

Angela Duckworth and the Research on 'Grit'

by [Emily Hanford](#)

How gritty are you?

[Take the Grit test.](#)

Before she was a psychology professor, Angela Duckworth taught math in middle school and high school. She spent a lot of time thinking about something that might seem obvious: The students who tried hardest did the best, and the students who didn't try very hard didn't do very well. Duckworth wanted to know: What is the role of effort in a person's success?

Now Duckworth is an assistant professor at the University of Pennsylvania, and her research focuses on a personality trait she calls "grit." She defines grit as "sticking with things over the very long term until you master them." In [a paper](#), she writes that "the gritty individual approaches achievement as a marathon; his or her advantage is stamina."

Duckworth's research suggests that when it comes to high achievement, grit may be as essential as intelligence. That's a significant finding because for a long time, intelligence was considered *the* key to success.

Intelligence "is probably the best-measured trait that there is in all of human psychology," says Duckworth. "We know how to measure intelligence in a matter of minutes."

But intelligence leaves a lot unexplained. There are smart people who aren't high achievers, and there are people who achieve a lot without having the highest test scores. In [one study](#), Duckworth found that smarter students actually had *less* grit than their peers who scored lower on an intelligence test. This finding suggests that, among the study participants -- all students at an Ivy League school -- people who are not as bright as their peers "compensate by working harder and with more determination." And their effort pays off: The grittiest students -- not the smartest ones -- had the highest GPAs.

The Grit Test

Duckworth's work is part of a growing area of psychology research focused on what are loosely called "non-cognitive skills." The goal is to identify and measure the various skills and traits other than intelligence that contribute to human development and success.

Duckworth has developed a test called the "[Grit Scale](#)." You rate yourself on a series of 8 to 12 items. Two examples: "I have overcome setbacks to conquer an important challenge" and "Setbacks don't discourage me." It's entirely self-reported, so you could game the test, and yet what Duckworth has found is that a person's grit score is highly predictive of achievement under challenging circumstances.

At the elite United States Military Academy, West Point, a cadet's grit score was the best predictor of success in the rigorous summer training program known as "Beast Barracks." Grit mattered more than intelligence, leadership ability or physical fitness.

At the Scripps National Spelling Bee, the grittiest contestants were the most likely to advance to the finals -- at least in part because they studied longer, not because they were smarter or were better spellers.

In October 2009, Angela Duckworth gave a TED Talk titled "True Grit: Can Perseverance be Taught?"

Grit and College Completion

Angela Duckworth is now turning her attention to the question of grit and college completion. In [a study](#) funded by the Gates Foundation, Duckworth and a number of other researchers are trying to understand what predicts college persistence among graduates of several high-performing urban charter school networks: [YES Prep Public Schools](#) in Houston, [Mastery Charter Schools](#) in Philadelphia, [Aspire Public Schools](#) in California and [Achievement First Schools](#) in Connecticut.

New ideas and projects sometimes distract me from previous ones.

- [Grit Test](#)

These charter school networks serve mostly students from low-income and minority families. The schools were founded to close the "achievement gap" between these students and their higher-income peers. The ultimate goal of these charter school networks is to get students to go to college and earn degrees.

The charter schools [have succeeded](#) in providing strong academic preparation. Most of their students go to college. Yet the students graduate from college at lower rates than would be expected based on their academic preparation.

The charter schools want to know why that is. Angela Duckworth wants to know if grit has anything to do with it.

Duckworth's previous research shows that people who have "some college" but no degree are lower in grit than people who have college degrees. Does that mean the charter school students who are not making it through college are lacking grit? And if that's the case, can grit be learned?

These are complicated questions, and the answers aren't in yet. Duckworth says there are a number of things to think about before jumping to the conclusion that students who don't finish college *aren't* gritty. Many factors contribute to college success, including money, what colleges students go to, and what Duckworth calls "social-psychological" barriers. She says low-income and minority students often feel out of place on college campuses, especially more elite colleges where the majority of students are upper-income, white and have college-educated parents.

Duckworth thinks a sense of social belonging may be key to persisting through college. One of her research goals is to "sharpen insights" about the psychological barriers that prevent well-prepared students from completing degrees -- and to test interventions that might help students overcome those barriers.

