Sensory Processing Disorder

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Sensory Processing is..

Detection

Registration

Modulation

Response
Key Idea is:

ADAPTIVE RESPONSE
Sensory Processing Disorder...

Difficulty detecting, registering, interpreting, responding to internal and external sensory information with a maladaptive outcome...
Sensory Systems

• Tactile: Light touch/pressure

• Position Sense: Where body parts are in space

• Movement Sense: Where in space you are moving
Sensory Systems

• Oral: flavor, texture, temperature
• Visual: Maps the space around us
• Auditory: Maps distance around us
• Smell: are primal and connected to emotions
Sensory Processing Disorder (SPD)

Sensory Modulation Disorder
- SOR = Sensory Over-reactivity - Low threshold
- SUR = Sensory Under-reactivity - High Threshold
- SS = Sensory Seeking/Craving - High Threshold

Sensory-Based Motor Disorder
- Dsypraxia

Sensory Discrimination Disorder
- Visual
- Auditory
- Tactile
- Position/Mvt
- Taste
- Smell

Postural Disorders

Facts about Sensory Processing

Brain operates on thresholds

Low: Brain processes input quickly

High: Brain takes longer to process

SOLUTION IS.......REGULATION, AKA MODULATION
DUNN’S MODEL OF SENSORY PROCESSING

Neurological Threshold

HIGH THRESHOLD

LOW THRESHOLD

Self Regulation

Passive  Active

Bystander  Seeker (UR)

Sensor  Avoider (OR)

Consider....

• 2 y.o. who has low threshold for food flavor and texture......

• 5 y/o, first day in K, having spent life at home in a quiet, predictive, calm surrounding......

• YOU...or our clients...in varied situations that we avoid/seek and it’s the opposite of someone live with, work with, play with...
A Basic Premise of Intervention

We are challenged differently by sensation

<table>
<thead>
<tr>
<th>Touch</th>
<th>Visual</th>
<th>Auditory</th>
<th>Movement</th>
<th>Taste</th>
<th>Smell</th>
</tr>
</thead>
</table>

Thus, we need unique strategies to adapt
Sensation is All About Us!
Sensory Interpretation: Unique
Why Do We Care About SP Issues?

We can figure it out and respond...

People with SPD cannot do so...without support
Children with a trauma history demonstrate significant prevalence of sensory modulation disorders

Atchison (2008)
## PREVALENCE OF SMD AMONG CHILDREN WITH A HISTORY OF TRAMUA

<table>
<thead>
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<th>Probable</th>
<th>Difference</th>
<th>Definite</th>
<th>Total</th>
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<tbody>
<tr>
<td>Tactile Sensitivity</td>
<td>16</td>
<td></td>
<td>31</td>
<td>47</td>
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<tr>
<td>Taste/Smell Sensitivity</td>
<td>13</td>
<td></td>
<td>12</td>
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<td>Movement Sensitivity</td>
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<tr>
<td>Auditory Filtering</td>
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<td>69</td>
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<tr>
<td>Visual/Auditory</td>
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<td>28</td>
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<tr>
<td>TOTAL SCORE</td>
<td>20</td>
<td></td>
<td>40</td>
<td>60</td>
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</table>

Short Sensory Profile (38 items)
N=293 children 3-10 years
There are five key limitations or disabilities commonly demonstrated by children with disturbances in sensory modulation.

Parham and Mailloux (1995)
Including…

(1) Decreased social skills and participation in play

(2) Disturbances in self-confidence–self-esteem

(3) Difficulties with daily life skills and at school

(4) Anxiety, disturbances in attention, and disturbances in the ability to regulate reactions to others

(5) Disturbances in skill development
This atypical responsiveness has a significant impact on the quality of life for these children and their families by limiting their participation in home, school, and community activities.

Cohn, Miller, & Tickle-Degnen, 2000; Dunn, 2001; Dunn & Westman, 1997; Miller, Reismann McIntosh, & Simon, 2001; Parham & Mailloux, 1995) and countless parent testimony…
Immediate Next Steps...

- Obtain *Dunn’s: Living Sensationally*
- Obtain *Lucy Miller’s: Sensational Kids*
- Bookmark SPD Network Website:
  - [http://www.sinetwork.org/](http://www.sinetwork.org/)

**NOTE:**

**Avoiders:** Books available on Amazon.com

**Seekers:** Maybe in one of all the bookstores in your town...check them all out! 😊

**Bystanders:** One of your classmates is likely to buy it..take a look at it when they get it but don’t try to borrow it.

**Sensors:** Buy it from amazon.com (comes in a nice, clean box) but hide it from that Bystander who wants to borrow it and will get food stains all over it.