

Arousal: Neurological state of alertness that readies a person to pay attention and respond appropriately to the immediate environment.

Bilateral Coordination: The ability to use both sides of the body together in a coordinated manner.

Body Awareness: Knowledge of one's body in space and in relation to one's environment.

Cognitive Skills: Skills involved in mental processes of perception, memory, judgment, and reasoning.

Dyspraxia: Impairment in motor planning that is often related to a decrease in sensory processing. The tactile system is suggested to serve as the foundation for developing praxis.

Emotional Regulation: Process of controlling and adjusting one's emotional arousal necessary for optimal attention, motivation, and adaptive behavior.

Equilibrium Reactions: Natural reaction of the body to maintain an upright position against gravity.

Eye-Hand Coordination: The efficient teamwork of the eyes and hands, necessary for activities such as playing with toys, dressing, and writing.

Fine Motor: Movements of the small muscles of the hands, in concert with our visual system.

Gravitational Insecurity: A sensory defensiveness that results in atypical fear response to movement or changes in head position.

Gross Motor: Movements of the large muscles of the body.

Hypersensitivity: (also called hyper-reactivity or hyper-responsiveness). An oversensitivity to sensory stimuli, characterized by a tendency to react either fearfully and cautiously or negatively and defiantly.

Hyposensitivity: (also hypo-reactivity or hypo-responsiveness). An undersensitivity to sensory stimuli, characterized by a tendency either to crave intense sensations or to withdraw and have difficulty engaging.

I.D.E.A.: The Individuals with Disabilities Education Act, P.L. 99-457, and amendments. This legislation requires school districts to provide occupational therapy as a related service to children who need it in order to benefit from education. Part H relates to 0-3. Part C relates to 3-5 year-old's services.

I.E.P.: Individualized Education Program, a legal document specifying the needs of a child identified as having a disability and providing for special education and related services.

Midline: A median line dividing the two halves of the body. Crossing the midline is the ability to use one side or part of the body (hand, foot or eye) in the space of the other side or part. Crossing midline is indicative of the brain hemispheres working in concert and the beginning of reciprocal and contra-lateral (opposite) activities.

Modulation: The brain's ability to regulate its own activity. This internal ability to modulate requires a balance between neural inhibition and facilitation in order to stay regulated.

Motor Planning: The ability to have an idea (conceptualize what to do), plan an action and execute the action necessary for completion of a new motor skill. Includes: 1) creating an idea of what to do, 2) using sensory feedback to determine starting position of the body, 3) initiating the action, 4) sequencing the steps required, 5) adjusting actions accordingly, and 6) cessation of the action.

Muscle Tone: The amount of resistance or assistance a muscle contributes to passive movement.

Oral Sensory Processing: Responses to touch and taste stimuli in the mouth.

Peer interaction skills: Ability of a child to engage in social participation with children their own age (i.e., sharing toys, taking turns, etc.)

Postural stability: Trunk control needed for gross motor and fine motor activities.

Pressure vests: Vests that velcro-on to the child to provide deep pressure input with the goal of sensory modulation of the child.

Proprioception: Perceived sensation from muscles and joints telling the brain when and how muscles are contracting, stretching, being pulled or compressed. This system contributes to our rate and timing of movements and assists with our sense of body organization.

Protective reaction: Natural reaction of body to protect oneself from harm by using one's arms (e.g., breaking a fall with an outstretched hand).

Pull-out: Therapist provides services outside the classroom setting, often in an OT sensory gym.

Push-in: Therapist provides services in the classroom or playground setting, integrating treatment directly into the classroom curriculum.

Righting reaction: Natural reaction of the head to maintain an upright position against gravity.

Self-regulation: Nervous system's ability to attain, maintain, and change levels of arousal or alertness.

Sensory Diet: A term devised by Patricia Wilbarger in 1971 to describe a therapeutic method to maintain an optimal level of arousal (in the nervous system) by offering the right combination of sensory information. The term diet is a metaphor for the regular "feeding of the nervous system"

to change one's state of arousal timed carefully throughout the day. A well planned "sensory diet" should include comfort touch, pleasurable social experiences, organizing proprioception, varied tactile activities and modulating vestibular input.

Sensory Input: The constant flow of information from sensory receptors in the body to the brain and spinal cord.

Sensory Integration: The ability to receive, process and act upon sensory input for "use". This "use" may be a perception, an adaptive response or a learning process. Through sensory integration many different parts of the nervous system work together so that a person can efficiently interact with the environment.

Sensory Integrative Dysfunction: A brain irregularity that makes it hard to receive, process and act upon sensory input efficiently. DSI can be observed as a delay or difference in one's motor learning, social/emotional, language, or attention abilities. Two categories of dysfunction in sensory integration include dysfunction in discrimination/praxis or dysfunction in sensory modulation.

Sensory Modulation: Increasing or reducing neural activity to keep that activity in harmony with all other functions of the nervous system. Sensory modulation refers to the maintenance of the arousal state to generate emotional responses, sustain attention, develop appropriate activity level and move skillfully.

Sensory Processing: Frequently used interchangeably with Sensory Integration. Sensory Processing is made up of five interrelated components: sensory registration, orientation, interpretation, organization of a response and execution of a response.

Sensory Registration: Initial awareness of a single input. It assigns value and emotional tone to a stimulus.

Sensory Threshold: Individual neural responses to sensory input across each sensory system or the point at which the summation of sensory input activates the central nervous system. This is the mechanism that drives our reactions to sensory input and whether we over-react or under-register the input.

Spatial Awareness: The perception of one's proximity to, or distance from, an object, as well as the perception of the relationship of one's body parts.

Tactile: Refers to the sense of touch and various qualities attributed to touch: to include detecting pressure, temperature, light touch, pain, discriminative touch.

Tactile Defensiveness: A sensory defensiveness that results in tactile sensations being perceived as negative. Decreased attention, avoidance of a variety of touch experiences and strong emotional reactions are seen consistently in a child exhibiting tactile defensiveness.

Therapeutic Listening: A therapy technique using modulated and filtered music to promote regulation and praxis, as devised and instructed by Sheila Frick, OTR.

Vestibular: Refers to our sense of movement and the pull of gravity, related to our body.

Vestibular System: Detects the sense of head movement and our response to gravity to help develop a sense of spatial relationships. Our inner drive is to keep the body in an upright position.

Visual Motor Skills: Ability to take in, organize and process visual information in order to have the appropriate motor response (i.e., copying shapes, letters, and numbers). It involves making sense of basic shapes and the relationship of the objects to each other and to the self.

Weighted vests: Vests with weights added proportional to the weight of the wearer and used to provide deep pressure input with the goal of sensory modulation of the child, especially for those who seek a lot of movement input.

Wilbarger Protocol: Specific professionally-guided treatment regimen designed to reduce sensory defensiveness. It involves deep-touch pressure throughout the day, with brushing of the skin followed by joint compressions. Developed by Patricia Wilbarger, M.Ed., OTR, FAOTA