

## THE BIG IDEAS

### The Double-Edged Sword

That is stress.

### "I feel excited!"

How about you?

### A Wandering Mind

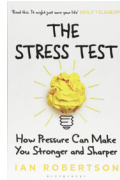
Is an unhappy mind.

### Hall of Fame Researcher

With a 70% hunch-failure rate.

### We Must Believe

If we want to Optimize.



# The Stress Test

How Pressure Can Make You Stronger and Sharper

BY IAN ROBERTSON · BLOOMSBURY PAPERBACKS © 2018 · 256 PAGES

"The big idea that now started brewing through my mind was trying to understand the interactions of the mind and the brain in order to help explain why some people are crushed by the problems life throws at them while others seem toughened by them. As I moved to Dublin, and into the twenty-first century, I was convinced that only by combining what we know about hardware and the software of the brain, as well as how they interact, could we really explore the limits of Nietzsche's maxim. How, when and why do some people rise to the challenge of bad experiences, while others fold under their weight?

This book draws on my own and other people's research but also on my first-hand observations of cases when I worked as a clinical psychologist. I have gone back to my old cases with new eyes and tried to understand them in the light of hundreds of research studies that have only emerged in the last decade and which have revolutionized our understanding of the mind, the brain, and our emotions. My reminiscences are tinged with irrational regret, because I now believe that, had I known then what I now know, I could have offered so much more to these people.

My consolation, however, is that I can offer the discoveries I have made, and the practical advice that people reading this book can take from them, to a much wider audience. I have no doubt that everyone can learn to better control their own mind and emotions and, if they do so, they can within limits turn stress to their own advantage. The main purpose of this book is to explain how and why this is possible through a better understanding of how the software and hardware interact with each other."

~ Ian Robertson from *The Stress Test*

*"At the beginning of the book [Twilight of the Idols] Nietzsche lists forty-two separate maxims, one of which is, What doesn't kill me, makes me stronger. He makes it clear that this isn't a new concept, quoting from the Roman poet Aulus Furius Antias' spirits increase, vigor grows through a wound' to illustrate his point."*

~ Ian Robertson

Ian Robertson is a clinical psychologist and neuroscientist.

He's widely considered one of the world's leading researchers in neuropsychology.

This book is, essentially, a fascinating tour through his decades-long pursuit to scientifically test Nietzsche's maxim "What doesn't kill me, makes me stronger." (Get a copy [here](#).)

It's interesting because we just featured another book by another leading researcher that was also focused on that same maxim. In fact, it was named after it: *What Doesn't Kill Us*. That one is all about "The New Psychology of Posttraumatic Growth."

As you'd expect, they have many parallels. I'm excited to share some of my favorite Big Ideas we can apply to our lives TODAY, so let's jump straight in!

## THE DOUBLE-EDGED SWORD OF STRESS

"What doesn't kill me really *can* make me not only stronger, but also *better*. But not

*"Experiencing success, in other words, can be a little like taking a tranquilizer and an energy drink combined."*

~ Ian Robertson

for everyone: if you worry about and doubt your ability, this has the opposite effect—it *weakens* your performance. But if you don't worry about your ability, *stress can boost your performance*—and in this case the more of it the better. Stress pushed them up into an optimal zone of performance, in other words.

Here was Yerkes-Dodson in action, a hundred years later, uncovering the two-edged sword of stress in action in twenty-first century classrooms. Cortisol—the classic stress hormone—had opposite effects in the maths-anxious students than in the non-anxious ones: more stress meant *worse* performance in the first but *better* in the second—even though their actual mathematical abilities were the same. Stress, in other words, seemed to push non-worriers into a performance sweet spot and worriers out of it.

Stress, I had discovered, is a two-edged sword—it can distract and inhibit you, or it can boost your abilities and push you nearer to optimal performance—just like a bend in a long, straight road. But most performers and sports people know this already: if they don't feel that edge of anxiety before a game, then they won't perform at their best. The golfer Tiger Woods captures this when he says: "The day I'm not nervous is the day I quit . . . That's the greatest thing about it, just to feel that rush."

Stress.

It does a mind and body good. Except when it doesn't.

Stress is a fascinating double-edged sword that has the potential to either BOOST your performance (and sense of flourishing) or diminish it.

In our Notes on Kelly McGonigal's *The Upside of Stress*, we talked about the fact that how you PERCEIVE the effects of stress determines how it will affect you. If you THINK stress is harmful and threatening to break you down, it will. On the other hand, if you think stress is *enhancing* and challenging you to step up and give your best, it will help you do exactly that.

Kelly and Ian both talk about the "[Threat vs. Challenge](#)" response. She says: "*If you believe that the demands of the situation exceed your resources, you will have a threat response. But if you believe you have the resources to succeed, you will have a challenge response.*"

Which leads us back to Ian's passage above and another facet of the impacts of stress.

