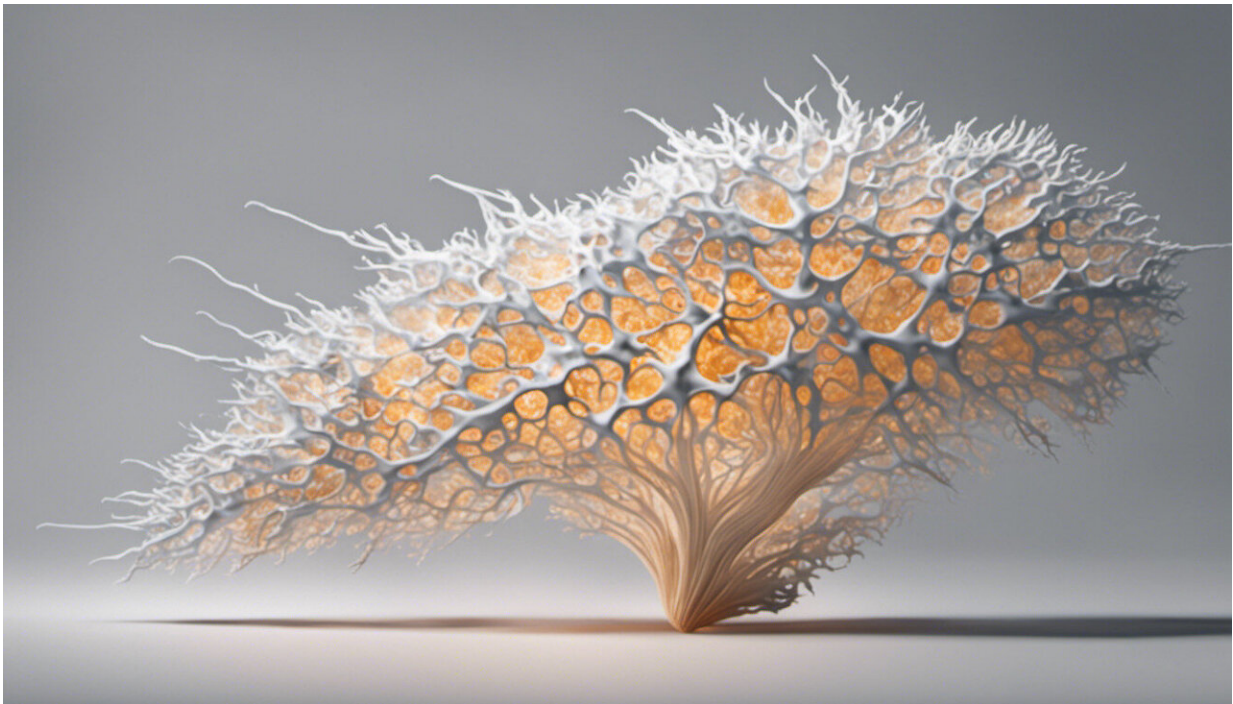


# Want to stop the COVID-19 stress meltdown? Train your brain

June 10 2020, by Laurel Mellin

---



Credit: AI-generated image ([disclaimer](#))

Let's face it: We're all under stress right now. The uncertainty and constant health threats surrounding the coronavirus pandemic have upended our lives.

We may need two vaccines: one to protect us from the [coronavirus](#) and

another from the toxic effects of too much [stress](#). Could we train our brains to prevent this stress from becoming lodged in our brains, so we can bounce back faster from stress—and even collect a kernel of wisdom from the experience?

Perhaps. [Neuroscience research](#) points to the stress-reactive [circuits](#) in the emotional brain as a trigger of toxic stress. These circuits are made of neurons that can guide us to respond ineffectively to stress. Once triggered, they unleash a cascade of stress chemicals. Instead of the brain orchestrating a symphony of effective self-regulatory processes and moderation, we have a garage band of dysregulation and extremes, which can cause [chronic stress](#) and rising rates of emotional, behavioral, social and physical [health problems](#).

[As a health psychology professor](#), I work on [emotional brain training](#) to help people deactivate and rewire the circuits that cause this [stress overload](#).

