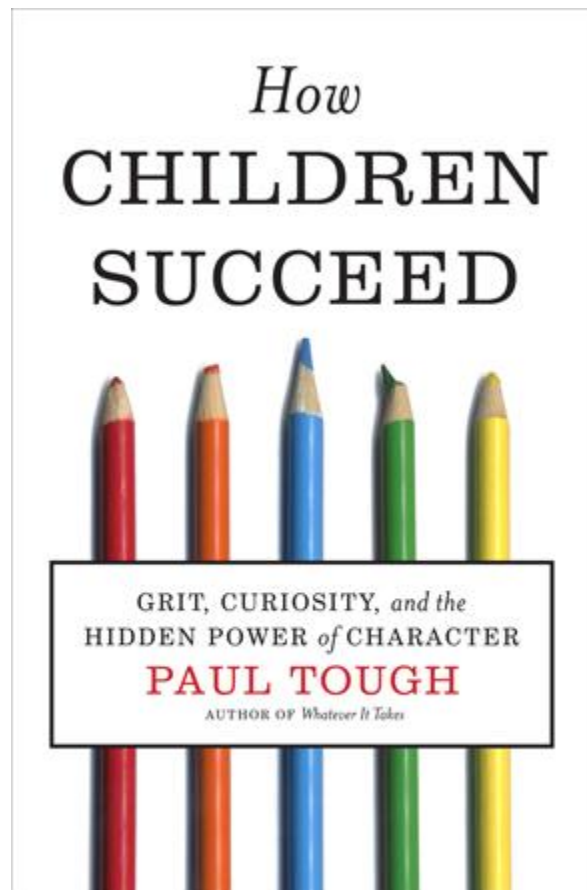


Ain't No Mountain High Enough
Review: *How Children Succeed: Grit, Curiosity, and the Hidden Power*

By Silvia A. Bunge, Ph.D.



Courtesy of Houghton Mifflin Harcourt

There is no obstacle in the path of young people who are poor or members of minority groups that hard work and preparation cannot cure.

~ Barbara Jordan, a leader of the Civil Rights movement

Paul Tough's work reflects his enduring concern about the achievement gap in our society between children from the poorest and wealthiest families in the United States. In his first book, *Whatever It Takes: Geoffrey Canada's Quest to Change Harlem and America*, he chronicled the creation of the Harlem Children's Zone, Inc., an organization that has received national acclaim for its efforts to pull children out of the intergenerational cycle of poverty.

Tough seeks to dispel the notion that children from underserved communities are doomed to fail. The basic premise is that, regardless of a child's IQ, she or he can excel through hard work and perseverance—if given proper encouragement and opportunity. Rather than dwelling on sobering national statistics, which do little to move even the most well-intentioned reader to action, he focuses on the human element. He does this by showing what is possible through the success stories of individual children, teachers, and schools and also by introducing us to top scientists who explain firsthand the significance of their and others' research on child development and education.

Each of the three blurbs on the jacket of his latest effort, *How Children Succeed*, praises a different aspect of the book. Annie Murphy Paul writes in *The New York Times Book Review* that it "illuminates the extremes of American childhood: for rich kids, a safety net drawn so tight it's a harness; for poor kids, almost nothing to break their fall." Certainly, this harsh disparity serves as the impetus for the book but it is not front and center. A reader hoping for an in-depth analysis of inequalities in the American educational system and promising approaches towards school reform would likely be better off picking up a copy of Linda Darling-Hammond's book, *The Flat World and Education: How America's Commitment to Equity Will Determine Our Future*.

Charles Duhigg, author of *The Power of Habit*, commends Tough for introducing "new, powerful ideas about how to help children thrive, innovations that have transformed schools, homes, and lives." Indeed, Tough focuses on some of the most promising ideas and practices of the past decade. He reviews the work of researchers studying key factors that

influence academic achievement, including adverse childhood experiences (e.g., Nadine Burke Harris, Michael Meaney), self-control (e.g., Walter Mischel, Clancy Blair), and motivation and mindset (e.g., Angela Duckworth, Carol Dweck). He also takes us into the schools, showcasing the legendary KIPP Academy in the South Bronx and delving into the life and work of a highly effective chess teacher in Brooklyn named Elizabeth Spiegel. Finally, Alex Kotlowitz, author of *There Are No Children Here*, notes that at the book's "core is a notion that is electrifying in its originality and its optimism: that character—not cognition—is central to success, and that character can be taught." Indeed, this is the central premise of Tough's book, and the one that best differentiates it from others. While I share Tough's optimism regarding the potential to alter the life trajectories of underserved children, I believe that this central message is flawed in relying on several shaky assumptions. First among them is that "character"—a term used to describe traits like self-control, perseverance, and curiosity—can be readily dissociated from "cognition." Another supposition is that cognition can be boiled down to that which is measured on an IQ test. And, lastly, Tough's central message assumes that cognitive skills are essentially fixed whereas character is not.

Tough credits this core idea of "character, not cognition" to James Heckman, winner of the 2000 Nobel Prize in Economics. In reanalyzing data from the famous Perry Preschool Project of the 1960s, which provided high-quality preschool education to children living in poverty and then tracked them through adulthood, Heckman found that the factors that best explained the improved life outcomes of the Perry Preschool students were not related to IQ but rather to "noncognitive" factors like curiosity, self-control, and social fluidity. Tough notes that many of the scholars he spoke with while researching this book could be linked to Heckman either directly or indirectly. These scholars include Walter Mischel, who has shown that delay of gratification in preschool is a good predictor of life outcomes,^{1,2} and Angela Duckworth, who has demonstrated the importance of "grit" and conscientiousness in achievement.^{3,4}

Tough's tenacity as a journalist is evidenced by the number of scientists he interviewed or learned about in his research for the book. The list reads as a "Who's Who" of developmental and social psychologists, economists, and education researchers. But I found the list short on cognitive scientists, whom I believe would have brought greater

clarity to the discussion of the relationships between cognitive abilities and scholastic achievement.

Numerous studies have shown that academic achievement depends on good self-control—a general concept that encompasses laymen’s terms like “willpower,” “character,” and “grit,” as well as technical terms like “executive functions,” “cognitive control processes,” or “emotion regulatory strategies.” Tough eventually hits on this central concept of self-control and uses it to weave together the different strands of research that he reviewed. Self-control makes it possible to sit still, listen quietly, keep relevant rules and goals in mind, work through feelings rather than erupting in anger, and consider long-term consequences before acting. As such, it makes good sense that research points to self-control as essential for scholastic achievement and good life outcomes.⁵

Self-control can be thought of as a character trait, but it is perhaps more productive to think of it as a set of neurocognitive processes that enable goal-directed thought and behavior. These processes are all instantiated in distributed brain networks that involve prefrontal cortex, and they are all governed by the same general principles of development and neural plasticity. Considered in this way, it seems unlikely that a child’s “character” can change with hard work but that his or her “cognitive abilities” are relatively fixed. A more plausible account is that, with hard work and access to promising interventions, a disadvantaged child can strengthen the neurocognitive skills that enable her to excel in school and in life.^{6,7}

Quibbles aside, Tough makes a powerful argument for giving children opportunities to rise out of poverty. *How Children Succeed* is likely to bring solace and inspiration to educators—especially those who have lost hope that they can make a difference.

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brain and cognitive development. Through her research and public service, she hopes to promote academic readiness among children at risk for school failure.

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