If you bring people into a lab with EQUAL math skills and have them do math problems under pressure, the ones who worry about whether they're good at math will be negatively affected by stress whereas the pressure will *boost* the performance of those who *don't* doubt their math skills. (Isn't that fascinating? And doesn't it make you want to trust yourself more? Hah.)

Ian also talks about the Yerkes-Dodson "[Inverted U](#)" curve. We've talked about this a number of times. Most recently in our Note on *What Doesn't Kill Us* in the context of dealing with post-traumatic stress and using it as an engine for growth. The trick there? We don't want the stress to "overheat" us. We achieve that by getting better at managing stress and alchemizing it.

We also talk about the inverted U in Steven Kotler's *The Rise of Superman* where he gives us some math to think about as we strive to find JUST the right edge as we develop our skills by playing outside our comfort zones.

He tells us: "*And that brings us back to the 'challenge/skill ratio,' the last of our internal flow triggers, and arguably the most important. The idea behind this trigger is that attention is most engaged (i.e., in the now) when there's a very specific relationship between the difficulty of a task and our ability to perform that task. If the challenge is too great, fear swamps the system. If the challenge is too easy, we stop paying attention. Flow appears near the emotional midpoint between boredom and anxiety, in what scientists call the flow channel—the spot where the task is hard enough to make us stretch but not hard enough to make us snap.*"

*"You need to respect yourself, I had learned, if you are to benefit from stress through your brain rising to challenge rather than shrinking from threat."*

~ Ian Robertson

*How hard is that? Answers vary, but the general thinking is about 4 percent. That's it. That's the sweet spot. If you want to trigger flow, the challenge should be 4 percent greater than the skills. In technical terms, the sweet spot is the end result of what's known as the Yerkes-Dodson law—the fact that increased stress leads to increased performance up to a certain intensity, beyond which performance levels off or declines. In real-world terms, it's not much at all."*

P.S. Right before the passage above, Ian references some research done by Sian Beilock. We featured some of her wisdom in our Note on [Choke](#). That book is all about: "What the Secrets of the Brain Reveal About Getting It Right When You Have To."

Check out those Notes for more. For now, here's some quick wisdom worth reflecting on:

*"Highly self-conscious people are more prone to choke under pressure."*

*"People choke under pressure because they worry. They worry about the situation, its consequences, what others will think. They worry about what they will lose if they fail to succeed and whether they have the tools to make it. They may even conjure images in their head of the unwanted outcome—the flubbed performance, the missed shot, the fall on the ice."*

*"If you can manage to interpret your body's response to the situation as positive, as a call to action, you are likely to thrive. But if you interpret your body's response as a sign that you are in a bad place with no way out, the worries and ruminations that result may send you into a 'choke.'"*

<- Let's train ourselves to reinterpret those signs of a healthy stress response as simply getting us ready to rock!!! How? Well, that leads us back to one of the most powerful Tools ever...

## "I FEEL EXCITED!"

"Sceptics may draw breath because the 'treatment' in the study I'm about to describe was so very simple—but it was published in one of the most respected experimental psychology publications, the *Journal of Experimental Psychology*.

Alison Brooks of the University of Pennsylvania put volunteers into various nerve-racking situations including: singing karaoke in front of strangers; public speaking; doing 'IQ-test' arithmetic problems under time pressure. But before each activity—and this was the 'treatment'—they spoke out loud a single sentence to themselves. That sentence was *I feel anxious*, *I feel calm*, or *I feel excited*. They all wore heart-rate monitors and, in order to make them aware of their bodily symptoms, how fast their hearts were beating was displayed prominently to them during the experiment.

The results of this 'treatment' were exactly in line with what Tiger Woods said: people who told themselves that they felt excited not only felt more self-confident but also *performed better*, objectively measured, at all the tasks—singing, public speaking, even arithmetic. The opposite was true for those who said 'I feel anxious.'

Saying 'I am calm,' on the other hand, had no effect at all, either on performance or self-confidence. I scratched my head: how could a single sentence influence performance and self-confidence so much?"

Now, as a guy who used to be afraid/anxious about pretty much everything (I can laugh now but it's true), I REALLY wish I learned this Tool when I was about 3 or 4 or 5. Or at least 13 or 14 or 15. Heck. Learning it at even at 23 or 24 or 25 would have been awesome. (Laughing.)

Seriously. This Tool is shockingly powerful.

Are you (and/or your loved ones/kids/etc.) using it yet? I'm smiling as I type this imagining one of our Optimize Coaches, Mrs. Kuehnast teaching her 5th graders how to practice this Tool before their exams and other stressful situations.

