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### Strategies for children with Sensory Processing Disorders (SPD)

Goals:

1. Participants will define Sensory Processing Disorder (SPD)
2. Participants will describe the characteristics of children within each category of SPD
3. Participants will describe movements and strategies that can be used to help children with SPD to stay in the 'calm-alert' state during their therapy sessions.

Outline:

- I. Sensory Processing Disorders (SPD): definition and description
- II. Movements and Strategies for:
  - a. Sensory Avoiders
  - b. Sensory Sensitivity
  - c. Sensory Seekers
  - d. Sensory Under-Responsivity/ Bystanders

<b>SENSORY PROCESSING</b>	<b>BEHAVIORAL CHARACTERISTICS</b>	<b>INTERVENTION APPROACH</b>	<b>DESIRED OUTCOME</b>
<b>Sensory Over-Responsivity (Sensory Avoiders)</b>	Seeks less Retreats Resists change Rituals	Honor their need to limit sensory input. Broaden their range	Sense of safety Adaptable Flexible
<b>Sensory Sensitivity (Sensors)</b>	Notices more Distractible Hyperactive Irritable	Sensory input to support them in completing tasks	Sense of relaxing and going with the flow Focused on tasks
<b>Sensory Seeking (Seekers)</b>	Seeks more Active Fidgety Excitable	Provide opportunities for sensory input during their day	Sense of calm & fulfillment
<b>Sensory Under-Responsivity (Bystanders)</b>	Notices Less Flat affect Self-absorbed Sedentary	Concentrated sensory experiences	Noticing their environment; involved in their world

## **SENSORY OVER-RESPONSIVITY (Avoiders)**

**DESCRIPTION:** Exaggerated responses to stimuli that are considered harmless & non-irritating.

### **CHARACTERISTICS**

- Reacts to sensory input more intensely and for a longer duration. Bothered by the environment much more than others. Quickly overwhelmed by sensory input. Retreats
- Sensory input might be perceived as dangerous or threatening
- May be sensitive to auditory (school alarms); visual (fluorescent lights); tactile (seams on clothes, windy days, sun block); and/or smells (scented products). May have a prominent auditory startle.

### **TEMPERAMENT**

- Thrives on familiarity; strong resistance to change
- Rule oriented and rigid behaviors; the child uses rituals to cope and limit new stimulus
- The child feels out of control in the world; tends to be bossy and controlling with peers
- May be lots of meltdowns

### **THERAPUETIC ENVIRONMENT**

Ask yourself: "How can I help this child to feel safe and comfortable?"

- Do your best to keep the environment calm and organized; brightly colored walls, posters and excessive materials may be overwhelming for the child.
- Monitor the volume of your voice and your energy level
- Odor-free lotions, cleaning products and environment
- Ideally, an initial setting that is 1:1 or small group. The child will likely struggle in larger groups
- If your only option for this child is a larger group setting, be sure to have some sort of a retreat. Ideally, a cozy spot with low lights, pillows and oral items for calming
- Seating on the edge of a group is best.
- Watch for signs of overload (i.e. smells, noises, movement, activity and/or stimulating days at school) that result in meltdowns. Provide opportunities for the child to decompress from stress.
- Provide lots of opportunities to make simple choices (e.g. "*do you want the green or red cup?*") throughout the session so the child can feel a sense of control over his world.
- Predictable routines
- Provide a very simple schedule of the session on the board to help the child know what to expect during the session.
- If needed, agree upon a code phrase or signal to signify the child's need for a break. Honor their requests, being sure they use it appropriately and don't cry wolf
- Avoid 'tip toeing' around the child to avoid disturbing or upsetting him. This can create a co-dependent relationship

SENSORY OVER-RESPONSIVITY Pg 2/2

**PRIMARY GOAL TO HELP SENSORY AVOIDERS**

Help the child feel safe and comfortable so he can benefit from your therapy rather than retreat or go into survival mode.

