

Sensory processing disorder: Understanding a client's touch needs

Have you ever enjoyed singing to a fun song on the way to work, but after work, it feels way too loud, and you need to turn the volume down? Do you enjoy a hug with your child in the morning, but at night when they jump on you or want a snuggle, you feel as if you need extra personal space?

Sensory processing: the neurology of how we feel

That's the effect of your nervous system feeling fatigued after a day of dealing with things at work. The nervous system is full of capacity at the start of the day, but as we 'pay attention' to the sensory demands of our daily lives, our nervous systems also 'pay'. The result is that we are more aware of sensory demands, or even find ourselves unable to cope with certain sensory stimuli.

This complex neurological defence mechanism is called sensory processing, and it is designed to help us manage the sensory input that we experience in everyday life. It influences the functional skills in most individuals and is crucial for coping with the information we receive through our senses.

Another way of thinking about this is that the nervous system (which includes all the

sensory systems), is like a 'cup of capacity'. We all have different capacities for each of the different senses. Over the day, we fill our 'cups' with all the effort, situations, and environments that we encounter throughout the day. While we have more capacity in the 'cup' we are in the coping zone, but once we reach the top (which we can also think of as our neurological threshold) the nervous and sensory system is at capacity and we can feel overwhelmed or unable to cope.

Sensory processing disorder: when the defences don't work

Sensory Processing Disorder (SPD) is a condition that affects how the brain processes sensory information (stimuli). Sensory information includes the things you see, hear, smell, taste, or touch. SPD can affect all your senses, or just one.

SPD exists 'when sensory signals don't get organised into appropriate responses and a person's daily routines and activities are disrupted as a result'¹.

This may mean that in some people, their 'cup' or capacity might be like a tiny espresso cup, or it could be like a giant drum. A person with a small 'cup' has a low threshold, meaning that one or more of their senses is easily overwhelmed.

Small 'cup' – the radio is too loud

So, let's go back to our example of having the radio on for the drive to and from work. On our way to work, our neurological or sensory 'cup' is like a large mug. We probably had a good sleep, went for a walk, and the nervous system is primed for the day. We feel good, and it's fun to sing along to a great song on the radio. Our 'cup' is at full capacity.

But by the end of the day, our 'cup' has dealt with a lot of different sensory inputs. It has shrunk to the size of an espresso cup, and we no longer enjoy the radio pumping out an

energetic song. It feels too loud because our 'cup' no longer has the capacity that it had in the morning.

Too much touch, or not enough?

The same concept can be applied to the touch system. You see, different ways of touching affect different neural pathways. Firm, deep touch pressure is the most calming sense (dorsal column pathway). It elicits a feeling of being safe and leaves us with that feeling of well-being and relaxation.

But light touch elicits a response from the anterolateral system, which is linked to alertness for potential danger. For therapists, this is important to remember when providing massage services to clients. It's essential to check with them to ensure that you're supporting their nervous systems with the right amount of touch pressure which in turn supports their threshold.

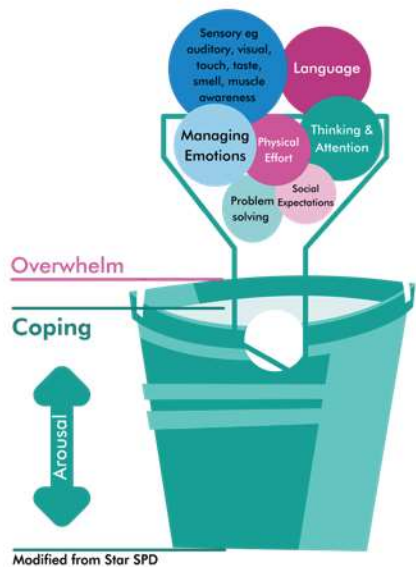
Deep touch pressure in the right amount for each client will help them to be calm and relaxed and will give them more capacity.

When a massage therapist gets it wrong

Last year, I was on holiday, and I booked in for a massage to relax. I love my massages and for me, getting a massage before or at the start of a holiday is like fast-tracking my relaxation by weeks within an hour. I call it my holiday sensory hack.

However, on this occasion, I had an uncomfortable massage. I came away with my touch cup and nervous system overwhelmed rather than calmed.

What went wrong? Perhaps it was a different technique than I was used to, but the massage therapist didn't check to ask if it was a good level of pressure for me, and most of it consisted of very light touch. This flooded my touch system with feelings of being unsafe. I was





hyper-vigilant as a result, and the experience was not relaxing at all.

Understanding sensory processing disorder for your massage or myotherapy practice

My example above may describe how a person can be oversensitive or overresponsive to touch input, but for a person with sensory processing difficulties, they feel oversensitive all the time, even during a firm touch massage. Many people have low thresholds or 'small cups' for their touch system. This applies to both children and adults. Many parents who bring their child to occupational therapy, for example, speak of how they were oversensitive to touch or textures as a child, and it's an issue that can be multi-generational. Many people with sensitivities to touch and texture will speak of how they are or were extra sensitive about their hands coming into contact with certain textures or didn't like playing with paint or mud when they were younger, or even as an adult.

Sensory processing, autism and ADHD

In the last nine years, researchers have been able to do brain scans and identified that sensory processing disorder can be a standalone disorder or can present comorbidly

as a part of autism and ADHD. This is fascinating as with sensory processing difficulties, autism and ADHD specifically, different parts of the brain are impacted.

Researchers found that boys with SPD had significant differences in brain structure compared with neurotypical boys. Other studies have shown that there is a strong correlation between ADHD and autism spectrum disorder, with children on the spectrum having a 93% chance of also experiencing some form of sensory symptoms.

Sensory symptoms can fall into three categories

1. Hyper-responsiveness is when a person has an overreaction to some type of sensory input, such as covering their ears if another person sings.
2. Hypo-responsiveness is when a person is under-responsive to sensory input, such as not turning down the radio when it's too loud.
3. Sensory seeking occurs when a person seeks extra sensory input; an example might be a child who touches toys repetitively or engages in a lengthy visual inspection of an object.

Questions are the best answers

For a clinician or a therapist, a thorough history and clarity are the best options for a

good client experience. Check in with your clients before, during, and after treatment to ensure that you deliver the right service that meets their needs. Many adults may also be on the spectrum but have not been diagnosed, so questions are the best answers for your client to have a good experience with you and feel safe.

I look forward to meeting many of you in my upcoming webinars where I'll explore more about understanding sensory processing and autism, and the importance of the touch system for self-regulation for those with autism and sensory processing difficulties.

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Reference

1. Miller, LJ 2006, 'Sensational Kids: Hope and Help for Children with Sensory Processing Disorder (SPD)', Penguin, New York.