

Amishi Jha: Pay Attention to Your Attention by Awakin Calls Editors

"Pay attention to your attention."

Amishi P. Jha came to her pathbreaking work studying the neuroscience of mindfulness and attention when, as a young professor of cognitive neuroscience at the University of Pennsylvania, she lost feeling in her teeth. She had been grinding them as a profound stress response to burnout from her responsibilities as a wife, mother, and tenure-track professor. Knowing from her academic work that the brain can change, she told herself at the start of summer, "before I quit my own career, let's see if I can get my own brain to change."

She had just heard a talk about the power of meditation to change brain images from another neuroscientist. And although she had grown up in a Hindu family, born in the Indian city of Gandhi's ashram – where meditation practice was "in the air" – she had never discussed it or practiced it (and her scientific mind had earlier dismissed some spiritual practices from her youth). But that summer, determined to see if she could change her brain, she bought a book by Jack Kornfield, Meditation for Beginners, with an accompanying CD. "I committed to reading a chapter each day and doing one of the practices, probably between eight and fifteen minutes. Within a couple of months, I was more present, more engaged. It got me thinking that there was something about doing this thing every day that was reacquainting me with my life. ... Instead of being foggy and distracted, I was aware and connected. So I thought to myself, hey, wait a minute; I study attention. I need to figure out how this works."

She went to look at the scientific attention literature and found almost nothing. So she decided to "put mindfulness meditation to the test and research it rigorously in the lab." This was in 2004, "before mindfulness was even a thing in our popular culture, and people in my department warned that I'd be committing career suicide by researching this topic," she recalls. She launched the first-ever study to offer mindfulness training tools to active-duty military service members as they prepared for deployment. What she has discovered is that without intervention, attention is compromised, and attentional lapses increase. Yet, with mindfulness training, attention can be strengthened and protected.

As one of the first scientists to research the links between mindfulness and attention, she is known for her pioneering mindfulness work with soldiers, firefighters, medical trainees, and others for whom attention is a matter of life and death. With her book, Peak Mind, she has started bringing her healthy-attention message to parents, CEOs, accountants, teachers, managers—essentially anyone whose work and decision-making feels like life and death.

Jha studies how we pay attention: the process by which our brain decides what's important out of the constant stream of information it receives. Both external distractions

(like stress) and internal ones (like mind-wandering) diminish our attention's power, Jha says -- but some simple techniques can boost it and train it for greater focus and less distractibility. "Pay attention to your attention," Jha says in a TEDx talk that has more than 5 million views. [You can watch it here below]

Jha is a Professor of Psychology at the University of Miami, and Director of Contemplative Neuroscience for the Mindfulness Research and Practice Initiative. Working with the U.S. Army and others in extremely high-stress occupations, Jha uses functional MRI, electroencephalography (EEG) and other neurobehavioral measures to study how the brain pays attention, the mental effects of stress, and ways to optimize attention.

In addition to her own published body of research, her work has been featured in many outlets including TED.com, NPR, and Mindful Magazine. In addition, she has been invited to present her work to NATO, the UK Parliament, the Pentagon, and at the World Economic Forum. She received her PhD from the University of California-Davis, and received her postdoctoral training at the Brain Imaging and Analysis Center at Duke University in functional neuroimaging. She studies the neural bases of attention and the effects of mindfulness-based training programs on cognition, emotion and resilience.

Acknowledging the tension between offering mindfulness tools (founded on Buddhist principles of nonviolence) to active military, Jha recalls her own Gandhian roots: "Nonviolence is part of my core philosophical thread. Yet nonviolence does not mean inaction. It doesn't mean you do nothing. Sometimes what you do to reduce violence and suffering is take action. ,,, [I]f a soldier has a machine gun that can destroy an entire village, I want to make sure that person has the capacity to really know what they're doing and have full control over their faculties, to be able to withhold as appropriate, not be reactive. So a super soldier in many ways is one that can control when to not pull the trigger, not to just pull the trigger."

Brief Excerpt from PEAK MIND by Amishi P. Jha. Copyright HarperOne, an imprint of HarperCollins Publishers, 2021.

Without attention, you would be completely at sea in the world. You'd either be blank, unaware and unresponsive to events happening around you, or you'd be overwhelmed and paralyzed by the sheer, incoherent mass of information assaulting you. Add to that the relentless flow of thoughts generated by your own mind, and it would all be incapacitating.

To study how the human brain pays attention, my research team uses a range of techniques—functional MRI, electrophysiological recordings, behavioral tasks, and more. We bring people into the lab and follow them out into their world—what we call going "in the field." We've conducted dozens of large-scale studies and published numerous peer-reviewed articles in professional journals about our findings. We've learned three major things:

First, attention is powerful. I refer to it as the "brain's boss," because attention guides how information processing happens in the brain. Whatever we pay attention to is amplified. It feels brighter, louder, crisper than everything else. What you focus on becomes most prominent in your present-moment reality: you feel the corresponding emotions; you view the world through that lens.

Second, attention is fragile. It can be rapidly depleted under certain circumstances—circumstances that turn out, unfortunately, to be the ones that pervade our lives. When we experience stress, threat, or poor mood—the three main things I call "kryptonite" for attention—this valuable resource is drained.

And third, attention is trainable. It is possible to change the way our attention systems operate. This is a critical new discovery, not only because we are missing half our lives, but because the half we're here for can feel like a constant struggle. With training, however, we can strengthen our capacity to fully experience and enjoy the moments we are in, to embark on new adventures, and to navigate life's challenges more effectively.

Join an Awakin Call with Amishi Jha this Saturday! More details and RSVP info here.