

How Autistic Sensory Processing Works

Sensory Processing in Action

Based on my personal experiences, I will attempt to demonstrate autistic sensory processing in action. My senses seem to work on a quota system. I only have a set amount of energy or capacity to deal with incoming sensory information. I refer to this as my finite number of Sensory Processing Units. If most of my Sensory Processing Units are dealing with one type of input, fewer units are available for processing other types of input. Vice versa, if units are not needed by one sense organ, more units are available to tackle other stimulatory sensations that might be intolerable under different circumstances. For example, if I am in a dark room, I can tolerate more auditory chaos because my eyes are not busy. If I am in a quiet library, I can tolerate the bright lights slightly longer than usual because my ears aren't dealing with a lot of noise.

Sensory Overwhelm and Other Sensory Problems

Using my quota system metaphor as a backdrop, it is now easier to see where sensory problems might take root. Since each sense organ and the sensory system as a whole has a finite number of Sensory Processing Units, what happens when those units are completely used up?

Basically, I can't tolerate receiving any more sensory information. At this point, I am not able to continue conversing, answering questions, or socializing, since these activities require further sensory processing and integration. I need time to calm my nervous system. Usually, this means retreating to a quiet, dark spot where I will not be interrupted. Even kind

and gentle suggestions like "Would you like some help?" continue the sensory depletion rather than helping matters. It's best to leave me alone. The faster I can retreat somewhere to recharge without further sensory bombardment, the faster I'll be able to gather myself and rejoin whatever is happening. This is what autistic people call a sensory meltdown or being "overstimulated."

Other sensory problems include scrambling and sensory cross-firing. Some on the spectrum report difficulty sorting the multitude of incoming sensory signals into meaningful chunks of information that can be interpreted and acted upon. Others on the spectrum report "hearing" colors or "seeing" music. In my own experience, these cross-fires are not hallucinations. It is as if the nerves that control one sense organ send the signals down the wrong highway. Auditory information is processed by the sight nerves. Or colors and images wind up on the sound pathway. Scrambling and cross-firing can cause confusion, anxiety, or frustration and can also lead to sensory overwhelm.

Soothing and calming techniques. Certain types of stimulation can be soothing when an autistic person has reached sensory maximum. For example, rocking back and forth, touching an item with a certain texture, or concentrating on an area of special interest can be comforting and can bring an autistic person back to sensory equilibrium. We may also "space out" briefly, move our bodies, make gestures in repetitive ways, hyper-focus or "stim" on a toy or object, or play

word or number games to displace some of the tension involved in handling sensory input, even if we are not having a sensory emergency.