## **A new crisis in emotional health**

Scientists have been exploring these issues for over a century. Some 100 years ago, the psychoanalyst Sigmund Freud speculated that [pathways in the brain](#) caused emotional and behavioral problems. Tom Insel, as director of the National Institutes for Mental Health from 2002 to 2015, called for revolutionizing psychiatry with neuroscience to focus on [faulty circuits](#). The [White House BRAIN initiative](#), launched in 2013, has been busily mapping the brain's billions of neurons and their connections to improve understanding of and treatments for a number of disorders.

Then came COVID-19, and suddenly 70% of the U.S. population was identified as moderately to severely distressed in a [nationally representative study](#) in April. That was up from 22% just two years earlier.

With a crisis in emotional health upon us, people can benefit from learning to take charge of these stress-reactive circuits and switch off the toxic stress chemical cascade they activate.

## Understanding the emotional brain

Most of us aren't aware that the neural circuits in our emotional brain—the [limbic system](#) and subconscious memory systems in what's sometimes referred to as the "[reptilian brain](#)" – are the major controllers of our emotional responses in daily life.

When a stimulus arrives in the brain, it activates either stress-resilient circuits, the internal calmers and healers, or stress-reactive circuits, the rabble-rousers that spiral us down into toxic stress.

The brain activates the strongest circuit, which then controls our responses. If it triggers a reactive circuit, that unleashes strong emotions that are challenging to process, especially since stress compromises the functioning of the part of our brains responsible for higher-level thinking and planning. The brain struggles to untangle those stuck emotions, and we become stressed out.

It gets worse. The longer these stress-reactive wires are activated, the more likely they are to activate other stress-reactive wires. One circuit can trigger another and another, which can cause an emotional meltdown of anxiety, numbness, depression and hostility which can overwhelm us for hours or days.

These problematic stress-reactive circuits are encoded during [adverse childhood experiences](#), and later experiences of stress overload. The [social isolation](#) from sheltering in place and financial and health uncertainty has strengthened these faulty wires, turning the pandemic crisis into a virtual incubator for making our brains even more reactive

and setting us up for a crisis in [emotional health](#).

## **How to retrain the stressed brain**

The stress wires in the emotional brain change through [experience-dependent neuroplasticity](#) – the brain learns to be resilient by being resilient. It takes becoming stressed, then using [emotional techniques](#) to discover and change the unreasonable expectations and unwanted drives stored in that circuit.

Here's one technique: First, briefly complain about what's bothering you. For example: "I can't stop beating myself up for all the things I have done wrong." This activates the reactive wire that has encoded a faulty response and makes rewiring possible.

Then, rapidly express emotions. Start with a burst of anger, which decreases stress and keeps the stressed "thinking brain" from becoming stuck in ruminating, zoning out or overanalyzing. Notice that you can then stay present to your strong, stress-fueled negative emotions, which will then flow rapidly. You can talk yourself through them by finishing phrases like "I feel sad that ..."; "I feel afraid that ..."; or "I feel guilty that ..."

That simple emotional release can ease your stress, and the previously unconscious unreasonable expectation encoded in the circuit will appear in your conscious mind. With the wire unlocked, you can then change the expectation into a reasonable one. For example, change "I get my safety from being hard on myself" to "I get my safety from being kind to myself." The unwanted drive that amplifies your stress fades.

In small but important steps to release stress day by day, you train your brain for resilience.

## Stress resilience as a social responsibility

Research has shown that emotions transmitted during social dialogue can eventually become [large-scale group emotions](#). We can spread stress to others, and much like secondhand smoke, secondhand stress is becoming a concern.

I've been surprised in my clinical practice at how quickly individuals link stress with [social responsibility](#). One technology company executive said, "Switching off my stress is good for me, keeps me from triggering stress in my family, and it's something I do for our country. We are a stressed nation, and I want to be part of the solution."

## Stress resilience as a foundation for health

Even though stress overload is a root cause of many [health problems](#), the current model of treating the symptoms of stress rather than [rewiring the brain's stress response](#) is not sustainable.

At some point, [health care's addiction](#) to using medications and procedures to treat the health problems caused by stress will require detox. A new emphasis on training the emotional [brain](#) for resiliency may emerge.

If we could reboot our brains for the high-stress times in which we live, just about every aspect of life would improve. Resiliency could provide a needed [internal health safety net](#).

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: Want to stop the COVID-19 stress meltdown? Train your brain (2020, June 10)  
retrieved 24 April 2024 from  
<https://medicalxpress.com/news/2020-06-covid-stress-meltdown-brain.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.