When You Think Your Brain Is Doing Nothing, It's Really Getting You Ready To Socialize

Your brain is *always* doing something. Even when you think it’s “offline” because you aren’t actively engaging a task or problem, your brain is busy reducing activity in some of its areas and increasing it in others. The question that’s preoccupied neuroscientists is, what’s the goal of all this brain activity when we aren’t outwardly doing anything in particular?

A new study ([http://www.mitpressjournals.org/doi/10.1162/jocn_a_00785#.VWrx9c9Viko](http://www.mitpressjournals.org/doi/10.1162/jocn_a_00785#.VWrx9c9Viko)) offers an answer that makes Facebook ([http://www.forbes.com/facebook-ipo/](http://www.forbes.com/facebook-ipo/)) browsing suddenly seem more meaningful. The researchers believe that when the brain isn’t actively engaging a task, it drops into a mode that prepares it to be social with other brains.

“When I want to take a break from work, the brain network that comes on is the same network we use when we’re looking through our Facebook timeline and seeing what our friends are up to,” according to Dr. Mathew Lieberman ([http://www.scn.ucla.edu/](http://www.scn.ucla.edu/)), study co-author from the University of California Los Angeles. “That’s what our brain wants to do, especially when we take a break from work that requires other brain networks.”

The research team observed participants’ brain activity using fMRI ([http://en.wikipedia.org/wiki/Functional_magnetic_resonance_imaging](http://en.wikipedia.org/wiki/Functional_magnetic_resonance_imaging)) while they made a series of fast “yes or no” judgements under a few different conditions, some involving social elements and others not. The researchers found that they were able to make predictions about how participants made social judgements by gauging activity in a brain area called the dorsomedial prefrontal cortex (DPC). As it turns out, the DPC is also central to the brain’s “default mode” – the mode we drop into when we aren’t actively engaging tasks.

The default mode is most often associated with daydreaming. Before the last couple of decades, daydreaming didn’t command much scientific attention because it seemed like pointless drifting. We’ve discovered, however, that...
daydreaming is important default-mode time for the brain where different, less directly-active processing happens. This study suggests that part of this default-mode processing helps the brain prepare for social interaction with other brains.

According to Lieberman, “The brain has a major system that seems predisposed to get us ready to be social in our spare moments. The social nature of our brains is biologically based.”

The DPC also happens to be an energy-intensive brain area – it takes a lot of circulating blood glucose to fuel our allegedly non-active brain processing time. Knowing that should inspire new respect for what our brains are accomplishing while we think we’re doing nothing. Downtime is never simply downtime — it’s just a different sort of processing time for the perpetually processing brain. (https://twitter.com/intent/tweet?url=http%3A%2F%2Fonforb.es%2F1eJvcPL&text=Downtime%20is%20never%20simply%20downtime-it%27s%20just%20a%20different%20sort%20of%20processing%20time%20for%20the%20perpetually%20processing%20brain.)

The study was published in the Journal of Cognitive Neuroscience (http://www.mitpressjournals.org/doi/10.1162/jocn_a_00785#.VWrx9c9Viko).

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