

How to Get Focused



8 Things Everybody Ought to Know About Concentrating

by SSCHEPER on APRIL 18, 2010

“Music helps me concentrate,” Mike said to me glancing briefly over his shoulder.

Mike was in his room writing a paper for his U.S. History class. On his desk next to his computer sat crunched Red Bulls, empty Gatorade bottles, some extra pocket change and scattered pieces of paper. In the pocket of his sweat pants rested a blaring iPod with a chord that dangled near the floor, almost touching against his Adidas sandals. On his computer sat even more stray objects than his surrounding environment. There must have been twenty browser tabs open. The tabs included political blog news, random Wikipedia entries, Facebook profiles and a Myspace page blasting more music at him. Two notifications with sound popped-up simultaneously in the top-right corner of his screen. One was an email; the other was a tweet. Behind his dozens of browser windows sat a pending music download and a handful of blinking IM’s.

Mike made a shift about every thirty seconds between all of the above. He’d write a little bit for his history paper, check his pending download, reply to his IM’s, and then start all over.

Do you know a person like this? I do. Those were my concentration habits at one point in my life. Yet, I made a series of decisions that resulted in a 180 degree turn. This book is about how to make that 180 degree turn. And this chapter centers on understanding a core component for getting focused: short-term focus (or concentration). We’ll first outline what science teaches us about concentration, and then we’ll dive into how you can concentrate when you feel overwhelmed through 8 steps.

The Science Behind Concentration

In the above account, Mike’s obviously stuck in a routine that many of us may have found ourselves in, yet in the moment we feel it’s almost an impossible routine to get out of. Many fall into this pattern because constantly shifting attention and multitasking eases the pain of doing something you hate in the first place. We mitigate essays and projects with blasts of dopamine delivered through tweets, music and gossip. **What science tells us, though, is that not only does multitasking make our work 50% less valuable; it takes 50% longer to finish.** Plus, it’s physiologically impossible for the brain to multitask.

When we constantly multitask to get things done, we’re not multitasking, we’re rapidly shifting our attention. And this rapid shifting kills the mind, it waters its effectiveness down significantly. When we follow Mike’s pattern above, the mind shifts through three phases:

Phase 1: Blood Rush Alert

When Mike decides to start writing his History essay, blood rushes to his anterior prefrontal cortex. Within this part of the brain, sits a neurological switchboard. The switchboard alerts the brain that it's about to shift concentration.

Phase 2: Find and Execute

The alert carries an electrical charge that's composed of two parts: first, *a search query* (which is needed to find the correct neurons for executing the task of writing), and second, *a command* (which tells the appropriate neuron what to do). This process propels Mike into a mental state of writing for his History essay. Your mind literally puts a writing cap on.

Phase 3: Disengagement

While in this state, Mike then hears an email notification. His mind rapidly disengages his current writing state, and then sends blood-flow back to Phase 1, which then leads him to phase 2, and then when he gets distracted again, he'll find himself at phase 3.

The process repeats itself sequentially. It doesn't work simultaneously (i.e. multitasking). The mind shifts rapidly through this phase at a rate of one-tenth of a second. This tells us two important things: it reinforces the case that we must only focus on one thing at a time, and second, it's critical to master selective attention, which we'll explore below.

Concentration drives intelligence

Research surfaced recently that revealed the true drivers of intelligence. They asked, "Is intelligence simply the ability to assimilate information and recall upon it whenever needed?" Is intelligence really a measure of memory? If not, than what makes a person intelligent? Amazingly, they found that intelligence is not founded on one's memory. Instead, intelligence emanates from one's ability to control their selective attention. It's their ability to control the three phases above, and where they route their blood-flow to within the prefrontal cortex.

As you improve in the ability to strategically allocate your attention, your brain also improves. In fact, it rewires itself. As you exercise concentration and selective attention, your mind rewires itself to support your new habits. You get better and better at concentrating when you concentrate. That's the good news. The bad news is that as you age, your mind's flexibility slows down slightly. Meaning, you can't rapidly jump out of habits and processes as well as you could in your earlier days. Yet, by practicing the small steps and exercises today within your mind, you can establish solid mental faculties for your older years. By practicing brain exercises through mental games you can significantly sharpen your mind. For brain exercises, I highly recommend Lumosity's brain training games. They're fun, effective and you can sign up for free. [Click here and sign up for a free account. \(free brain game training\)](#)

Now that you know a bit about the science and background of your mind, we'll explore 8 things that will help you build short-term focus (concentration).

