Session 09

Strategies Part 1

February 2, 2026

BOTTOM-UP EXECUTIVE FUNCTIONING

Strategies Part 1

- Body Doubling
- Fill the Bowl / Task Pairing
- Dopamine Reset

Body Doubling

Body Doubling

- “Using the presence of others to accomplish tasks” (Eagle et al. 2024)
- Community terminology.
- Examples:
  - Working next to someone who is also working, usually without interacting (like working in a coffee shop where others are also working).
  - Having someone sit with you while you complete a difficult task you can’t get started on.
  - Being with someone in a Discord channel working without talking.
  - Watch videos of others doing things in the background

Possible Reasons

- Social facilitation theory: presence of others improves performance (Allport, 1920)
  - Co-action (e.g. cyclists ride faster as a group)
  - Audience effects (e.g. weight lifters lift heavier weights when someone is watching)
  - Doesn't work for complex tasks, best with well-practiced motor tasks (Strauss, 2002)
  - Social inhibition (when presence of others decrease performance)
- Co-regulation and no evaluation
  - No-pressure, gentle presence in the environment that signals now, work, attention, and keep going
- Could be increasing alertness norepinephrine and dopamine

Body Doubling

- Where have you used body doubling before?

Fill the Bowl

Fill the Bowl

Imagine your brain is an empty bowl waiting to be filled with interesting tasks before it can act.

Imagine that any empty space in the bowl is boredom. And boredom is death. Or at least very painful.

Fill the Bowl

- If something is not interesting or urgent enough, it does not fill the bowl. It feels painful.
- Add as many interests, sensations, movements, and tasks as you can to fill the bowl.
- Think of tasks as irregularly-shaped objects, and some objects can get pushed out (like the unpleasant task).
- Combine carefully.

Task Pairing

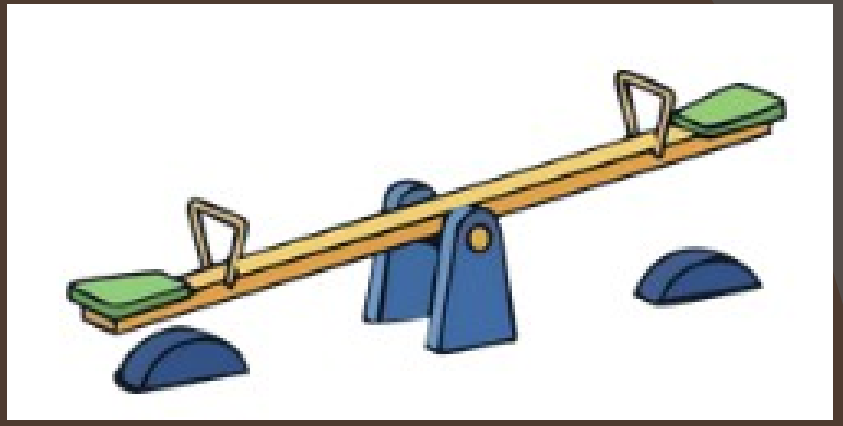
- Combine unpleasant task with pleasant task (e.g. watching a work video while playing a low-demand game)
- Combine 2 unpleasant tasks together (e.g. making an unpleasant phone call while doing laundry that you don't like to do)
- Combine more than 2 tasks.
- Experiment with combining tasks to notice what works best for you.
- Different combinations for different situations. Develop recipes.

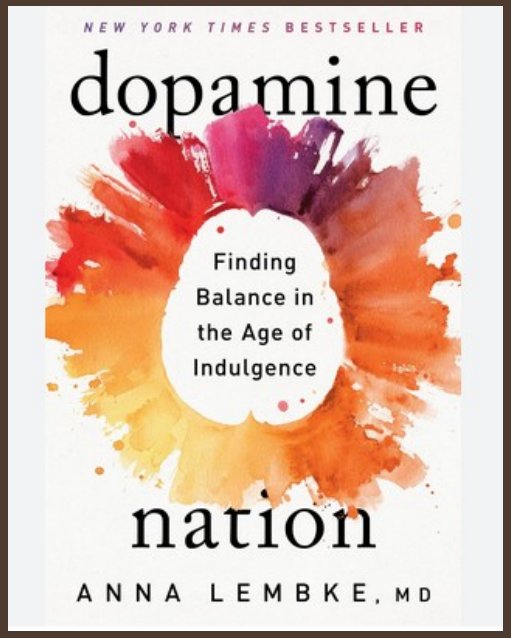
Discussion

Dopamine Reset

Brain is a see-saw

Brain likes to function in homeostasis, a state of equilibrium. If you add too much weight on one end, it will automatically add weight on the other end to balance it out.





Anna Lembke is a psychiatrist who is the Medical Director of Addiction Medicine and runs the Addiction Dual Diagnosis Clinic at Stanford University.

She says there is a “see-saw” in the brain for pain vs pleasure (Lembke, 2022).

The brain will automatically balance out excess pleasure with pain.

