nature or nurture? Inspiration or perspiration? Most of us have wondered whether success is due more to the talents we’re born with or to the choices we make. Assistant professor of psychology Angela Duckworth’s, G’03, Gr’06, lifelong fascination with this question colored her work as a public school teacher and volunteer. She worked with bright children who performed well below their academic potential, and she worked with kids who demonstrated average intelligence but excelled in school.

Duckworth, who is also a member of the center, and Seligman began discussing the non-intellectual traits they identified in their personal observations of successful people. Duckworth extended this conversation to interviews with successful professionals in a variety of fields — investment banking, painting, journalism, academia, medicine and law. From these interviews, she determined there was one personal characteristic shared by most prominent leaders in every field: grit.

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Duckworth’s paper states, “Whereas disappointment or boredom signals to others that it is time to change trajectory and cut losses, the gritty individual stays the course.”

Through a series of studies that required participants to answer questionnaires, Duckworth developed a Grit Scale that ranked how gritty subjects were and correlated that rank with other characteristics and achievements. Subjects of some studies represented the general population, while others represented high-achieving populations, such as Penn undergraduates, freshman cadets at West Point and finalists in the 2005 Scripps National Spelling Bee. She found that grittier individuals attained higher levels of education and made fewer career changes than less gritty individuals of the same age. The study also determined that older individuals tend to be higher in grit than younger ones, which suggests that the trait might increase over a person’s life.

In the study on West Point cadets, Duckworth found that grit predicted first-year summer retention of cadets better than self-discipline or the overall measure of cadet quality used by the military academy’s admissions committee. Self-discipline, however, was a better predictor of academic performance among cadets who did stay through the first summer training. Duckworth also discovered that grittier competitors in the spelling bee outranked less gritty ones, in part because they accumulated more practice. Finally, the study
on Penn undergraduates showed that grittier subjects earned higher GPAs than their less gritty peers, despite having lower SAT scores.

Duckworth’s research on grit has several practical implications. It suggests that in school settings, educators should support children who demonstrate great commitment to a goal with as many resources as they offer those identified as “gifted” or “talented.” Parents and educators should also prepare children to anticipate failure and misfortune and to work with stamina.

“There’s literature that shows that in every field that has been studied, the world-class performers do not get there until thousands and thousands and thousands of hours of practice,” she says.

Duckworth feels that her own resume isn’t very gritty. Before she came to Penn, she dabbled in a number of successful but disparate ventures. She worked as a school teacher and as a management consultant, she founded a free summer-enrichment program for low-income children, and she helped create a non-profit Web site providing comparative school information. She also earned a master’s degree in neuroscience at Oxford on a prestigious Marshall Scholarship. But after the birth of her first child, Duckworth had what she calls an “existential crisis” in which she reconsidered the consequences of constantly changing careers. When she decided to enroll in the psychology doctoral program at Penn, she told her husband that she “would not look up for at least 10 years.” This change in life strategy partly informed her studies on grit.

“We live in a period of time where people are very comfortable with changing careers, and in some ways that’s a wonderful thing,” Duckworth adds. “But a danger of this newfound good fortune is that you switch around all the time, and you never become really good at anything.”

Despite claims that her professional past lacks grit, Duckworth’s ventures demonstrate “perseverance and passion” for finding practical solutions to problems. Her research is no different. In the long-term, she wants to study why grit and other non-intellectual traits related to success are stronger in some people than in others and how they can be acquired. She’s also planning to work with charter schools to implement programs that can increase grit and self-discipline in children.

“If you ask people what they would like to change about themselves, oftentimes they say, ‘I wish I were more self-disciplined, or I really wish I could really stick with things,’” Duckworth says. “If I could help figure out that puzzle, even a small piece of it, I think that would be a contribution.”