

Which Traits Predict Success? (The Importance of Grit)

By Jonah Lehrer

What are the causes of success? At first glance, the answer is easy: success is about talent. It's about being able to do *something* - hit a baseball, play chess, trade stocks, write a blog - better than most anyone else. That's a fine answer, but it immediately invites another question: What is talent? How did that person get so good at hitting a baseball or trading stocks? For a long time, talent seemed to be about inheritance, about the blessed set of genes that gave rise to some particular skill. Einstein had the physics gene, Beethoven had the symphony gene, and Tiger Woods (at least until his car crash) had the golf swing gene. The corollary, of course, is that you and I can't become chess grandmasters, or composers, or golf pros, simply because we don't have the necessary anatomy. Endless hours of hard work won't compensate for our biological limitations. When fate was handing out skill, we got screwed.

In recent years, however, the pendulum has shifted. It turns out that the intrinsic nature of talent is overrated - our genes don't confer specific gifts. (There is, for instance, no PGA gene.) This has led many researchers, such as [K. Anders Ericsson](#), to argue that talent is really about deliberate practice, about putting in those 10,000 hours of intense training (plus or minus a few thousand hours). Beethoven wasn't born Beethoven - he had to work damn hard to *become* Beethoven. As Ericsson wrote in his influential review article "[The Role of Deliberate Practice in the Acquisition of Expert Performance](#)": "The differences between expert performers and normal adults are not immutable, that is, due to genetically prescribed talent. Instead, these differences reflect a life-long period of deliberate effort to improve performance."

That's interesting, right? Talent is about practice. Talent takes effort. Talent requires a good coach. But these answers only raise more questions. What, for instance, allows someone to practice for so long? Why are some people so much better at deliberate practice? If talent is about hard work, then what factors influence how hard we can work?

The ability to ask these questions, to peel away layers of explanation, is one of the reasons I'm drawn to the psychological sciences. And this leads me to one of my favorite recent [papers](#), "Deliberate Practice Spells Success: Why Grittier Competitors Triumph at the National Spelling Bee." The research, published this month in the journal of *Social Psychological and Personality Science*, was led by Angela Duckworth, a psychologist at Penn. (Anders-Ericsson is senior author.) The psychologists were interested in the set of traits that allowed kids to practice deliberately. Their data set consisted of 190 participants in the Scripps National Spelling Bee, a competition that requires thousands of hours of practice. After all, there are no natural born spellers.

The first thing Duckworth, et. al. discovered is that deliberate practice works. Those kids who spent more time in deliberate practice mode - this involved studying and memorizing words while alone, often on note cards - performed much better at the competition than those children who were quizzed by others or engaged in leisure reading. The bad news is that deliberate practice isn't fun and was consistently rated as the least enjoyable form of self-improvement. Nevertheless, as spellers gain experience, they devote increasing amounts of time to deliberate

practice. This suggests that even twelve year olds realize that this is what makes them better, that success isn't easy.

But that still begs the question: Why were some kids better at drilling themselves with note cards? What explained this variation in hours devoted to deliberate practice? After analyzing the data, Duckworth discovered the importance of a psychological trait known as grit. In previous papers, Duckworth has demonstrated that grit can be reliably measured with a short survey that measures consistency of passions (e.g., “I have been obsessed with a certain idea or project for a short time but later lost interest”) and consistency of effort (e.g., “Setbacks don’t discourage me”) over time using a 5-point scale. Not surprisingly, those with grit are more single-minded about their goals - they tend to get obsessed with certain activities - and also more likely to persist in the face of struggle and failure. Woody Allen famously declared that “Eighty percent of success is showing up”. Grit is what allows you show up again and again. Here are the scientists:

Our major findings in this investigation are as follows: Deliberate practice—operationally defined in the current investigation as the solitary study of word spellings and origins—was a better predictor of National Spelling Bee performance than either being quizzed by others or engaging in leisure reading. With each year of additional preparation, spellers devoted an increasing proportion of their preparation time to deliberate practice, despite rating the experience of such activities as more effortful and less enjoyable than the alternative preparation activities. Grittier spellers engaged in deliberate practice more so than their less gritty counterparts, and hours of deliberate practice fully mediated the prospective association between grit and spelling performance.

There are two interesting takeaways from this study. The first is that there's a major contradiction between how we measure talent and the causes of talent. In general, we measure talent using tests of maximal performance. Think, for instance, of the NFL Combine: Players perform in short bursts (40 yard dash, short IQ test, catching drills, etc.) under conditions of high motivation. The purpose of the event is to see what players are capable of, to determine the scope of their potential. The problem with these tests, however, is that the real world doesn't resemble the NFL Combine. Instead, success in the real world depends on *sustained* performance, on being able to work hard at practice, and spend the weekend studying the playbook, and reviewing hours of game tape. Those are all versions of deliberate practice, and our ability to engage in such useful exercises largely depends on levels of grit. The problem, of course, is that grit can't be measured in a single afternoon on a single field. (By definition, it's a metric of personality that involves long periods of time.) The end result is that our flawed beliefs about talent have led to flawed tests of talent. Perhaps that explains why [there is no](#) "consistent statistical relationship between combine tests and professional football performance." We need to a test that measures how likely people are to show up, not just how they perform once there.