8 Things Everybody Ought to Know About Concentrating

1. You can't start concentrating until you've stopped getting distracted

The phrase above is self-explanatory. Yet, it's amazing how most people look for some crazy, obtuse solution for the reason why they can't concentrate. They reason, "I just have ADD. I can't concentrate." In reality, their situation likens itself to Mike's situation above.

In the late 80's, two researchers asked themselves a chicken-egg question. ("What came first the chicken or the egg?"). Their version centers on distraction and boredom. They asked themselves, "What came first, distraction or boredom." What they found is rather subtle, yet it's profoundly significant. They found that distraction leads to boredom (not the other way around). This displays that we must cut out distraction in order to get focused; or else, we'll get bored.

2. Just do one important thing per day

Scientists also found that we can only focus on one thing at once. Nobody does that. We've always got something going on in the background of whatever we're doing. We've always got two-dozen tasks on our to-do list. On top of this, we've got a handful of projects that we try and finish simultaneously.

When you've got a mountain of paperwork on your desk, the best thing to do is clear it all off. Pick it all up and place it in a drawer. Do anything required to get it out of your sight. After this, kick your feet up and daydream. Yes, I'm serious. Daydream and ask yourself the following question: "What's the most important thing I can do right now?" Once you've identified the item that will actually make a difference, do it.

Try and make it a goal to do just one critical thing per day. This habit proves much more effective than living the routine everyone else lives: doing many insignificant things a day. They live on fooling themselves into thinking they've added value.

The quote below by John Wooden summarizes this quite nicely. Recall upon this daily if you're having a difficult time breaking away from the ineffective lifestyle.

"Don't mistake activity for achievement." – John Wooden

3. Chunk into three's

Most of the time your one important thing that you can do per day takes more than just one action. Oftentimes it takes a series of smaller steps to accomplish. For this reason, it's very helpful to chunk activities into sets of three. If you set out to accomplish one important item without a plan, you'll be just as ineffective as the crack-berry work-a-holic running around the office making copies.

Outline your three-step to-do list using an offline to-do planner (which we outline in another chapter); or if you're working online, use a three-item FocusList to keep you focused on the task at hand. [Click here for a simple, effective, downloadable To-Do List.](#)

4. Questions that kill procrastination

The brain processes meaning before detail. This is where procrastination stems from. Your boss, professor or co-worker tells you that the task on your desk is important, but your brain doesn't yet agree. If you push forth anyways, and embark on the task before understanding its meaning, you'll end up frustrating yourself and wasting time because you may have to do it all over.

For this reason, whenever you find yourself procrastinating, ask yourself the following questions:

Question one: Does this really need to be done?

- If you're in the business world, term it as, "Will this increase revenue, and/or reduce cost?"
- If you're in school, ask "Will this impact my grade?" Note: In school, it's not necessarily about preparing you for the real-world, it's about assimilating information, regurgitating it on a test, and then hopefully remembering some of it in the future, which gives you more context for the real world. This is why, the question isn't, "Will this prepare me for the real world?"

Whatever your environment, if you can't come up with a compelling reason for doing something, ask why the task needs to be done. If it's not your choice, and it's your boss' choice, have him or her step into your office and explain the situation. Tell them, "So, I've been sitting here trying to figure out how to best approach this project, yet I everytime I advance further, I keep coming back to why this is meaningful in the first place. Can you help me understand the big picture and value this actually adds to our business?"

The result will be one of four things:

1. The person will realize that this is just busy work. Thus, you won't have to do it,
2. The person will try and convince you that it's important. In this case, assign yourself an insanely fast deadline to finish the project, and finish it. This type of boss values people that look like they've done something; he or she doesn't actually care about its effectiveness, thus they won't care about results.
3. The person will come up with a compelling reason for why it's important, and thus you'll be able to finish the project with grace and effectiveness because you understand its meaning and purpose.
4. The person will get angry at you for questioning the process. This indicates that you're at a bureaucratic organization that devalues innovation and purpose. If you're OK with this, enjoy a work-life of hell. If you're not OK with this, sprint to the exit as quickly as possible.

