

'Traffic Jam in My Brain' Summary post PD

Fundamentals:

'Sensory integration'

- organisation of sensation for use/turns sensation into meaningful information.

'Sensory Integration Dysfunction'

- flow of sensation is disorganised, inefficient and not integrated
- difficulty forming perceptions, behaviours and learning

'Sensory modulation'

- turns the "volume" up and down
- relevant vs non-relevant

'Sensory discrimination'

- receiving and interpreting sensation in a precise way

Sensory systems:

- first system developed in utero
- base for all CNS functions- cannot have optimal function in cognition/intellect without well-developed sensory system

Core:

- strong core is vital for good respiration > good respiration is required for good attention
- Core development: 1. Mouth, 2. Flexion/extension, 3. Lateral flexion/extension, 4. rotation
- trunk flexion/extension is required before core rotation

Sensory Defensiveness vs Sensory Overload vs Low Arousal

Sensory defensiveness:

- overactive protective response
- screaming, biting, throwing things

Sensory overload:

- "shut down" mode
- appearing lost, avoidant
- appear to have low arousal
- inefficient pain registration
- oral/olfactory seeking- smell is the last sense to shut down

Low arousal:

- flat affect, belly breathing, internally rotated shoulders, low tone
- "Eeyore"

Primary modulators:

- heavy work/movement- 20-30 mins of heavy work last in system for 2-2.5 hours. Aim to complete this before heightened state/meltdown
- deep pressure- needs to be passive and move with individual i.e. brushing, massage. Weighted blankets can become ineffective over time- Jereb does not recommend. These will alert/calm depending on what's needed.

Sensory diets

- Needs to start in morning- brain chemistry 're-boots' in the morning/starts fresh
- Heavy work/movement = sensory meals
- Fidget toys= sensory snacks
The more frequent the meals, the less you will need the snacks
- Look for the behaviours i.e. running away, throwing things- clues to what is needed in sensory diet.
- If not implemented with positive/playful intent= will not be ineffective
"yucky massage", "forced treadmill" study= will not produce dopamine

Breathing:

- Optimal breath: not with joints locked
- Being on uneven surfaces, or pushing against resistance automatically unlocks joints to allow optimal breaths.
- Diaphragmatic breathing: Crawling, lying on back with knees up
- If you are a mouth breather you will have learning and attention difficulties, will not have REM sleep
- "smell the soup, cool the soup"
- High arousal: resistive such and blow (narrow straw)
- Low arousal: easy to blow, big sounds, lots of bower i.e. animal eye poppers

Emotional perception:

- 8th sense
- emotional receptors in the ear- children do not hear what you say, they hear what you're thinking and feeling.

Rhythms & entrainment

- entrainment: the ability of a stronger rhythm to cause a weaker rhythm to sync with it.
- poor regulation = poor rhythm
- rhythm tools: body, music, drum, equipment, voice
- us as humans function off of internal and external rhythms
- external rhythms can impact internal rhythms
- stopping starting the rhythm is important so the person doesn't habituate- keeps them engaged
- one beat per second is said to be healthiest rhythm- slows body functions (respiration, speech, heart rate, puts mind in a state for optimal information take in.
- typically start by meeting the individual's rhythm, then slowly reduce.