Sensory Processing 101

Making Sense of Sensory:
Understanding and
Supporting Sensory Needs
in Young Children

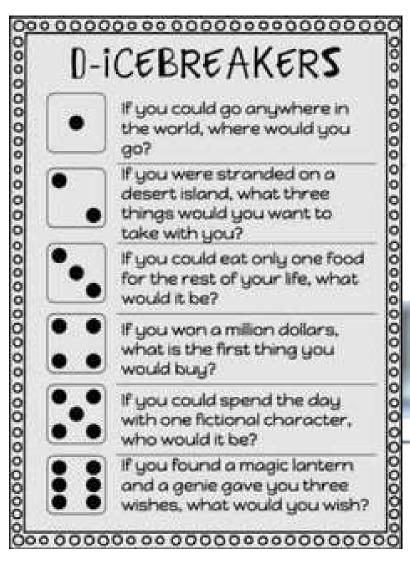
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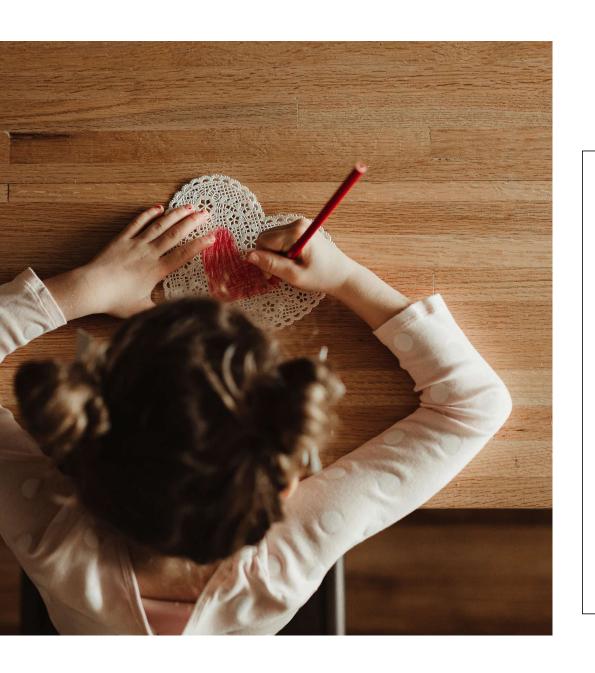
Objectives

- Participants will state the definition of Sensory Processing Disorder.
- Participants will name characteristics of an "Over-responsive" child. (Defensive)
- Participants will name characteristics of an "Under-responsive" child. (Seeker)
- Participants will name 7 specific Sensory
 Systems.



Dice Breaker





What is SPD?

Sensory Processing Disorder

A condition in which the brain has trouble receiving and responding to information that comes in through the senses.

It is <u>NOT</u> recognized in the DSM-5 as a medical diagnosis!

BRAIN HIERARCHY

PARIETAL LOBE

*Sensory Information

FUNCTIONS

- *Smell

CEREBELLUM

*Temperature

- *Visual System
- *Visual Information

FUNCTIONS

*Processes words on a page

OCCIPITAL LOBE

- *Knows shapes and sizes
- *Recognizes letters
- *Knows left from right

TEMPORAL LOBE

FRONTAL LOBE

*Executive Functioning *Organizing *Motor Functions

*Regulates Emotions

*Expressive language

*Remembers facts from teacher

TEMPORAL

LOBE

*Starts and completes tasks

FUNCTIONS

*Tells stories

*Abstract Thinking

*Problem Solving

*Reasoning

- *Speech
- *Auditory Processing
- *Hearing
- *Behavior
- *Emotions
- *Short-Term memory
- *Long-term memory

FUNCTIONS

- *Processes what the teacher teaches
- *Fear
- *Fight or Flight
- *Retains Facts



SPINAL CORD

CEREBELLUM

- *Balance
- *Coordination
- *Attention
- *Rhythm
- *Proprioception
- *Vestibular

FUNCTIONS

- *Kick a ball
- *Throw a ball
- *Jump on one foot
- *Ride a bike





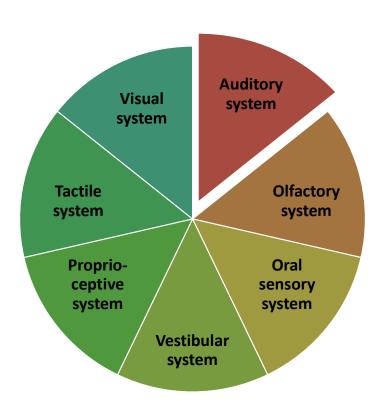


When Sensory Systems are Regulated:

- The child is not in fight or flight mode.
- The body is calm and at peace
- The brain is clear and ready to receive information.
- The child wants to learn and play.
- The child is free to explore and investigate.



The Sensory System Includes:





Sensory Over-Responsitivity

- Children who over respond to sensory stimuli in their environment.
- They may cover their ears at clapping or noise in the cafeteria.
- Gag at the smell of peanut butter or a public bathroom.