The second takeaway involves the growing recognition of "non-cognitive" skills like grit and self-control. While such traits have little or nothing to do with intelligence (as measured by IQ scores), they often explain a larger share of individual variation when it comes to life success. It doesn't matter if one is looking at retention rates at West Point or [teacher performance](#) within the Teach for America program or success in the spelling bee: Factors like grit are often the most

predictive variables of real world performance. Thomas Edison was right: even genius is mostly just perspiration.

Taken together, these studies suggest that our most important talent is having a talent for working hard, for practicing even when practice isn't fun. It's about putting in the hours when we'd rather be watching TV, or drilling ourselves with note cards filled with obscure words instead of getting quizzed by a friend. Success is never easy. That's why talent requires grit.

5 Characteristics Of Grit -- How Many Do You Have?

By [Margaret M. Perlis](#)

Recently some close friends visited, both of whom have worked in education with adolescents for over 40 years. We were talking about students in general and when I asked what has changed with regards to the character of kids, in unison they said "grit" – or more specifically, lack thereof. There seems to be growing concern among teachers that kids these days are growing soft.

When I took a deeper dive, I found that what my friends have been observing in-the-field, researchers have been measuring in the lab. The role grit plays in success has become a topic du jour, spearheaded by [Angela Duckworth](#), who was catapulted to the forefront of the field after delivering a [TED talk](#) which has since been viewed well over a million times. Additionally, in the last month, Duckworth received a \$650,000 MacArthur fellowship, otherwise known as the “Genius Grant,” to continue her work. And, while Duckworth has made tremendous leaps in the field, she stands on the shoulders of giants including William James, K.E Ericson, and Aristotle, who believed tenacity was one of the most valued virtues.

According to the Merriam-Webster dictionary, grit in the context of behavior is defined as “firmness of character; indomitable spirit.” Duckworth, based on her studies, tweaked this definition to be “perseverance and passion for long-term goals.” While I recognize that she is the expert, I questioned her modification...in particular the “long-term goals” part. Some of the grittiest people I’ve known lack the luxury to consider the big picture and instead must react to immediate needs. This doesn’t diminish the value of their fortitude, but rather underscores that grit perhaps is more about attitude than an end game.

But Duckworth’s research is conducted in the context of *exceptional* performance and success in the traditional sense, so requires it be measured by test scores, degrees, and medals over an extended period of time. Specifically, she explores this question, talent and intelligence/ IQ being equal: why do some individuals accomplish more than others? It is that distinction which allows her the liberty to evolve the definition, but underscores the importance of defining her context.

The characteristics of grit outlined below include Duckworth’s findings as well as some that defy measurement. Duckworth herself is the first to say that the essence of grit remains elusive. It has hundreds of correlates, with nuances and anomalies, and your level depends on the expression of their interaction at any given point. Sometimes it is stronger, sometimes weaker, but the

constancy of your tenacity is based on the degree to which you can access, ignite, and control it. So here are a few of the more salient characteristics to see how you measure up.

Courage

While courage is hard to measure, it is directly proportional to your level of grit. More specifically, your ability to manage fear of failure is imperative and a predictor of success. The supremely gritty are not afraid to tank, but rather embrace it as part of a process. They understand that there are valuable lessons in defeat and that the vulnerability of perseverance is requisite for high achievement. Teddy Roosevelt, a Grand Sire of Grit, spoke about the importance of overcoming fear and managing vulnerability in an address he made at the Sorbonne in 1907. He stated:

It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, who comes again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows great enthusiasms, the great devotions; who spends himself in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly.

Fear of failure, or atychiphobia as the medical-set calls it, can be a debilitating disorder, and is characterized by an unhealthy aversion to risk (or a strong resistance to embracing vulnerability). Some symptoms include anxiety, mental blocks, and perfectionism and scientists ascribe it to genetics, brain chemistry, and life experiences. However, don't be alarmed...the problem is not insurmountable. On Amazon, a "fear of failure" search yields 28,879 results. And while there are millions of different manifestations and degrees of the affliction, a baseline antidote starts with listening to the words of Eleanor Roosevelt: "do something that scares you every day." As I noted in a recent post, courage is like a muscle; it has to be exercised daily. If you do, it will grow; ignored, it will atrophy. Courage helps fuel grit; the two are symbiotic, feeding into and off of each other...and you need to manage each and how they are functioning together.

