

Vestibular

Vest-bull

The vestibular system is responsible for balance and orientation in space, providing information about movement and position of the head relative to gravity.

Proprioceptive

Propeller-scepter

The proprioceptive system is the one responsible for the sense of position, location, movement of the muscles and joints, and orientation. Proprioceptive sense combines sensory information from neurons in the inner ear, which facilitates detection of motion and orientation and stretches receptors in the muscles and joints, assisting ligaments in order to facilitate stance during ambulation.

Interoceptive

Internal-scepter

This sense refers to sensations related to the physiological and physical needs of the body. It provides internal sensors that provide a sense of what the body is lacking or needs. The interoceptive sense works alongside the vestibular and proprioceptive senses to facilitate well modulation sensations.

Considerations

Sensory Modulation

Sensory-satellite Modification

Sensory modulation is the ability the brain has to properly regulate input received. There are three types of sensory modulation disorders: over-responsivity, under-responsivity, and sensory craving.

Over responsivity: exaggerates the sensory input received.

Under responsivity: lacks or insufficient response to sensory input received.

Sensory craving: The nervous system needs intense input for the sensation to be registered properly in the brain.

Therapy Intervention

Therapist

Occupational and physical therapists collaborate with families/caregivers and the interdisciplinary team to determine the needs of the patient and select the specialized evaluation/assessment and individualized intervention plan. As part of the therapy intervention, it is imperative to identify and modify sensory and environmental barriers that limit performance and participation in everyday activities, as well as individual strengths and supports. During the process, the practitioner aids with educating and modeling activities to support sensory, motor, and behavioral needs. As part of the intervention, the practitioner facilitates the process by helping identify and provide adaptive sensory and motor strategies and interventions using a variety of sensory approaches to facilitate full participation in daily routines and social interactions. Additionally, part of the intervention consists of helping raise an individual's self-awareness of the impact of sensory and motor factors on everyday activities and real-life situations and providing ways to counter sensory processing challenges.