



## Understanding a Toddler's Sensory System

### How toddlers interpret their world via sensory input



Advising parents on how to manage their exuberant toddlers behaviour and instil discipline and boundaries is a common baby clinic consultation. Helping parents to have an understanding of how their toddler's sensory system works, will empower them to know when, why and how to play with their child, nurture, stimulate or calm them. It will also help them to enhance their toddler's physical and mental development with appropriate play and stimulation while at the same time keeping them happy, calm and confident.

During the toddler years, a child's body and mind will develop in leaps and bounds. However, the downside is that they are generally able to focus only on their own needs and desires. Toddlers have a will of their own, and will be able to only see things from their point of view. While their memory and imagination are developing, their thinking is still pretty much non-logical, as most toddlers live for the moment, have more power than sense and will be inclined to rush headlong into all sorts of behaviours with absolutely no regard of any danger, self control or consequences!

On the plus side, their language skills are developing, so they are more able to communicate, however, interaction with other children in the early years of toddlerhood is pretty limited to pushing, poking and shoving. Toddlers do eventually start to show an interest in other children, and by about the age of 3 years, will have learnt how to play with, as opposed to alongside, their peers, share toys and games and develop friendships. All a completely normal and necessary part of toddler development!

Children begin to learn through their senses from the day they are born. In fact, their senses start developing shortly after conception. The sensory system is the very special part of our nervous system that receives and processes information in the brain. It is through this process that our brains grow and develop, unlocking the door to all learning and knowledge. Here's a thought: How we interpret sensory information shapes our experience of our world, whilst at the same time, our sensory systems is shaped by our experiences of the world.

Let's go on a "journey of the senses" to see how toddlers interpret their world via their sensory system. When toddlers are exposed to sensory input their behaviour will vary depending on how their nervous system interprets the input. All their senses (hearing, sight, touch, smell, taste and the body senses) work together to form a complete picture of what is going on around them. A toddler's nervous system responds to her world either with enjoyment and appropriate interaction to the stimulation, or, when exposed to excessive or distressing sensory stimuli, by becoming overwhelmed by it, causing her to become irritable and argumentative.

As babies grow into toddlers, it is still important that parents or caregivers, regulate the type of sensory input they receive, as well as to filter out excessive sensory input by avoiding over-stimulation to prevent sensory overload. Some children register every stimulus in their environment, battle to habituate to their environment and therefore cannot stay focused on one activity for long. Other toddlers may need a lot more intensive stimuli or input to interest them in an activity in the first place and to sustain that level of interest. In order for toddlers to benefit optimally from their

environment, and of course, play is the best way to stimulate a young child, they need to be exposed to a variety of different stimuli on a regular basis. This would include:

- All movement activities
- Lots of touch (tactile) exploration
- Exposure to a variety of food textures and tastes, so that they can experience biting, chewing, sucking, blowing and swallowing.
- Plenty of auditory stimulation in the form of talking, singing and story-telling.

It is important to also understand that this wonderful and important sensory system can get overloaded very quickly. It is never too late to gain insight into how a child's sensory system works, and in particular how they will signal to you when they are in sensory overload.

When toddlers are ready to play and take in new experiences, they are relaxed, but alert and interested in their environment. They seek eye contact, and will ask and respond to questions, smile and laugh. Their little bodies are relaxed, with smooth body movements – no aimless wandering, flailing arms or running around purposelessly. All children are different and have varying sensory profiles and thresholds to manage sensory input, but after a period of stimulatory input, toddlers begin to act in a way that shows you that they are feeling uncomfortable and overwhelmed with the stimulation around them, and that they are trying very hard to stay calm and happy. Toddlers often begin to suck their fingers or wrist, or chew excessively on an object. They also fidget, whine and have decreased eye contact and a scowly facial expression. These signals are often perceived as being “naughty” or “badly behaved”. Parents need to be taught to act on these signals, and be encouraged to modulate the sensory environment for their child by removing their little ones from the play environment so that they can become calm again. Often a few minutes of quiet time is all that is necessary for a little toddler to re-balance his sensory system and to feel ready to tackle the world once more.

If toddlers are not successful in calming themselves, or if the parent or care giver has not modulated the environment for them, they will become overloaded with sensory input and become whiny and clingy. At this point no toddler will benefit from any further stimulation or play, and it won't be long before tantrum behaviour manifests. Sensory overload is one of the primary causes of tantrums and seemingly “bad behaviour” in small children. A balanced sensory diet of both stimulatory and calming input, behavioural boundaries and regular routine and bedtimes are necessary for a toddler to grow and develop optimally and be “well behaved” most of the time.

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