**THERAPEUTIC STRATEGIES**

- For the tactilely sensitive child, greet him without using light touch. Some kids like firmer touch or bear hugs. During your session, provide help by approaching the child from the front rather than the back.
- Allow short sensory breaks to decompress (e.g. head on desk with eyes closed, bathroom breaks, a walk outside for a few minutes, sit in a quiet cozy spot)
- Sensory diet: chair sit ups, push hands together, jumping jacks
- Use Social Stories so the child can explore new ways to act (Carol Gray)
- For severe auditory sensitivity, consider noise cancellation headphones or an iPod with white noise to muffle noises.
- Monitor multi-sensory demands: can the child listen and look at the same time? (can she maintain eye contact while you talk? can he talk & maintain eye contact?)

**SPEECH MOVES**

- PACE from Brain Gym® (Braingym.org) at the start of therapy as part of a predictable schedule
- Sensory diet: to calm and organize the nervous system. Proprioceptive activities are best: heavy-footed marching, jumping jacks, catch weighted ball, deep pressure input (brushing, joint compression, firmly holding the joints, roll a ball over the back)
- Mini-Trampoline, short break on climbing equipment
- Brain Gym. Lengthening Movements that encourage moving out of frozen postures:
  - The Energizer: sphinx movement while sitting with the forearms on the top of the desk or table
  - The Calf Pump: similar to a runner's stretch of the calves to integrate the Tendon Guard Reflex
  - The Double Doodle: doodle in a flowing manner with 2 hands in opposite directions
- Yoga for lengthening (downward dog, cat, cow, child's pose)
- Calming breaths: Inhale through the nose and emphasize a slow exhale out the mouth

## **SENSORY SENSITIVITY (Sensors or Sensory Defensiveness)**

**DESCRIPTION:** Sensitivity to sensory input

### **CHARACTERISTICS**

- The child readily directs her attention to the latest stimuli (e.g. people talking, background noises, smells, bright lights). The child notices the details other people easily ignore.
- Distractible; may be hyperactive; startles easily to noise, touch &/or movement
- Lots of comments about smells, noises, etc.
- Tends to cope by using passive strategies like complaining
- Fight-flight behaviors (e.g. hitting, poking, pushing)

### **TEMPERAMENT**

- May be irritable and/or bossy.
- May view himself as a victim, especially with peers on the playground
- The child may have a set idea about the way things should be
- May be emotionally sensitive and intuitive about other people's feelings. Clear communicators, especially about how they feel about things

### **THERAPEUTIC ENVIRONMENT**

How can you make the surroundings more calm and predictable for this child?

- Monitor yourself: volume of voice, activity level, speed of talking, energy level
- Avoid perfume and scented lotions
- Avoid lightly touching the child (e.g. patting head or back)
- Learn your sensory profile (Dunn, 2008) & how it affects your relationship with clients
- Seat the child at the edge of the group
- Carpet shapes to allow extra space during floor time
- Child walks at end or front of the line to avoid incidents of hitting or pushing

### **PRIMARY GOAL TO HELP WITH SENSORY DEFENSIVENESS**

Help the child feel comfortable and focused

### **THERAPEUTIC STRATEGIES**

- Routines help because the child thrives on predictability
- Teach ways to appropriately express discomforts and to ask for their needs
- Teach scripts (e.g. *"I'm a little uncomfortable when I'm touched, okay if we keep our space?"* or *"Please don't touch me, it makes me feel a little uncomfortable"; "that feels funny on my skin" or "my skin is a little sensitive, please don't touch me"*)

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- Use a child's irritability as a teaching opportunity: *"Check in with yourself. You seem to be getting irritated (..in your voice, posture, facial expression). Is the noise level bothering you?"*
- Short breaks to circumvent sensory overload
- In louder environments: noise cancellation headphones, earplugs, quiet music with ipods (white noise, Steven Halpern, sounds of nature)
- Quiet area or quiet breaks (in the classroom or bathroom breaks or a quiet bench outside, learning resource room or library)
- Prepare the child for transitions (e.g. *"in ½ hour we're going to head to the cafeteria"*) and stimulating environments (e.g. *"It will be loud at the start of group time, but only for 15 minutes"*)
- For social groups, modify the environment so the child will be calm enough to play with other kids.