*"People who believe they have some control over their lives, no matter what the objective circumstances are, are more likely to see stress as a challenge to face up to, rather than as a threat to retreat from."*

~ Ian Robertson

Ian walks us through WHY saying “I feel excited” rather than “I feel anxious” has such a powerful effects on our performance.

Super-short story: A big theme of the book is the importance of having a healthy “approach” orientation in our lives that drives us toward goals and rewards and a life of meaning. Ian tells us people who don’t perform well under pressure often have an overactive “avoidance” mechanism. He also connects the phrases to the challenge vs. threat responses.

It goes something like this:

“I’m excited” → Challenge Response → Approach → Rewards → Increased Performance  
vs.

“I’m anxious” → Threat Response → Avoid → Punishment → Decreased Performance

In the book he walks us through all the fascinating details of what’s going on in our brains (and bodies) as a result of those two orientations. For now, if you feel so inspired...

The next time you feel the butterflies going before something important to you, remember to speak out loud to yourself: “I feel excited!!!” Then go have fun crushing it.

Remember: That simple phrase can turn a potentially toxic energy into a wonderful tonic!

P.S. “[Bring it on!](#)” goes REALLY well with “I’m excited!” <- The perfect peak performance elixir!

P.P.S. We’ve talked about that Tiger Woods quote many times. I first discovered it a decade ago when I read John Eliot’s *Overachievement*. Remember: “*Butterflies, cotton mouth, and a pounding heart make the finest performers smile—the smile of a person with an ace up their sleeves... They definitely would agree with Tiger Woods, who has often said, “The day I’m not nervous stepping onto the first tee—that’s the day I quit.”*”

P.P.P.S. Ian also tells us that it’s all about finding the healthy expression of our two fundamental drives (approach + avoidance) so we have a nice balance sure we stay [antifragile buoyant](#).

## A WANDERING MIND IS AN UNHAPPY MIND

“The SMS signal in your phone bleeps. A question on the screen: *How are you feeling right now?* You choose a number from between 0 (very bad) to 100 (very good).

Another question: *What are you doing right now?* You scroll through and click from the choices.

Then the final question appears: *Are you thinking about something other than what you’re currently doing?* You thumb one of four options — No. Yes — something pleasant. Yes — something neutral. Yes — something unpleasant.

More than two thousand people signed up to allow Matthew Killingsworth and Dan Gilbert of Harvard University to send them these messages at random times, roughly three times per day for a few weeks.

People’s minds wander a lot: as the replies came pinging back, they gave the intriguing picture of 2,000 minds wandering roughly *half* the time. And here is the even stranger fact: it didn’t matter whether they were doing a really grungy home chore like cleaning the bathroom, or sipping cocktails on the sun-drenched deck of a yacht—minds were equally likely to wander to good, bad or neutral things whatever the activity.

Not only that, but a wandering mind was almost always less happy than a mind focused on what it was doing—even if *drudgery was being done!* You might think—ah, but if I am sitting on a yacht, sipping a Manhattan while dolphin frolic under the gleaming white hull, how could my daydreams not make me happy.

Wrong. People are no happier during pleasant daydreams than when their minds are focused on scrubbing the lavatory.”

*“A wandering mind, then, is an unhappy mind. If you can focus on your day-to-day tasks and save your daydreaming for when you choose, you will be able to cope with the sorts of stress that earthquake victims suffer much better than if you are a mind wanderer. Resilience then, needs focus. If you keep your mind on the moment-to-moment tasks of ordinary life, you’ll shield yourself from extra stress which saps your energy and hence your strength.”*

~ Ian Robertson

*"If you let your mind wander, you'll make yourself unhappier."*  
~ Ian Robertson

How fascinating is THAT study? Know this: *"A wandering mind, then, is an unhappy mind."*

Here's what's scary. Now that we're being inundated with more inputs in a SINGLE DAY (!) than our 15th century ancestors were exposed to in an ENTIRE LIFETIME (!) as we bounce from text messages to email to news to this and that and back again (I get dizzy just thinking about the cascade of inputs!), we're basically *training* our minds to be constantly distracted—rarely focusing our attention on any single thing for any significant duration.

And, in the process, we're basically training our minds to wander. Which is basically saying we're training ourselves to be unhappy. Which is why we make such a big deal out of training ourselves to FOCUS. On What's Important Now.

Oh, btw. That wisdom was from a chapter called "What a New Zealand Earthquake Taught Me About Nietzsche." What did it teach Ian? That people who allowed (key word: allowed!) their minds to wander suffered more after an earthquake than those who didn't allow their minds to wander so much.

So... Let's train our focus. TODAY.

