Overloaded: Sensory Integration and Inclusion for All!

Moderated by: Sommer Murphy: Museum of Discovery

Presenters:
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During The Panel: Housekeeping

Be Kind and Respectful and Take Care of Yourself

- Cell Phones
- Restrooms
- Water
- Handouts
- Manipulatives
- Q&A
- Feedback Forms
Learning Outcomes for Session

- Understand basics of sensory processing and integration
- Examine and evaluate various manipulatives and fidget devices
- Compare and contrast ways to adapt, modify, and/or integrate for sensory inclusion
For Resources and More Information
Scan the QR Code:
Listen and Write!

List All the Different Sounds You Hear
SENSORY INTEGRATION

What is it and why does it matter?

Presented by: Erin Neuman
Science City at Union Station KC
DISCLAIMER

- This presentation is for information purposes only!
- we are not licensed to give medical advice or diagnoses concerning sensory integration.
WHAT IS SENSORY INTEGRATION?

The term “sensory integration” refers to the processing, integration, and organization of sensory information from the body and the environment.

It is how we experience, interpret and react to (or ignore) information coming from our senses.
OUR 8 SENSES

- Sight (vision)
- Hearing (auditory system)
- Touch (tactile system)
- Taste (gustatory system)
- Smell (olfactory system)
- Proprioception (senses of body awareness and position)
- Vestibular (awareness of movement, balance, and coordination)
- Interoception (our internal sensory system that tells us what is happening inside our body, such as... hunger, bathroom, tiredness, emotions, etc)
A NOTE ON DEVELOPMENT

• The development of sensory integration occurs when we are young.
• It is part of our normal development—such as rolling, crawling, walking, and play.
• For some, sensory integration is less well developed or develops atypical.
Sensory Integration vs. Sensory Processing?

- both refer to the processes in the brain that allow us to take the signals from our senses, make sense of those signals and respond appropriately.

- Therapists and authors tend to use a particular term depending on where they trained.
WHO DEVELOPED THE CONCEPT?

• The concept of sensory integration was first developed and described by Dr A Jean Ayres in the 1970s.

• Dr Lucy Miller published a model of “sensory processing disorder” in 2006 based on Ayres Sensory Integration.

• Dr. Winne Dunn further developed a model of four patterns of sensory processing in 2007.
FOUR PATTERNS OF PROCESSING

The Dunn’s Model of Sensory Processing proposes four basic patterns of sensory processing which are emerged from the interaction of the neurological threshold and self-regulation.
- **Neurological threshold** - a personal range of threshold for noticing and responding to different sensory events in everyday life.
- **Low sensory threshold** - notice and respond to stimuli more (neurological system activates easier and more readily).
- **High sensory threshold** - often miss stimuli (neurological system requires stronger stimuli to activate).
- **Self-regulation** - a continuum of behavioral construct.
- **Passive strategy** - remaining in place
- **Active strategy** - adjusting one's position
A NOTE ON THIS MODEL

Individuals with extreme responses to a sensory event are likely to have interfered daily life.

This model provides assessment and intervention strategies for therapists and other professionals.
Foster a Neurodiversity Inclusive Environment

- Neurodiversity refers to the concept that certain developmental disorders are normal variations in the brain.
- May refer to: ADHD, Autism, Dyslexia, and Other Learning Disabilities
- There are many types of disability and neurodiversity. Even within a subgroup, remember everyone is an individual.
- Always Presume Competence!
Golden Rule of Neurodiversity

Nick Walker's Golden Rule of Neurodiversity: Respect the bodily, sensory, and cognitive needs of others as you would want your own to be respected, whether or not you understand the reasons for those needs.
SENSORY IS FOR EVERYONE!

Putting together information from our eight senses allows us to participate in everyday activities. By integrating, or combining all the information we get from our senses, we make sense of the world around us and successfully move through and interact in our environment!

Everyone has different sensory needs and their neurological threshold and self regulation can impact those needs.
Ways to Introduce (or lessen) Sensory Input

- Play-dough
- Putty/Slime
- Sand
- Water
- Scent Jars
- Finger Paint
- Cooking
- Squeezing
- Swinging
- Movement Breaks
- Dancing
- Tunnels
- Headphones
- Sunglasses
- Quiet spaces
- Giving options
- Prepare for transitions
- And more!
Sources and References

Sensory Brain Break
Jump In Jump Out
Get into a large circle with enough room to move in front of you and behind you.
If you agree with the described scenario, jump IN.
If you disagree with the described scenario jump OUT of the circle.
I enjoy being close to people who wear perfume or cologne

Jump In or Jump Out
(agree) (disagree)
I avoid elevators and/or escalators because I dislike the movement.

Jump In or Jump Out
I keep the shades down during the day when I am at home.

Jump In or Jump Out
I don’t like particular food textures (ie: peaches with skin, cottage cheese, chunky peanut butter).

Jump In or Jump Out
It takes me more time than other people to wake up in the morning.

Jump In or Jump Out
I find it difficult to work with background noise (ie: fan, radio, etc.)

