Sensory play, self-stimulating behavior, or "stimming" are all terms used to describe a group of behaviors seen in many delayed children. It is repetitive, it often appears compulsive, and it can occur using any of the senses. Parents usually describe it as something that doesn’t seem quite right.

As neurodevelopmentalists we view sensory play as negative, self-perpetuating, self-isolating behavior. High functioning children and adults do not engage in significant amounts of sensory play, but low functioning individuals do. Our goal, and the goal of the parents we work with, is to help each individual develop to their highest potential. Therefore, we discourage any behavior that will be counter-productive to high function.

Sensory play is a learned behavior that an individual develops for several reasons. Primarily, it feels good and so the behavior is repeated. With typical young children, playing with toes and fingers is pleasurable, and developmentally it is important as connections are made in the brain about where their body is, but the child soon moves on to the next exciting step in development. When senses are delayed or impaired, the child can become stuck and the behavior becomes obsessive and can actually stop development.

You may have heard some say that sensory play is beneficial, calming, a communication attempt, or even a type of psychological mechanism. It is possible that on an unconscious level some children use stimming to control their environment or to avoid the things they wish not to do. For example, if a child stims he may be able to avoid uncomfortable social situations. It is important to consider that many adults engage in various behaviors for the same reasons--- some to note are: smoking, drinking, drugs, overwork etc. Just because a behavior has a purpose does not mean the behavior is healthy or developmentally helpful.

There is often a metabolic component to stimming. When children are out of balance metabolically their stimming is increased. Appropriate metabolic intervention can often reduce stimming and occasionally halt it.

Repetitive sensory play creates endorphins, "happy," "feel good" chemicals in the brain, much the same as the "runner's high." These chemicals become addictive, causing the individual to repeat the activity in order to renew the good feeling. Thus, the child becomes trapped in a compulsive behavior. Development stops progressing, becoming more and more delayed, and for many children actually begins regressing.

We seek to stop sensory play, not as an end in itself, but as part of an overall treatment plan, which includes addressing the underlying neurodevelopmental causes of the behavior. The causes often relate to dysfunction in one or more sensory channels. To address sensory dysfunction, we need to: determine why the sensory information is not going into the brain correctly (where it would organize and progress to the next level), stop the sensory play, and address the root cause of the dysfunction with specific appropriate neurodevelopmental activities.

In order to stop a child from stimming we first need to be able to recognize it. The behavior will appear strange and repetitive, and there is often a compulsive element to it. Typically, a child who is stopped from stimming will become quite angry. Stopping stimming is equivalent to breaking an addiction such as smoking or drinking caffeine. The intensity of the anger can be a clue to parents as to how “stimmy” a behavior is.

To stop sensory play parents can redirect the behavior, distract the child and get them
engaged in other activities, or remove the implements the child is using to stim. It is usually best not to try to explain or make a huge negative thing attached to the stim. Nagging does not work and can sometimes intensify the behavior.

When the quantity of stimming has been reduced it can sometimes be refined into something more appropriate. An example is teaching a child who makes strange throat noises to form words.

The following is a list of stims in which children have engaged. This list is not a complete list of all possible stims. It is designed to give parents an idea of what behaviors function as sensory play.

**The “Stim” List**

**VISUAL:**

- dangling strings
- shaking toys
- wiggling fingers--in front of or to the side of face--
- most often in exactly the same spot
- lining up toys
- repeatedly stacking toys and knocking them down --excessively
- spinning wheels on toy cars/trucks
- pushing toy trucks and cars while tilting head to watch wheels
- watching out the window at cars driving by
- staring out window
- watching dust specks in the air
- watching ceiling fans
- staring at dining room lights
- looking sideways and/or upside down at TV
- nose on TV
- flipping pages without looking at pictures
- flipping toys
- wall walking
- opening/shutting drawers and doors
- spinning bowls
- spinning toys
- walking in patterns
- pacing
- splashing
- watching water
- running sand/beans etc. through hands while watching
- spinning coins
- looking at maps with nose about 1” away
- following roads on map with nose
- box hopping or
- lining up chairs, laundry baskets, boxes and storage
- containers in a path and stepping from one to another

**rocking:**

- from foot to foot
• back and forth while sitting
• side to side while sitting
• throwing or dropping toys over and over
• throwing toys over shoulder
• picking fuzz
• shredding paper
• looking out car window with peripheral vision (while giggling)
• walking down hall with head to one side
• standing on head on furniture
• running in circles
• rewind video while watching it rewind
• excessive drawing
• rubbing pencils together
• watching own reflection in doorknobs, toasters, windows
• at night, oven door, shiny faucets, tv screen
• when off, clean cars, blank computer
• screens and mirrors
• holding up small toys (usually characters) in front of TV while video is going
• perseverating on Thomas the Tank or other train stuff
• turning head in light patterns made by blinds
• obsessively pouring a "slinky" from hand to hand
• watching a yoyo with peripheral vision over and over
• multiple cartwheels frequently and excessively
• head shaking
• spinning own body or twirling around
• twirling self under own arm which is against a wall
• dangling pieces of grass or twigs
• twirling long hair or braids (girls) in peripheral vision

**VERBAL or AUDITORY:**

• blurting out loud and/or high pitched noises
• Repetition of odd noises/sounds
• talking to self-- excessive and nondirective
• echolalia of phrases, movies, songs........
• humming
• nose humming
• banging on everything
• throat sound--compulsive
• pounding toys or books
• excessive giggling
• excessive pretend play
• electronic games that repeat
• inappropriate giggling (often a sign that they are stimming)
• repeating a video scene over and over
• telling the same story over and over
• constantly singing
• reciting alphabet over and over

**TACTILE:**
• chewing on insides of cheeks
• rubbing clothing between fingers
• biting fingernails
• chewing fingernails
• scratching obsessively/to bleeding
• head banging
• teeth grinding
• spitting
• grabbing someone's arm with both hands and squeezing with head against arm
• rubbing face/hands
• bobbing up and down with top part of body while sitting in chair
• sucking on tongue

VESTIBULAR:

• spinning
• rocking
• swinging

OTHER:

• excessive pretending
• acting out a movie scene repeatedly
• sharpening and sharpening and sharpening pencils
• writing numbers or days of the week over and over
Sensory play is important to brain development because sensory stimulation for baby is essential for brain development. It can strengthen sensory related synapses and functions. Synapses in the brain are added or pruned based on life experiences. Sensory play for babies helps developing brains bridge nerve connections. But it isn’t just good for the little ones as brain development continues into adulthood. New and frequent experiences create connections that improve a child’s ability to do more complex learning activities. 2. Sensory activities allow children to develop their knowledge. The use of sensory material creates hands-on, self-directed, and self-centred play, and it encourages discovery and development. Sensory play is, quite simply, any activity that stimulates the senses. This includes the five main senses of touch, smell, sight, taste, and sound, as well as the two not-as-frequently-mentioned senses: vestibular (sense of balance) and proprioceptive (sense of where each body part is in relation to the rest). Below are the sensory play activities that have been featured at Gift of Curiosity. Click any image to be taken to the post that features the activity. Sensory bins.