

# Sensory Approaches to Enhance



**Peggy Swarbrick, PhD, FAOTA,**

**Rutgers University Behavioral Health Care**

**Deb McKernan-Ace, MOT, COTA, Program  
Director, Rutgers University OTA Program  
November 2019**

# Welcome!



# Objectives

At the end of this session, you will be able to:

- **Describe sensory regulation approaches**
- **List the seven sensory systems**
- **Identify practical strategies for individuals**
- **Identify environmental modifications**
- **Consider how to use resources for a sensory diet**

# What is Sensory Processing?

**Sensory Processing** is a complex set of actions that enable the brain to understand what is going on both inside your own body and in the world around you.

# Sensory Processing Definitions

- Registration- how easily your brain recognizes and responds to stimuli
- Integration- taking in sensations from different sensory fields at the same time, making sense of the combination and generating an adaptive response
- Modulation- allows the brain to keep pace with what is happening
- Defensiveness- protective response that should turn on when needed.

# Brain Work

- Your brain has a lot of work to do throughout the day.
- There is a continuous flow of information available from all the sensory systems.
- The brain must: sort through the information, prioritize the information, decide how to understand what is going on and decide what you will do based on the information available.

# Sensory Input



# What affects children's ability to process sensory information safely and effectively?

- Emotional state: stress, mood, social relationships, trauma
- Environment: home, school, work
- Demands of the task: multi-tasking????
- Predictability/past experiences: familiar stimuli, expected/unexpected
- Defensive component- fight, fright or flight????



# Sensory Modulation

- Ongoing process, often unconscious
- Each person has unique tendencies / preferences
- Affected by stress, trauma
- Habits and rituals play an important role





# Sensory Modulation Strategies

- Increase self-awareness
- Improve ability to engage in self-care
- Help people cope with stressors and triggers

# Sensory Modulation Strategies

- Increase self-awareness
- Improve ability to engage in self-care
- Help people cope with stressors and triggers

**Collaborative**  
**Trauma-informed**  
**Healing-focused**  
**Sensory-supportive**

# Visual

- Sight
- Light
- Integrates senses



# Olfactory

- Odors
- Links to emotions
- Links to memories



# Gustatory

- Taste
- Links to attention





# Tactile

- Touch
- Pressure
- Heat / Cold
- Rough / Smooth

# Auditory

- Hearing
- Sounds

# Vestibular

- Middle ear
- Balance
- Head rotation
- Location in space
- **IMPORTANT NOTE:**  
linear movement  
has longest lasting  
positive affects on  
regulating the  
sensory system



Photo by Nathan

<https://www.flickr.com/photos/gemsling/2805186876>

# Proprioception

- Positioning of body
- Sensory points
- Deep pressure through joints and muscles
- **IMPORTANT NOTE:**  
proprioceptive input has lingering positive affects on regulating the sensory system



# Sensory Modulation

Things you can do

# Sensory Processing Challenges

Oversensitive  
Under-responsive  
Craving/Seeker  
Avoider

# Observation

- What comes right before?
- Triggers?
- Calming activities?
- Attention grabbers?
- Distractions?
- Grounding events or actions?

# Sensory Modulation Activities

yoga

bath

exercise

rocking

touch

food



# How to Create the 'just right' sensory environment

- Color
- Light
- Noise
- Furniture
- Schedule
- Program resources
- Personal items
- Space

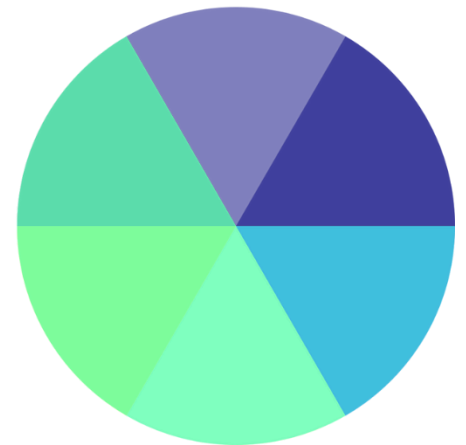
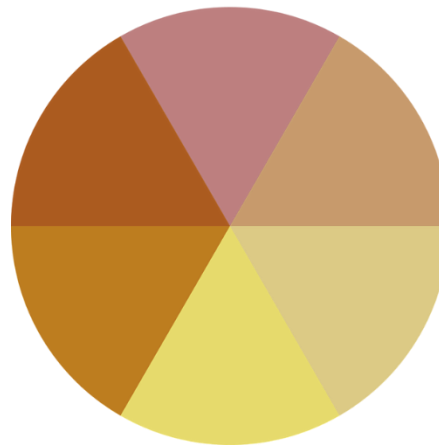
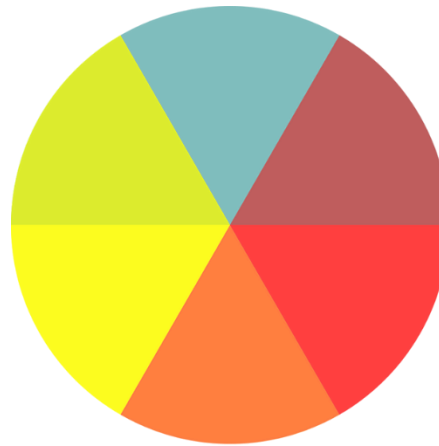
# Lighting

