



Episode 23: Understanding Interoception and its Role in Sensory Processing

Hosts: Tracy Stackhouse · Cory Dundon · Michelle Maunder



LISTENER NAME

DATE LISTENED

TOTAL LISTENING + REFLECTION TIME (MINS)

CPD HOURS CLAIMED



Episode Summary

How does interoception change as we move through the polyvagal states? That is the thread we follow here, from the receptors that quietly re-tune themselves depending on whether we feel safe, to the mismatch in the insula that turns a gut signal into oh, something is off. It is a deep one, full of everyday moments, a touch on the neck, a full bladder in a meeting that ran long, that make the neuroscience land. We set out to understand interoception in the mix of polyvagal theory: how the body's internal signals shift as we move between a regulated ventral state, sympathetic mobilisation, and dorsal shutdown, and what that means for the kids in front of us. Tracy takes us deep into the receptors, and the lovely, surprising idea that they are not fixed, they become more open or more bristly depending on whether we feel safe and connected. We keep landing it in the everyday: Tracy's daughter who only wants her neck touched in the right context, a little boy who no longer needs to touch to share his joy, and Michelle nearly wetting her pants in a meeting because the signal never got loud enough until it was urgent. Along the way we get into the posterior and anterior insula, the moment neuroception tips into awareness, and why we have to treat both the valence and the discrimination when we work on something like toileting. It is a meandering, generous conversation that, as ever, keeps finding its way back to the clinic.



Resources & Mentions

- Interoception is bigger than the viscera, the interoceptors are everywhere, and feelings and emotions are part of interoception too.
- The receptors re-tune to our state, the same receptor is more open when you feel safe and more bristly, more defensive, when you do not.
- Neuroception tips into awareness at the mismatch, in the posterior insula until a mismatch between what is expected and what is happening pulls it up into the anterior insula.



Reflection Prompts

Take a few quiet minutes to consider each prompt and write freely. Add or remove a prompt block to suit the episode.

- 1** We argue interoception is bigger than the viscera, that feelings and emotions are part of it too. How does broadening the category change what you notice in a child?

- 2** The same receptor is more open when a child feels safe and more bristly when they do not. Think of a child whose interoceptive signals seem unreliable: how might their state of safety be shaping what they can feel?

- 3** Context decides how a sensation is read, a touch on the neck is delicious in one moment and a threat in another. Where might you be reading a child's response to input without accounting for the context they are in?

- 4** Michelle's signal never got loud enough until it was urgent. For a child you support around toileting, feeding or sleep, how might you treat both the valence and the discrimination, not just the behaviour?

5

Neuroception tips into awareness at the moment of mismatch. How could you use safety and connection to help a child feel their internal signals before they reach the urgent, too-late point?
