

Train Your Brain for Test Success: Mastering Test Anxiety

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A confluence of research in psychology, neuroscience, education and even genetics demonstrates that you can train to be very, very good at something—even taking standardized tests. Even if you think you are not naturally good at tests, you can improve dramatically. Here's how.

The GMAT, or any graduate school admissions test, is a bear. No one needs to tell you how competitive it is, nor do they need to tell you how important it is to score within the target school's range.

Some people are better at taking tests than others. They are natural test takers. We all know some of them, and those of us who fall apart at the thought of a standardized test have to work a lot harder. This article is designed for the grad school applicant who is not a good standardized test taker: someone who knows they are more intelligent than the computer thinks they are.

Many terrific test-prep companies specialize in test content: you should take advantage of the information they have to offer. Going through their material, and going through it well, is one of the best ways to boost confidence in taking standardized tests. Indeed, just knowing you are prepared is can boost your own confidence.

New Research Shows You Can Train Your Brain

The good news is that you do not have to accept your fate as someone who has to give up on standardized tests. A confluence of research in psychology, neuroscience, education and even genetics demonstrates that you can train to be very, very good at something.

This isn't an article that tells you how to get a high score. But it is an article about how to approach the test so that it doesn't get the better of you. It draws upon the research and wisdom of Dr. Benjamin Bernstein, performance coach and psychologist, author of *The Workbook for Test Success: How to Be Calm, Confident and Focused on Any Test*.¹

¹ Based on decades of research and coaching, *The Workbook for Test Success* helps test-takers who feel anxious during tests, lose their confidence, or who simply want to raise their scores on the GMAT, GRE, or LSAT. <http://workbookfortestsuccess.com/>

The article also draws upon some of the newest literature in learning, such as David Shenk's *The Genius in All of Us*², David Coyle's *The Talent Code*³, Daniel Amen's *Change Your Brain, Change Your Life*⁴ and earlier works such as Mihaly Csikszentmihályi's⁵ *Flow*.

Dr. Bernstein's theory is simple: When stress is too high or too low, performance suffers. He invokes the model of a three-legged stool, with each leg representing tools to be calm (one leg) confident (second leg) and focused (third leg). They work together, but to really understand the dynamic, let's break it down.

1. Why Being Overly Anxious Doesn't Get You Anywhere

Most people can remember times when being stressed got in the way of good performance. That feeling of stage fright before an oral report in the fifth grade? The panic attack before an important job interview, sporting event, or confrontation? As long as 40 years ago, researchers had concluded that anxiety interfered with learning and academic performance.⁶ More recently, researchers have spent a lot of time making rats very nervous, and figured out that a chunk of that residual anxiety comes from the time when humans had to be in "fight or flight" mode; when we had to run away from saber-toothed tigers, or whatever beasts thought we were more interesting than the antelope grazing on the other side of the plain.

Neuroscientists attribute this to our limbic system, which effectively lets our emotions (fear) to take over our more rational side of the brain⁷. The corollary of this effect is that some stress lights a fire under us, and helps jazz us up, and helps us perform better. Over the last hundred years, researchers have repeatedly found that the point of optimal performance (aka "the zone") is right at the point where the level of challenges are high enough to allow us a feeling of accomplishment, where we are pushed just enough beyond our skills.

But sometimes our limbic system overreacts – we feel that our skills are not good enough, and the challenge is just too great. that's when we revert back into our primitive selves. At that point, we feel, as Dr. Bernstein says, disconnected.

2. Stress is a Function of Disconnection, So Re-connect

It sounds simple: reduce stress and improve performance through re-connection. It's a tall order, but through cognitive tools such as thought restructuring, or more physical approaches such as breathing, a yoga practice, and these days, a range of readily available techniques, you can bring your heart rate down, and get your brain back to where you need it to be to perform.

² <http://geniusblog.davidshenk.com/>

³ <http://thetalentcode.com/>

⁴ http://www.amenclinics.com/store/index.php?main_page=product_info&products_id=15

⁵ http://en.wikipedia.org/wiki/Mihaly_Csikszentmihalyi

⁶ Rosenfeld, Rachel Ann, "Anxiety and Learning," *Teaching Sociology*, Vol 5, No. 1, p. 151

⁷ Amen, *Change Your Brain, Change Your Life*, p. 43

The first point though, is to recognize that you are disconnected so that you can do something about it. Otherwise, you get sucked into the vortex: this can take you down the rabbit-hole of negative thoughts (“If I don’t nail this test, I will end up as a bag lady under a bridge”) or blank out, or just shut down.