Sensory Under-Responsivity

- Children with under-responsitivity register sensory input to a low degree.
- They need extra sensory input in various ways to alert their systems to be ready to learn. They crash and are rough.
- Children with SUR often are low tone, may lack initiative, and take a lot to keep them going or engaged.

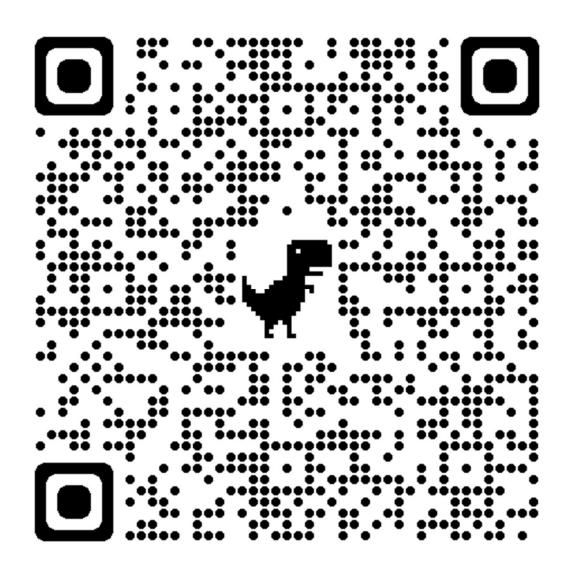








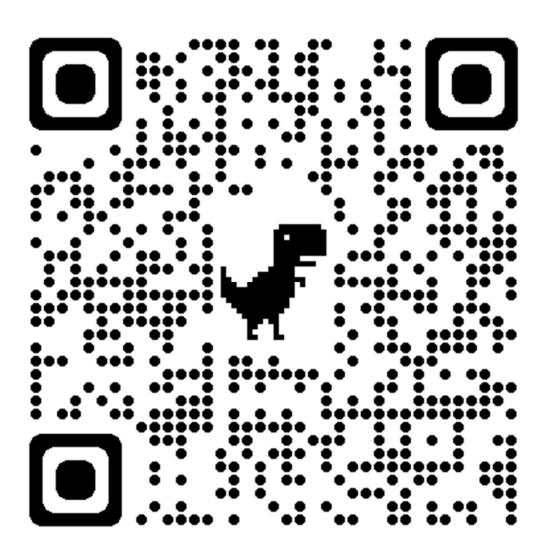
Auditory sensory system



Vestibular Sensory System



Proprioceptive Sensory System



Tactile Sensory System



Visual sensory System

What sensory needs could these toys meet?



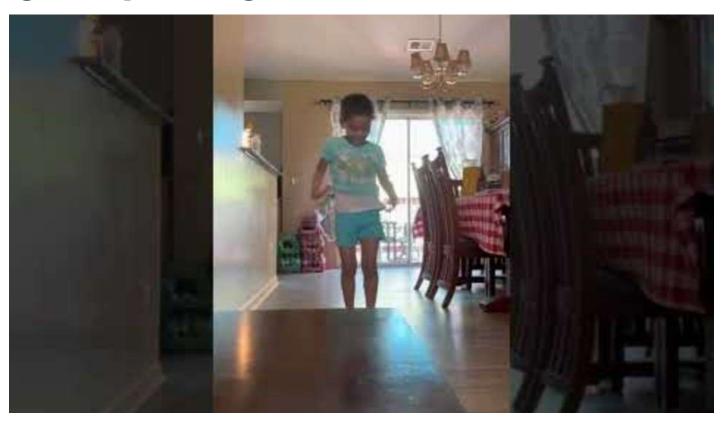


What sensory needs could these toys meet?





Listen to the language that emerges when the just right input is given.



What concerns me most as a therapist?

- Interactions with others
- Participating successfully at school
- Going out in public
- Tolerating basic self care and grooming experiences
- Eating a healthy diet and maintaining a healthy weight
- Getting an adequate amount of sleep.







Yoga for Kids is a Game Changer!





Pair literature with sensory bins by collecting props to help children retell the story or name the characters. Here are two favorite books: <u>Growing Vegetable Soup and Little Blue Truck</u>



Dice Debrief



Name one new thing you learned today.



Acknowledge someone for a job well done.



Describe a good idea you heard.



Describe a feeling you experienced.



Describe something that pushed you outside your comfort zone.



How will you apply what you learned today?

Bibliography



- 1) https://www.sciencedirect.com/science/article/pii/ /S2213158213000776
- Kranowitz, Carol Stock. <u>The Out of Sync Child.</u>
 2005, Penguin Random House NY, NY. https://out-of-sync-child.com/
- 3) Abnormal White Matter microstructure in children with SPD. https://www.sciencedirect.com/science/article/pii/S2213158213000776
- 4) We Connect Cards: Create Conversations that Matter. www.weand.me/connect
- 5) Abraham, Dayna, Claire Heffron, Lauren Drobnjak.

 <u>Sensory Processing 101</u> 2015. ebook at
 - www.sensoryprocessing101.com
- 6) https://lemonlimeadventures.com/tactile-sensoryprocessing/