

Recognizing Sensory Processing Disorders

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Course Objectives

- Identify difference between what is a true sensory processing disorder and what isn't.
- Identify the difference between stimulating versus calming sensory stimulation.
- Determine what types of services an OT may provide to an individual diagnosed with a SPD.
- Be able to tell the difference between sensory diet and sensory stimulation.

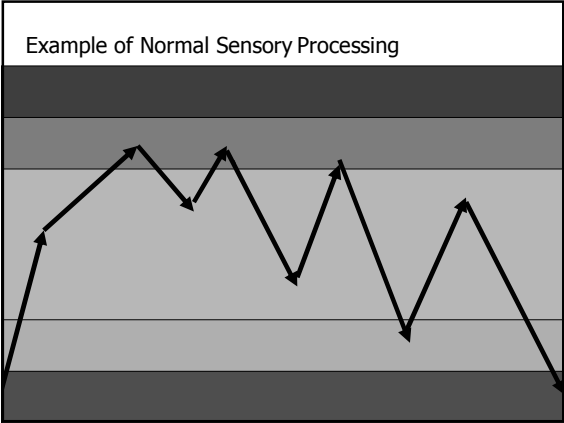
Neurology 101

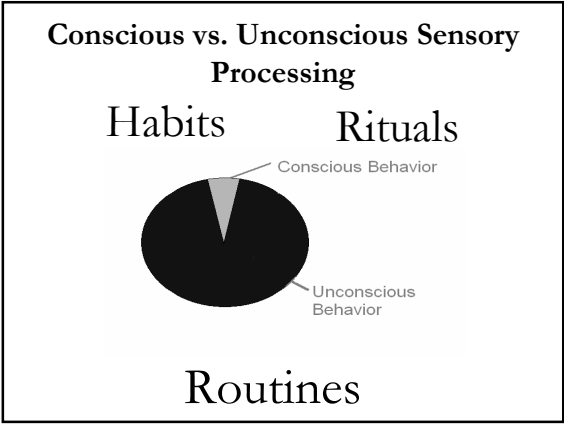
WHY?

RECOGNIZE
EXPLAIN
ANSWER



Levels of Arousal
Shutdown: hides face, moves to corner to avoid input/interactions, may appear to be sleeping
Nervous, anxious, limited ability to attend, easily distracted
Alert, attentive, able to participate actively, engaged in listening/learning, able to shift focus, and transition from activity to activity easily
Drowsy, lethargic, needs cues or assistance maintain participation
Asleep





What isn't a sensory processing disorder?

- Medical conditions such as C.P., hard of hearing/deaf, vision impairment, food allergies, neuropathy etc.
- OCD or schizophrenia, bipolar disorders, depression or anxiety disorders
- Episodic periods of impaired sensory processing from stress, illness, or other environmental factors.

SEVERITY

- Defensiveness
- Modulation
- Under registration
- Integration

Symptoms of Defensiveness

- Has a narrow or limited interests
- Fear movement and heights, or get sick from exposure to movement or heights
- Be very cautious and unwilling to take risks or try new things
- Respond to being touched with aggression or withdrawal
- Responds negatively to certain sounds
- Be very picky eaters and/or overly sensitive to food smells
- Will only wear certain kinds of clothes, sensitive to tags.

DEFENSIVENESS

- What is the problem? ■ What are we trying to do?
 - Brushing
 - Slow rhythmic, linear Swinging or Rocking (don't use if defensive to movement)
 - Deep pressure (directly applied or through weight vests, pressure vests)

Dealing with Defensiveness

- Recognize the problem especially important for team involvement of BC and SLP.
- Reduce offending stimuli in the environment.
- Reorganize patterns and habits to reduce likelihood of experiencing unpredicted
- Increase activities to experience pleasure (when therapeutically controlled behavior becomes more adaptable).
- Explain what you are going to do prior to contact. Give calming input prior input which to help prepare system.
- Grade contact: ex. self, touch through object, touch by another person.

