



Episode 17: Vestibular Based Treatment: A Case of Gravitational Insecurity

Hosts: Tracy Stackhouse · Cory Dundon · Michelle Maunder



LISTENER NAME

DATE LISTENED

TOTAL LISTENING + REFLECTION TIME (MINS)

CPD HOURS CLAIMED



Episode Summary

We pick straight up from Episode 16 with the young woman Tracy treated, diagnosed with autism, minimally verbal, devoted to all things Disney, and so rigid in her posture she had not leaned over to pick anything off the floor since she was seven or eight. Years of resources had focused on engagement and communication, and a physical therapist had been working on fluidity with Adele and a treadmill, but nobody had asked the underlying why. Tracy did, and recognised gravitational insecurity: at the top of an open staircase the woman froze, as if stepping into unbounded space, and any movement of her head out of upright brought a fear response, held breath, a trapped look. Tracy's first move was not technique, it was being received and understood, and noticing the woman's own regulation, a shudder breath as her feet landed on solid ground.

From there the treatment is a thing of beauty. On a platform swing, feet planted, Tracy displaced her the slightest amount until it felt a little uh-oh, then helped her land it in her feet and her breath, pairing tiny proprioceptive shifts, hands from pronation to neutral on a pool noodle, to the movement, so the vestibular-postural mechanism began working in synchrony. They built anchor activities, yoga, Adele dance parties, the swing, and worked the sequence of head, postural and eye movements the way the Astronaut Training protocol unfolds, without running the protocol, always pairing vestibular discrimination with modulation. About three months in, her gait on the stairs changed, she found rotation and feed-forward control, the sense that lets you anticipate your own movement rather than have everything happen to you. The conversation widens into the vestibular system's role in body schema, muscle tone (the vestibulospinal pathway and the reticular activating system), and a lovely reflection on the art of clinical practice: hold all the theory, then meet the person where they are, set up safety and agency, and notice-and-respond, moment by moment.



Resources & Mentions

- Jean Ayres on gravitational insecurity and feed-forward control; *Sensory Integration and Learning Disorders* (1972), the vestibular sections (around pp. 57-58) referenced here. Note: long out of print.
- The vestibulospinal pathway and the reticular activating system, on the vestibular system's influence on whole-body muscle tone and readiness for action.
- Sheila Frick's Therapeutic Listening (modulated music; Quickshifts) and the Astronaut Training protocol, used as a sequence to think with rather than a protocol to run.
- The Spirit model's pairing of vestibular discrimination and modulation (attain, maintain, challenge).
- Check out DFX's Learning Journeys to build your clinical reasoning skills: <https://dfxlearningjourneys.thinkific.com/>



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 A decade of avoidance had been treated as behaviour when the root was gravitational insecurity, a vestibular issue no reward could reach. Where might you be reading a child's avoidance as behaviour when a sensory cause sits underneath?

- 2 Tracy's first move was not technique but being received and understood. For a fearful or rigid child, how do you establish felt safety before you introduce any sensory challenge?

- 3 The treatment paired tiny proprioceptive shifts to vestibular movement, landing each one in the feet and the breath. For a child with gravitational insecurity, how could you grade a challenge to the smallest tolerable uh-oh and help them land it?

- 4** Feed-forward control is the sense that lets you anticipate your own movement rather than have it happen to you. For a child who seems at the mercy of movement, how might you help them build that anticipatory control?

- 5** The closing reflection is to hold all the theory, then meet the person where they are and notice-and-respond, moment by moment. Where could you trust that responsive, in-the-moment stance more, rather than running a protocol?
