

Pain As Experience

- ☞ *What is the difference between feeling something and experiencing it?*
- ☞ *How does my brain process pain?*
- ☞ *How can my mindset affect my pain?*

The psychology of pain has been observed and studied for hundreds of years—and still, it is not fully understood. Until quite recently, the amount of pain experienced was thought to be in direct proportion to tissue damage—the more damage, the more pain. Studies and research indicate, however, that the experience of pain may be controlled by the brain.

Frank Beecher, a World War I medic, observed differences in the way people experienced pain after a battle in Anzio, Italy. Soldiers who suffered traumatic injury, such as losing a limb, needed far less pain medication than citizens who had similar injuries. He concluded that the experience of pain was subjective—it had a lot to do with what it meant to the individual. The soldiers knew they would be going home—no longer in the line of fire. Residents felt trapped by circumstances beyond their control.

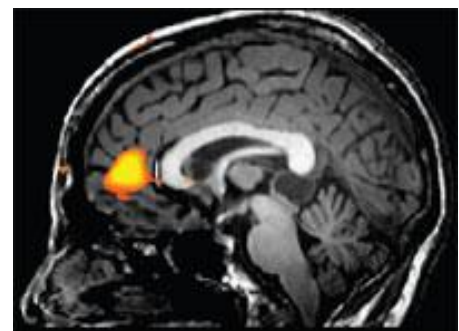
It is now understood that **processing** or feeling pain utilizes different receptors than **anticipating** pain. Functional magnetic resonance imaging (MRI) allows researchers to see the affects of pain in real time. As the level of expected pain increases, the regions of the brain where pain is processed become more active. It also becomes evident that the patient's mental "picture" of an impending sensory event shapes the neural response.

As an example, if I notice the weather is changing, and in the past weather changes have been painful, I start thinking about how much I will hurt. The regions in my brain where pain is processed will become active and my pain will increase.

The anterior cingulate cortex of the brain appears to play a role in the perception of pain by assessing emotional information and regulating autonomic functions, such as blood pressure and heart rate. Functional studies indicate that revising our thoughts and attitudes about pain can alter our perception of the pain. Thus, input from pain receptors can actually be changed by thoughts and emotions.

Pain is most often associated with negative emotions, but are there situations where pain is our friend? Leprosy patients can lose the sensation of pain due to damaged peripheral nerves. As a result, they suffer medical complications and death due to the absence of pain signals. For the leper, the sensation of pain would be a gift.

We grow up knowing that acute pain will eventually diminish and go away as our injury heals. But what do we do when it doesn't go away—when weeks or months, maybe a year goes by, and the pain is still with us or even worse? This *experience* with pain is labeled "chronic."



Researchers have demonstrated that chronic pain is largely processed in a different brain region than acute pain, which explains why treatments for acute pain have little effect on chronic pain. Thoughts, emotions and painful experiences can actually change the way the brain processes input from pain receptors and responds to different stimuli. (*Functional MRI: Unlocking the Mystery of Chronic Pain*, Miki Fairley)

For anyone who suffers chronic pain, describing it as an experience, rather than a sensation, may be difficult. What *are* the five senses? Sight, hearing, taste, smell, touch. Pain is not on the list. While it does have a sensory component, pain is influenced by our environment, our temperament, and our emotions and thoughts.

Let's do an experiment together. First, imagine that you aren't feeling any pain right now. This may be difficult at first, but try to imagine it. Next imagine that you're standing on the sidewalk waiting for the light to change, when a car takes a corner too tight and runs over your right foot, breaking all the bones in your foot. Imagine what it **feels** like to have all the bones in your foot broken. On a scale of 0 to 10, what is your pain (0 being no pain, 10 being the worst pain imaginable). *Circle the number that describes the amount of pain you have.*

0 1 2 3 4 5 6 7 8 9 10

Let's change the experiment a little bit. Now imagine that you're standing on that same sidewalk and you see the same car headed for the sidewalk. Standing in the path of the car is a small child. You rush to save the child, but you are too late. The child is run over. And all the bones in your foot are broken as the car slams into you. *On a scale of 0 to 10, rate your pain.*

0 1 2 3 4 5 6 7 8 9 10

Now put yourself on the same sidewalk. You see the car headed for the sidewalk; the small child is in the way. You rush to save the child and this time you are successful. The child is unharmed. Unfortunately, your foot is crushed by the car. *Rate your pain in this scenario.*

0 1 2 3 4 5 6 7 8 9 10

Think about what makes a difference in your pain when the injury is the same.

Most of us look for cures to our pain. We try medications, go to new doctors, seek help from therapists, and agree to surgeries. When all options are exhausted, we may realize there is no cure for our problem. At this point, it's easy to become deeply discouraged and lose hope. However, with the knowledge that pain is experience—an experience that we have some control over—we can actually make progress towards managing our pain.

As we let go of the *cure* mentality and accept that we have chronic pain, we can allow ourselves to enter a management mode. Acceptance allows our mind to relax; this, in turn, produces physical relaxation—an essential element in the reduction of pain.

Consider This... *While dread can heighten our pain, positive expectations may diminish our experience of pain. Focusing on the pain increases our perception of it; focusing on anything else can lower our awareness of the pain. Have you noticed that following a pleasant social event, you are suddenly re-aware of pain that was never gone? The pain is the same, but your sensation of it was muted while you enjoyed the company of friends or family.*

What are the main points of this week's lesson.

List one thing you can do or think differently during this next week to reduce your pain.

Can you identify anything that causes you to think of pain only as a feeling?

Can you identify anything that will remind you to define your pain as experience, rather than feeling?

Was there anything said during this week's session that confused or troubled you?

Do you have any questions from this week's lesson?