

# When Coaching and Applied Neuroscience Intersect

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Much has been made in the last several years about the brain and neuroscience. It seems as if it's popping up everywhere. I think that's a good thing. I was introduced to the field of neuroscience over 10 years ago through my coach training and certification, and I often say, "The brain is the one neutralizer—everybody has one," and "If you're not working *with* the brain, you're working *against* it."

So, what does neuroscience have to do with coaching?

Good question.

There are many ingredients that go into being an effective coach. The ICF Core Competencies are a good place to start. Additionally, I'd suggest a decent understanding of basic brain functioning, and foundational neuroscience research is a tremendous help, too.

Many people may think an applied neuroscience coaching approach is overly cold or rational. What they don't realize (at first) is that to apply neuroscience is to understand that emotions play a *critical* role in how we feel, think and behave. Ignoring emotions is not anywhere close to an applied neuroscience approach—understanding the power of emotions and how to manage them so they inform rather than derail us *is*. It's a big piece of this coaching puzzle.

*Why else should coaches care about the brain?*

As I mentioned a moment ago, everybody has one. And the human brain is predictable in many functional ways. At the same time, every single person is uniquely wired regarding how they experience, make sense of and interact with the world. So, we can leverage a few foundational ideas about the brain (to a point) and then adapt in the moment to the uniqueness of the person in front of us.

What are the foundational neuroscience ideas every coach should know?:

- Our [human brain](#) has one primary organizing principle: minimize danger, maximize reward
- Like the body, our brain has its own (social/emotional) needs
- The amount of threat/danger present can either increase or decrease performance (this is the [Yerkes-Dodson law](#) at work)

What are the implications of these foundational ideas?:

- Everyone is susceptible to the power of the primary organizing principle (predictable)
- The rank and weight of everyone's social/emotional needs is different (unpredictable)
- The client's ability to manage "danger" impacts his performance

Let's take the first idea/implication—everyone is susceptible to the power of the primary organizing principle.

The research tells us:

- We have a primary organizing principle that seeks to protect us from danger every waking moment of our life, multiple times a second (that's good)

- The threat (fight or flight) network kicks in faster, is stronger, lasts longer and has more brain real estate devoted to it than the reward network (that can be good, too)
- The right amount of threat can increase performance, but it also diminishes and can overwhelm higher-level “executive” brain function (that’s not so good)

We can’t necessarily overcome or completely short-circuit this organizing principle, but we can work to lessen its impact on us and for our clients. The goal is knowing how much threat is necessary and managing the situation to minimize unnecessary threat.

This brings us to our next idea/implication—the rank and weight of each person’s brain’s social/emotional needs is different. This implies that guessing someone’s social needs can be quite tricky. So, I’ve simplified it: Work in an intentional way at noticing threat and meeting as many social needs as possible during any interaction.

Our third idea/implication is that a client’s ability to manage his own “fight-or-flight” reaction has a direct impact on his performance, meaning someone with a lesser ability to manage threat will have lower executive function/performance and someone with a higher ability to manage threat will tend to have higher executive function/performance in the same situation.

You and I have developed different levels of self-awareness and self-control (regulation). For instance, your brain and my brain are wired in such a way that things we unconsciously perceive as dangerous will trigger a quick “fight-or-flight” response, effectively dampening down executive (prefrontal cortex /PFC) function and marshalling our body’s resources to get away from or “kill” the danger. We will differ, however, in our response to the threat based on our level of self-awareness and self-regulation.

The key to managing threat well is the ability to quickly notice the threat response kicking in and a strong braking system (right ventrolateral prefrontal cortex). Studies link a strong direct experience network (this may also be thought of as mindfulness, interoception or self-awareness) to a strong braking system. This means the more aware you are of what is happening inside of you, the more quickly you can apply your brain’s brakes as the threat response is trying to take over. This allows you to maintain more executive function during the situation, which will promote higher/better performance.

So, there you have it, three core ideas and implications to consider if you are thinking of applying neuroscience as a coach.

Remember, when you honor the brain, you honor the person.

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Paul McGinniss successfully navigated a 20-year career in corporate America before launching his own coaching/consulting practice in 2006 and joining EY’s Americas Leadership and Team Coaching practice. Paul has coached, mentored and taught coaching skills to thousands of senior leaders and managers at different companies including Accenture, American Express, Coca-Cola, CVS Caremark, D.E. Shaw, eBay, EY, FedEx, Genentech, John Deere, Ericsson, Humana, Microsoft, Northrop Grumman, Pfizer, Prudential Inc., Stanford University, Starbucks, Time Warner and The Walt Disney Company. In his work with senior leaders, Paul uses neuroscience-based models and coaching structures to help create new thinking, re-engage employees, jumpstart performance and maximize results. He has an MS in Human Resources

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