As a side note, some educators believe that the current trend of coddling our youth, by removing competition in sports for example, is preventing some kids from actually learning how to fail and to embrace it as an inevitable part of life. In our effort to protect our kids from disappointment are we inadvertently harming them? Coddling and cultivating courage may indeed turn out to be irreconcilable bedfellows. As with everything, perhaps the answer lies in the balance...more to come.

Conscientiousness: Achievement Oriented vs. Dependable

As you probably know, it is generally agreed that there are five core character traits from which all human personalities stem called... get this... The Big Five. They are: Openness, Conscientiousness, Extroversion, Agreeableness, and Neurotic. Each exists on a continuum with its opposite on the other end, and our personality is the expression of the dynamic interaction of

each and all at any given time. One minute you may feel more agreeable, the next more neurotic, but fortunately, day-to-day, they collectively remain fairly stable for most of us.

According to Duckworth, of the five personality traits, conscientiousness is the most closely associated with grit. However, it seems that there are two types, and how successful you will be depends on what type you are. Conscientiousness in this context means, careful and painstaking; meticulous. But in a 1992 study, the educator L.M. Hough found the definition to be far more nuanced when applied to tenacity. Hough's study distinguished achievement from the dependability aspects of conscientiousness.

The achievement-oriented individual is one who works tirelessly, tries to do a good job, and completes the task at hand, whereas the dependable person is more notably self-controlled and conventional. Not surprisingly, Hough discovered that achievement orientated traits predicted job proficiency and educational success far better than dependability. So a self-controlled person who may never step out of line may fail to reach the same heights as their more mercurial friends. In other words, in the context of conscientious, grit, and success, it is important to commit to go for the gold rather than just show up for practice. Or, to put it less delicately, it's better to be a racehorse than an ass.

Long-Term Goals and Endurance: Follow Through

As I wrote in the introduction, I had some reservations about accepting the difference between Webster's definition of grit and Duckworth's interpretation. Both have to do with perseverance, but the latter exists in the arena of extraordinary success and therefore requires a long-term time commitment. Well, since you are Forbes readers and destined for the pantheon of extraordinary success, it is important to concede that for you...long-term goals play an important role. Duckworth writes:

“... achievement is the product of talent and effort, the latter a function of the intensity, direction, and duration of one's exertions towards a long-term goal.”

Malcolm Gladwell agrees. In his 2007 bestselling book Outliers, he examines the seminal conditions required for optimal success. We're talking about the best of the best... Beatles, Bill Gates, Steve Jobs. How did they build such impossibly powerful spheres of influence? Unfortunately, some of Gladwell's findings point to dumb luck. Still, the area where Gladwell and Duckworth intersect (and what we can actually control), is on the importance of goals and lots, and lots and lots of practice... 10,000 hours to be precise.

Turns out the baseline time commitment required to become a contender, even if predisposed with seemingly prodigious talent, is at least 20 hours a week over 10 years. Gladwell's 10,000 hours theory and Duckworth's findings align to the hour. However, one of the distinctions between someone who succeeds and someone who is just spending a lot of time doing something is this: practice must have purpose. That's where long-term goals come in. They provide the context and framework in which to find the meaning and value of your long-term efforts, which helps cultivate drive, sustainability, passion, courage, stamina...grit.

Resilience: Optimism, Confidence, and Creativity

Of course, on your long haul to greatness you're going to stumble, and you will need to get back up on the proverbial horse. But what is it that gives you the strength to get up, wipe the dust off, and remount? Futurist and author Andrew Zolli says it's resilience. I'd have to agree with that one.

In Zolli's book, Resilience, Why Things Bounce Back, he defines resilience as "the ability of people, communities, and systems to maintain their core purpose and integrity among unforeseen shocks and surprises."

For Zolli, resilience is a dynamic combination of optimism, creativity, and confidence, which together empower one to reappraise situations and regulate emotion – a behavior many social scientists refer to as "hardiness" or "grit." Zolli takes it even further and explains that "hardiness" is comprised of three tenets: "(1) the belief one can find meaningful purpose in life, (2) the belief that one can influence one's surroundings and the outcome of events, and (3) the belief that positive and negative experiences will lead to learning and growth."

Wait, what? Seems that there is a lot going on here, but this is my take on the situation in an elemental equation. Optimism + Confidence + Creativity = Resilience = Hardiness = (+/-)Grit. So, while a key component of grit is resilience, resilience is the powering mechanism that draws your head up, moves you forward, and helps you persevere despite whatever obstacles you face along the way. In other words, gritty people believe, "everything will be alright in the end, and if it is not alright, it is not the end."

Excellence vs. Perfection

In general, gritty people don't seek perfection, but instead strive for excellence. It may seem that these two have only subtle semantic distinctions; but in fact they are quite at odds. Perfection is excellence's somewhat pernicious cousin. It is pedantic, binary, unforgiving and inflexible. Certainly there are times when "perfection" is necessary to establish standards, like in performance athletics such as diving and gymnastics. But in general, perfection is someone else's perception of an ideal, and pursuing it is like chasing a hallucination. Anxiety, low self-esteem, obsessive compulsive disorder, substance abuse, and clinical depression are only a few of the conditions ascribed to "perfectionism." To be clear, those are ominous barriers to success.