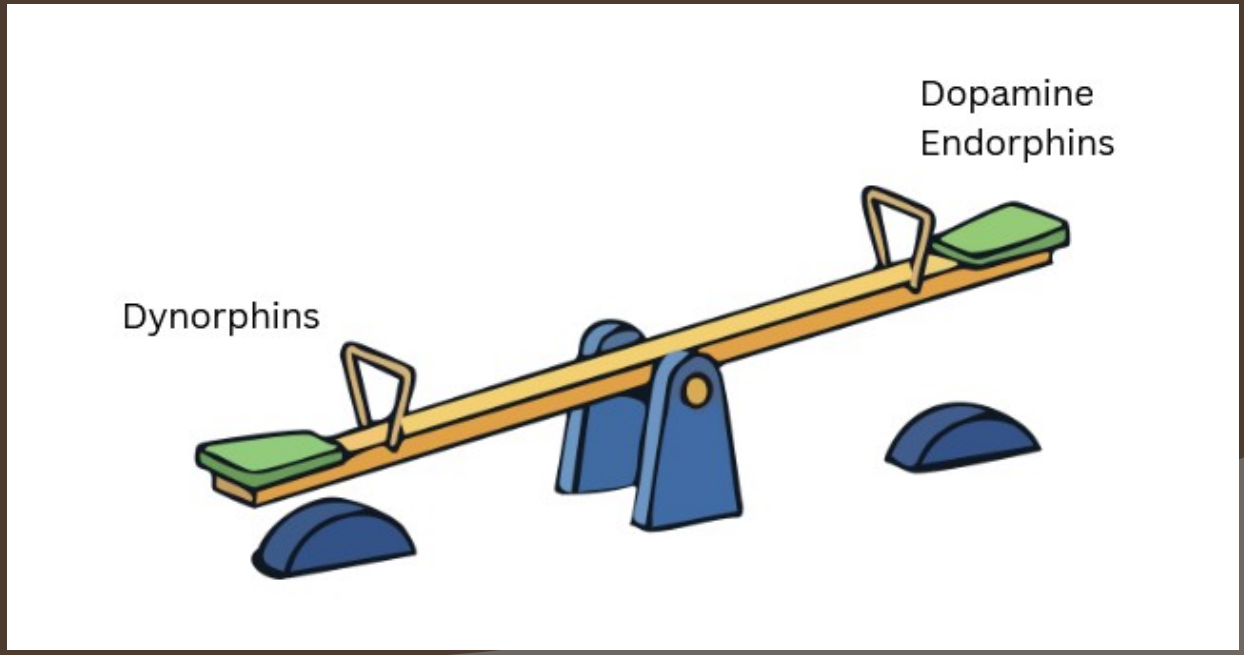
Dopamine
Lembke in a Huberman Lab interview (2025)

- Neurotransmitter associated with reward and movement
- “Same parts of the brain that process pleasure also process pain.”
- “Some people need more [friction] than others…because their brain is not suited for this world [where survival is easier].” She said people who need more friction don’t feel normal unless there is friction.

Brain is a see-saw (Lembke, 2022)

Modern behaviors such as social media, games, shows, food, and shopping feed a lot of dopamine and endorphins to the brain.

The brain then tries to balance that out by producing dynorphins. Dynorphins DECREASE dopamine release, to make up for excess dopamine. (For example, repeated cocaine use in rats increases dynorphin concentration.)

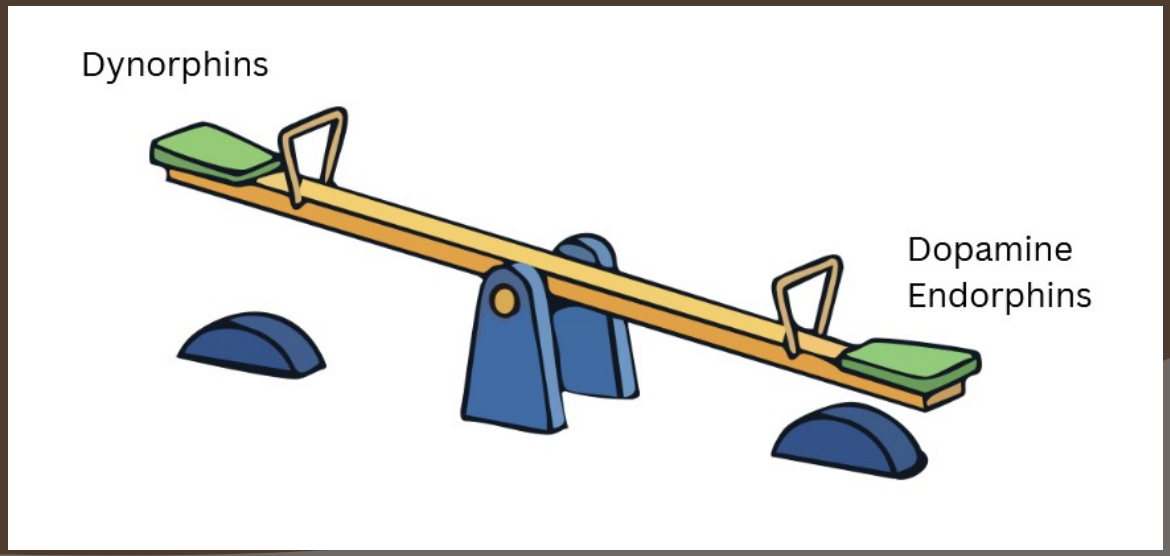


Addiction as a see-saw cycle.