Question two: Can I delegate this?

If you find yourself with a task that has meaning (with or without a lie from a boss), and you don't want to do it, delegate it. Doing something you hate is a lose-lose. It's bad for you, as well as your organization because you'll likely turn in sub-par work.

5. Be Smart With Your Time

The Pareto principle is founded on a theory that 80% of effectiveness is driven by 20% of our activity (or causes). I argue that it's more like 99%:1%. It's amazing how many insignificant tasks we're constantly filling our lives with. Don't make it your goal to involve yourself with 20% of meaningful items during the day. It gets too confusing, and your untrained mind will still end up taking-on too much. As state above, just do one important task per day. Say no to everything else—even your boss. Be humble, but be logical.

There's three types of people in corporations:

Type 1: Busy People

This is the person who constantly stresses themselves out by running around with paper, working on vacations and constantly checking email. They look like work-a-holics, but they get very little work done. They end up burning themselves out. They can even end up lashing out at others.

What ends up happening is that others perceive them as being able to get the most done, thus people assign more work to them. The work results in being half-assed because the busy person doesn't have the appropriate time needed for the task. People end up giving the most work to those who are least effective. This is why busy people and work-a-holics are bad for organizations. They eventually end up hurting companies.

Type 2: Lazy People

Lazy people are those that put the blame on their external environment for a lot of things. In the back of their minds sits hope that they'll one day succeed and hit that million-dollar home-run. Yet in the meantime, they fill their lives with activities that release dopamine.

Activities such as T.V., potato chips, video games, researching whether or not Tupac faked his death and conspiring over whether our government is run by free masons. I was this person once. These were my habits. I occupied my time with message-boards, reading hours of sports articles, and more. I wanted to achieve my dreams, but my mind craved dopamine derived from reading sports blogs. Getting out of this state and into the state below is what this book is about.

Type 3: A Sage

A Sage is one that doesn't involve themselves in dopamine-driven activities; instead, he or she is very selective about what they do. They have a habit of asking themselves questions that most people are too busy to ask. They pre-occupy themselves with the unspoken, yet meaningful assumptions that others fail to address. Sages ask questions about the meaning behind any activity that they embark on. They view turning down work as a logical

decision, not an emotional one. They even say no to their bosses in a strategic way. In order to become a Sage, you must become indispensable to your organization, which is accomplished through practicing Wu Wei (which we will cover soon in the chapter on Flow). Of course, when it comes to business, nobody is indispensable, even the CEO and Founder can be replaced (e.g. Yahoo's CEO/Founder, Jerry Yang). By becoming indispensable, I mean you must be economically indispensable. Meaning, to the economy, you must be indispensable. In other words, you, yourself, can generate monetary value wherever you go—even if you work for yourself. The most empowering feeling is knowing you can land a job at any time, or just make money for yourself whenever you want to.

A true sign of being indispensable is not a pat on the ass from a boss. It's not a bonus or a raise. A true sign of being indispensable comes from making money on your own and getting job offers when you're not looking for a job.

In summary, in order to be a Sage, you must earn it. You must earn it by being economically indispensable, and we'll learn shortly that this falls into place naturally.

6. Mind Maps

Whenever you're feeling overwhelmed, it's critical to allow the mind to disentangle itself by mapping out your thoughts on paper.

There's two types of maps: (i) PS Map, and (ii) Fear Map

I. PS Map:

A PS Map is short for a **problem-solution mind map**. This becomes a helpful tool when you're trying to get something done, yet your mind keeps wandering towards a problem you think you have. A PS Map is also critical for when you feel restless—when your mind won't stop racing. You tend to pace around the house contemplating a problem. Whenever you're in this state, pull out a piece of paper and at the top write: "Problem." Then map out every single detail and nature of the problem. Halfway down, on the same piece of paper, write out "Solution" And then map out possible solutions to this problem. This simple exercise slows down the mind, puts things into perspective and makes the solution shockingly clear.