Excellence is an attitude, not an endgame. The word excellence is derived from the Greek word *Arête* which is bound with the notion of fulfillment of purpose or function and is closely associated with virtue. It is far more forgiving, allowing and embracing failure and vulnerability on the ongoing quest for improvement. It allows for disappointment, and prioritizes progress over perfection. Like excellence, grit is an attitude about, to paraphrase Tennyson...seeking, striving, finding, and never yielding.

Are there any others you'd add? By definition, passion is critical, but what role do you think it plays? I am sure that Duckworth will continue to explore and share the distinctions in the years to come, but I'd love to hear your thoughts.

Is “Grit” Really the Key to Success?

A new book says you need passion and perseverance to achieve your goals in work and life. Is this a bold new idea or an old one dressed up to be the latest self-help sensation?

By [Daniel Engber](#)

In the summer of 2004, Angela Duckworth, then a graduate student in psychology at the University of Pennsylvania, went up to West Point to study 1,200 new cadets. The first-years were about to start “Beast Barracks,” an infamous seven-week training program during which they’d toil in the classroom and on the field for 17 hours every day without a break. Many would drop out. Duckworth wanted to find out why some cadets managed to endure this challenge, while others just gave up.

Scientists have tried to solve this puzzle for more than 50 years, writes Duckworth in her new book [Grit: The Power of Passion and Perseverance](#). But even the school’s best means of screening its applicants—something called the “whole candidate score,” a weighted mixture of a student’s SATs, high school ranking, leadership ability, and physical fitness—does not anticipate who will succeed and who will fail at Beast. So Duckworth designed her own way of scoring candidates, giving each a survey that tested his or her willingness to persevere in pursuit of long-term goals. She called this measure “grit.” And guess what? Grit worked. The cadets’ survey answers helped predict whether they would make it through the grueling program.

Duckworth’s best-seller peddles a pair of big ideas: that grit—comprising a person’s perseverance and passion—is among the most important predictors of success and that we all have the power to increase our inner grit. These two theses, she argues, apply not just to cadets but to kids in troubled elementary schools and undergrads at top-ranked universities and to scientists, artists, and entrepreneurs. Duckworth’s book describes a wide array of “paragons of grit,” people she’s either interviewed or studied from afar: puzzle masters and magicians, actors and inventors, children and adults, Steve Young and Julia Child. Grit appears in all of them, sprinkled over their achievements like a magic Ajax powder. In tandem with some feisty scrubbing, it dissolves whatever obstacles might hold a person back.

While her book has only just arrived, Duckworth’s gritty tales—and the endlessly extensible ideas they represent—have already spread throughout the country, into [classrooms](#), [boardrooms](#), and [locker rooms](#) alike. Popularized in a [viral TED talk](#) from 2013 and validated by that year’s [MacArthur “genius” grant](#), they’ve been inscribed into [national education policy](#), and public school districts in California are [grading kids](#)—as well as [schools themselves](#)—on grit. Duckworth’s message has been broadcast with such speed and thoroughness that other people even started selling [books on grit](#) before she published her own.

With *Grit*, Duckworth has now put out the definitive handbook for her theory of success. It parades from one essential topic to another on a float of common sense, tossing out scientific insights as it goes along. How to raise your kids, how to unearth your inner passion, how to find

a higher purpose—like other self-help authors, Duckworth finds authoritative answers to these questions, promising to change how we see the world. And like other self-help authors, she pulls a sleight of hand by which even widely held assumptions end up looking like discoveries. It's as important to work hard, the book contends, as it is to be a natural talent. Who would disagree with that?

Consider the recent run of best-selling pop-science books, often citing the same body of research, that purport to give us new, better, and more scientific ways to tweak our mindsets, get rid of our bad habits, and put in the [10,000 hours](#) it takes to build a better life. Think of Malcolm Gladwell's [Outliers: The Story of Success](#), or his earlier piece for the *New Yorker* on "[The Talent Myth](#)." Think of Carol Dweck's [Mindset: The New Psychology of Success](#), about the false belief that "talent alone creates success—without effort." Think of Charles Duhigg's [The Power of Habit: Why We Do What We Do in Life and Business](#), about the neurology and psychology of changing behavioral patterns through hard and steady work. Think of Roy Baumeister and John Tierney's [Willpower: Rediscovering the Greatest Human Strength](#), about how a person's [self-control can be strengthened like a muscle](#).

These books convey the same optimistic message that you find in *Grit*: It's possible for all of us to change or, as one book puts it, to feel the triumph of a "[neuroplastic transformation](#)." They tell us that we needn't be the victims of our meager talents or our lousy genes.

