

## How Three Extra Senses Can Impact Children's Sensory Integration



Our SENDI early years specialist Natalie explains what the three extra senses are and how they can affect children.

### **Sensory Integration**

Understanding how and why children might react will help us to support children at home and in nursery or schools. Behaviour is often an output of an unmet need. Sensory integration is a neurological developmental process, that supports all parts of daily life allowing us to function well in different environments by using memories and experiences stored in our brain to support reactions to new situations in the environment and through our body.

“The neurological process that organises sensation from one’s own body and from the environment and makes it possible to use the body effectively with the environment” Jean Ayres (1972)

### **Ways Sensory Integration Difficulties Might be Displayed**

Sensory seeking and avoidance behaviours

Behavioural difficulties

Difficulties with concentration and attention

Difficulties in physical activities and coordination difficulties

Difficulties with unstructured play at playtimes

Difficulties with managing transitions

Difficulties with loud environments

Difficulties separating from care giver

Avoiding or seeking messy/tactile play and exploration

Distracted

Poor motivation

Reduced social skills or interaction

Poor handwriting

Poor visual skills

Struggles to follow a plan and organise

### **Three Additional Senses**

When we consider senses, people are often only aware of five: sight, sound, touch, taste, and smell but occupational therapists consider eight senses of integration therapy. Let's look at the other senses in a bit more detail.

#### **Vestibular System**

The vestibular system function is to maintain balance and space around us and allows us to move smoothly within the environment. Children who have integration problems with the Vestibular system can often be seen as clumsy and may enjoy big movement activities like jumping, swirling and swinging.

#### **Proprioception**

Proprioception is how our brain and body work together to coordinate movements such as getting dressed or eating. When these receptors are interrupted or not processed correctly children may have difficulties getting dressed, tying shoelaces or applying too much pressure to things and breaking things.

#### **Interoception**

Interoception is how our body tells our brain what is happening on the outside and inside of our body. This sense contributes to primary functions such as feeling hungry and thirsty and supports us to identify feelings we need to connect a sensation within our body to the emotion we are feeling enabling us to self-regulate. Children who struggle with this may go from 1 to 10 on scale regulation with no incremental in between. They are unable to identify they are becoming anxious or upset and may struggle with knowing when they are hungry or thirsty.

### **Identifying Support Needs**

If you can identify with this or feel your child is showing signs of sensory integration difficulties, then speak to the settings SENCO and your GP. A good place to start is a hearing test and sight test followed by an occupational therapy referral who can support with implementing a specific sensory assessment and sensory diet.

Your nursery or school SENCO may also be able to work with you to suggest sensory activities and help implement elements of a sensory diet. Identifying key times that your child is under or over stimulated will help in planning activities to meet that sensory need.