**SPEECH MOVES**

- Start each session with PACE to help the child transition to your setting and get in a ready state for learning
- Oral strategies for calming: sugarless gum, suckers or fruit rollups
- Tactile embrace: Deep holding around the arms and legs
- Brain Gym®: the goal is to do movements that help the child feel relaxed and focused
  - Hook-ups: for emotional upsets
  - Rest the tongue on the roof of the mouth for self-calming
  - The Thinking Cap: before listening
- Big breaths with an audible sigh

## **SENSORY SEEKING (Seekers)**

**DESCRIPTION:** People who need and generate extra sensory input

### **CHARACTERISTICS**

- Active and fidgety
- Continuously engaged in the environment; may not be aware of dangerous situations
- Lots of noisemaking, hanging on others, touching others, rough play, knocking leg against a desk or chair, busy hands, chewing on clothes

### **TEMPERAMENT**

- Bounces right into a group
- More, more, more; excitable
- Fiddlers, doodlers, lots of ideas, talker
- Bored with everyday events; may be forgetful and late

### **THERAPUETIC ENVIRONMENT**

Help the child get the sensory input they need so they can concentrate on your therapy

- Allow the child to move, to stand or pace
- Seating preference: in the back for lots of visual stimulation and decreased chances of distracting others
- Define space with a carpet shape or chair for floor/circle activities
- Observe the child and ask yourself: “what kind of sensory input is the child seeking?” Is she constantly on the move?.. making noises?.. touching?.. mouthing things?. This might help you to know how to provide the child with the sensory input she needs.
- Weighted lap pad or hot water bottled on the lap to encourage sitting still (e.g. FocusLappy.com)
- Keep it positive and avoid negative behavioral interventions. Use learning opportunities such as “I see you need to move, what would be best for you right now: 10 jumping jacks or a run to the fence?”

### **PRIMARY GOAL TO HELP SENSORY SEEKERS**

Incorporate additional sensory input to meet the child’s sensory needs during the session

### **THERAPUETIC STRATEGIES**

- Deep pressure: bear hugs, firm touch
- On stomach with weighted vest, pad, or blanket for grounding
- Opportunities for “heavy work”: chair pushups, push hands together, wheelbarrow
- Active jobs (e.g. notes to the office, erase the board, move/carry chairs, wash tables, sweeper)

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- Alert Program to help improve self awareness and self regulation. Red light = Engine running too fast; Yellow light="Uh oh"; Green light = Just right (AlertProgram.com)
- Lots of movement: quick trip to the playground on the way to therapy, animal walks
- Encourage friendships with kids who are physically active, but know how to channel their energy into activity.
- Social stories (Carol Gray) to clarify expected behaviors
- Add lots of pizzazz: music with strong tempos; movement
- Handwriting without Tears : a multi-sensory handwriting program (hwtears.com)

## SPEECH MOVES

- Movement opportunities: fidgets to keep the hands busy (squish balls, warmed beeswax, paperclips); roll a tennis around the bottom of the foot
- Sit on a disc or big therapy ball for movement input. It's especially good for kids who try to get up and move around the room
- Deep pressure and/or heavy work
- Hand drumming games
- Lots of manipulatives, kinesthetic activities and hands-on activities
- Chewing: sugarless gum, chewy tubing, chewelry (necklace for chewing for those who suck their shirt. Available at Therapro.com)
- Crunchy food or sugarless hard candy to suck
- Calming breaths: inhale fully through the nose and exhale with a steady hum
- Blow toys for deep respiration: whistles, bubbles, sucking from a straw
- Impulse control activities: Red light-Green light; Simon Says
- Mini-Trampoline
- Brain Gym®: Goal is to slow down and involve prefrontal part of the brain
  - Cross Crawl: explore fast, slow, 'just right' speed. Kids especially love the opportunity to go fast
  - Cross Crawl Sit-Ups and variations
  - Lazy 8s: 'just right' speed

