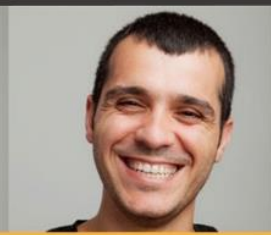
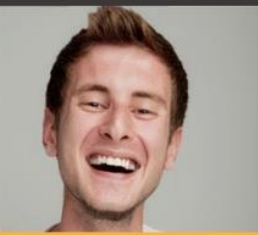
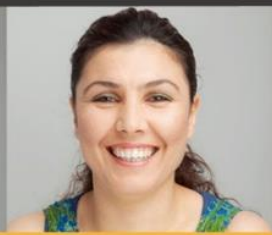
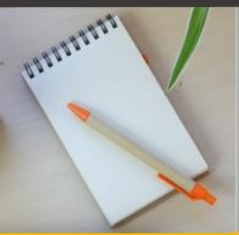


Happy Brain Science

Fostering productivity, creativity & happiness through
the application of cutting-edge brain science.



WHAT IS THE REAL VALUE OF HAPPINESS IN THE WORKPLACE?

TRANSCRIPT

Minimize Multi-tasking

Thrive From Nine to Five: The Science of Happiness at Work

The problem with flow is the cultural disease we have called multi-tasking. Trying to do two things at once, if you're paying attention to them, is essentially impossible. Let me make abundantly clear, your brain is a wonderful parallel processing machine. That is, you can do many things at once easily, if you're not paying conscious attention to them. Walking, chewing gum, if you have a repetitive task at work, especially a physical task. Parts deep in the middle of your brain, called your basal ganglia and your cerebellum back here at the base of your brain can completely automate repetitive physical tasks. That includes your commute home, by the way. If you have the same commute home every day you can have that bizarre experience where you're driving along and you end up in your own parking place and you go, "Now, that's weird. I wasn't paying any attention for the past 10 minutes. Was I conscious?"

Don't worry, your basal ganglia and cerebellum have things like that totally under control and if there suddenly had been a whale on the street it would have said, "Hey, prefrontal cortex, we need you. We don't see this every day." If you're not paying attention I don't care, but if you are paying attention, you cannot effectively pay attention to two things at once. All you can do is rapidly shift your attention between things.

If you shift your attention between eight projects in a day, I don't care. It's eight things in a minute that tend to severely undermine your performance and prevent you getting in flow. Now I know some of you might be thinking, "Spare me old man. I've been multi-tasking my whole life and I'm excellent at it, thank you." So, I want you to experience the price you pay for multi-tasking.

Please, if you're willing, what I encourage you to do is when I say, "Go," in a moment I want you silently, that's with your mouth closed, say the alphabet as fast as you can, count from 1 to 26 as fast as you can and then stand up. Anybody not clear what I'm asking you to do? Silent alphabet, 1 to 26, stand up. On your mark, get set, go.

And don't worry if you're one of the later people standing up. You have better internal enunciation than your peers here. Thank you, you can sit down. Now I invite and encourage you to do exactly the same things. Silent alphabet, 1 to 26 fast as you can, then stand up. This time alternate. A-1, B-2, C-3. On your mark, get set, go.

Okay, I've only got about five hours left with you, so let me stop you there, because that's about 15 seconds. And at 15 seconds, almost all of you were standing up before. That is the price you pay for rapidly shifting your attention. Any computer nerds out there like me, know that context switches for computers are expensive. They're also expensive for your brain. Similar things going on. "Oops, we're going to do something else, let's flush this data. We need that other data. Where was that? Is it here? Is it here? Oops, got that data now. Now we're working on it. Oops, interrupt. We got to flush that. Where did that other thing go that I was thinking about? Oh yeah, here it is. I got to load that up and where was I again?"

"Where was I," is the loss of flow and it is killing one of the happiest, most productive states of mind you will ever have in all of life, never mind just work. Now there's good news about interruptions which is interruptions under two minutes can leave you in flow. Again, your mileage will vary because every brain is different. Typically, if you get a very quick question, "Hey, did you send that report to Martha?" "

"Yup." Right back where you were.

