## Autism and Supporting Sensory Sensitivities

The autistic neurotype is marked by intense neuronal wiring, which translates to an intense experience of the world, one of which is having different sensory perceptions to non-autistics. We used to think that exposure therapy was the way to go when supporting sensory sensitivities.

#### Expose them to the stimulus enough and they'll get used to it, right?

That theory makes sense if you're thinking of a neurotypical person getting used to the cold water. They don't like it, but their skin habituates.

For autistic people however, being exposed to the experiences that we are sensitive to overwhelms our nervous system. Autistic brains are wired differently, and it's important to centre ourselves in the idea that we may never have had these reactions before. These sensory experiences register as threat, overwhelm, physical pain, which helps make those extreme reactions that autistic people make sense.

Research backs this up too, that autistic brains just don't habituate to sensory experiences (Jamal, Cardinaux, Haskins, Kjelgaard & Sinha, 2020) and anecdotally, autistic people report sensory trauma from prolonged exposure to stimulus. Using accommodations helps reduce sympathetic nervous system activation, which reduces the likelihood of distress behaviours. (Pfeiffer, Stein, Murphy & Shui C., 2019).

This means more cognitive energy to focus on the good things, like learning!

Jamal, W., Cardinaux, A., Haskins, A. J., Kjelgaard, M., & Sinha, P. (2020). Reduced Sensory Habituation in Autism and Its Correlation with Behavioral Measures. Journal of Autism and Developmental Disorders, 51(9), 3153–3164.



Pfeiffer, B., Stein, D. L, Murphy, A., Shui C. (2019) Effectiveness of Noise-Attenuating Headphones on Physiological Responses for Children With Autism Spectrum Disorders. Front Integr Neurosci. Nov 12;13:65. doi: 10.3389/fnint.2019.00065. PMID: 31798424; PMCID: PMC6863142.

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What do we do? Two things.

### 1) Lower nervous system stress.

The more stressed our nervous system is, the more heightened our sensitivities. Accommodations support with lowering of stress, but so does access to nature, movement, safe people and deep interests.

### 2) Provide accommodations

Collaborate with the family and individual to understand what they are sensitive to. Work to reduce the likelihood that they're exposed to the situation, as well as if they're in a situation, to reduce the intensity of the stimulus. For example, if an individual was noise sensitive, we might look at getting headphones (reduce intensity), as well as having breaks in a quiet space (reduce access to stimulus).

Thank you for listening deeply and creating an inclusive environment for autistic students.

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