In 2009, the U.S. Department of Defense gave $2 million to Dr. Amishi Jha and her team of neuroscientists at the University of Pennsylvania to see if meditation can help soldiers stay sane and focused in warzones. Their latest published research is promising, signifying the kind of breakthrough that could transform the way American servicemen perform, react, and live through war. And given that all data everywhere conceivable shows that war veterans suffer
from PTSD and suicidal depression at inexcusable rates, this research, Dr. Jha and the U.S. military hope, could potentially abate those terrible statistics. GQ recently spoke with Dr. Jha to parse out the science of breathing deeply, and the implications of an ultimately chill-er military.

GQ: Why meditation?

Dr. Amishi Jha: The motivation from my side was to find out what preparing to go to war does to a soldier’s mental state, which we measure as their attention and working memory. Because during that critical training period, the goal is to best ready them for what they’re going to be doing next—to optimize their mental and physical readiness to do the task at hand.

So my first inquiry was to see if the current training method actually helped their mental capacity—if it helped keep them stable over time, and if it improved their working memory—but what we found was that working memory was actually degrading over time.

GQ: Why "working memory" as a metric? Why not stress level or ability to duck?

AJ: We looked at working memory capacity because it’s a good way for neuroscientists to measure a broad set of mental functions. Working memory capacity is really the ability to hold and manipulate information while you’re actively trying to block out distraction.

GQ: So how would that translate onto the battlefield? Remembering commands and protocol?

AJ: Well, the mindfulness training practice comes into play with a broad range of complex tasks that require flexibility or mental engagement, or sensitivity to your environment.

GQ: What are the practices? What does it look like in the barracks and then how does it translate to a warzone situation?

AJ: There are two main components to the training. One is mindfulness, and the other is physiologic re-regulation, which is really looking at how trauma and stress manifests itself in the body.
So on the mindfulness side, it’s tied into a set of trainings that have been implemented in medical contexts for the past 30 years—it’s an eight-week course called Mindfulness-Based Stress Reduction. The core component has to do with attending to your present moment experience without elaborating or judging what’s going on.

**GQ:** OK. As someone whose job it is to elaborate and judge, I’m wondering how you could train someone out of a natural predisposition.

**AJ:** I guess a very fundamental training practice would be mindfulness in breathing. And you would instruct the participant—the soldier—to sit in a very upright position and to pick a particular sensation associated with breathing, and to focus on that sensation while excluding anything else that could be going on in your surroundings and your mind, whether it be the coolness of air in the nostrils, or the belly moving up and down. And if you wander off to other ruminations, you practice coming right back to that physical sensation of breathing.

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**GQ:** From what you’re saying, it seems like meditation could be oddly fitting in an army context if you’re showing soldiers a different path to the same goal of emotional detachment. These guys are trained to emotionally cauterize themselves for the greater good of the mission and the country.

**AJ:** Yes, I think it fits into a mindset that’s aimed toward emotional control. I’ve been having conversations with military leadership who express understanding that how they’ve been training soldiers hasn’t been working.

And if the military’s intention is to be able to have the best possible cognitive processes and complex thinking and even moral decision-making, this practice would help them handle any
emotions that come up that could get in the way of that.

**GQ:** So having an emotional reaction to a situation is in direct conflict with moral decision-making? Isn’t emotionality an important part of judgment? I’m picturing a collateral civilian damage situation here.

**AJ:** Well we’re realizing that emotional function and cognitive function aren’t unrelated to each other. They’re completely intertwined. This could prevent them from succumbing to fear and having an emotional breakdown.

**GQ:** I guess what I’m asking is could fear and emotional attachment be appropriate, even "healthy" experiences on the ground in a war zone?

**AJ:** The route that we’re taking, and our intention with these training exercises to prepare the mind is not to block out or even restructure experience. You’re not numbing yourself to fear and anxiety. That’s actually the exact opposite of what happens when people engage in these practices.

So compared to when people do nothing—or just do the current pre-deployment requirements—their affective disregulation seems to go up.

**GQ:** Affective disregulation?

**AJ:** Yeah, they’re loading up more and more tasks, their increasing exhaustion, and they’re preparing to leave their families. So what we found in the test group was the more time they spent in our practices, the less degradation they experienced.

**GQ:** How do you measure your success rate? Do soldiers who go through mindfulness training self-report better awareness or engagement in the present?

**AJ:** Yeah, what’s very interesting is when we talked to the guys who came back, they report that in previous deployments everybody felt like an enemy, everything felt like a potential target. And after the training, they’ve reported that even in highly ambiguous, highly stressful contexts they can change that common narrative and see, "That’s just a child that’s playing. That’s not a potential insurgent." And this becomes an especially important way of thinking now as operations
are shifting toward more peacekeeping contexts. Those skills tend to be more important when you’re training the local police force, which is what new deployments will be preparing to do in Afghanistan and Iraq. It will be increasingly important to not overreact, or over-generalize, or act out of habitual response instead of what’s actually happening in front of them. This is a way to refocus completely on their present experience.

GQ: Is it possible that mindfulness training could cause a soldier to have a negative side effect of becoming too attached to that present experience, of becoming over-involved in a situation to the point where it’s, well, crippling?

AJ: Yes, sometimes it’s the case that having new awareness actually slows you down or makes you less able to do what you need to do. Nothing in our data would make that obvious, but one of our concerns is to make sure we don’t train people in these techniques too near to when they’re leaving. Because it may be that there is a developmental trajectory when you’re learning it, and that you may become overly aware to the point where it does become a problem, and you need to be able to stable out in your ability to flexibly engage in the techniques. So it does have that downside. But, again, we need to keep doing research to find the point where it becomes most beneficial.

GQ: Maybe I’ve seen too many dystopian movies with a government aiming for drone-like obedience from its military, but do you think this new, promising ability to train soldiers not to degrade or "disregulate" could, well, fall into the wrong hands? Do you worry that this could get nefarious?

AJ: No. Everything that we’re finding suggests that the capacities that are actually being bolstered are tied to ethical decision-making—are tied to more elaborated thought. We’re seeing an increased ability to have complex, logical thinking. And I should emphasize that the funding of this whole enterprise from our side comes from the medical command, not operations. And they’re coming to us to see if we can help protect against, and heal, a really large public health problem that the Army is going to face, which is having lots of psychological dysfunction.
GQ: So have you found that mindfulness training helps abate incidences of PTSD and depression and other forms of post-deployment psychological dysfunction in addition to diminishing unnecessary stresses on the ground?

AJ: Well if your decision-making is improved on the ground, certainly you’ll be less likely to make the kind of errors that will linger with you the rest of your life and lead to regret, remorse, and a whole cascade of psychological dysfunction. The intention is to cause the least amount of damage—whether that’s the use of excessive force or incidence of civilian casualties—these are the kind of situations that haunt you for the rest of your life. So, it seems logical. My hope is to continue to study and evaluate this to a larger extent. It’s the first time that mindfulness training has been done in a pre-deployment context—there are still open questions.