

Trauma, Stress and the Brain

Research helps us to understand how trauma and stress impacts the brain and body.

When one is experiencing trauma and stress, cortisol, the stress hormone is released. Cortisol is produced by the adrenal glands and released for a variety of reasons. It can increase your heart rate, blood pressure, make you feel shaky, this is your bodies response to stress.

“The body processes the stressful information and elicits a response depending on the degree of threat. The bodies autonomic nervous system is broken down into the sympathetic nervous system (SNS) and the parasympathetic nervous system (PNS). In times of stress, the SNS gets activated. The SNS is responsible for the fight or flight response, which causes a cascade of hormonal and physiological responses.”

NCBI Education

Fight, Flight or Freeze

Fight/flight/freeze response is the body's automatic, built-in system, designed to protect us from threat or danger.

For example, if you see a snake on the narrow path up ahead, you would probably stop (freeze) and remain quiet and still, until it moves on.

In this scenario our system demonstrates its effectiveness at protecting us from danger. This is not a conscious process – if we had stopped to think about how to respond to the snake – we probably would have already been bitten.

With the fight/flight/freeze response, we have acted before we know it, to protect ourselves in the best way possible.

The fight/ flight/freeze response is very helpful – protects us from danger very quickly, but it can also be activated when there is no real physical danger.



For example, you avoid going to a party or leave early because you feel very anxious around unfamiliar people (flight). In this situation, the thought of the party, is triggering your fight/flight response, and you are engaging in flight, even though being at a party is not on the surface of a dangerous situation. But for you it feels like a dangerous situation because your system is set to high alert – you might have had some bad experiences at parties or with people.

If your alarm system is set to “high alert” it will go off even in relatively harmless situations. If you have experienced trauma your alarm system will be activated more easily.

Grounding Exercise: Drop the Anchor

There are times when we get overwhelmed with emotions or when anxiety can take us over. We can get so caught up in our thoughts that it's almost impossible to do the things we want or have to do and we then lose touch with what's important. At times like these, we can use a great grounding technique called Dropping Anchor.

This technique comes from ACT (Acceptance and Commitment Therapy) practitioner and trainer Dr Russ Harris.

Grounding is a mindfulness technique that helps us bring our attention to the present moment. When we feel overwhelmed by our feelings and thoughts, we may lose track of our surroundings. Mindfulness helps us to reconnect to the present moment. It's about taking a moment to pause and check-in with ourselves.

Though it can be very difficult to engage in mindfulness during times of distress or crisis, it is a helpful skill to practice and our capacity to use this technique will increase.

Follow the instructions on the following page to ‘drop an anchor’ when you notice yourself getting overwhelmed by your emotions and thoughts.

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Grounding Exercise: Drop the Anchor



1. Pause for a moment to re-orient yourself with your surroundings.



2. Take slow deep breaths, noticing how your chest rises and falls with each breath.



3. Firmly plant your feet into the ground, feeling the muscles in your legs tense up.



4. Stand or sit up straight, feeling the muscles in your back contract.



5. Then look around you and describe three things that you can see.



6. Listen to the sounds that might be present and describe three things that you can hear.



7. Repeat the exercise until you feel more calm or grounded.