The fact that this message can be written and rewritten in so many different ways and still find a following hints that Americans are a gritty bunch already. Who's more passionate and resilient—more a paragon of grit—than the earnest sap who spends 10,000 hours reading books that promise to change his life?

Still, good ideas will bear repeating. If Duckworth's premises are valid—first, that grit matters more than talent; and second, that it's possible to enhance your grit—then we ought to shout her message, and [stream it](#), and push it even further up the [best-seller list](#). If grit really works as both a diagnostic tool and a target for intervention, then it could help the elite and underprivileged alike. It could elevate the strivers to even greater heights, while pulling up the ones who are too often left behind.

But a closer look at Duckworth's seminal research, as well as some recent studies from her colleagues in the field, suggest there isn't much supporting evidence for either of her theses. It now appears that someone's grit, as compared with other, more familiar measures of her character, may not matter in determining success. And there's good reason to believe that intervening to enhance a person's passion and perseverance—"growing grit," as Duckworth calls it—would be highly inefficient.

You can expect to hear Duckworth's message many times in the weeks and months ahead, as it comes to dominate the culture of self-help: "Grit is good." This maxim hides shortcomings in the work, however, and it overlooks a crucial fact: The single-minded pursuit of single-mindedness may carry dangers of its own.

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Up in the Hudson Valley, among the plebes at [Beast Barracks](#), Duckworth found the secret of success. Students who identified with statements such as “Setbacks don’t discourage me” and “I never give up” were more likely than their peers to make it through West Point’s seven-week test of fortitude. (That’s how grit is measured: Students assign themselves a score of 1 to 5 for each of 10 related character statements; the 10 scores are then averaged together.) This was Duckworth’s first case study, and it delivered a clear and forceful message: If you want to make it through basic training, you gotta have grit.

Here’s another less surprising way to frame the same research: Grit matters, but only in specific situations that require strength of will.

To make it through Beast, cadets must perform extraordinary feats of mental and physical stamina. They do [pushups, situps, pullups, dips, flutter kicks, and arm claps](#); they have to [run for miles](#) every day; they’re [forced to hustle](#) even as they move from one class to another. Is it any wonder that someone’s whole candidate score, the measure that includes his SAT scores and his high-school grades, would have little bearing on his success or failure?

Duckworth likes to talk about “the marathon of life,” as if we’re all going through our own private versions of the training at West Point. But for most people, life may be less like a marathon than a series of sprints, interspersed with periods of rest, conversations with our friends, and hours upon hours spent browsing the internet.

Even the task of graduating from West Point itself doesn’t really compare to the trials of Beast. When Duckworth looked at students’ grades and “military performance scores” during their first year at school, she found that [grit offered little guidance on how they’d handle](#) the rest of the United States Military Academy curriculum. The whole candidate score—that old-fashioned, talent-based assessment—did much better. Considering that three-quarters of the students who fail to finish at West Point flunk during the post-Beast curriculum, those first seven gritty weeks appear to represent a special case, and one of marginal importance.

To show that the challenges of Beast stand in for those of life, Duckworth [looked for grit in other settings](#), places where one might not expect to find endurance as a major factor in success. For one study, she surveyed 149 undergrads at the University of Pennsylvania, finding that the students’ grit and SAT scores—the latter used as a proxy for their natural aptitude—were each and independently related to their school performance as measured by their grades. Even for these brainy Ivy Leaguers, grit seemed to be just as important as intelligence. Indeed, Duckworth writes that this was one of the key findings that led her to the “fundamental insight that would guide [her] future work.”

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There’s a hitch in this analysis, though, one academics refer to as a “[restriction of range](#).” Duckworth was looking at a tiny sliver of the distribution of intelligence: Students in the Penn

study group had an average SAT score of 1,415, putting them in the 96th percentile nationwide. Since everyone in her study was super bright, even the very brightest weren't that much brighter than the rest of the group. That sort of bunching-up tends to make even robust correlations go away. To wit: We can all agree that, as a rule, being really tall correlates with scoring points while playing basketball. But if you look only at the players in the NBA, where the players' [average height is 6-foot-7](#), that effect [disappears](#)—in the NBA, the tallest players aren't necessarily the highest scorers.

When everyone excels on one dimension—height, SAT scores—[other factors](#) will appear to play an outside role. In the case of Duckworth's brainy Ivy Leaguers, this makes their SATs seem less important for predicting how they'll do in school and exaggerates the relative importance of their grit. If she'd mixed the same people in with a more balanced sample of their peers, let's say those with average SAT scores closer to 1,000, then the link between their aptitude and grades would have appeared more pronounced—and that would in turn have made the correlation with their grit seem less impressive.

