

Global Certificate Course in Sensory Integration Education for Therapy

Unit 5: Sensory Integration Intervention Strategies and Activities

Sensory Integration is the process of organizing sensory input from the environment and the body to produce an adaptive response. It involves the brain's ability to integrate information from the senses to produce a meaningful response. Sensory integration allows individuals to effectively interact with their environment, engage in daily activities, and participate in social interactions. Individuals with sensory integration difficulties may have challenges processing sensory information, leading to difficulties with attention, behavior, and motor skills.

Sensory Processing refers to how the nervous system receives, interprets, and responds to sensory information. The sensory processing system includes sensory input from the five senses (sight, sound, touch, taste, smell) as well as the proprioceptive and vestibular systems. Proper sensory processing is essential for individuals to engage in activities and interact with their environment effectively. Sensory processing difficulties can result in sensory seeking or avoiding behaviors, hyperactivity, impulsivity, and difficulty with motor coordination.

Sensory Integration Intervention refers to therapeutic techniques and activities designed to help individuals with sensory processing difficulties improve their ability to process sensory information and respond appropriately. Sensory integration interventions aim to provide individuals with the sensory experiences they need to organize and make sense of the sensory input they receive. These interventions are tailored to the individual's specific sensory needs and may include activities that target the vestibular, proprioceptive, tactile, visual, and auditory systems.

Sensory Diet is a term used to describe a personalized plan of sensory activities designed to meet an individual's sensory needs throughout the day. A sensory diet typically includes a combination of sensory input to help regulate arousal levels, improve attention, and support self-regulation. Sensory diets are often used in conjunction with sensory integration interventions to help individuals maintain an optimal level of arousal and engagement throughout the day.

Vestibular System is the sensory system responsible for detecting movement and spatial orientation. The vestibular system is located in the inner ear and provides information about the body's position in space, balance, and coordination. Activities that stimulate the vestibular system include swinging, spinning, jumping, and rolling. Vestibular input is essential for developing a sense of balance, coordination, and body awareness.

Proprioceptive System is the sensory system responsible for detecting body position, movement, and force.

The proprioceptive system provides information about muscle tension, joint position, and body awareness. Activities that stimulate the proprioceptive system include heavy work activities, deep pressure, and resistance exercises. Proprioceptive input is essential for regulating arousal levels, improving body awareness, and supporting motor coordination.

Tactile System is the sensory system responsible for detecting touch and pressure. The tactile system provides information about textures, temperatures, and pain. Activities that stimulate the tactile system include touching different textures, playing with sensory materials, and receiving massages. Tactile input is essential for developing a sense of touch, discrimination, and social-emotional skills.

Visual System is the sensory system responsible for detecting light, color, and movement. The visual system provides information about the environment, objects, and spatial relationships. Activities that stimulate the visual system include tracking moving objects, visual scanning tasks, and visual-motor activities. Visual input is essential for developing visual perception, eye-hand coordination, and visual attention.

Auditory System is the sensory system responsible for detecting sound and processing auditory information. The auditory system provides information about pitch, volume, and location of sounds. Activities that stimulate the auditory system include listening to music, auditory discrimination tasks, and sound-based games. Auditory input is essential for developing auditory processing skills, language development, and social communication.

Multi-Sensory Integration refers to the ability to integrate information from multiple sensory systems to produce a coherent response. Multi-sensory integration allows individuals to make sense of complex sensory input and respond appropriately. Activities that involve multiple sensory systems, such as combining visual, auditory, and tactile input, can help improve multi-sensory integration skills. Multi-sensory integration is essential for everyday tasks, social interactions, and learning.

Regulation refers to the ability to maintain an optimal level of arousal and attention to engage in activities effectively. Regulation involves the ability to self-regulate emotions, behavior, and sensory responses. Individuals with sensory processing difficulties may have challenges with regulation, leading to difficulties with attention, impulsivity, and emotional regulation. Sensory integration interventions can help individuals improve regulation skills through sensory activities and strategies.

Modulation refers to the ability to regulate the intensity, duration, and frequency of sensory input. Modulation involves adjusting the sensory input to match the individual's needs and preferences. Individuals with sensory processing difficulties may have challenges with modulation, leading to sensory seeking or avoiding behaviors. Sensory integration interventions can help individuals improve modulation skills by providing opportunities for adaptive responses to sensory input.

Praxis refers to the ability to plan and execute purposeful motor actions. Praxis involves ideation (coming up with an idea), motor planning (planning the motor actions), and execution (performing the motor actions). Individuals with sensory processing difficulties may have challenges with praxis, leading to difficulties with

motor coordination, planning, and sequencing. Sensory integration interventions can help individuals improve praxis skills by providing opportunities for motor planning and execution through sensory-motor activities.

Adaptive Response refers to a purposeful and successful response to sensory input that allows the individual to engage in activities effectively. An adaptive response involves organizing sensory input to produce a meaningful and goal-directed action. Sensory integration interventions aim to facilitate adaptive responses by providing individuals with the sensory experiences they need to respond appropriately to their environment. Adaptive responses are essential for learning, social participation, and daily functioning.