II. A Fear Map

Sometimes, thoughts and ideas creep into our mind that are intrinsically negative in nature. These thoughts generate fear. In this situation, it's best to outline the consequences of your fear. Through outlining the results of your fear, you can oftentimes find how insignificant the fear really is. And even in the case of where the fear still seems significant, at least you know what the worst thing could happen is. Oftentimes you'll find that the worst thing that could happen, really isn't that bad.

A fear map forces you to apply simple logic to the source of your fear. It's founded on 'If X, then Y.

On paper map out the following formula “if x, then y.” Where “x” is the fear, and “y” is your estimate of the fear’s result.

Through mapping out your thoughts, you can calm the racing mind, which will free your mind to focus on the task at hand.

7. Blame something

Other times, sitting down to concentrate is as simple as blaming a simple object for your inability to concentrate. As we discussed above, lazy people are those that blame almost everything on their environment. You don’t want to do this, as it’s not a long-term, sustainable solution. However, in instances where you can’t get excited to actually pump blood to your prefrontal cortex (phase 1 of concentrating), a simple object can help you out. Such an object would be coffee, a drink, a Bonsai tree or a walk. You can reward your mind for concentrating by saying, “OK, mind, here’s the deal—it’s hard to concentrate on this right now, but I’ll pick up a bonsai tree, which will create a more compelling environment to concentrate.” You’ll find that this object-based motivator actually works.

8. Interest

Researchers found that concentration is not a gift. It’s not about intelligence. It’s not about being a prodigy with a gifted memory. It’s not about possessing the ability to recall an insane amount of facts (That’s what Google’s for). Researchers found that concentration is driven by interest, and interest is driven by attitude. If your attitude towards a specific project swells with interest, intrigue and passion, concentration is astonishingly easy.

Conclusion

A core component of concentrating is building up a repertoire of purpose-driven habits that enables you to seamlessly step into “flow.” It’s my thesis that “flow” is the combination of mastering short-term focus and long-term focus. This book is about building this repertoire through goals, habits, exercises, philosophies and practices which will result in you becoming a more focused person.

What’s Next

As we covered, the key to proper concentration is creating your own purpose-driven habits that enable you to step into “flow.”

It’s my thesis that “flow” is the mastery of both short-term focus and long-term focus. In this chapter, we’ve outlined the science behind short-term focus, and the 8 actions you can do to improve concentration.

Remember – intelligence comes from focused concentration. Beware of the distractions around you. We’re all human and prone to laziness or becoming an inefficient work-a-holic, but we can choose to be strategically lazy, and thus, becoming effective.

More About 'How to Get Focused'

This book is about building the habits of focus through goal-setting, exercises, philosophies and practices that result in an increased ability to focus for success.

In the next chapter, we'll explore the concept of flow.

As always, please let me know how you liked this chapter and what can be improved in the comments section below.

More resources

- [Attention and Intelligence](#)
- [Brain Rules](#)

The Frontal Cortex

Attention and Intelligence

Posted by [Jonah Lehrer](#) on April 2, 2010

Let's begin with this recent [experiment](#) by neuroscientists at Rutgers, which demonstrated that general intelligence (at least in rodents) is mediated by improvements in selective attention. Here's the [abstract](#):

*In both humans and mice, the efficacy of working memory capacity and its related process, selective attention, are each strongly predictive of individuals' aggregate performance in cognitive test batteries. Because working memory is taxed during most cognitive tasks, the efficacy of working memory may have a causal influence on individuals' performance on tests of "intelligence". Despite the attention this has received, supporting evidence has been largely correlational in nature. Here, genetically heterogeneous mice were assessed on a battery of five learning tasks. Animals' aggregate performance across the tasks was used to estimate their general cognitive abilities, a trait that is in some respects analogous to intelligence. Working memory training promoted an increase in animals' selective attention and their aggregate performance on these tasks. This enhancement of general cognitive performance by working memory training was attenuated if its selective attention demands were reduced. **These results provide evidence that the efficacy of working memory capacity and selective attention may be causally related to an animal's general cognitive performance and provide a framework for behavioral strategies to promote those abilities.** Furthermore, the pattern of behavior reported here reflects a conservation of the processes that regulate general cognitive performance in humans.*

Obviously, every discussion of general intelligence in the context of mouse performance is bracketed by lots of question marks. Nevertheless, I think this research can help clarify what, exactly, intelligence is, and why it's so important. I think most people assume that intelligence is largely a matter of learning and memory, so that smarter people end up with more facts in their head. (We'll call this Trivial Pursuit model of intelligence.) This helps explain why people searched for centuries for a correlation between brain mass and raw intelligence, as if Einstein was nothing but a massive hard drive.