In her paper on this research, Duckworth notes that the same issue might also work in the opposite direction: If the Ivy Leaguers were somewhat grittier than other kids, then the signs of their hard work would also be reduced in the analysis. Still, you'd expect this distortion to be more pronounced for the students' SATs, since we know they were selected for admission to the university precisely on the basis of those scores.

This isn't just an issue with one of Duckworth's studies. Another, in which she measured the grit of contestants in the National Spelling Bee, has similar range-restriction issues. (Her paper on the Ivy League and the National Spelling Bee research does acknowledge this concern, noting that it may "attenuate" the link between IQ and achievement.) But despite this shaky base of evidence, *Grit* doesn't merely claim that perseverance makes a difference. The book argues that it makes all the difference in the world.

Among Duckworth's major virtues as an author is her commitment to transparency. She never claims that she's identified a trait that no one has ever seen before, nor does she ignore all the other scientific measures of a person's character that overlap with the one that she invented. A person's grit, she would acknowledge, must not be so far off from what some might call her *willpower*, or others her *resilience*, or else perhaps her *industriousness*, *impulse control*, or *fortitude*. Duckworth also likens grit to other trendy latecomers to psychology: *growth mindset* and capacity for *flow*. In looking to the past, she mentions grit's relationship to *sisu*, a Finnish virtue that sustained the soldiers of the [Winter War](#) in 1939. She might have gone back much further still, to the factor known as *w*, meant to represent a person's "[consistency of actions resulting from deliberate volition](#)," which debuted in psychology in 1915.

In the book and elsewhere, Duckworth shows a noble willingness to piggyback her work on that of other researchers, explaining how they reach a common end. But that doesn't make this array of intersecting concepts any less bewildering. We're still left to wonder where, exactly, one might locate grit amid the rows and seedbeds of psychology. Does it represent a novel species, like [the orchids and the dandelions](#) (first described as [mental types](#) in 2008), or is it just a modern cultivar of something planted long ago?

That's long been a problem for personality psychologists, who often struggle with competing terms for common, underlying inclinations. The field had become a tangled mess by the 1950s and the 1960s, says Brent Roberts, a professor at the University of Illinois (whom Duckworth also cites). For any given outcome in a person's life—whether he might turn out to be a drunk, let's say, or a genius or a crook—researchers would devise a brand-new measure, calibrated to predict it. “It had a brutal elegance,” Roberts says, “and I often pine for those days, to be honest with you.”

But this rampant sowing of new ideas made it hard even for the specialists to find their way within the field. They didn't always know how their measures related to their colleagues' or if they might be duplicating one another's work. By the 1980s and the 1990s, [lumpers](#) in psychology had embraced a grand unified theory of personality, which collapsed all the nuances that came before into a set of super traits—the [Big Five](#). Under this new system, grit and all its near and distant cousins—willpower, superego strength, industriousness, and so on—would fall under an umbrella factor known as “conscientiousness.” (The remaining four of the Big Five super traits: extraversion, agreeableness, neuroticism, and openness to experience.) Like grit, conscientiousness could be [measured](#) with a survey: a set of [statements](#), maybe several hundred, for a person to read and then [assign himself a score](#). (There are other ways to measure personality: A psychologist might ask people, for example, whether they engage in [specific behaviors](#) such as making lists or showing up early for meetings.)

“[The Big Five] brought clarity to a true buzz of confusion,” Roberts says, and it allowed researchers to make bigger claims about the broad significance of character. A measure of someone's conscientiousness, for example, could [help predict](#) her longevity and physical health, as well as her marital stability. It could also tell you how likely she would be to find success in high school, college, and the workplace. But if the adoption of the Big Five proved useful in the lab, it made the science of personality harder to explain to outsiders. “When I say, *conscientiousness*,” says Roberts, “people go, ‘Huh?’ ”

That's why Duckworth worked so hard to give her measure a catchy name. “I came up with it over other terms like *pluck*, *tenacity*, *persistence*, *perseverance*,” [she said during one interview](#). “It has the connotations that I wanted. It sounds good.” It's true: *Conscientiousness* comes off as something weak—a nerdy way of playing by the rules; *grit* suggests a vigorous, old-fashioned form of virtue. Grit's the antidote for an overpolished age, a return to rough-hewn authenticity. “It's brilliant in terms of marketing,” says Roberts. “People understand it immediately.”

Grit the measure and *Grit* the book are clearly triumphs of rebranding. It's not as easy to discern whether Duckworth has produced something more than that—a set of new and substantive ideas to match her innovative presentation. To put this another way: Is she the Alice Waters of psychology, the leader of a [revolution](#), or is she the field's [Rick Mast](#), more a pioneer of pretty packaging?

A brand-new meta-analysis of the literature on grit—conducted by researchers Marcus Credé, Michael Tynan, and Peter Harms using 88 samples and 67,000 subjects—provides some clues.* There isn't much space between Duckworth's measure and conscientiousness, the study argues. If you test a group of people for both traits, administering standard surveys to measure

grit and conscientiousness, the results will end up very tightly linked; in some studies their relationship approaches 1-to-1. In Roberts' view, grit corresponds very closely to a facet, or subtrait, of conscientiousness that has for many years been called [industriousness](#).

