# Practical Tips for Meeting the Sensory Processing Needs of Children and Youth

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#### Learning Objectives:

- The Dental Professional will be able to:
- Describe Sensory Integration
- Describe Sensory Processing Disorder (SPD)
- Identify how Sensory Environment may impact child with SPD
- Describe at least 3 ways to Adapt the Sensory Environment to help clients with SPD

### What is Sensory Integration (SI)?

 Neurological process of organizing sensory inputs for function in daily life.

 Brain takes in sensory information and sends signals to the body as to how to respond.

How many senses are there???

#### **EIGHT!!!**

- OVision
- OAuditory
- **OTactile**
- **O**Taste
- **OSmell**
- Vestibular(Movement and Balance)
- OProprioception (Body position)
- OInteroception



### What is Sensory Processing Disorder (SPD)?

A neurological problem with Sensory Integration

 Person is unable to respond effectively to sensory inputs (from one or more of the 8 senses)

Daily life activities are impacted

www.SPDStar.org

### Sensory Processing Disorder (SPD) vs. "typical" sensory problems

• All of us have little sensory problems.

 A person whose sensory deficits cause him to be unable to function in daily life, has a SPD.

GROCERY SHOPPING!

### Sensory Processing Disorder (SPD) Incidence Rates

 At least 1 in 20 typically developing children has a SPD

> 93% of children with Autism have a SPD

40-60% of children with ADHD also have a SPD

### What causes SPD???

- Risk factors:
- low birth weight, prematurity
- prenatal complications
- maternal illness or stress, maternal drug use (NAS-Neonatal Abstinence Syndrome)
- low socioeconomic status

### SPD may be related to problems with learning, motor development or behavior

- Coordination problems
- Poor attention span
- Academic-related problems: handwriting or cutting with scissors
- Unusually high or low activity level

- Problems with selfcare: tying shoes, zipping, buttoning, feeding
- Low self-esteem
- Poor social interaction
- Oversensitivity to touch, sights or sounds

2 Categories of Sensory Processing Disorder (most recognizable by dental professionals:)

- Sensory Avoiders (Over-responders):
  - O RESPOND
    TOO MUCH!
- Sensory Seekers:
  - Crave More and More



### Sensory Avoiders (sensory system responds TOO MUCH...so avoids input)



- Over-responsive to sensations from one or more sensory system.
- Child may respond to certain sensory input as if it were irritating or painful.
- FIGHT-FLIGHT-FREEZE

### Sensory Avoiders

- Children may avoid one or more of the sensations:
  - O Vision
  - Auditory
  - O Vestibular
  - O Tactile
  - Proprioception
  - OTaste/Smell



### How does it feel?

 http://www.upworthy.com/experience-for-60-seconds-how-the-world-looks-soundsand-feels-to-someone-who-hasautism?c=upw1

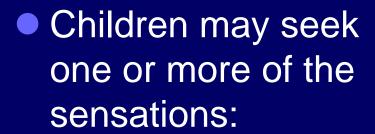
### Sensory Seekers (sensory system craves more and more input)

- Craves excessive stimulation from one or more of the sensory systems.
- Child seeks more stimulation than other children.
- Child seems like he has ADHD.



### Sensory Seekers





- O Vision
- Auditory
- O Vestibular
- O Tactile
- Proprioception
- O Taste/Smell

#### Many Children are Seekers and Avoiders



- Common for a child with SPD to be a Seeker of one sensation and Avoider of a different sensory input.
- Child can't avoid and seek the SAME sensory input!

### Red Flags for Sensory Processing Disorders REMEMBER:

- No two children are alike.
- Sensory processing can vary from day to day or moment to moment.
- Child will probably have difficulty with more than one input.

## Helpful Hints for Sensory Avoiders

#### **BEFORE YOU BEGIN Treatment:**

- Remember Child or Youth with SPD will likely be OVERWHELMED by New Situation
- Prepare child and family BEFORE visit
- Ask parents questions and LISTEN to input
- It is easier to PREVENT Sensory
   Avoidance than to correct it

### Offer Social Story to Read BEFORE visit: This helps prepare child.



My Trip to the Dentist

### Provide Emotional Check-In Chart Allows child to tell you feelings

I am hurting



I am sad



# Sensory Environment Adaptations for Dental Settings

Focus on Sensory Avoiders

## Visual Environment: What do you see?



### Visual Environment: What do you see?



#### Visual Environment

- Avoid Bright Lights
- Calming Colors: light blue, tan, gray-warm tones
- Cover blinking lights

