Your Brain Is Not for Thinking

https://www.nytimes.com/2020/11/23/opinion/brain-neuroscience-stress.html?action=click&module=Opinion&pgtype=Homepage

In stressful times, this surprising lesson from neuroscience may help to lessen your anxieties.

By Lisa Feldman Barrett
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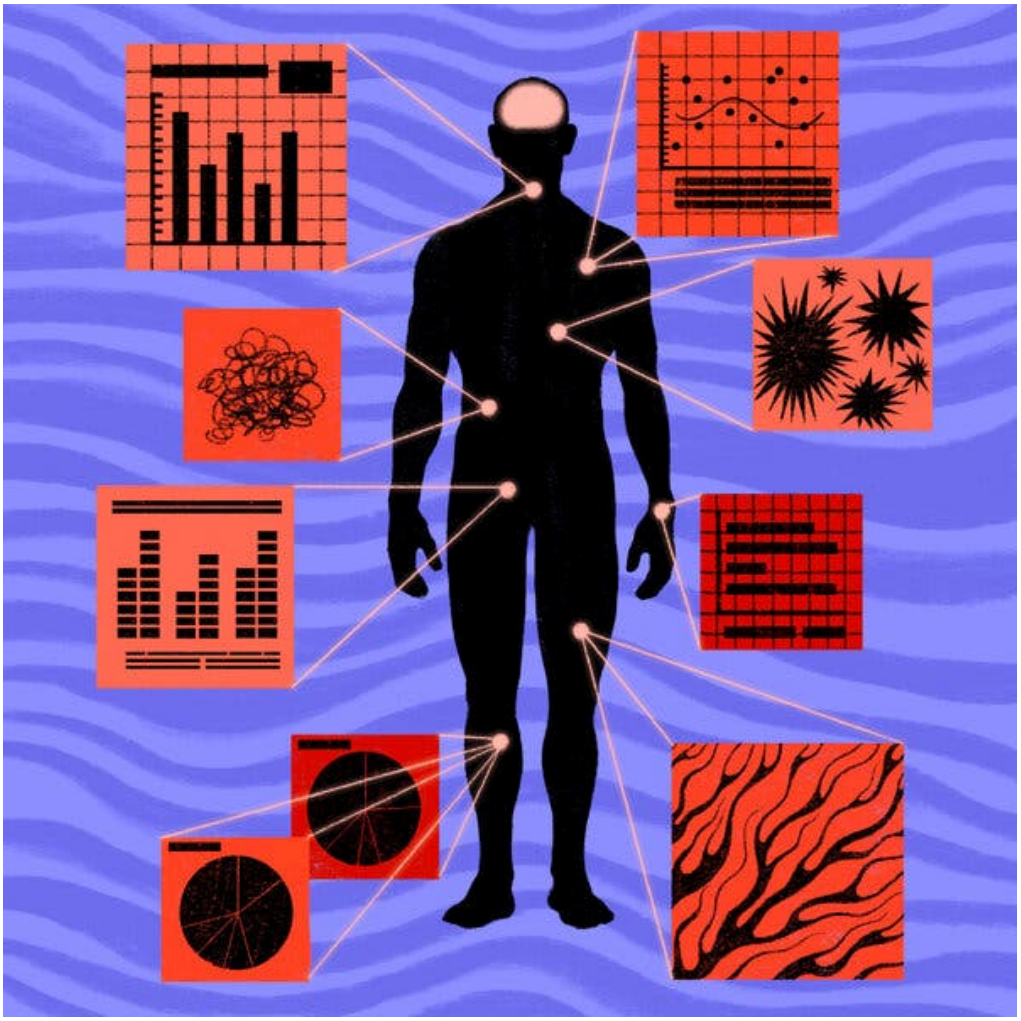

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Five hundred million years ago, a tiny sea creature changed the course of history: It became the first predator. It somehow sensed the presence of another creature nearby, propelled or wiggled its way over, and deliberately ate it.