(How? Meditation is like hitting the Focus gym. So is Deep Work. And Digital Sunset. And...)

P.S. The book has some great chapter titles. Another one was called: "Why Do Engineers Build Bends in the Road?" Do you know the answer to that riddle? Short story: It's because super-long super-straight roads (without ANY challenge!) bore people so much they often lead to tragic accidents. Enter: Bends in the road (a little challenge!) for the win.

P.P.S. Ian also shares some astonishing stats about the relationship between early retirement and Alzheimer's. Basic idea: Keep challenging yourself (mentally/socially/etc.) to build a "cognitive reserve" and keep your brain nice and healthy. Challenges do a brain good!

## HALL OF FAME RESEARCH STATS (AND CREATIVE LIVING!)

"Because attention is key to our mental and emotional life, getting below the skin of just one small aspect of attention can have quite big spin-offs.

But a hunch is just that—a hunch—and the only way to test it out is the lengthy business of gathering data to see whether the ideas are right or wrong. I would estimate that, throughout my career, my hunches have been right about a third of the time and wrong the rest of the time. Given how challenging and time-consuming human research can be, that is a lot of research that goes nowhere, and it can be quite discouraging at times. But when you do make a discovery, the exhilaration is just great, making up for all the grind and the failures along the way."

Note: Ian is one of the most respected neuroscientists on the planet. He's made some incredibly powerful discoveries as he followed his hunches and did the hard work to test his ideas.

And... HE WAS WRONG NEARLY 70% OF THE TIME!! <- That's a stat worth a shout.

Recall: A Hall of Fame baseball player bats 300. And a Hall of Fame entrepreneur/investor like Randy Komisar also bats 300—which is why Adam Grant puts it this way in *Originals*: "Whether you're generating or evaluating new ideas the best you can do is measure success on the kind of yardstick that batters use in baseball. As Randy Komisar puts it, 'If I'm hitting .300, I'm a genius. That's because the future cannot be predicted. The sooner you learn it, the sooner you can be good at it.'"

Ian also shares J.K. Rowling's story—referring to [her Harvard commencement address](#) and the important role failure played in her journey.

All that to say: Cut yourself some slack. There are no perfect human beings. And you and I won't be the first! :)

"Ever tried. Ever failed. No matter. Try again. Fail again. Fail better."

~ Samuel Beckett

## WE MUST BELIEVE

"If what doesn't kill you is to strengthen you, then you have to *believe* that you have some control over your own mind and emotions. Without that conviction, you will not be able to put in place the other ingredients of resilience that I have identified in the course of this book. With that belief, every single human being has the capacity of using what we know about the way the software and hardware of our brains interact to keep, wherever possible, nearer to a balance between mental extremes—between being fatigued and stressed out, chilled out and alert, between approaching and avoiding, self-forgetting and self-awareness, among many others.

Above all, we have to believe that many of the symptoms of stress are also symptoms of excitement, and of anger. Low mood shares symptoms with extreme tiredness and low arousal. We have the ability to gain some control over these emotions by the way we label them in our minds. But we have to believe in their malleability, and not cripple ourselves by false theories that these and our personalities are fixed. I hope that this book will help readers understand their own beliefs and so become more confident about being able to shape their own mental abilities, motivation and emotional balance by understanding what determines these states.

For only by believing that we have some such control can we use the magnificent complexity of the brain, and the mental software that controls it, to find the right mental balance we need for each challenge that faces us."

Those are the final words of the book from the Epilogue in which Ian walks us through some of Carol Dweck's ideas we discuss in our Notes on [Mindset](#) and [Self-Theories](#).

We've GOTTA KNOW that it ALL STARTS with the BELIEF that we can actually DO SOMETHING about our lives—that we have the power to use life's inevitable challenges as fuel for our antifragile growth.

If we don't have THAT core, fundamental belief, then nothing else we're always talking about really matters.

Remember, with the right attitude: What doesn't kill us, CAN make us stronger. Let's get to work. And get a little stronger in service to our families, communities and world. TODAY.

B

**Brian Johnson,**  
*Philosopher in Residence*

### About the Author of "The Stress Test"

IAN ROBERTSON



Ian Robertson is a clinical psychologist and neuroscientist with a unique ability to apply his research to the pressures of everyday life. His books, *The Stress Test*, *Mind Sculpture*, *The Mind's Eye* and *The Winner Effect*, have been translated into many languages and he is widely recognised as one of the world's leading researchers in neuropsychology.

### About the Author of This Note

BRIAN JOHNSON



Brian Johnson loves helping people optimize their lives so they can actualize their potential as he studies, embodies and teaches the fundamentals of optimal living—integrating ancient wisdom + modern science + practical tools. Learn more and optimize your life at [optimize.me](https://optimize.me).

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