

# Patty's PT Tips

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The Brain's Pain Alarm

May 11th, 2022

## Brain Centric Healing and Pain Management – Part 2

**Resources for this Topic:** curablehealth.com This is an app-based format that can be viewed on phone or on your computer. There is a free introductory version or a monthly subscription at \$5-\$10/month.

**The Way Out-** book by Alan Gordon, LCSW with Alon Ziv available on Amazon

Pain is a conversation between the body and the brain.

Neuroplastic pain is a misunderstanding between the body and the brain. It's caused by your brain misinterpreting normal messages from your body as if they were dangerous. It can be a false alarm. "Neurons that fire together, wire together" This is useful if you are trying to learn a new motor skill but not helpful if you are reinforcing the experience of pain. Neuroplastic pain can change the brain pathways, but the brain can remodel with enough positive/new information.

Fear amplifies our senses and amplifies signals like pain. Fear is the fuel for pain.

### Three habits that trigger fear and aggravate neuroplastic pain:

1. Worrying
2. Putting pressure on yourself
3. Self-criticism

**Pain-Fear Cycle:** The more you are afraid of the pain the more likely your pain is to get stuck. Fear of the pain can include frustration, despair, stress, anguish, anxiety, annoyance, dismay and anything else that puts you on high alert.

Conditioned responses can protect us from repeating dangerous behaviors. But it can also perpetuate pain if the brain associates the pain with a specific activity even if that activity is not harmful to the body. These responses can be unlearned.

Sometimes if we are enjoying the moment we deprive the neuroplastic pain of its fuel: FEAR  
Counteract the fear with: a hobby, music, watching a football game etc.

**Mindfulness definition:** paying attention, on purpose, in the present moment, non-judgmentally. It increases the brain's feelings of safety therefore decreasing fear.

Somatic tracking exercises-refer to last week's PT Tips. It is one method to rewire the brain.

Corrective Experience-exposure to a situation that has instilled fear in a safer, controlled way  
Avoidance behaviors-anything you do to reduce your pain or keep it from being triggered in the first place. These can be helpful when your pain is high. For example-icing a sprained ankle. **DO NOT PUSH THROUGH PAIN!** When the pain is high the brain is flooded with danger signals.

Send the brain signals of safety if you are attempting something more challenging. Explore the pain/sensations with a sense of curiosity and lightness. You should feel like you are doing something safe and good.

When you lean into positive physical sensations, and you'll strengthen those connections again. You'll train your brain to feel good more easily.

1. Notice the fear thoughts
2. Don't buy into them
3. Send yourself a message of safety and positivity
4. Connect with sensations that make your body feel good.

Repeat the above even if you feel you are having a setback. Keep taking care of yourself on a consistent basis.

**\*\*See additional attachment regarding Mindful Resources\*\***