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The Search for Security and Resilience

CORONAVIRUS DISEASE 2019

How to Help Both Brains Feel Safe During Coronavirus

Part 1: The thinking brain and survival brain have different needs right now.

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Our thinking brain and survival brain are at odds during the coronavirus pandemic. As a result, many choices to calm ourselves are actually exacerbating our stress and anxiety. Part 1 explains this paradox. Part 2 recommends what we can do instead.



Our Two Brains

Recent neuroscience research has coalesced around a “dual-processing” model of decision-making, popularized by Daniel Kahneman (2011) as “thinking slow”



Our thinking brain and survival brain are at odds during coronavirus.

Source: Amin Moshrefi/Unsplash

scious decision-making, reasoning, and willpower—happens in our *thinking brain* (neocortex). The thinking brain allows us to

focus; recall, keep in mind, and update relevant information; and make decisions. To support these functions, it has an explicit learning and memory system, situating information within time and space, which we can access intentionally. We know our thinking brain is engaged whenever we hear that running commentary of thinking, comparing, judging, and narrating in our head. Its strategy for protecting us is to anticipate, analyze, plan, deliberate, and decide.

In contrast, thinking fast—which manifests in our emotions, stress arousal, habits, and basic survival—is performed by our *survival brain*, the evolutionarily older limbic system, brain stem, and cerebellum. One of the survival brain's most important functions is neuroception (Porges, 2011), an unconscious threat-appraisal process to steer us towards opportunities/safety and away from threats/danger/pain. Its strategy for protecting us is quite simple: Approach opportunities and avoid threats. To support neuroception, the survival brain has an implicit learning and memory system—fast, automatic, and unconscious, bypassing the thinking brain. Most importantly, the survival brain isn't verbal, so it can't communicate with us via thinking or narrating. Instead, it activates neurotransmitters and hormones, which produce physical sensations and emotions in the body.

How The Survival Brain Turns Stress On

novel, unpredictable, uncontrollable, and threatening to our ego, sense of identity, or physical survival (Lupien, 2009; Stanley, 2019). COVID-19 embodies all these characteristics, which is why it's tailor-made for creating stress and anxiety.

Moreover, if the survival brain perceives itself to be *helpless, powerless, or lacking control*—or if aspects of the current situation contain cues or triggers related to past traumatic events—the survival brain will likely create traumatic stress (Scaer, 2005; Stanley, 2019). During this pandemic, this might happen if a healthcare worker must triage and keep some patients off ventilators. Or, if someone loses their job or must shelter-in-place with an abusive partner or parent. Or, more mundanely, if a parent feels ill-equipped to unexpectedly homeschool their children.

Although neuroception is unconscious, we can observe its effects in our body. We might notice the following: a faster heart-rate; faster or shallow breathing, or holding our breath; constriction in our chest; butterflies in our stomach; muscle tension in our arms, legs, buttocks, shoulders, neck, or back; shoulders hunched up by our ears; a collapsed body posture; dry mouth or clenched jaw; the sense of feeling jittery or ready to jump out of our skin; and clammy hands or sweating.

In the mind, we might notice racing thoughts. Thoughts related to planning, worrying, or trying to fix the situation. Comparing thoughts, such as “I need to get over this already; my situation isn’t nearly as bad as Person X has it.” Devaluing thoughts, such as “At least I still have my job.” Critical thoughts, such as “If only I had done X or Y, I could have pre-

rified, pressured, impatient, restless, angry, tired, overwhelmed, ashamed, guilty, burned out, fuzzy, or numb.

All these are signs that the survival brain has neurocepted danger and turned stress on.

The Paradox

Here’s the paradox: The strategies that our thinking brain often chooses to feel better are likely to make stress and anxiety worse.

THE BASICS

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Remember that the thinking brain’s protection plan is to anticipate, analyze, plan, deliberate, and decide. It usually does this by consciously remembering similar past events and then projecting forward into the future. Of course, this strategy is likely to fall short when we’re in experiencing a once-in-a-century global pandemic!

The thinking brain gets anxious when it doesn’t have enough information to accurately predict what’s going to happen next. It hates uncertainty, because it wants to anticipate, plan, and prevent unwanted things from occurring—something vir-

make accurate predictions, it guesses about what's likely to happen next by spinning “what if” scenarios incessantly: “What if the economy doesn't reopen soon? What if scientists can't create a viable vaccine? What if I have to homeschool my children next year, too?”

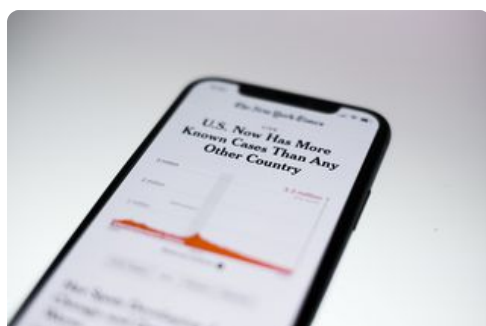
CORONAVIRUS DISEASE 2019 ESSENTIAL READS



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Our thinking brains crave non-stop information right now.

Source: Brian McGowan/Unsplash

The thinking brain also craves information. That's why many people are currently addicted to watching the news, scanning social media feeds, and running frequent Google searches.

Unfortunately, however, both strategies to try to reduce uncertainty—anticipating via “what if” scenarios and gathering more information—are likely to lead the survival brain to turn on *more* stress arousal.

Alternatively, some thinking brains may write COVID-19 off as “no big deal.” Deciding that they personally are at low risk of infection, these thinking brains may make choices that actually increase their risk of contracting COVID-19 and accidentally infecting others. While people in this group may not be especially aware of stress and anxiety, their survival brains

brain finds threatening or challenging.

Finally, while it's non-negotiable that our survival brains will feel some stress and anxiety during coronavirus, our thinking brain may choose coping habits that worsen it. Whenever our thinking brains try to spin the situation positively, devalue the source of our stress, or judge ourselves for feeling stressed, they create the conditions that place our thinking brains and survival brains at odds. An adversarial stance between them always unconsciously exacerbates our stress and anxiety.

So, what can we do?

The survival brain isn't just responsible for turning stress and anxiety *on*—it's also responsible for turning stress and anxiety *off*. Part 2 will explore how to help our survival brain do this. For now, it's helpful to become aware of when our thinking brain is making things worse for our survival brain. This is a crucial first step for making different choices to help *both* brains feel safe during these challenging and uncertain times.

References

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