Jump In or Jump Out
A Museum For All

Museum of Discovery
Little Rock, Arkansas
Inclusive and Fun for Everyone

- Tinkerfest and sensory overload
- Portable, pop up experience available for festival settings
- Community Partners
  - Arkansas Autism Foundation, Arkansas Autism Resource & Outreach Center
- Sensory Friendly Tent
  - Designed as a space for decompression and sensory inclusivity
  - Sensory tools & manipulatives and sensory exhibittes
Sensory Station

For some individuals, going to events can be overwhelming due to sensory overload. The Sensory Station offers simple modifications to help create an accepting and inclusive environment for everyone.

If you or a loved one has a sensory need, please visit the Sensory Station or ask us for more information!
Sensory Tent Materials

- Liquid floor tiles
- Sunglasses
- Gloves
- Compression body socks
- Fidgets
- Light cubes
- Headphones
- Fans
- Foam cushions
- Grounding tools
Sensory Exhiblettes

- Built “in house”
- Zand-garten
- Noodle Wall
- Peddle Lights
- Light & Shadow Table
What about everyday inclusivity?

- Making the museum more accessible on a smaller scale
- Sensory Backpacks
  - Available to check out at the admissions desk
- Each backpack includes
  - Sunglasses
  - Gloves
  - Grounding tools
  - Post it notes
  - Headphones
Move to a Museum for All

- Began partnership with University of Central Arkansas graduate student
- Museum Assessment
- Changes at MOD:
  - Staff-wide training
  - Began quarterly Sensory Friendly Sundays
  - Accessibility information on our website
  - Sensory Map
  - Museum Social Narrative
  - Plan for permanent Sensory Friendly space (Sensory Cove)
Museum Social Story

- Preparing for visits to the museum
Question Toss

What does your museum do or can do to make a “museum for all?”

- Catch the ball!
- Answer the question!
- Toss the ball to someone
Pop-Up Quiet Rooms

Sarah Iannotti – Manager of KidsTown at the Orlando Science Center
Goals

• Share OSC’s quiet room process

• Encourage you to get started, regardless of resources

• Get you thinking creatively about supplies and materials
What is a quiet room?

Generally, a quiet room is a space intentionally set aside to be used to take a break from an otherwise very stimulating environment.
Getting Started: Challenges

We could see that there was a need to add a quiet space for guests to take a break from the busy museum, but…

- We didn’t have a budget.
- We didn’t have a permanent space for this offering to live.
- We didn’t have anyone with specific expertise.
What’s in OSC’s Pop-Up Quiet Room?
No Budget? Get Creative With Supplies!

• We got grant funds to do double duty.

• We borrowed from our Events team.

• We borrowed from our Exhibits team.

• We borrowed from ourselves!
No Permanent Space? Try Flexible Setups!
No Expertise? There’s Value in Getting Started!

• It allows staff and guests to see the value and potential of a space like this.

• You can’t get guest feedback unless you get started!
Collecting Feedback

Quiet Room Experience Survey

1. Are you a member?
   [ ] Yes  [ ] No

2. Please list the ages of those in your party utilizing the Quiet Room:

3. Overall, how was your experience in the Quiet Room?
   [ ] Poor  [ ] Fair  [ ] Good  [ ] Excellent  [ ] Superior

4. How did you hear about the Quiet Room?
   [ ] Program schedule  [ ] Wayfinding sign  [ ] Have attended before and looked for it  [ ] Other (please specify): __________________________

5. Is there anything we can do to improve the Quiet Room?

Today’s Date: ________________
Remember...

• **No budget?** Get creative with your materials and how you source them!

• **No location?** Stay flexible and try out different spaces!

• **No expertise?** Do your best, get started, and seek feedback!
Thank you!
Manipulative Exploration

Look, Touch and Play with the items on your table and around you!

- What do they feel like?
- What can you make them do?
- How do they make you feel?
Sensory Friendly Mornings

San Diego Children’s Discovery Museum
Visual Activity Card

- We created the Visual Activity Card to help our non-verbal guests be able to navigate the museum.
- It's a visual representation of what is inside the museum.
- Starting from when they walk into our doors to all of our exhibits.
- As we change exhibits, we are also able to update them.
Visual Story

- Museum Visual Story
  - A Step by Step guide for a visit with the museum
  - Prepares them for what is inside and what can happen even before they come in
Manipulatives

- Puzzles
- Fidgets
- Weighted Blankets
- Sensory Swing
Sensory Bags

- Available for check out with the front desk, not specific to Sensory Friendly Morning
- Curated to have the following
  - Alerting Tools
    - i.e. light stick
  - Calming Tools
    - i.e. Noise cancelling headphones, sunglasses
  - Organizing Tools
    - i.e. whiteboard with dry erase marker, visual cards, emotion cards
  - Grounding Tools
    - i.e. squish ball
Sensory Bag Show and Tell!
For Resources and More Information
Scan the QR Code:
Thank you!
We appreciate your feedback!