



Episode 21: Somatosensory Processing and Praxis

Hosts: Tracy Stackhouse · Cory Dundon · Michelle Maunder

LISTENER NAME

DATE LISTENED

TOTAL LISTENING + REFLECTION TIME (MINS)

CPD HOURS CLAIMED



Episode Summary

Last episode we kept dodging praxis, so this time we go straight at it, starting with the body-based cluster, somatodyspraxia, and the body map that makes skilled movement possible. We start with somatodyspraxia, the body-based dyspraxia, and the clear, almost startling signs of it, like the little one Cory watched bump one eyebrow and rub the other. From there Tracy takes us into the body map, the recently updated homunculus, and the idea that it is not a static picture but a dynamic thing that has to keep up with movement. We spend real time on feedforward and feedback, which turns out are not a tidy sequence but two processes waiting on each other at once, and then on the part that matters most clinically: how modulation and discrimination interweave, why the somatosensory system is the primary inhibitory system, and how a co-regulator holds a child at the wobbly, tipping point of a new experience until curiosity can win. There are toddlers meeting sand for the first time, a baby learning on the grass, and a reminder that often our most powerful intervention is simply noticing what no one else was trained to see.



Resources & Mentions

- Somatodyspraxia and the body map, when a child cannot reliably tell elbow from hand, learning to colour with a crayon becomes a huge task, traced back to undernourished tactile discrimination and body schema.
- The homunculus is dynamic, not static, drawing on recently updated research showing the body map keeps pace with movement itself.
- Feedforward and feedback at the same time, taught as sequential but really simultaneous, with corollary discharge changing how we read a child adapting to an unstable surface.



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** Think of a child you'd describe as clumsy or careless with their body. How confident are you that tactile discrimination and body schema, rather than effort or attention, are at the root, and what told you?

- 2** Cory noticed a child bump one eyebrow and rub the other. Where in your own observation could you slow down and notice the small body-map signs no one else is trained to see?

- 3** We reframe the body map as dynamic, having to keep pace with movement. For a child you're working with, how might you build the map through movement rather than treating it as a fixed picture to correct?

- 4** Feedforward and feedback turn out to be simultaneous, not a tidy sequence. How does thinking of them as interwoven change the way you set up an activity on an unstable or novel surface?

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We argue modulation has to clear the slate before discrimination can work. Consider a child stuck at the wobbly, tipping point of a new experience: how could you hold them as a co-regulator until curiosity wins?
