

How Trauma Affects the Brain

Human brains are designed to perceive, understand, and store new information in an organized manner. Our brains gather information through our five senses—sight, sound, smell, feel, and taste. In trauma, these senses are severely overwhelmed—sights seem unbelievable, sounds and smells magnify, and pain pierces. Terrified, your body and brain are flooded with adrenaline, your heart beats fiercely, and your mind struggles desperately to survive.

At some point, it is too much. The circuits blow. Normal brain functioning lessens and survival mode kicks in. In survival mode, your limbic system (the emotional center of your brain) takes over and the frontal lobe (the rational part of your brain) goes numb. Instead of feeling the intense fear, helplessness, and threat of the situation, the brain slips into a sense of numbness and disconnect from the moment.

Psychologist and trauma expert, Judith Herman, writes: “This altered state of consciousness might be regarded as one of nature’s small mercies, a protection against unbearable pain.” Most trauma survivors describe similar sensations as their brains moved from high alert to disconnectedness and emotional numbness. Some felt like it was just a dream that they couldn’t wake up from. Some remember it all in slow motion. Others felt like the event wasn’t actually happening to them, as if they were outside their own body and standing beside the situation. For some, this sense of disconnect and numbness only lasts days; for others it can be months or years. While this natural defense system is helpful in the moment of trauma, it ultimately delays the necessary stages of healthy recovery. The memory of the trauma is pushed below normal consciousness—but awakes with a fury in dreams and restless states. In cutting off the negative emotions and associations, the trauma survivor is also inadvertently cutting off opportunities for positive emotions and building new, positive associations and connections. Healing begins by rebuilding the neural (brain) pathways that were overwhelmed by the intensity of the trauma.

Now it is time to use those same senses—sight, sound, smell, taste, and touch—to create new positive experiences and memories. It is like a tree in the spring. After the frost and falling leaves, the tree needs to sprout new leaves and buds.

From “The Ammendment Trauma Recovery Guide”