If you don’t know your limbic system is interfering with your better self, then you can hobble along, and will your way through. And that sometimes can get you the results you want. But the cost is high, and there’s a pretty good chance that you’ll be testing below your ability.

Dr. Ben Bernstein has developed a number of exercises to bring the anxious test taker back to earth, including breathing through the belly, grounding yourself, releasing physical tension, and tapping into your five senses. This brief description does little justice to some tried-and-true techniques; for more information, please see *The Workbook for Test Success*.

3. Beat Back the Nasty Voices that Sap Your Confidence

Standardized tests can drain your confidence, especially the GMAT, a computer-adapted test, which evaluates as you are going along. This pumps up the anxiety level, and the disconnection begins. A lack of confidence leads to second-guessing, which not only takes up valuable time, but undermines your focus, hurting your ability to score well. Then it’s back to the vortex: you get distracted by those nasty voices in your head that say “I don’t test well.”

Let’s deconstruct that thought. “I don’t test well” implies that you have tested poorly in the past, and that means you will test poorly now, or in the future. It disregards the fact that you can learn to do something differently; not only learn to do it differently, but learn to do it well.

Negative self-talk is a dangerous spiral. Many of us know about that very noisy inner dialog that goes hand-in-hand with anxiety. Dr. Daniel Amen, a clinical neuroscientist, child and adolescent psychiatrist, and medical director of the Amen Clinic for Behavioral Medicine, calls these Automatic Negative Thoughts “ANTs”, and recommends we get rid of them for overall health. Dr. Amen says, “Thoughts have actual physical properties...they have significant influence on every cell in your body.”⁸ So not only are these ANTs bad for our confidence, but they sap our physical well being.

Cognitive tools like positive self-talk or thought inquiry (questioning whether these thoughts are true) are extremely helpful. You can remind yourself (over and over if you have to), that you *can* change your pattern by learning how think differently. The learning about learning is all part of your training for taking the test: like any sports figure, you’ve got to build up that confidence for the big game.

You can also build your confidence by practicing in a way that allows you to improve in increments, and believe it or not, by making mistakes.

⁸ Amen, *Change your Brain, Change Your Life*, pp 55-56.

4. Make Lots of Mistakes and You'll Learn More

Here's a surprise: it's fine to make mistakes. In fact, research shows that making mistakes is one of the best ways to get continuous feedback on your learning. Mistakes are well known to be a critical part of the learning process. Google the two words together "mistakes" and "learning" and you get 16 million hits.

Imagine that: learning from failure – it doesn't seem to be a way to build confidence, but learning from being corrected, and then repeating, is one of the most effective ways to learn. Daniel Shenk's *The Genius in All of Us* tells us Michael Jordan didn't even make the varsity team in high school after attending a summer basketball camp. But he got better— much better—by continually improving the weakest part of his game.⁹ In a powerful Nike ad on YouTube, you can watch his inspirational message:

*I've missed more than 9,000 shots in my career.
I've lost almost 300 games.
Twenty-six times I've been trusted to take the game winning shot.
And missed.
I've failed over and over and over again in my life.
And that is why
I succeed.*¹⁰

Knowing that it is OK to make mistakes can help you stay calm and help quell those critical voices, or "ANTS" Daniel Coyle's *The Talent Code* offers numerous examples where correcting mistakes actually fire electrical circuits that improve the brain's performance with the benefit of myelin, a sheath that makes those impulses even more productive. "The more we fire a particular circuit, the more myelin optimizes that circuit, and the stronger, faster, and more fluent our movements and thoughts become."¹¹

5. Deliberate Practice and Focus Are Part of the Drive to Succeed

Knowing that you can learn and get better from mistakes is one way to stay calm and boost confidence. Now it's time to bring it all together and learn how to focus in a new and different way, especially during test preparation. For an anxious test taker, it's easy to lose focus when there are hundreds of thousands of external distractions (many of which can be found on your smart phone).

Daniel Shenk's *The Genius in All of Us* argues persuasively that "deliberate practice" can enhance skill level, no matter where we start. Even as adults, the process of improvement is within our control: it is a matter having the right mindset and going about the learning in a

⁹ Shenk, *The Genius in All of Us*, page 78, 235

¹⁰ Michael Jordan "Failure" Nike Commercial <http://www.youtube.com/watch?v=45mMioJ5szc>

¹¹ Coyle, *The Talent Code*, p 35

specific and organized way. “Deliberate practice [goes] far beyond the simple idea of hard work,” Shenk writes. “Our muscles and brain regions adapt to the demands that we make of them.” It’s about more than wanting something badly, but an intense “will to learn.”