- De- Clutter
- Organize work space

### Visual Adaptations



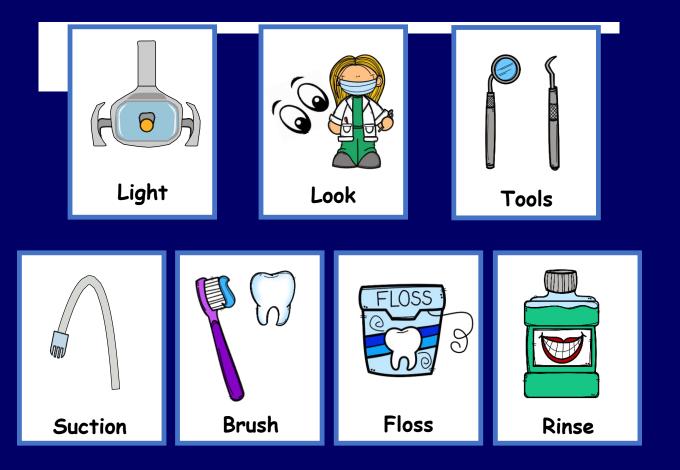
Child wear sunglasses or eye masks

### Visual Adaptations: Picture Schedule



- Helps with Routine
- Easier Transition
- BuildsIndependence

### Visual Adaptations: Picture Schedule



### **Auditory Environment**



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- Sporadic loud sounds from various sources-Overwhelming
- Background music is not always a good choice
- Fluorescent lights buzz- turn off?
- Towel under tray for tools

### **Auditory Adaptations**

 Child with SPD may be Slow to process and respond to language

- Use fewer words- short phrases
- Give time to process
- Use QUIET and CALM VOICE

### Auditory Adaptations

#### **White Noise Machine**



### Noise Cancelling Headphones



#### Tactile Environment



- Make external environment less stimulating
- Decrease lighting
- Decrease noise:

Lower your voice, turn off extraneous equipment and TV

#### **Tactile Adaptations**

- Prevent unexpected touches when possible
- Tell the child before a touch is going to occur
- Briefly explain what is going to happen
- Be patient with child

### Tactile Adaptations



- Use Firm Touch
- Add extra weight to body to CALM:
- Weighted Vest (Xray)
- Weighted Blanket
- Child bring own blanket/toy

#### Smell/Taste Environment

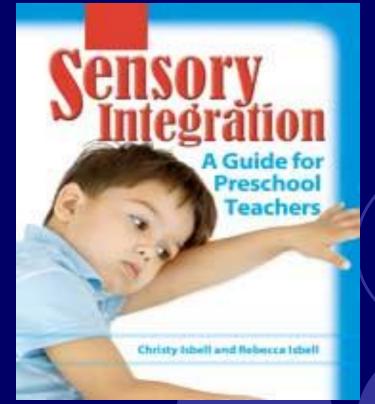
- Avoid wearing products with scents
- Avoid chewing gum/breath mints with strong scents
- Give child choice of 2 flavors for toothpaste



60	Chairside Sensory Checklist
100 × 100	Visual: ☐ Turn off overhead lights
	☐Turn on Lamps
	<ul> <li>Ready visual display equipment (pattern projector, lava lamp, waterfall fountain, LED Bubble machine, etc.)</li> </ul>
☐ Ready sunglasses/Night mask in case patient prefers	
<ul> <li>Remember to avoid sudden movements, hand gestures, and prolonged eye contact with client.</li> </ul>	
Hearing:	☐ Turn-off unneeded equipment to reduce noise
	☐ Place a towel between instruments and tray to reduce contact noise.
	$\square$ Ready sound machine (Set to calming sounds)
	☐ Ready ear plugs/ noise-cancelling headphones
	☐ Put cell phone on vibrate
Touch:	☐ Add soft cover to chair
	☐ Ready assistive equipment (weighted blanket, fidget toys, vibrating mini massagers, exam gloves for patient to wear/hold, etc.)
	☐ Check for jewelry such as rings/ watches that may make abrasive contact with patient
	$\square$ Avoid using soft touch with patient (use firm touch)
Smell:	☐ Check area for strong smells
	☐ Use unscented cleaning and wash off strong smelling lotions or perfume
Taste:	☐ Ready fluoride and pumice paste flavor choices. Use light favors if available

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## More Information on SPD:

Isbell, C. & Isbell, R. (2007). Sensory Integration: A Guide for Preschool Teachers. Baltimore, MD: Gryphon House.

www.SPDStar.org



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