degree, nature, and intensity of the sensory input. Challenges arise when regulating responses to sensory input are not adjusted to the situation. These messages STOP at the lower levels of the brain before integration at the cortex.

Sensory Discrimination: Interpretation and perception of the spacial, temporal, and amplitude aspects and specific characteristics for each sensory system. This information is processed in the more cortical, higher levels of the post central gyrus in the parietal lobe.

Sensory-Based Motor Functions:

- 1. Posture: Supporting the body during movement or at rest to meet the demands of the environment or for a motor task. This includes proximal stability for distal mobility, weight shifting, crossing midline, and endurance for functional activity.
- 2. Motor Planning (praxis): Processing sensory information for ideation, sequencing, planning, and execution of novel motor activities using feedforward and feedback information from previous experiences.

Sensory-Based Motor Structures of the brain include the basal ganglia, cerebellum, primary motor cortex, pre-motor cortex, and supplemental motor cortex **as well as the sensory discrimination centers.

