

SENSORY, ACADEMICS, AND BEHAVIOR: IT ALL GOES TOGETHER

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OVERVIEW

- Introduction and discussion on sensory and behavior
 - What is sensory integration?
- Sensory Processing Defined: The way the body takes in information, analyzes, and produces a response based on the signals it receives from the environment.
 - What is behavior intervention?
 - How do the two relate?
- Examples and activity on implementation in our district
 - Exploration of sensory boxes
 - Explanation of each of the seven senses, common misconceptions, problem solving

SENSORY PROCESSING DEFINED

DEFINITION: The Brain's ability to receive information from the senses and utilize that information to create a behavioral response.

Sensory Integration Theory is a theory of the brain-behavior relationship coined by Dr. Jean Ayres an occupational therapist (Bundy, Lane, and Murray, 2002, p. 4).

Who does sensory processing occur in?? **EVERYONE**

Optimal Sensory Processing: The ability to respond to the sensory information received automatically and in an effortless manner.

Example: Tornado or fire drill at school. Auditory System hears the alarm and sends a signal to your brain to process the sound. The automatic response should produce the behavior of assuming the position for safety and remaining calm.

If you have an unclear pathway to communicate your senses to your brain you will not process the sensory information appropriately. This can potentially result in behaviors i.e. covering your ears and/or evoke an emotional response: meltdown

7 SENSES!

TACTILE: TOUCH

ORAL: TASTE

AUDITORY: HEARING

OLFACTORY: SMELLING

VISUAL: SEEING

PROPRIOCEPTIVE (Body Position)-Information receiving from pushing/pulling on muscles and tendons (Henry, Wheeler, and Sava, 2004). -If you close your eyes you know where your body is.

VESTIBULAR (Balance & Movement)-Information received when the head changes position as the head and/or body move (Henry, Wheeler, and Sava, 2004).

http://www.7senses.org.au/wp-content/uploads/2013/08/7-Senses-Street-Day-What-are-the-7-Senses_.pdf

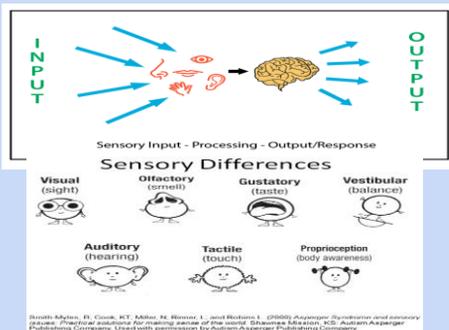
YOUR BIG WHY?

Why is the student in your classroom eliciting a behavior?

Finding your big sensory WHY behind the behavior and providing ACTIVITIES and STRATEGIES will assist in changing the student's behavior.

When developing a plan there is no one size fits all because Learning styles are unique and individual.











FINDING YOUR WHY AND YOUR WAY TOGETHER.....



<https://www.youtube.com/watch?v=V5o5reBfRI>

DO YOU KNOW ME?

I'm a Sensational Kid!

I mean, I have Sensory Processing Disorder. That just means that my brain can't process sensory information the right way. Whenever I take any information through any of my senses - sight, smell, hearing, touch, taste, or proprioception - it doesn't always know what to do with that information and I become very disorganized and confused. Sometimes I respond to the sensory input and sometimes I don't react at all. This makes it really hard for me to do things in school, in public, and even at home! I might have trouble learning or making friends. I might feel really shy and withdrawn from everyone, even my own team. I might have trouble concentrating and have a lot of tantrums and meltdowns. I might be afraid of a lot of activities that kids usually enjoy. Oh, yeah? I really am sensational, by the way!

Sensory Overresponsivity (The sensory over-reactionist)

Sensory Underresponsivity (The sensory under-reactionist - 'the blank')

Sensory Craving (The sensory addict)

Dispreference (The sensory rebel)

Sensory Discrimination Disorder

Sensory Postural - Habit

Proprioceptive Disorder

The sensory shifter

<https://www.youtube.com/watch?v=ELpfYCz87g>

- ACADEMICS
- BEHAVIOR
- SENSORY



THE WHY OF BEHAVIOR

Function of Behaviors

- Automatic - Sensory Stimulation
 - Hardest to interrupt
- Access to Tangible
 - Gaining a reinforcer
- Attention
 - Positive/negative
- Escape/ Avoidance

CORE PRINCIPLES OF BEHAVIOR

Reconditioning behaviors by

- Antecedents
- Consequences
- Reinforcement
- Punishment

Motivating Operations and Variables

- Deprivation
- Immediacy
- Size (magnitude)

GROUP ACTIVITY

Investigation of the seven different sense boxes

Proprioceptive (weighted input): weighted animals, weighted vest, trampoline, body sock, dot markers, Therabands and Therabands.