Okay, so when we launch in Asia, we need to be several weeks after so that we can see how the marketing went over and the countries that are closest to Asia in culture ..." You're right back where you were. If you get an interruption longer than 2 minutes, "Hey, did you send that report to Martha? Do you think she's read it yet? Because Martha hates it when we identify risks later in the project and we're identifying some risks now that we didn't see in the beginning. I'm a little concerned she's going to ..." Three four minutes go by. You try to go back to what you were doing and what do you think and feel? "Where was I?" "Where was I," is the loss of flow. It kills a wonderful productive, happy experience.

You feel like you're being more effective when you multi-task because it's very challenging and anything challenging for your brain releases additional neurotransmitters that can feel good to us. "Mmm, dopamine, serotonin. I feel alive when I multi-task." Okay good, but there's a better way of getting those releases of neurotransmitters, and that is to get and stay in flow because getting that rush from multi-tasking, you pay a price.

It takes you longer to get things done. As you just experienced, you actually finish faster if you do one thing and then another than if you go back and forth between the two or three things you're trying to get done. You're faster. You make less mistakes. Anyone been in a meeting, sent an email to somebody, later gotten a reply back that says something like, "Crabtree, can't believe you said, 'ABC.'" I'm like, "What? I did not say ABC. I said, ABC? What was I thinking?" I wasn't thinking. I was trying to multi-task. I was trying to send an email in a meeting unrelated to the meeting I'm in. You

Happy Brain Science

make more mistakes. You have to clean those mistakes up later.

Multi-tasking also makes you what Professor Clifford Nass at Stanford called a sucker for irrelevancy. That is, you undermine your own ability to stay focused even when you want to. Imagine now, you're all Stanford undergraduates. Congratulations. I know you all looked very smart. You all come into Professor Nass' lab at Stanford and you all answer a questionnaire about your multi-tasking habits. Some of you say you frequently multi-task and some of you say you rarely multi-task. Those who frequently multi-task believe that they're very good at it. Very good at switching attention without paying a price. Then you're all given a task which I'll simplify for the sake of speed, as count the blue rectangles we're going to flash a bunch of shapes at you.

Those of you that rarely multi-task have little challenge here. Blue rectangle one, two, other stuff. Three, four other stuff. Five, no sweat. Those of you who multi-task a lot, even though you're getting paid for correct performance, your experience is much more like, "Blue rectangle one, two, orange oval, not what I'm supposed to be counting, but for that new website we need to put up. That wouldn't be a bad centerpiece to sort of convey, uh oh. I think I missed a blue rectangle." You become a sucker for irrelevancy.

Intel is where I learned the phrase, "Drink from the fire hose," because that's what work can feel like in a challenging, successful company like yours, right? Lots of information coming at you all day long. Instant messages, emails, phone calls, people stopping by, projects, pieces of paper. Part of your job is to figure out what's important and focus on the most important things. If you multi-task frequently, you'll undermine your own ability to stay focused on what's important.

You also may lower your IQ. Now I pride myself on scientific sources. The following study was not published in a peer reviewed academic journal so you can take this with a big fat grain of salt if you'd like. But it makes the point so well, I feel compelled to include it. A study done at King's College, London, found an IQ drop in multi-taskers while multi-tasking, even adjusting for time, of 10 points. That suggests that it may be true. That if you choose to multi-task you choose to slide yourself past another 10% of the population in intelligence. That's how IQ scores work. They are percentiles.

If you choose to multi-task, you choose to lower your intelligence, roughly 10%. 100 is average intelligence for IQ. That 10 point drop in IQ is more than double the IQ drop regularly observed when people consume marijuana. My question for you all is, if you wouldn't get high at lunch and go back to work. And maybe you would, we're legalizing marijuana in Oregon right now, but if you wouldn't, then why are you choosing to multi-task and do your most important work? You're operating not at 100% smart, but 90% smart. Making more mistakes, taking more time to get things done.

I know for some of you, interruptions are a fact. It's your job for some of you to be available to other people. You have to decide how you can manage your interruptions, how you can try to get into flow. For some of you, it may make sense for the whole team for you never to get in flow. The best thing for the whole team is for you to be available at anyone's beck and call to answer a question or solve a problem.

Happy Brain Science

I just want you to be aware of the price you pay so that you can choose and maybe turn on, "Do not disturb," on your instant message program or don't answer the phone for a little while. Or put up a little sign to people that says, "Can it wait? I'm trying to be in flow right now." If you manage your interruptions and get into flow, you will find that you are very happy and very productive.