

Re-tune and Reconnect!



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Neurologic Music Therapists

1

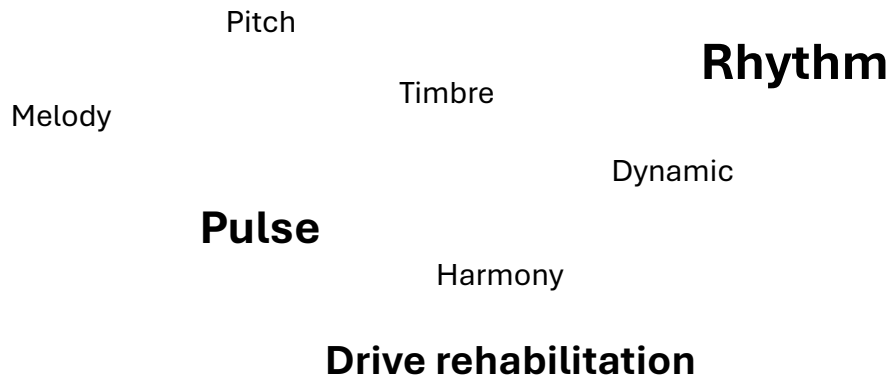
Re-tune and Reconnect!

Pitch
Rhythm
Melody
Timbre
Dynamic
Pulse
Harmony

Drive rehabilitation

2

Re-tune and Reconnect!



3

Re-tune and Reconnect!

- [Frontal Lobe](#) - enhanced executive function
- [Temporal Lobe](#) - processes what we hear across both hemispheres (language left, music right)
- [Broca's Area](#) - produce speech/express music
- [Wernicke's Area](#) - comprehends language, analyses and understands music
- [Cerebellum](#) - coordinates movement, stores muscle memory
- [Nucleus Accumbens](#) - music increases dopamine, produces pleasure and reward response, similar to addictive drugs
- [Amygdala](#) - processes and triggers emotions ('shivers' moment in music)
- [Hippocampus](#) - central processing structure, helps us retrieve memories and regulate emotional responses. Music can increase neurogenesis in this region
- [Hypothalamus](#) - links endocrine and nervous systems, controls hormones, keeps the body's 'status quo'. Music can increase/decrease heart rate or blood pressure
- [Corpus Callosum](#) - music requires logic and intuition so uses this part of the brain that enables right and left hemispheres to communicate
- [Putamen](#) - processes rhythm and also regulates body movement and coordination.

4

Case study: Patricia, post Stroke, RAS intervention



5

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6

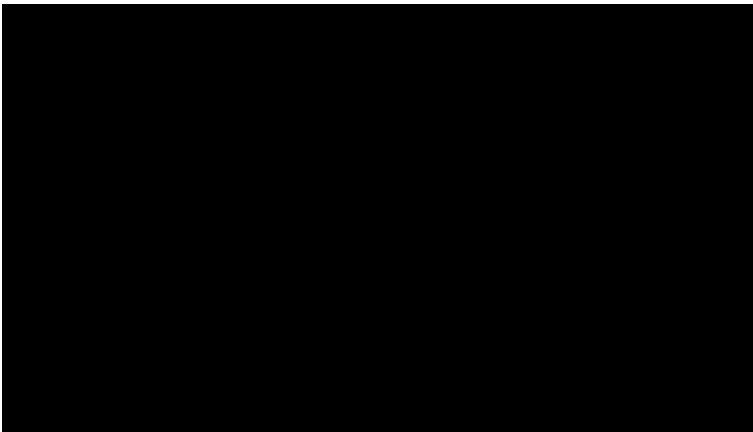
Singing!

Senua Dedende, Senua

(Sen-wa Day-den-day)

7

Case study: Nina, MIT intervention



8

Case study: Peter, MIT/TS intervention