Proprioceptive Input refers to sensory information related to body position, movement, and force. Proprioceptive input is provided by sensory receptors in the muscles, joints, and tendons. Activities that provide proprioceptive input, such as heavy work activities, resistance exercises, and deep pressure, can help individuals regulate arousal levels, improve body awareness, and support motor coordination. Proprioceptive input is essential for developing a sense of body position and movement.

Heavy Work Activities are activities that provide deep pressure and resistance to the muscles and joints. Heavy work activities can include pushing, pulling, lifting, squeezing, and carrying heavy objects. These activities provide proprioceptive input to help individuals regulate arousal levels, improve attention, and support motor coordination. Heavy work activities are commonly used in sensory diets and sensory integration interventions to help individuals maintain an optimal level of arousal throughout the day.

Deep Pressure refers to firm and sustained pressure applied to the body. Deep pressure can be provided through activities such as hugs, weighted blankets, compression garments, and massage. Deep pressure input stimulates the proprioceptive system to help individuals regulate arousal levels, reduce sensory seeking behaviors, and promote relaxation. Deep pressure is commonly used in sensory diets and sensory integration interventions to support self-regulation and emotional regulation.

Oral Motor Activities are activities that target the muscles of the mouth and face. Oral motor activities can include blowing bubbles, chewing gum, using a straw, and sucking on a lollipop. These activities provide proprioceptive input to the oral muscles to support speech, feeding, and sensory processing. Oral motor activities are commonly used in sensory integration interventions to improve oral motor coordination, sensory awareness, and feeding skills.

Visual Tracking Activities are activities that involve following moving objects with the eyes. Visual tracking activities can include watching a swinging pendulum, tracking a moving ball, and playing visual tracking games. These activities stimulate the visual system to improve eye movement, visual attention, and visual-motor coordination. Visual tracking activities are commonly used in sensory integration interventions to enhance visual perception and tracking skills.

Auditory Discrimination Tasks are activities that involve distinguishing between different sounds. Auditory discrimination tasks can include listening to sound patterns, identifying environmental sounds, and

matching sounds to pictures. These activities stimulate the auditory system to improve auditory processing skills, language development, and sound recognition. Auditory discrimination tasks are commonly used in sensory integration interventions to enhance auditory perception and discrimination.

Joint Compression refers to deep pressure applied to the joints of the body. Joint compression can be provided through activities such as squeezing, hugging, and pushing against a wall. Joint compression input stimulates the proprioceptive system to help individuals regulate arousal levels, improve body awareness, and support motor planning. Joint compression is commonly used in sensory integration interventions to provide proprioceptive input and promote self-regulation.

Swinging Activities are activities that involve back-and-forth movement in a suspended swing. Swinging activities can include swinging on a playground swing, using a therapy swing, or rocking in a hammock. These activities stimulate the vestibular system to improve balance, coordination, and spatial awareness. Swinging activities are commonly used in sensory integration interventions to provide vestibular input and promote sensory regulation.

Spinning Activities are activities that involve rotating the body in a circular motion. Spinning activities can include spinning in a swivel chair, spinning on a sit-and-spin toy, or spinning in a spinning disc. These activities stimulate the vestibular system to improve balance, coordination, and body awareness. Spinning activities are commonly used in sensory integration interventions to provide vestibular input and promote sensory integration.

Jumping Activities are activities that involve vertical movement off the ground. Jumping activities can include jumping on a trampoline, jumping rope, or jumping over obstacles. These activities stimulate the vestibular system to improve balance, coordination, and proprioception. Jumping activities are commonly used in sensory integration interventions to provide vestibular and proprioceptive input and promote motor planning and coordination.

Oral Sensory Activities are activities that target the sensory receptors in the mouth. Oral sensory activities can include tasting different textures, sucking on sour candies, and exploring different tastes. These activities stimulate the oral sensory system to improve oral awareness, feeding skills, and sensory processing. Oral sensory activities are commonly used in sensory integration interventions to support oral motor coordination and sensory exploration.

Sensory Integration Room is a specially designed space equipped with sensory equipment and materials to provide individuals with a variety of sensory experiences. A sensory integration room may include swings, trampolines, sensory bins, and tactile materials. This space is used for sensory integration interventions to help individuals regulate arousal levels, improve sensory processing, and engage in purposeful activities. Sensory integration rooms are commonly used in therapy clinics, schools, and homes to support individuals with sensory processing difficulties.

Sensory Bin is a container filled with sensory materials such as rice, beans, sand, or water. Sensory bins

provide tactile input to stimulate the sensory system and promote sensory exploration. Individuals can engage in sensory play by digging, pouring, scooping, and manipulating the materials in the sensory bin. Sensory bins are commonly used in sensory integration interventions to provide tactile input and support sensory processing.