- Avoid fluorescent light  
(use light covers if needed)
- Natural light is best
- Install dimmer switches



# Color

- Avoid bright and white
- Earth tones are good
- Blues
- Greens



# Things you can add

- Beanbag chairs
- Posters
- Murals
- Colored lighting
- Projected light
- Meditation bell
- Water fountain
- Scents



# Offer choices

- Books
- Music
- Nature sounds
- Exercise balls
- Journaling
- Art / Crafts





# Sensory Room

# Sensory Rooms

- A safe space
- Practicing coping strategies
- Quiet activities
- Relaxation
- Exploring sensory preferences
- A place to go during transitions
- Chilling out before bedtime

# Sensory Retreat

- Mini retreat space
- Soft chair
- Pillows, blankets
- Bins





# Sensory Retreat Components

- Soothing tools, matched to the person
- Decreased sensory input
- Relaxing touch
- Calm, quiet
- Low light

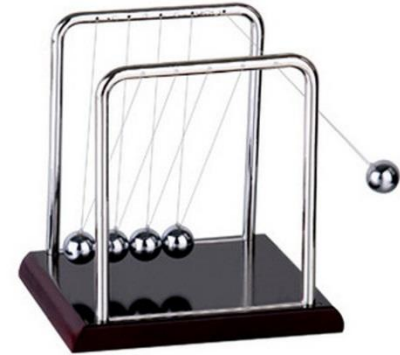
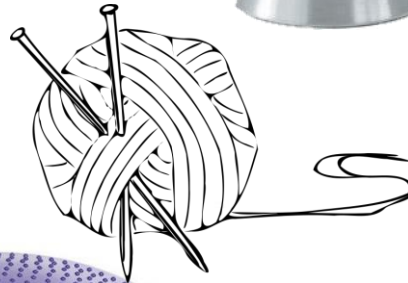
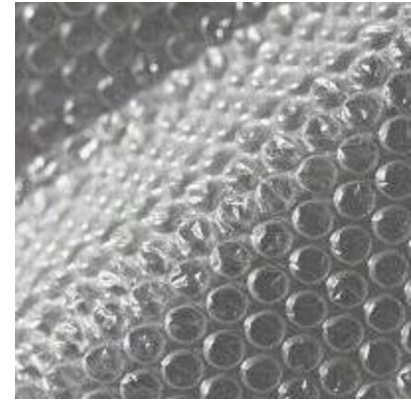
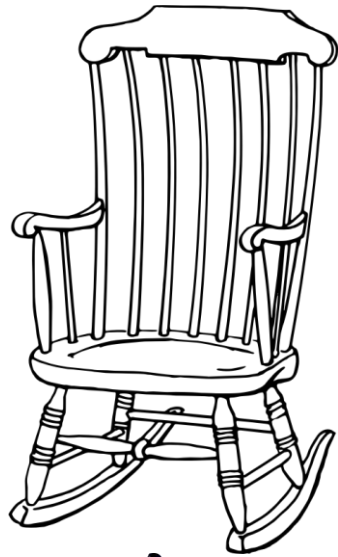


# Wellness Benefits

A sensory retreat can:

- Offer a safe place
- Provide tactile stimulation
- Assist in self-regulation
- Recover from or avoid a sensory meltdown
- Help get ready for sleep

# Sensory Diet



# Downloadable resources

## **Guide for Setting up a Sensory Room (1 page)**

<https://www.ot-innovations.com>

## **SPD Education Toolkit for Adolescents and Adults** (Spiral Foundation)

<https://thespiralfoundation.org/>

## **Sensory Connection to Trauma and Treatment...** (Karen Moore & Angela Balzarini-Leonhart)

<https://reachcounseling.com/>

# Websites

**A Sensory Life** (A. Voss)

<http://asensorylife.com/>

**The Alert Program** (M. S. Williams & S. Shellenberger)

<https://www.alertprogram.com/>

**Zones of Regulation** (L. Kuypers)

<http://www.zonesofregulation.com/index.html>

**Raising a Sensory Smart Child** (L. Biel & N. Peske)

<https://www.sensorysmarts.com/>

# Books

**Sensory modulation & environment: Essential elements of occupation, 3<sup>rd</sup> ed.**

(T. Champagne)

<https://www.ot-innovations.com/>

**Sensational Kids** (L. J. Miller)

<https://www.spdstar.org/>

**Living Sensationally: Understanding Your Senses** (W. Dunn)

<http://www.jkp.com/uk/living-sensationally.html>

**Is it Sensory, or Is it Behavior?** (B. Paris & C. Murray-Slutsky)

# Book Chapter

- Miller, L. J., Reisman, J. E., McIntosh, D. N., Simon, J. ( 2001). An ecological model of sensory modulation. In S. Smith Roley, E. I. Blanche, & R. C. Schaaf (Eds.). *Understanding the nature of sensory integration with diverse populations* (pp. 57-88). Austin, TX: Pro-Ed, Inc.

# Assessment

## **Adolescent/Adult Sensory Profile**

(C. Brown & W. Dunn)

Available from <https://www.pearsonclinical.com/>



# For more information

**Contact:**

**Peggy Swarbrick**

**[swarbrma@ubhc.rutgers.edu](mailto:swarbrma@ubhc.rutgers.edu)**

**Deb McKernan-Ace**

**[dam440@shp.rutgers.edu](mailto:dam440@shp.rutgers.edu)**