

# UNIT 2: IN SYNC/OUT OF SYNC

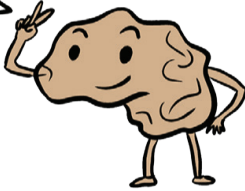
**H**ave you ever been called on in class, froze and your memory went blank? Or gotten mad at the side walk when it “ran” into your foot? What about saying something out of frustration that you totally regretted later on?



CALM



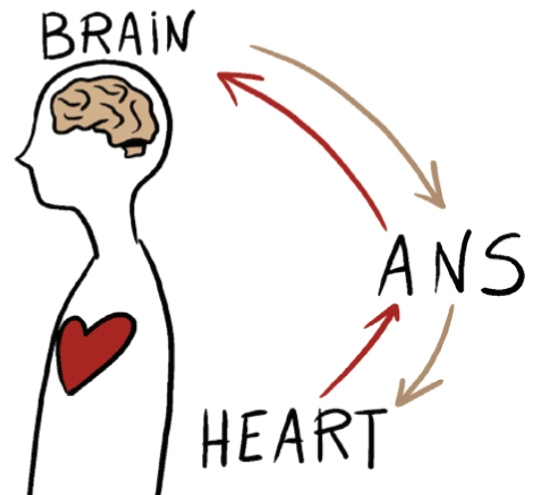
GREAT!



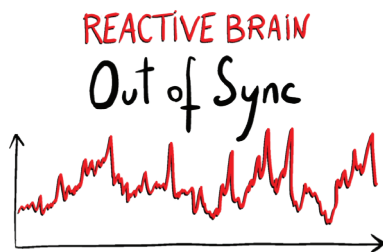
These are moments when our reactive brain overwhelms our thinking brain. **Staying calm allows our brains to work better and life to flow smoother.** In order to have more control, to be in sync, to do our best, our brain, body, and heart must work together.

**Your brain and heart constantly communicate through the Autonomic Nervous System or ANS.** It regulates all the things in your body that you never think about, like breathing, digestion, and heart rate. Messages are being sent up and down the ANS constantly to keep your energy and body in balance.

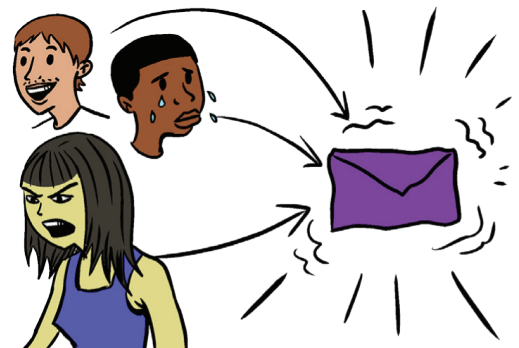
**These messages flow through two parts of the ANS: the sympathetic and parasympathetic.** The sympathetic turns up our energy and heart rate for taking action. The parasympathetic slows down your heart rate and helps us recover our energy after a lot of activity.

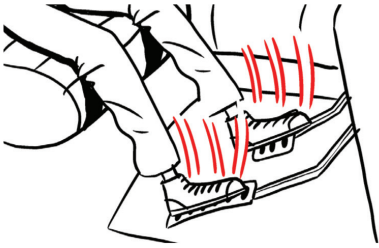


Thoughts and emotions dramatically affect those messages.



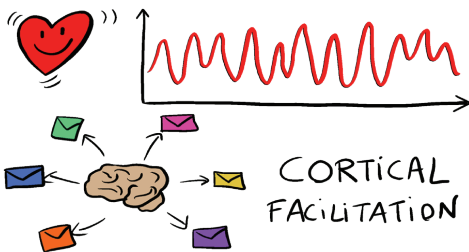
**Emotions like frustration, anger, or worry can kick the signals in the ANS out of balance — we are out of sync.** Heart rhythms show us what this chaos looks like.





When you experience frustration, it's like driving a car with one foot on the gas pedal (sympathetic) and the other one on the brake (parasympathetic) at the same time. Who would want to do that? It makes for a jerky ride, uses more gas, and eventually wears out the car.

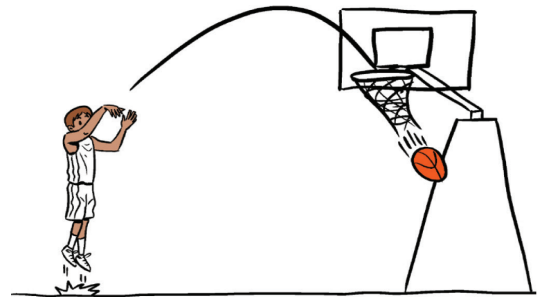
When we are stressed out, those chaotic messages interfere with our ability to think, make good decisions, and maintain physical coordination. Try solving a math problem when you're mad. In sports, if you're upset, that winning shot might fall short. **When chaos happens in our ANS, it affects your cortex — the thinking part of your brain — scrambling your ability to think.** It's called cortical inhibition.



When we are feeling emotions like appreciation, care, and enthusiasm, the heart sends signals that help the brain get in sync. Heart rhythms become smooth and even. Brain power and decision-making become easier. Scientists call this cortical facilitation.

We all have the ability to change our physiology, attitudes, and emotions to get to that sweet-spot — IN SYNC.

**But just like scoring that winning shot, it's a skill that comes with practice.**



### One last thing. . .

Did you know that the heart sends more messages to the brain than the brain sends to the heart? Yep, it's a lot more than a blood pumping machine

**It influences how we think, feel and make decisions.**

Maybe that is why people and cultures throughout history have talked about the heart as a source of wisdom.