Oral Motor: gum in various flavors, pretzels, soft and hard candy, room temperature and cold water, and straws of various diameters

Olfactory (smell input): diffusers, scencicles, smell markers, scratch 'n sniff stickers, small canisters with cotton ball with drops of an essential oil such as vanilla, peppermint, and lavender placed in it.

Vestibular (swinging, spinning, or hanging): sensory swings, sit and spin, monkey bars

Tactile (Touch): bean box, orbeez, kinetic sand, brush, sand paper, velcro, Koosh-like balls, balls that squish and/or stretch, stress balls of various textures and resistance levels, small cloths of various textures and other "fidget" items.

Auditory: classical music, Piano Guys on Pandora, headphones, chimes, headphones which block out varying decibels of noise

Visual: find it games, water timer, classroom fish tank

CASE STUDY 1

Billy is a first grader that spends the majority of his time in the regular education classroom. He is constantly taking off his shoes and is shouting out and interrupting the class. As a result his teacher has been giving constant verbal reminders to have a quiet mouth and put his shoes back on.

Discussion:



- Theraband Across desk in the form of an x for provide Proprioceptive input
- Visual cues on desk teacher can point to
- Instruction in Whole Body Listening



CASE STUDY 2

Aria is a non-verbal Third grader in a self-contained classroom with a 1:1 paraprofessional that is constantly trying to escape from her work at the table. When asked to return to the table to complete her work she screams and drops her body to the floor.

Discussion:



Addressing the class - whole group movement break

- Visual cues for first, then
- Chunking of tasks into smaller more manageable tasks
- Reflect on ways to decrease this in the future

CASE STUDY 3

Adam is a kindergarten student who struggles to attend classroom instruction. He is constantly moving, tipping in his chair, and yelling out. As a result his teacher has been providing him with movement breaks in the form of running laps in the gym before beginning instruction. She has been trying this for 3 months now and has noticed that while he is tired when coming back to class he is still elevated.

Discussion:



Restrictions of movement breaks - they can escalate

Therapeutic listening - EAS with noise cancelling headphones

Fine motor tactile tasks



CASE STUDY 4

Kathryn is a Fifth grade student who struggles to stay emotionally regulated throughout her day in general education. When faced with an adverse event or situation she will often times cry, scream, and refuse to talk or problem solve. When in this moment she often times sticks her head inside of her shirt and will not respond to verbal cues.

Discussion:

Time	Scale	Problem	Reaction	Coping skill
Years	10	Hurricanes Sandy	Crying	Talk it out
	9	Friendship & home	Prankling out	
	8	Getting hurt	Sad or	Expressive hands
	7		Scream	
Days/ Weeks	6	Lost your dog		
	5	When someone hurts you	Hurt Pretends	Count to 10
Hours	4	Someone asks you to do something you don't want to		
	3	Accidentally break something		
Minutes	2	Losing a game	Upset	Deep breaths
Seconds	1	Forgot your lunch	Disappointed	

Instructional time vs. de-escalation

Problem rating scale (Think Social! Michelle Garcia Winner)

Light aversion strategies



CASE STUDY 5

Mr. Ingram is a Freshman Language Arts teacher. He is struggling to maintain the attention and focus of his students in his 6th period class (after lunch) which includes multiple students who have ADHD. He is seeking proactive ways to address inattention and promote focus.

Discussion:

Sensory Integration Tools



Yoga 4 Classrooms - providing sensory input

Diffuser with oils such as calm, focus, peppermint

Classical music - Pandora internet radio, Piano Guys music, Dallas String Quartet

Gum and hard candy to increase focus

Sensory Starter Kits from Target or Dollar Tree 20.00 and under



<http://www.funathomewithkids.com/2013/05/sensory-starter-kit-for-under-20-from.html>

ROADBLOCKS AND SOLUTIONS

- Time constraints
- Space
- Funding
- Inexperience
- Negativity

Reinforcement - increases the likelihood of behavior to occur again

Positive - the **addition** of something (ex: providing sensory input while performing a task)

Negative - the **removal** of something (ex: removal of an undesired sensation) - **ESCAPE**

Punishment - decreases the likelihood of behavior to occur again

Positive - the **addition** of **SOMETHING** (ex: weighted input to stop head banging)

Negative - the **removal** of something (ex: removing an overstimulating toy)

MO's and Variables

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