This rodent experiment, however, argues that intelligence is really about the ability to control the spotlight of attention. After all, having access to facts doesn't matter if we can't focus on the facts, or figure out which facts are actually important. (Herbert Simon said it best: "A wealth of information creates a poverty of attention." To push Simon's metaphor a bit farther: Intelligence, then, is like a savings account that keep us from going broke when faced with too much information.) This is why training mice on selective attention tasks makes them smarter – it allows them to make better use of all the relevant information that's already out there.

This reminds me of the ideas I wrote about in the [New Yorker](#) last year, while discussing the work of Walter Mischel and the marshmallow task. Mischel pioneered a delayed gratification protocol in which four-year olds were given a choice between eating one marshmallow right away or waiting 15 minutes and getting two marshmallows. It later turned out that the ability to delay gratification as a little kid was a powerfully predictive test, and that kids who could delay for longer scored higher on the SAT, had fewer disciplinary problems and responded better to stressful situations.

At the time, psychologists assumed that children's ability to wait depended on how badly they wanted the marshmallow. But it soon became obvious that every child craved the extra treat. What, then, determined self-control? Mischel's conclusion, based on hundreds of hours of observation, was that the crucial skill was the "strategic allocation of attention." Instead of getting obsessed with the marshmallow—the "hot stimulus"—the patient children distracted themselves by covering their eyes, pretending to play hide-and-seek underneath the desk, or singing songs from "Sesame Street." Their desire wasn't defeated—it was merely forgotten. "If you're thinking about the marshmallow and how delicious it is, then you're going to eat it," Mischel says. "The key is to avoid thinking about it in the first place."

Mischel's large data set from various studies allowed him to see that children with a more accurate understanding of the workings of self-control were better able to delay gratification. "What's interesting about four-year-olds is that they're just figuring out the rules of thinking," Mischel says. "The kids who couldn't delay would often have the rules backwards. They would think that the best way to resist the marshmallow is to stare right at it, to keep a close eye on the goal. But that's a terrible idea. If you do that, you're going to ring the bell before I leave the room."

According to Mischel, this view of will power also helps explain why the marshmallow task is such a powerfully predictive test. "If you can deal with hot emotions, then you can study for the S.A.T. instead of watching television," Mischel says. "And you can save more money for retirement. It's not just about marshmallows."

In other words, delayed gratification isn't really about gritting our teeth or exerting willpower: it's about controlling the spotlight of attention. Likewise, intelligence isn't just about remembering abstract facts – it's about controlling what thoughts we're thinking about in the first place. (To put it another way, being smart is not just about having a larger working memory – it's about having more precise control over what's *in* working memory.) The brain is a bounded machine and the world is a confusing place, full of errata and distractions – intelligence is the ability to parse reality so that it makes just a little bit more sense. (As William James famously wrote, "Everyone knows what attention is...It implies withdrawal from some things in order to deal *effectively* with others.") Our mind has strict cognitive limitations – selective attention helps us compensate.

So how can we bolster our selective attention abilities? This is pure speculation, but I see research like this as an important defense of difficult novels. When we read a complex narrative – say, Proust or Woolf or DFW – we're forced to constantly exert our attentional muscles just to follow along. On a deeper level, however, we're also being asked to switch between different kinds of informational streams. We need to pay attention to the sentence, and to the subtleties of language and character and plot, but we need to also remain aware of the larger themes unfolding in the work. Is this Marcel the narrator? Or Marcel the author? What is Proust telling us about memory and Paris and jealousy? Unpacking the text, in other words, is an extreme form of cognitive exercise, as we must alternate for hundreds of pages between local comprehension (the sentence and the mechanics of plot) and global understanding (the larger meaning of the novel). That's not easy, and it's often not particularly fun. (Why read Proust in an age of YouTube and the Twilight Saga?) But the difficult novel just might make you a touch smarter. It might even make it a little easier to *not* eat the marshmallow.