Setbacks don't discourage me.

- [Grit Test](#)

But Duckworth thinks grit is likely a significant factor when it comes to college completion among the charter school students she is studying. That's because grit is a particularly helpful trait when it comes to *challenging* experiences, and for the charter school students, college tends to be a challenging experience.

Most of the students are first generation; their parents didn't go to college -- in many cases, *no one* in their family has any experience with higher education. College can be a difficult and confusing experience even for people who come from college-educated families, but for first-generation students, college is like learning a new language, says Tenesha Villanueva, a co-director of alumni programs at YES Prep Public Schools in Houston.

"It's like going to a foreign country and trying to navigate systems and programs that you have never come in contact with before," says Villanueva.

When first-generation students come up against obstacles in college, they have no one in their families to turn to for help, says Villanueva. College-educated families provide their students with support that many students and families may not even be aware of, but it's a powerful force that helps propel students through college. Villanueva says first-generation students are at a disadvantage.

Not only do first-generation students lack the kind of family support that can help them overcome obstacles in college, they also tend to face more obstacles than higher-income students from college-educated families, according to Villanueva and her colleagues at YES Prep. They may have trouble with money or financial aid paperwork. A lot of the students have to work while going to school. Many live at home and have family obligations, such as taking care of siblings or grandparents and helping to pay the bills. Research shows all of these things make going to college harder and increase the chances a student will quit.

YES Prep graduated its first class of seniors 11 years ago. So far 40 percent of the students have earned bachelor's degrees within six years of finishing high school. Twenty-eight percent have dropped out. The rest are still in college, gritting it out years after they were expected to finish.

The Grittiest College Students

When college is hard, grit helps, according to Angela Duckworth's research.

In fact, people who succeed in getting associate's degrees are, on average, *more* gritty than people who get bachelor's degrees, according to Duckworth's research. It takes as much grit to get an associate's degree as it does to get a Ph.D.

I have achieved a goal that took years of work.

- [Grit Test](#)

"Graduating from a two-year college versus a four-year college is a much greater difference than people might imagine," says Duckworth.

Community colleges are full of students who are a lot like the students at YES Prep and the other urban charter schools Duckworth is studying: first-generation college students from poor

families who have to balance work and family while going to school. The community college dropout rate is high.

"If you're going to get through a two-year college where the attrition rate is 50 or maybe even 75 percent, maybe you do need more grit to surmount all those obstacles," says Duckworth.

Learning to Be Gritty

It's not clear what makes some people grittier than others, but Angela Duckworth believes grit is something people can probably learn.

She says every human quality that has been studied has proven to be affected at least in part by a person's environment -- even intelligence. In addition, people change over time.

"Think about things about your personality like, 'I'm a pretty extroverted person,'" says Duckworth. "Well, how fixed is that?"

It turns out a personality trait like extroversion can change a lot over a person's life. "If you look at large population data, people get more or less extroverted over time," says Duckworth.

"There's no reason to think that grit is any different."

She believes grit can wax and wane in response to experiences. In addition, people might be gritty about some things and not others.

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

- [Grit Test](#)

"You can see a child be exceptionally self-disciplined about their basketball practicing, and yet when you see them in math class, they give up at the slightest frustration," says Duckworth.

Donald Kamenz, director of college initiatives at YES Prep, says students he's worked with are some of the grittiest people he's ever met. They "deal with things and persevere through situations that most people would find insurmountable," he says.

He's known students who get jobs to pay the bills when their parents are laid off, or figure out how to get the electricity back on when the power company shuts it off.

"And then they go to college and they're struggling with financial aid or their financial aid didn't come through and they don't know what to do," he says. Some of them drop out when confronted with these kinds of challenges. He says they're not gritty enough when it comes to college.

A question for YES Prep and other charter schools in Duckworth's study is not necessarily how to get students to be gritty, but how to get them to be gritty about college completion.

"Which experiences do we give kids to get them in the direction of more grit and not less?" asks Duckworth.

One of the goals of Duckworth's research is to figure this out. Her current project began in the fall of 2011 and is scheduled to wrap up in 2014.