Weighted Vest or Blanket is a wearable garment or blanket filled with weights to provide deep pressure input to the body. Weighted vests or blankets can help individuals regulate arousal levels, reduce sensory seeking behaviors, and promote relaxation. These tools are commonly used in sensory integration interventions to support self-regulation, emotional regulation, and sensory processing. Weighted vests or blankets should be used under the guidance of a trained therapist to ensure safe and appropriate use.

Compression Garment is a form-fitting garment that provides deep pressure input to the body. Compression garments can include compression shirts, socks, or wraps. These garments provide proprioceptive input to help individuals regulate arousal levels, improve body awareness, and support motor coordination. Compression garments are commonly used in sensory integration interventions to provide sensory input and promote self-regulation.

Therapy Swing is a suspended swing designed to provide vestibular input and promote sensory regulation. Therapy swings can include platform swings, bolster swings, or hammock swings. Individuals can engage in swinging activities to improve balance, coordination, and body awareness. Therapy swings are commonly used in sensory integration interventions to provide vestibular input and support sensory processing.

Sensory Processing Disorder (SPD) is a condition in which the brain has difficulty processing and responding to sensory information. Individuals with SPD may have challenges with sensory modulation, sensory discrimination, and sensory integration. SPD can affect individuals' daily functioning, behavior, and social interactions. Sensory integration interventions can help individuals with SPD improve their sensory processing skills and engage in activities effectively.

Sensory Seeking Behaviors are behaviors in which individuals actively seek out sensory input to regulate arousal levels. Sensory seeking behaviors can include jumping, spinning, crashing, and seeking out tactile input. Individuals with sensory seeking behaviors may have challenges with modulation and self-regulation. Sensory integration interventions can help individuals with sensory seeking behaviors engage in adaptive responses to sensory input and improve sensory processing.

Sensory Avoiding Behaviors are behaviors in which individuals actively avoid or withdraw from sensory input to regulate arousal levels. Sensory avoiding behaviors can include covering ears, avoiding touch, and avoiding bright lights. Individuals with sensory avoiding behaviors may have challenges with modulation and sensory processing. Sensory integration interventions can help individuals with sensory avoiding behaviors engage in adaptive responses to sensory input and improve sensory regulation.

Sensory Overload refers to a state in which individuals are overwhelmed by sensory input and have difficulty processing and responding to sensory information. Sensory overload can result in anxiety, meltdowns, and

withdrawal. Individuals with sensory processing difficulties may be more prone to sensory overload. Sensory integration interventions can help individuals regulate arousal levels and respond adaptively to sensory input to prevent sensory overload and promote sensory integration.

Sensory Under-Responsivity refers to a state in which individuals have a reduced awareness or responsiveness to sensory input. Sensory under-responsivity can result in difficulties with attention, arousal, and engagement. Individuals with sensory processing difficulties may exhibit sensory under-responsivity in certain sensory domains. Sensory integration interventions can help individuals increase awareness and responsiveness to sensory input to improve sensory processing and participation in activities.

Sensory Discrimination Disorder is a condition in which individuals have difficulty distinguishing between different sensory stimuli. Sensory discrimination disorder can affect individuals' ability to process and interpret sensory information accurately. Individuals with sensory discrimination disorder may have challenges with sensory modulation, praxis, and social interactions. Sensory integration interventions can help individuals with sensory discrimination disorder improve their ability to discriminate and respond to sensory input effectively.

Sensory-Based Motor Disorder is a condition in which individuals have difficulty with motor coordination and planning due to sensory processing difficulties. Sensory-based motor disorder can affect individuals' ability to perform motor tasks effectively and engage in activities. Individuals with sensory-based motor disorder may have challenges with praxis, motor planning, and motor coordination. Sensory integration interventions can help individuals with sensory-based motor disorder improve their motor skills and participate in activities successfully.

Sensory Integration Dysfunction is a term used to describe difficulties with sensory processing and integration that impact individuals' daily functioning. Sensory integration dysfunction can manifest as challenges with attention, behavior, motor skills, and social interactions. Individuals with sensory integration dysfunction may benefit from sensory integration interventions to improve their sensory processing skills and engage in activities effectively.

Sensory Integration Education refers to training and education programs that focus on sensory integration theory, assessment, and intervention strategies. Sensory integration education is designed for therapists, educators, and caregivers who work with individuals with sensory processing difficulties. These programs provide knowledge and skills to support individuals in improving their sensory processing skills and participation in activities. Sensory integration education can include workshops, courses, and certifications in sensory integration theory and practice.

Global Certificate Course in Sensory Integration Education for Therapy is a comprehensive training program that provides therapists with the knowledge and skills to assess, plan, and implement sensory integration interventions for individuals with sensory processing difficulties. The course covers sensory integration theory, assessment tools, intervention strategies, and practical applications. Therapists who complete the

course gain a deeper understanding of sensory processing and how to support individuals in improving their sensory integration skills. The Global Certificate Course in Sensory Integration Education for Therapy prepares therapists to work effectively with individuals with sensory processing difficulties and promote participation in daily activities.