Duckworth acknowledges the similarities between grit and conscientiousness and says that both predict achievement. (Again, she's very forthright about the limitations of her work.) But she also argues that grit adds value to the other measures—that it's a better way of measuring success. The majority of recent research, though, conducted on students of different ages and in different countries says that argument is wrong.

The fact that grit may be little more than a new and glossy version of an old idea does not make it unimportant.

For one paper, from 2014, a pair of Yale psychologists looked at several hundred teenagers at a private high school in New England and checked scholastic outcomes (disciplinary record, grades, academic honors, etc.) against their measured grit, conscientiousness, and something called "emotion regulation ability." Only the latter two had predictive value; [grit proved to be extraneous](#). The authors proposed that school success might demand more than simple, gritty passion and persistence. To excel across the board, teens must have the social skills to forge relationships with both their teachers and their peers, and their focus must be balanced across many different kinds of challenges.

Two more studies came out just this year. In one, Austrian researchers followed nearly 500 eighth-grade students and managed to explain about 40 percent of the differences among the students' grades on the basis of their relative intelligence and conscientiousness. Kids who measured higher in grit did do somewhat better in their classes, overall, but not in any unexpected way: [Their conscientiousness appeared to be the overriding factor](#), with grit as one component. The second study looked at 156 college freshmen taking physics at a community college in Montreal and found that [grit had little value](#) at predicting their success.

The fact that grit fails to offer extra information in these settings—that it may be little more than a new and glossy version of an old idea—does not make it unimportant. Roberts, for one, is thrilled to have Duckworth on his side, arguing for the importance of character in fostering success. A 2009 meta-analysis of personality and academic performance found that, across 80 different studies, [a student's conscientiousness can predict her academic outcomes](#), to an extent that's comparable to her intelligence and socio-economic background. Duckworth's evangelism for grit—as opposed to self-control, willpower, conscientiousness, and the rest—may be parochial, but at least it helps to drive this bigger message home.

But that's only half of Duckworth's argument. It's one thing to argue that grit matters more than talent or—more accurately—that your personality helps determine your success. Duckworth goes much further, asserting that you can *change* your personality and learn to "grow your grit."

* * *

It takes Duckworth 80 pages to argue for the power of grit. It takes 200 more for her to explain that we can all be grittier. These latter sections serve what she calls her “purposeful, top-level goal” in life, the passion to which she applies her own reserve of grit: She wants to “use psychological science to help kids achieve and thrive.” She hopes to prove to us that change is possible, and then she wants to tell us how to make it happen.

Grit aims to offer scientific tips on how to choose your own purposeful, top-level goal and how best to practice at it. It tells readers they should find a greater meaning in that goal and keep their spirits up when things start to go astray. The book gives advice on how to foster grit at home, at school, and in the workplace. But in the end, these rules of thumb—practice optimistic self-talk, find a mentor, go to therapy—have less to do with the study of psychology than with common sense and intuition. That’s not Duckworth’s fault: The problem is that there haven’t been so many studies on “growing grit.”

Always modest even as she makes her sweeping claims, Duckworth notes this lack of solid research. That doesn’t stop her from dispensing helpful aphorisms, though. In the section on how to change your child’s grit through parenting, Duckworth tells readers that she’d love to wait for scientific evidence, “but as a mother of two teenagers, I don’t have time for all the data to come in. Like the parents asking *me* this question, I have to make decisions today.”

In lieu of data, she provides a string of anecdotes—celebrity interviews, mostly—interspersed with authoritative equivocations. It’s important for a child to overcome adversity, she concludes, but not too much adversity, which can damage him for life. Parents should be very demanding but also very warm and loving. Children should devote themselves to their activities but not be so single-minded that they fail to find their passions.

This doesn’t sound like bad advice, but I’m not sure how well it serves Duckworth’s top-level goal. While her book assumes we can choose to change our grit, the research that we do have seems to gesture at the opposite. Two recent twin studies (one of which is [not yet published](#)) looked at how grit and other personality traits predict academic success and [how they relate to genetics](#). Like many other studies, they find that grit has little predictive value of its own (as compared with conscientiousness or other personality factors). But the analyses of twins reveal something else: While differences in grit can be explained in part by the students’ genes, they cannot be explained by shared environmental factors. In other words, there’s no evidence that the differences in how we’re treating kids today—the standard range of parental styles and pedagogic modes—are doing much at all to grow (or shrink) their grit.

The church of grit has grown so rapidly in the past few years that even Duckworth has been calling for a pause.