Hansch Evaluation and Tx. 2000 Section 3 pg 30
Fisher, Murray Bundy Pg. 128

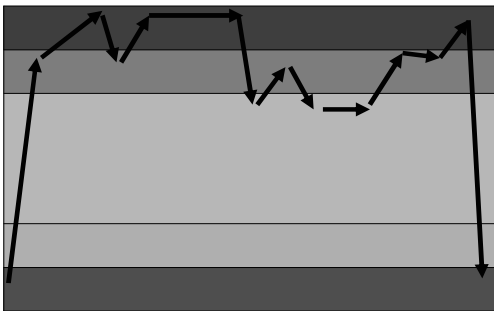
Symptoms of Modulation Disorder

- Difficulty tolerating or adjusting to even minor changes in routine
- Disregard or impaired ability to interact with others
- Disrupted sleep and wake cycles
- Attention problems either easily distracted, or fixated on one activity with difficulty shifting focus
- Feel uncomfortable in busy environments, such as sports events, malls

Modulation

- What is the problem?
- What are we trying to do about it?
- Provide calming, organizing input throughout the day to help them keep within the “green zone”.

Example of a person who has symptoms impaired sensory modulation.



Stimulating vs. Calming

- | | |
|-----------------------|--------------------|
| ■ Change | ■ Sameness |
| ■ Unexpected | ■ Expected |
| ■ Unpredictable | ■ Predictable |
| ■ New/novel elements | ■ Old/familiar |
| ■ Erratic/ arrhythmic | ■ Rhythmic/melodic |
| ■ Fast | ■ Slow |
| ■ Loud/hard | ■ Quiet |
| ■ Jarring/moving | ■ Gentle/still |
| ■ Bright/shiny | ■ Dim/dull |

Hansch Autism Section 4 page 6

Stimulating vs. Calming

All Proprioceptive Input

* Remember to use caution when using joint compression or stretch to individuals with low tone to ensure good joint alignment and stability.

- “heavy work” pushing pulling, lifting, carrying.
- Joint compression or stretch.
- Swaddling or neutral warmth
- Hugs
- Deep Muscle Massage

Stimulating vs. Calming

VESTIBULAR

- Spinning
- Swinging
- Rolling
- Head Inverted such as when you touch your toes
- Bouncing or Jumping
- Scooter board
- Rocking
- Linear movements (either) forward and backward or side to side
- Wagon

Hansch Evaluation & TX. 2003
Section 3 page 8

Auditory System Stimulating vs. Calming

- Sudden or unexpected
- Quick rise time (sneeze or cough)
- Narrow frequency range (shrill or nasal tones)
- Low frequency vibration
- Slow
- Rhythmic
- Predictable
- Melodic

Mary Kavar
Listening with the Whole Body 2006

Stimulating vs. Calming

TACTILE

Light “tickly” touch
Quick, erratic
application
High frequency
vibration

Firm deep
pressure
Slow
rhythmic
evenly
applied

Modify for Modulation

TIME

- Provide a structured daily routine
- Help them to build their own habits and rituals
- Build in time for transitions
- Use time related cues and aides
- Prioritize do not overscheduled
- Checks lists and visual schedules.

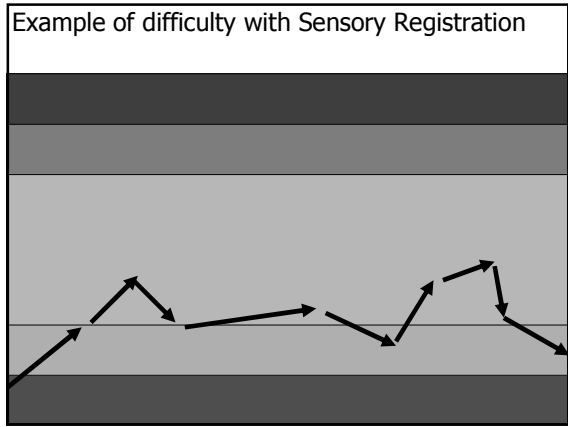
ENVIRONMENT

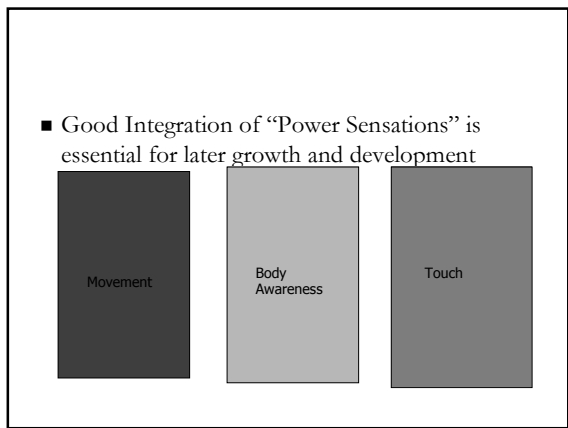
- Keep things uncluttered
- Model organized behavior
- Contracts , and other behavior management systems so individual has a predictability.
- Allow the to individual a break and quietly request permission to move or leave if they are feeling overwhelmed.