## **UNDER RESPONSIVITY (Low Registration or Bystander)**

**DESCRIPTION:** Kids who notice and register sensory input much less than others

### **CHARACTERISTICS**

- Low endurance. Sedentary
- Do not seem aware of what is going on; messy clothes and face
- Poor listeners; has to have things repeated; delayed responses
- Decreased nonverbal communication; miss social cues of facial expressions or gestures

### **TEMPERAMENT**

- Flat affect; may seem uninterested, uncaring, apathetic or withdrawn
- Easy going; undemanding

### **THERAPEUTIC ENVIRONMENT**

- Observe the child and ask: *“how can I help this child to become alert?”* and then utilize that kind of sensory input before tasks.
- Seating placement: In the middle of the group
- Provide active encouragement. Engage the child:
  - walk by them a lot
  - use touch
  - wait for responses and eye contact
  - vary your voice level
- Encourage groupings with kids; may need extra encouragement to be social or join groups
- Exaggerate your facial expressions and voice to encourage the child to stay alert and cue into nonverbal messages

### **PRIMARY GOAL TO HELP WITH LOW REGISTRATION**

Provide concentrated sensory experiences to improve chances for noticing their environment

### **THERAPEUTIC STRATEGIES**

- Encourage upright posture for alertness and breath control
  - Chair: straddle backwards?
- Help the child to stay alert:
  - hands on tasks, kinesthetic activities
  - active jobs
  - vary the pace and routines



UNDER RESPONSIVITY Pg 2/2

- Alert Program for Self Awareness: Red= Engine is running too slow (lertprogram.com)
- Vary activities; keep them active and alerting
- Encourage involvement: the child will likely be on the sidelines in group activities

**SPEECH MOVES**

- Lots of stimulating movement experiences (e.g. wheelbarrow walk to the table, somersault to the door, log rolls)
- 'Wake up' activities: rub vigorously on their back or arms; music/singing, pat their extremities
- Proceed with alerting input (e.g. quick spin, dance to music, drumming on their back, 'head and shoulders') if their level of arousal diminishes
- Play with facial expressions: silly, in the mirror, exaggerated emotions
- Breath work
  - MORE/Motor-Oral-Respiratory-Eyes: Blow toys that encourage involvement of the mouth, breath, eyes, ears and hands (Therapro.com)
  - Blowing games (races to blow cotton balls, bubbles. blowing in a crazy straw)
- Brain Gym®. The goal is to increase stimulation and alertness
  - Energy Yawn: Rub jaw joint/TMJ with a noise such as yawning, goofy sounds, singing or animal sounds for younger kids (e.g. meek like a mouse; strong like a lion). Great activity for tight TMJ or when the child avoids expressing himself
- Energizing breaths: Deep breaths in and out of the nose
- Rhythmic activities to encourage an internal rhythm (Mozart music, balance boards, drumming games on the table)
- Animal Walks for younger kids (bear walks, crabwalks, snake-walks)

## SPEECH MOVES RESOURCES

Alert Program: [www.alertprogram.com](http://www.alertprogram.com)

Brain Gym International Foundation **for classes and general information.**

**800.356.2109 or [www.braingym.org](http://www.braingym.org)**

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[www.pearsonassessments.com/.../Sensory\\_profile\\_Sample\\_rpt.pdf](http://www.pearsonassessments.com/.../Sensory_profile_Sample_rpt.pdf)

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Sensory Processing Disorder Connection: [www.spdconnection.com](http://www.spdconnection.com)

Veenendall, Jennifer. **Arnie and His School Tools: Simple Sensory Solutions that Build Success.** Shawnee Mission, KS: Austim Asperger Publishing Co., 2008.

## PRODUCTS

Abilitations: [www.abilitations.com](http://www.abilitations.com) 800.850.8603

Pocket Full of Therapy: [www.pocketfulloftherapy.com](http://www.pocketfulloftherapy.com) 800.PFOT.124

Sensory comfort: [www.sensorycomfort.com](http://www.sensorycomfort.com) 800.436.2622

## SPEECH MOVES: Strategies for pediatric clients with Sensory Processing Disorders