

## Neuroplasticity

Module Three, Session One

Welcome to Module Three, Mindset Mastery: Harness the Power of Your Mind. I've been working with riders on matters of mindset for many, many years now. And I'm still blown away by the results that people get in their lives by working with these mindset concepts. By being intentional with our thoughts, we're able to change long ingrained habits, shift our thinking and ultimately, become more fulfilled. Mental skills mastery reaps obvious, measurable results in training and competition but also creates more subtle results in long term mood improvement and resilience.

How does this work?

It's science. When I began using mindset strategies with my riders, I was introduced to neuroscience and learned the term <u>neuroplasticity</u>.

Neuroplasticity refers to the brain's ability to reorganize itself by forming new neural connections. It allows the nerve cells in the brain to adjust as conditions change. Things like injury or disease or trauma all trigger neuroplasticity in the brain. Changes in environment and new experiences do as well. We now know, that even new thoughts can cause the nerve cells in your brain to change their activity.

Your brain is reorganizing itself all the time. Cells are constantly being damaged and regenerated. This means that the brain can constantly form new neural pathways to accomplish particular things. A common example of this is that when one hemisphere of the brain is damaged, the other hemisphere will often take over some of its functions. The brain compensates for damage by forming new connections between healthy nerve cells and damaged ones. In order for this to take place, the nerve cells need to be stimulated through activity. This is why stroke and TBI patients have intense therapy geared toward forming or reforming damaged neural pathways.

What does this mean for us as riders? Our brains are constantly being shaped by our experience. Every time we think a new thought, we are forming a new neural pathway. As we learn and experience new things, neuroplasticity is causing actual changes in brain structure. This allows us to adapt and evolve. With every repetition of a thought or emotion, we reinforce a neural pathway - and with each new thought, we begin to create a new one. These small changes, when repeated over time, lead to changes in how our brains work. This can work for us or against us!

The things we do a lot, we become better at, and the things we don't do, fade away. This is why thinking a particular thought over and over increases its power- good or bad. Over time, a once foreign thought or activity can become automatic. We literally become what we think and do.

As riders, we're super aware of what we often refer to as muscle memory or creating a "new normal." Because riding requires such a complex collection of thoughts and actions to work in harmony, an understanding of how to use neuroplasticity to our advantage is key.

The real revelation here is that WE CAN CHANGE OUR BRAINS. This is science. It may seem like a no brainer (pun intended) now but a few years ago, we pretty much thought that we were born with what we had and by the time we were young adults, our brains had formed. We now know this is not the case. We can harness neuroplasticity and change what we think and do.

In The Performance Project, we'll be exploring ways to leverage neuroplasticity. By thinking new thoughts and developing new habits you can cause your brain to expand and adapt in ways that are beneficial to your riding. I will be inviting you to take advantage of your brain's neuroplasticity to get to the other side of fear, self-doubt and destructive habits.

Have a brain changing day!