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centre for
positive psychology
and health

Session 7: Know your Brain –Dr Trudy Meehan

The Science of Health *and Happiness* *for young people*

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Gut, heart, brain – Dr Barbara Fredrickson

- How do we know the difference between smiles?
- Mimicking smiles is the key
- Moving the same muscles, we activate the same neural pathways and we feel it in our bodies.
- We feel a little of what the other person is feeling when we make eye contact and mimic their facial expression
- Eye contact triggers mimicry
- We need to mimic so that we can understand the subtleties of another person's intentions.
- Implications for online versus in-person interaction?

Paying attention to your gut

- Value of connecting to your body and paying attention
- Times when children or adolescents are told to disconnect from their guts/hearts (be polite! that's rude!).

Your brain is not fully developed until you are 24/25

- Not great at planning and taking consequences into account
- Overly self conscious



Pruning

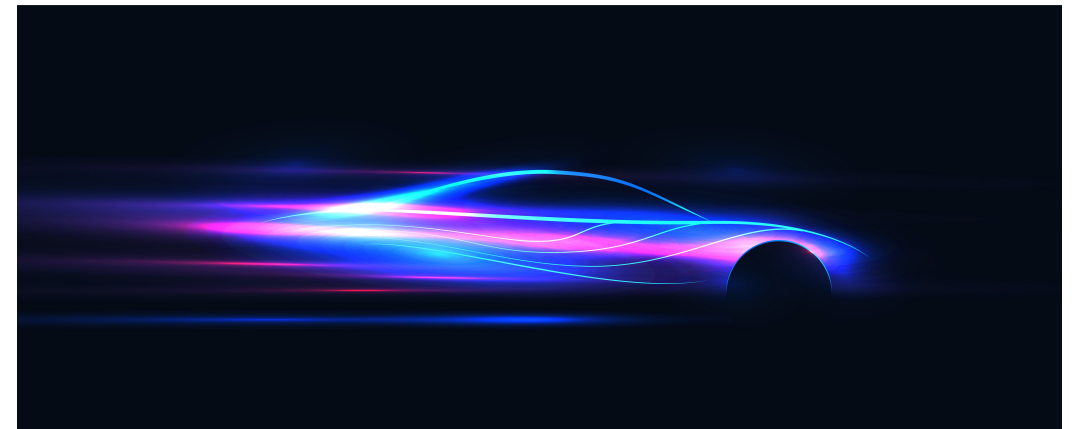
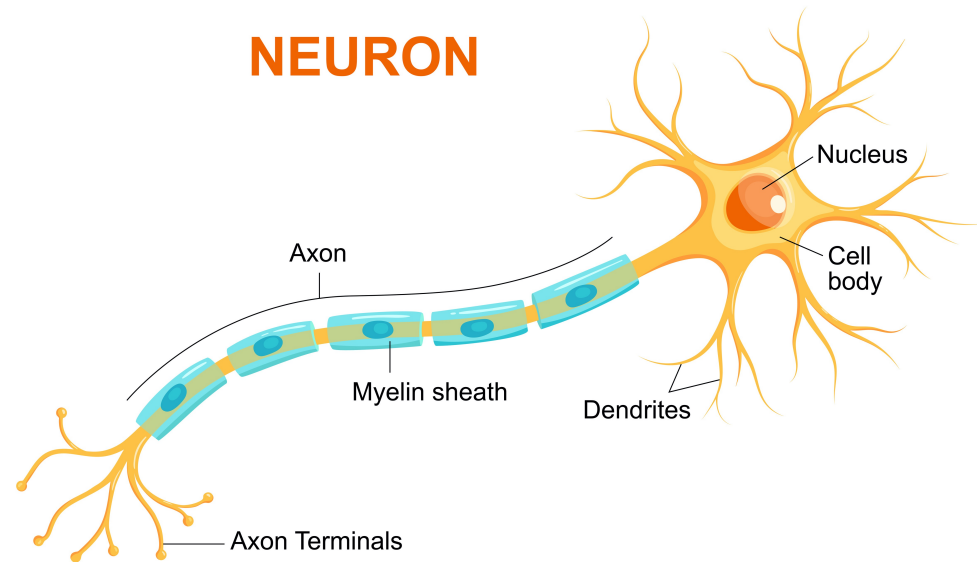
- Starting to specialize
- Some neurons getting pruned away



Your brain is fine tuning and getting faster

Dan Siegel on Myelination and Pruning in the Adolescent Brain

<https://www.youtube.com/watch?v=0O1u5OEc5eY>



A young person with curly hair is lying on a grey couch, looking bored. They are wearing a purple t-shirt and holding a black plastic bottle of soda. There is a blue pillow next to them, and some popcorn and chips are scattered on the couch. The background is a simple living room with a white shelf and a plant.