This new activity of hunting started an evolutionary arms race. Over millions of years, both predators and prey evolved more complex bodies that could sense and move more effectively to catch or elude other creatures.

Eventually, some creatures evolved a command center to run those complex bodies. We call it a brain.

This story of how brains evolved, while admittedly just a sketch, draws attention to a key insight about human beings that is too often overlooked. Your brain's most important job isn't thinking; it's running the systems of your body to keep you alive and well. According to recent findings in neuroscience, even when your brain does produce conscious thoughts and feelings, they are more in service to the needs of managing your body than you realize.

And in stressful times like right now, this curious perspective on your mental life may actually help to lessen your anxieties.

Much of your brain's activity happens outside your awareness. In every moment, your brain must figure out your body's needs for the next moment and execute a plan to fill those needs in advance. For example, each morning as you wake, your brain anticipates the energy you'll need to drag your sorry body out of bed and start your day. It proactively floods your bloodstream with the hormone cortisol, which helps make glucose available for quick energy.

Your brain runs your body using something like a budget. A financial budget tracks money as it's earned and spent. The budget for your body tracks resources like water, salt and glucose as you gain and lose them. Each action that spends resources, such as standing up, running, and learning, is like a withdrawal from your account. Actions that replenish your resources, such as eating and sleeping, are like deposits.

The scientific name for body budgeting is allostasis. It means automatically predicting and preparing to meet the body's needs before they arise. Consider what happens when you're thirsty and drink a glass of water. The water takes about 20 minutes to reach your bloodstream, but you feel less thirsty within mere seconds. What relieves your thirst so quickly? Your brain does. It has learned from past experience that water is a deposit to your body budget that will hydrate you, so your brain quenches your thirst long before the water has any direct effect on your blood.

This budgetary account of how the brain works may seem plausible when it comes to your bodily functions. It may seem less natural to view your mental life as a series of deposits and withdrawals. But your own experience is rarely a guide to your brain's inner workings. Every thought you have, every feeling of happiness or anger or awe you experience, every kindness you extend and every insult you bear or sling is part of your brain's calculations as it anticipates and budgets your metabolic needs.

This view of the brain has many implications for understanding human beings. So often, for example, we conceive of ourselves in mental terms, separate from the physical. A bad stomach ache that follows an indulgent meal may send us to the gastroenterologist, but if we experience that same ache during a messy divorce, we may head to a psychotherapist instead. At the gastroenterologist's office, we experience our discomfort as an underlying physical problem; at the therapist's office, we experience the same discomfort as anxiety — a psychological disturbance, physically manifested.

In body-budgeting terms, however, this distinction between mental and physical is not meaningful. Anxiety does not cause stomach aches; rather, feelings of anxiety and stomach aches are both ways that human brains make sense of physical discomfort. There is no such thing as a purely mental cause, because every mental experience has roots in the physical budgeting of your body. This is one reason physical actions like taking a deep breath, or getting more sleep, can be surprisingly helpful in addressing problems we traditionally view as psychological.

We're all living in challenging times, and we're all at high risk for disrupted body budgets. If you feel weary from the pandemic and you're battling a lack of motivation, consider your situation from a body-budgeting perspective. Your burden may feel lighter if you understand your discomfort as something physical. When an unpleasant thought pops into your head, like "I can't take this craziness anymore," ask yourself body-budgeting questions. "Did I get enough sleep last night? Am I dehydrated? Should I take a walk? Call a friend? Because I could use a deposit or two in my body budget."

This is not a semantic game. It's about making new meaning from your physical sensations to guide your actions.

I'm not saying you can snap your fingers and dissolve deep misery, or sweep away depression with a change of perspective. I'm suggesting that it's possible to acknowledge what your brain is actually doing and take some comfort from it. Your brain is not for thinking. Everything that it conjures, from thoughts to emotions to dreams, is in the service of body budgeting. This perspective, adopted judiciously, can be a source of resilience in challenging times.

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