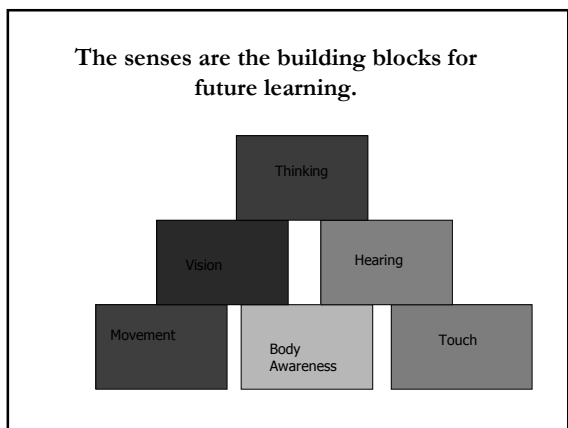
Hansch Autism 2003
Sections 4 Pg 14

Hyposensitivity (under registration)

- Handles people or objects roughly
- Unawareness of touch or pain, or touching others too often or too hard (which may seem like aggressive behavior)
- Taking part in unsafe activities, such as climbing too high
- Fatigues easily and appears unmotivated







REGISTRATION

- What is going on?
 - What do we do about it?
 - Increase intensity and duration of input provided.
 - Provide single channel stimulation
 - Usually start with vestibular
 - Add other layers of stimulation if these systems are struggling as well

INTEGRATION

Poor Integration or discrimination or dyspraxia

- Has difficulty with fine motor tasks such as handwriting, coloring or cutting
- Trouble maintaining balance or coordinating movements for activities such as kicking throwing
- Difficulty with discrimination of visual, touch or auditory information
- Difficulty using tools or uses objects inappropriately
- Trouble with motor planning (dyspraxia).

INTEGRATION

- What is going on?



- What can we do about it?

- Provide a conducive atmosphere.
- Provide enhanced multi-sensory information that can be used to conceptualize and plan.
- Allow them to explore variations and increased complexity.

What can you do?

- Rule out other disorders which may look like Sensory Processing Disorders. Remember IDT approach.
- Determine if “behavior” is related to environmental factors, implement some of strategies listed earlier to determine if symptoms are alleviated.
- Record data related to types of symptoms observed/frequency. You can use checklists, but remember to consider the severity of impaired function and quality of life rather than only number of symptoms noticed.
- Obtain a referral for an occupational therapy evaluation from a practitioner who has experience evaluating sensory processing disorder.

<http://www.kidfoundation.org/spdchecklist/>
or
<http://www.sensory-processing-disorder.com/sensory-processing-disorder-checklist.html>

***If the person is found to have a SPD.
The occupational therapist may provide
Services in two ways: consultation and/or
direct treatment (Sensory Integration
Therapy).***

Consultation Services

- Strategies
- Home Program

* Discuss methods to review or monitor results of sensory diets or home program

What is Sensory Integration Therapy?

- Active Participation
- “Just Right Challenge”
- “Adaptive Response”
- Self Directed



Goals and Outcomes of Sensory Integration Therapy

- Improve attention to task, participation and learning
- Increase independence in self care tasks
- Decrease fear and anxiety
- Improve communication
- Improve ability to adapt to change/flexibility
- Increase socialization
- Increase self confidence
- Improve ability to explore choices in their environment, community integration

Sensory Diet vs. Sensory Stimulation



- For more information or examples of a sensory diet you can go to:
- Sensory Diets should never be used for someone other than whom it was recommended.
- <http://www.sensorysmarts.com/diet.html>
- <http://www.sensorysmarts.com/diet.html#Sample>

How can I help a person who may have a sensory processing disorder?

USE AN INTERDISCIPLINARY APPROACH

- Rule out medical or psychiatric conditions
- Facilitate good communication through assistive techniques or devices
- Ensure behavioral supports are in place
- Review environmental space and time recommendations previously mentioned
- Ask yourself is it interfering with function or quality of life.
