

Relevance

This proposal relates to the Health strand because it focuses on the support of individuals with neurological differences. It relates to the Head strand because by supporting individuals' differences and needs, classrooms become more inclusive for students who may present with significant academic challenges that are actually not connected to the coursework.

Brief Program Description

Neurodivergent students are now seen as a larger percentage of the student population than previously recognized even when keeping a narrow focus on neurodivergences such as autism, ADHD, and other learning differences. This presentation will explain sensory-seeking vs sensory-avoiding, the 8 sensory systems, and how to support diverse sensory experiences in order to create a more inclusive environment for students, teachers, and other school staff.

Summary

Sensory differences in autistic individuals have been increasingly recognized by society as a whole. However, areas of limited information such as the extent of the differences, that the differences extend beyond autistics to include most neurodivergent individuals, and how to support the differences in an affirming manner create a large gap in understanding that then has a negative impact on the lives of neurodivergent individuals. At the core of the negative impact is the difficulty in regulating one's body and emotions which limits a person's ability to participate in society, and this presentation aims to provide information that will enable attendees to take a more affirming and inclusive approach.

This presentation will start with a brief overview of the concepts of overstimulation (also referred to as sensory overload) plus sensory-seeking and sensory-avoiding actions and how they can both be used for self-regulation. Through this regulation-focused lens, the 8 sensory systems will be discussed in detail to allow the attendees to understand the range of impacts of sensory input.

A model of dysregulation will be presented that shows the interplay between sensory input, emotional input, and executive functioning. This model builds on commonly recognized models of regulation and executive function by adding the new research and understandings of sensory experiences presented thus far. Some challenging behaviors may become seen as a result of sensory-driven dysregulation or sensory-driven executive dysfunction rather than simply bad behaviors.

All of this information will conclude with practical ideas to be used in classrooms and other educational settings in order to support sensory needs without placing unachievable demands on teachers and other school staff. Attendees will leave the session with theoretical knowledge that provides a depth of understanding necessary for building on successes and useful tools that can be put in place immediately upon returning to work after the conference.

Note: While the conference submission page encourages the use of person-first language, this proposal uses identify-first language as an affirming practice since it is shown to be preferred by a growing majority of the members of the neurodivergent community.

Evidence

This presentation is supported by three primary areas of research. The first area of research may be most familiar to educators and is on executive functioning; Dr. Thomas Brown's framework of 6 categories of executive functions is an example. The second area of research pertains to emotional regulation, and authors such as Dr. Stephen Porges will be cited here. Finally, most of the research used in this presentation will come from researchers and authors in the neurodivergent space and will include several citations from a range of perspectives.

American Psychiatric Association. (2022). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., text rev.).

Ashburn, M. & Edwards, J. (2023). *I will die on this hill: Autistic adults, autism parents, and the children who deserve a better world*. Jessica Kingsley Publishers.

Brown, T. (2008, February). Executive functions - describing six aspects of a complex syndrome. CHADD, 12-17.

Center on the Developing Child at Harvard University. (2012, June 18). InBrief: Executive Function: Skills for Life and Learning [Video]. YouTube. https://www.youtube.com/watch?v=efCq_vHUMqs

Hayden, C. (2023). *Different, not less: A neurodivergent's guide to embracing your true self and finding your happily ever after*. Murdoch Books.

Nerenberg, J. (2020). *Divergent mind: thriving in a world that wasn't designed for you*. New York, NY, HarperOne, of HarperCollins. Publishers.

Patriquin, E., Hartwig, E., Friedman, B., Porges, S., Scarpa, A. (2019). Autonomic response in autism spectrum disorder: Relationship to social and cognitive functioning. *Biological Psychology*, 145, 185-197. <https://doi.org/10.1016/j.biopsycho.2019.05.004>.

Porges, S. (2021). Polyvagal Theory: A biobehavioral journey to sociality. *Comprehensive Psychoneuroendocrinology*, 7. <https://doi.org/10.1016/j.cpnec.2021.100069>.

Price, D. (2022). *Unmasking autism: discovering the new faces of neurodiversity* (First edition.). Harmony Books.

Rogers, A. (2023). *Thriving together: An essential guide: finding support and mastering self-care for caregivers of children with differences and disabilities*.

Vogel, S., and Schwabe, L. (2016). Learning and memory under stress: Implications for the classroom. *Npj | Science of Learning*. <https://doi.org/10.1038/npjscilearn.2016.11>

Learning Objective 1

Participants will be able to identify and define the 8 sensory systems.

Learning Objective 2

Participants will understand overstimulation and how sensory seeking and sensory avoiding actions are acts of regulation.

Learning Objective 3

Participants will be prepared to immediately incorporate more inclusive practices for individuals with sensory differences.

Keyword Descriptors

neurodivergent, neurodivergence, sensory, autism, adhd, asd, neurodiversity

Presentation Year

2024

Start Date

3-5-2024 11:30 AM

Recommended Citation

Marion, Sam, "Supporting Sensory Differences in Neurodivergent Students" (2024). *National Youth Advocacy and Resilience Conference*. 59. https://digitalcommons.georgiasouthern.edu/nyar_savannah/2024/2024/59

This document is currently not available here.

DOWNLOADS

Since March 12, 2024

 PlumX Metrics (https://plu.mx/plum/a/?repo_url=https://digitalcommons.georgiasouthern.edu/nyar_savannah/2024/2024/59&theme=plum-bigben-theme)

Share

[\(facebook\)](#) [\(linkedin\)](#) [\(whatsapp\)](#) [\(email\)](#)

https://www.addtoany.com/share?url=https%3A%2F%2Fdigitalcommons.georgiasouthern.edu%2Fnyar_savannah%2F2024%2F2024%2F59%2F&title=Digital%20Commons%40Georgia%20Southern%20National%20Youth%20Advocacy%20and%20Resilience%20Conference%3A%20Supporting%20Sensory%20Differences%20in%20Neurodivergent%20Students
COinS