



STIMMING: WHAT IS IT AND DOES IT MATTER?

“Stimming,” also known as self-stimulating behaviors or stereotypy, are repetitive body movements or repetitive movements of objects. Many individuals on the autism spectrum engage in routine stimming. There are different theories as to why individuals engage in self-stimulatory behavior, and it’s likely that the reasons are different for different persons. It may be that the behavior provides sensory reinforcement or sensory stimulation to the individual, or the behavior may be used to regulate sensory input, either increasing stimulation or decreasing sensory overload. Another theory is that there is a brain dysfunction in the areas controlling these behaviors or that the behaviors produce endorphins in the nervous system.

Stimming behaviors in individuals on the autism spectrum may include full body or more isolated motions. Examples of full body stims are body rocking and spinning. These motions affect the body’s vestibular sensory system (which helps with balance and orientation of the body). Other stims that do not affect the entire body, but which affect one or more senses, include hand flapping, squinting, staring at rotating objects (for example, a fan), stroking or rubbing surfaces of a certain texture, smelling objects, head banging, and squealing or making other vocalizations. Sometimes these behaviors can be disruptive and interfere with learning or work; others, such as head banging, may involve self-injury and be potentially harmful.

Self-stimulatory behavior is not unique to individuals on the autism spectrum and can be seen in neurotypical individuals as well. Infants and young children often engage in self-stimulating behaviors; however, as they age and mature, these behaviors start to decline and are replaced by other activities (playing with toys and social interactions, for example). Even typical adults sometimes stim. For example, many people tap their foot when impatient or anxious, twirl their hair when bored, or tap their fingers when intensely thinking.

Like neurotypical adults, not all individuals on the spectrum stim to the point of

being disruptive or harmful. When it is harmful, however, family members, teachers, employers, and others often wonder if the behaviors can be controlled and, if so, whether it is a good idea to stop the stims. The good news is that many of these behaviors can be reduced through environmental manipulations and teaching self-control. However, before trying to end the stims, the first step is to consider why they happen.

Many adults and children on the autism spectrum have reported that they stim to help adapt to their environments. Some people report that they stim to counteract an overwhelming sensory input or as a way to reduce internal anxiety. Others may feel the need for more sensory stimulation. For some, stimming may be a way to self-regulate behavior, to “keep it together,” so to speak. Sometimes the stimming behaviors may be calming; other times, they may be a way to maintain focus and attention. Because stimming is repetitive, it can easily become a habit for many individuals on the spectrum and may simply become pleasurable in and of itself, outside of any self-regulatory benefits. Indeed, self-stimulatory behavior may serve multiple functions across settings.

If a self-stimulatory behavior prevents an individual from engaging in more meaningful activities or has the potential to cause physical harm, it should be stopped. (The Healthcare and Treatment section of the CAR Autism Roadmap™ explains more about self-injurious behaviors and ways to keep loved ones safe.) Punishment should not be used to stop self-stimming behavior. More effective strategies involve gradually decreasing the stim behavior by teaching socially appropriate replacement behavior, using the stim behavior as a natural motivational reward, and teaching self-management skills.

There may be a time and place for some stims, however. For example, to the extent that self-stimulatory behaviors indicate anxiety or emotional arousal, they can be used as a signal for caregivers, teachers, and employers that the individual may need a break from the current environment. Many individuals on the autism spectrum can learn to request a break or find another alternative (although in most cases, stimming is preferred to tantruming) when they get the urge to stim. As noted above, not all self-stimulatory behavior needs to be extinguished. Careful examination of the behavior can help to identify times during the day when stimming behavior is permissible and the settings where it is okay, such as in the privacy of the individual’s own bedroom.

Finally, to the extent that stimming behaviors are sensory seeking, providing opportunities to receive sensory input throughout the day (for example, jumping on a trampoline, frequent opportunities to walk or run, or carrying heavy objects) may result in a reduction of self-stimulatory behaviors. Indeed, regular exercise has been shown to reduce self-stimulatory behaviors in some individuals.

Analyzing the reason for self-stimulatory behaviors should help guide families, schools, and employers in their reactions to the stims. Finding a way to balance work needs with the needs of the individual to self-regulate is key.

Related Articles:

- [Sensory Processing and Sensory Integration in Individuals with ASD](#)
- [Self-Injurious Behavior](#)
- [Functional Behavioral Assessment: What is it?](#)

Additional Resources:

- [The Stim List](#)

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