It may even be the case that a child’s personality is no more (or less) amenable to change than his basic cognitive skills. That is to say, we might do just as well (or poorly) at helping kids to thrive if we tried to help them grow their genius, not their grit.

Even better, we could focus on more specific skills that have a clear relationship to student grades. Why not try to foster [better study habits](#) in our kids or teach them tricks for improving

their attendance? Those aren't big book tour-ready concepts, but they've been shown to [have effects](#). If Duckworth's book can tell us anything at all, it's that we shouldn't lose our focus every time we come across a new idea in shiny packaging. It might be better if we persevered and stuck to things that work.

The self-help industry has little time for such considerations, though. The church of grit has grown so rapidly in the past few years, and with such incautious [fervor](#), that even Duckworth has been calling for a pause.

In a March op-ed for the *New York Times*, she decried [recent efforts to measure grit in public schools](#) and to evaluate teachers on their success at making kids more gritty. "We're nowhere near ready—[and perhaps never will be](#)—to use feedback on character as a metric for judging the effectiveness of teachers and schools," Duckworth wrote. Still, the same essay cites her study showing that kids can be taught the gritty skills of setting goals and making plans and that this learning helps them to succeed. That [research](#) isn't quite a proof of principle: It looked at 77 fifth-graders at an urban public school and checked to see if the skills training would improve the students' report cards, classroom attendance, and conduct. The intervention seemed to work—but only for a single academic quarter. By the end of the year, the effects had gone away.

In the concluding section of her book, Duckworth arrives at her final big idea—what she calls "the culture of grit." Here she finds her paragon in Pete Carroll, Super Bowl-winning head coach of the Seattle Seahawks and author of a memoir called [Win Forever](#). In 2013, she says, Carroll watched her TED talk and decided he had to get her on the phone. He wanted to know more about Duckworth's research, and he wanted to tell her that "building grit is exactly what the Seahawks culture is all about." Two years later, she went to the team's training facility and gave lectures on the power of grit to Seahawks players, coaches, and scouts. The visit was for research, too: Duckworth says she learned how the Seahawks remain courageous, and find lessons, even in the [heartbreak of defeat](#). "Compete in everything you do," they say. "You're a Seahawk 24-7. Finish strong. Positive self-talk. Team first."

This Seahawks visit forms the book's anchoring anecdote and its final case study of success. But for me it raised a ticklish question: There may be power in having passion and perseverance, but might there be some menace, too? Could it be that football shows the darker side of grit and the ways that it goes wrong? The NFL sells itself on manly virtues: fighting through adversity, getting knocked down and getting up again, leading with the head, playing through your injuries, giving up your body for the game. That sounds a lot like grit—but is it good?

For win-forever guys like Pete Carroll, the benefits of grit seem to have no bounds. ("The best way to advance something is to live it out in [everything you do](#)," he says.) Even in a league that doesn't lack for excess in this regard, Carroll's team has often pushed the line: In 2013, he got called out for a pattern of his players [taking performance-enhancing drugs](#);* in 2014, he was fined for having players hit one another at a practice, [in violation of league safety rules](#); in 2015, he was criticized for [fielding players with a history of domestic violence](#). Depending on your point of view, the Seahawks could be taken as a cautionary tale, of what happens when you pray with too much zeal at the altars of passion and perseverance.

It could be that having too much strength of purpose is worse than having not enough. At least that's what I'd like to think: I took [Duckworth's test](#) last week and learned to my dismay that I'm among the nation's least gritty citizens. The trait is scored from 1 to 5, and I came in at 2.9. That sounds like it could be right around the average, but in fact it's very low. According to Duckworth's book, my grittiness puts me in the 20th percentile of American adults—more mercurial and weak-willed, less inclined to follow through, than four-fifths of the U.S. population.

That's OK with me. As a journalist, I thrive on flexibility, flitting around from one topic to another; I don't believe my job lends itself to grit. Mine is not the only field where inconstancy can be a virtue. If you want to win forever on the football field, or join the military, or write a book about a big idea, then it might be best to stay on target, compete in everything, and finish strong. But others find their path through mindful wavering and steer away from simple answers.

Grit Scale

Here are a number of statements that may or may not apply to you. There are no right or wrong answers, so just answer honestly, considering how you compare to most people. At the end, you'll get a score that reflects how passionate and persevering you see yourself to be.

1. New ideas and projects sometimes distract me from previous ones.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

2. Setbacks don't discourage me. I don't give up easily.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

3. I often set a goal but later choose to pursue a different one.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

4. I am a hard worker.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

5. I have difficulty maintaining my focus on projects that take more than a few months to complete.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

6. I finish whatever I begin.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

7. My interests change from year to year.

- Very much like me
- Mostly like me
- Somewhat like me

- Not much like me
- Not like me at all

8. I am diligent. I never give up.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

9. I have been obsessed with a certain idea or project for a short time but later lost interest.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

10. I have overcome setbacks to conquer an important challenge.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all