At an addictions conference, Lembke with co-presenter McCauley (2022) said addiction happens when a person seeks more and more pleasure to make up for the dynorphins produced by the brain to balance itself out.

It takes more and more dopamine to just feel normal because the dynorphin side has become so heavy.

Lembke suggested doing a dopamine fast to reset the see-saw.



Addiction as a see-saw cycle.

Lembke talks about avoiding easy dopamine for 30 days for the reset. Mostly she advocates restricting dopamine for managing addiction.

Andrew Huberman, also at Stanford, had Lembke on his show (Huberman Lab, 2025). They talked about how telling the truth, radical honesty, connects the planning part of the brain with the emotional part. It is hard work but also comes with dopamine from the connection with other people.

Dopamine / Norepinephrine and ADHD

- Older literature understanding is that dopamine and norepinephrine levels are involved with cognitive tasks and inhibition (Levy & Swanson, 2001).
- Newer understanding is that maybe there isn't less dopamine in ADHD (MacDonald et al., 2024).
- There may be complex dopamine regulation differences. During interest or crisis or friction, plenty of dopamine kicks in (MacDonald et al., 2024).
- Like Lembke said, these differences were made for a different world (Huberman Lab, 2025).

Discussion of Strategies

User Manual

- When we started the group, we talked about a user manual to write notes on what environment helps you thrive the most.
- What's in your user manual?

What works?

What doesn’t work?

Changes to your lifestyle?

Review: Any changes?

- BIMS / PDA
- Nutrition
- Medicine
- Circadian Rhythm
- Exercise
- Interoception
- Attunement
- Emotion Processing
- Monotropism
- Energy Management
- Sensory Processing
- Lifestyle / Environment

Review: Any changes?

- BIMS / PDA

Review: Any changes?

- Nutrition

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- Medicine

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- Circadian Rhythm

Review: Any changes?

- Exercise

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Review: Any changes?

- Lifestyle / Environment

6 Month Project

- Rating of Perceived Exertion?

Information on Grounding

- Here is a pilot study on grounding and cortisol levels (Ghaly & Teplitz, 2004).
- Examples, not a recommendation.

https://a.co/d/0eOrFZwk

https://a.co/d/0dtZOzF9

References

- Allport, F. H. (1920). The influence of the group upon association and thought. *Journal of Experimental Psychology, 3*(3), 159–182. https://doi.org/10.1037/h0067891
- Ara, Z., Rahim, I. B., Zhou, P., Yu, L., Esmaeili, B., Yu, L.-F., & Hong, S. R. (2025). *You are not alone: Designing body doubling for adhd in virtual reality* (arXiv:2509.12153). arXiv. https://doi.org/10.48550/arXiv.2509.12153
- Eagle, T., Baltaxe-Admony, L. B., & Ringland, K. E. (2024). "It was something i naturally found worked and heard about later": An investigation of body doubling with neurodivergent participants. *ACM Transactions on Accessible Computing*, *17*(3), 1–30. https://doi.org/10.1145/3689648
- Ghaly, M., & Teplitz, D. (2004). The biologic effects of grounding the human body during sleep as measured by cortisol levels and subjective reporting of sleep, pain, and stress. *Journal of alternative and complementary medicine (New York, N.Y.)*, *10*(5), 767–776. https://doi.org/10.1089/acm.2004.10.767
- Huberman Lab. (2025, June 26). *Essentials: Understanding & treating addiction | Dr. Anna Lembke* [Video]. YouTube. https://youtu.be/i4gvleA3Rcl?si=u8t2iR7IuAH6dsmo
- Lembke, A. (2022). *Dopamine nation.* Penguin USA.
- Lembke, A. & McCauley, K. (2022, October 6-8). *Dopamine nation: Finding balance in the age of indulgence* [Conference session]. Trauma and Addictions Conference, Las Vegas, NV, United States
- Levy, F., & Swanson, J. M. (2001). Timing, space and adhd: The dopamine theory revisited. *Australian & New Zealand Journal of Psychiatry*, *35*(4), 504–511. https://doi.org/10.1046/j.1440-1614.2001.00923.x
- MacDonald, H. J., Kleppe, R., Szigetvari, P. D., & Haavik, J. (2024). The dopamine hypothesis for ADHD: An evaluation of evidence accumulated from human studies and animal models. *Frontiers in Psychiatry*, *15*. https://doi.org/10.3389/fpsyt.2024.1492126
- Strauss, B. (2002). Social facilitation in motor tasks: A review of research and theory. *Psychology of Sport and Exercise*, *3*(3), 237–256. https://doi.org/10.1016/S1469-0292(01)00019-X