Daniel Coyle’s, *The Talent Code*, draws similar conclusions. Calling highly effective learning “deep practice,” he claims that breakthrough performance means more than just willpower or concentration. “Not all practice is created equal... Certain kinds of practice—which I call deep practice—add skill ten times faster than shallower practice”¹² Like Shenk, Coyle digs into studies showing there are ways of going about learning so that the brain actually changes.

Imagine that. The evidence shows that we can train our brains to get better at standardized tests. We can train our brains to increase focus during study time as well as during the actual test. According to Dr. Ben Bernstein, clear focus is one of the most important requirements for mastering standardized tests, which test ability to think through a complex issue in a sustained way.

6. Effective Practice Breaks Down the Job

While brain chemistry is complex, it is comforting to know that our original assumptions about our abilities are not pre-determined. So how do we deal with the enormity of something that is so large, especially when we’ve been assuming for decades that we “don’t test well?” The very best test-prep companies, the ones who really know the material and even the inside-out of the tests’ construction, offer a way to break it down. Author Daniel Coyle calls it “chunking.” More familiarly, it’s what one of the greatest basketball coaches of all time, John Wooden, uses as his signature technique.

Wooden, according to Coyle, was a great coach because he fired very specific information at his players. “*This, not that. Here, not there...*He was seeing and fixing errors...He taught in chunks, using what he called the ‘whole-part method’—he would teach players an entire move, then break it down to work on its elemental actions. He formulated laws of learning...explanation, demonstration, imitation, correction, and repetition. ‘Don’t look for the big, quick improvement. Seek the small improvement one day at a time. That’s the only way it happens—and when it happens, it lasts,’ he wrote in *The Wisdom of Wooden*.”¹³

7. Breaking it Down Slows it Down, So Plan Way Ahead

Given the monumental challenge of learning how to study for a test like the GMAT, you would think that most students who want to retrain their brains would plan well ahead. Like Wooden’s basketball players, they would break it down into tiny pieces and master each piece. They would be able to increase their skill level so that their responses became intuitive or automatic; pushing into the unconscious the early part of the learning so that they could take

¹² <http://49writers.blogspot.com/2009/04/dan-coyles-talent-code-read-about-it.html>

¹³ Coyle, *The Talent Code*, p. 170

on more complex material.¹⁴ They would study daily, so they could sleep between study sessions, letting the circuits in their brains piece the new information together and draw new conclusions.¹⁵

And there's the rub: training takes time. Test preparation classes can be several months long, but teaching your brain to rewire its circuits is likely to take longer than that. **Take the time.**

Take advantage of test-prep instructors, and be sure to find one whom you know can help you learn. Since the test is testing the *way* you think about a problem rather than the actual answer, you want to work with someone on your process. Test coaches can also help you avoid the many traps test writers put in to trip up the unsuspecting test taker. Coaches can drill you to learn to organize how you think about a question, and make sure that you are answering the question that was asked. Make mistakes, then learn from them, and practice over and over and over again.

Learning to re-learn is a long project. But even then, research shows that the brain loves a challenge. Says Mihalyi Csikszentmihályi, one of the original researchers on the psychology of optimal experience, "the best moments usually occur when a person's body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile."¹⁶

Think of it as a marathon, the Tour de France, the big game or opening night. There's no feeling better than pushing yourself to do something you didn't think you can do. Your brain will thank you for it.

About the Author

Betsy Massar is Founder and CEO of [Master Admissions](http://www.masteradmissions.com). A graduate of Vassar College and Harvard Business School, she spent the majority of her extensive career as an investment professional and financial journalist on Wall Street, in Asia and Silicon Valley. Betsy has been helping candidates in their applications to business school since she was in her second year at Harvard. She is an ESL tutor and a lifetime member of the Hong Kong Foreign Correspondents Club.

¹⁴ *The Talent Code and The Genius in All of Us*, (specifically p. 53)

¹⁵ Wagner, U, Gais, S, Haider, H, Verleger, R, and Born, J (2004): "Sleep Inspires Insight." *Nature* 427, 352-355.

¹⁶ Csikszentmihalyi, M. *Flow*, p. 3