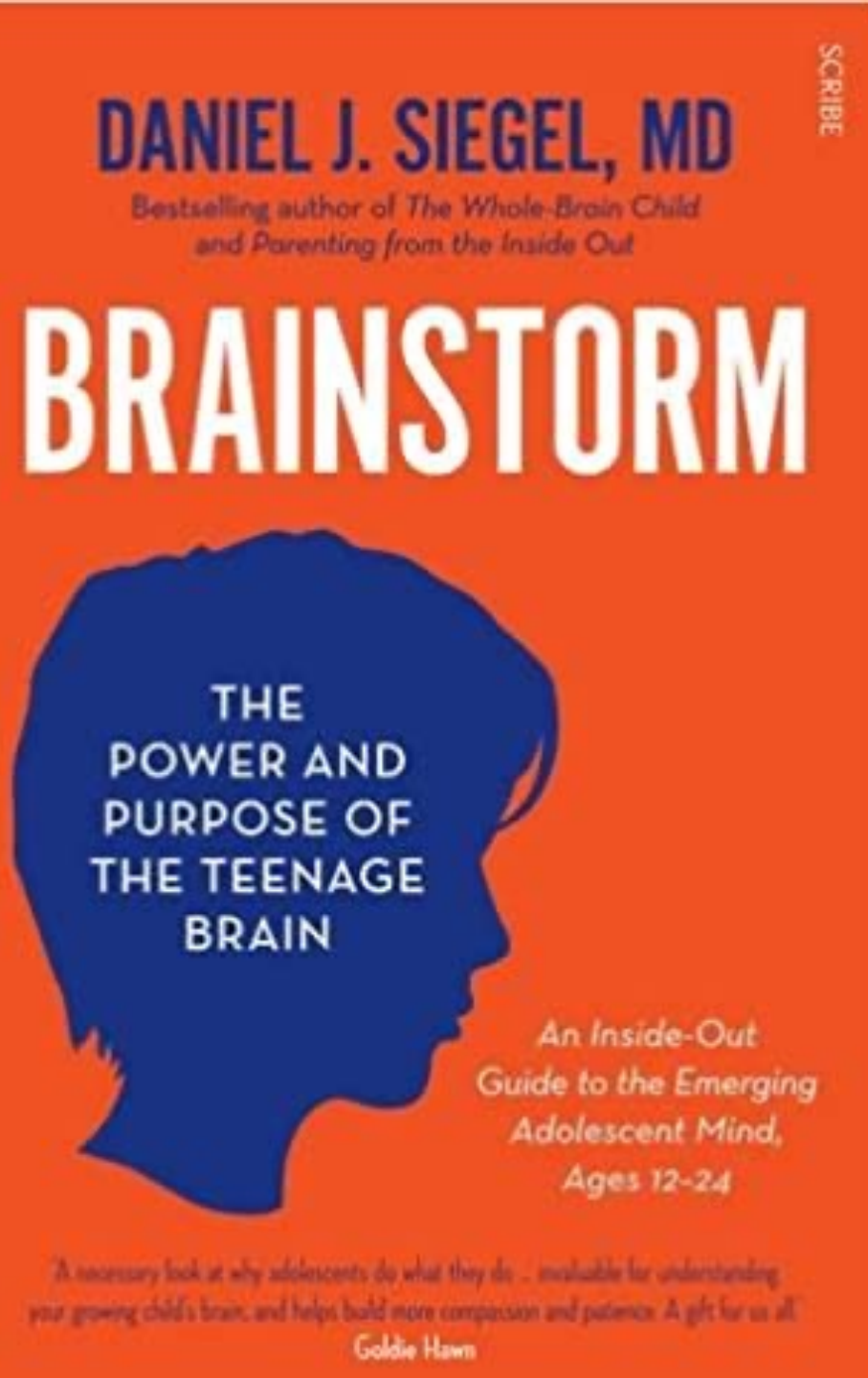
Why is all this happening?

- Dopamine/reward centres of the brain are extra active – need novelty, will take risks – Dr. Adriana Galván
- <https://www.youtube.com/watch?v=LWUkW4s3XxY>
- Makes you seek novelty and interesting things
- Makes you bored at home
- Family become boring and annoying and outside world becomes fascinating and exciting

Know your Brain

- Brain is a construction site
- Pruning and myelination
- Dopamine system changing
- Frontal lobes not fully developed yet so all this going on without full brain coordination
- Exhausting and confusing and frustrating





Adolescence = Adult - ESSENCE

ES: Emotional Spark

SE: Social Engagement

N: Novelty

CE: Creative Exploration

Resources

- Galván, A. (2013). Insight into the Teenage Brain
<https://www.youtube.com/watch?v=LWUkW4s3XxY>
- Siegel, D. (2014). Brainstorm: The power and purpose of the teenage brain. Scribe
- Siegel, D. (2018). The Adolescent Brain
<https://www.youtube.com/watch?v=0O1u5OEc5eY>