

Going the Distance: Stereotypes and Hard Work

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I plead guilty to trading in stereotypes. For example, I've somehow gotten the idea that East Africans are especially good distance runners, and I think I've even said as much on a few occasions. But I don't know this to be true. I've never done the work to verify that East Africans are statistically superior at distance running. It just seems that every time I flip on ESPN and happen on a long-distance event, an East African is winning.

This kind of stereotyping seems harmless enough, but is it? I intend it with admiration rather than disrespect, but new research suggests that my intentions may be irrelevant, as irrelevant as the truth or falsity of the stereotype. Attributing any ability to a particular social group may be damaging, contributing to the belief that natural talent is more important than hard work, which in turn can undermine effort and achievement, especially in children.

I know what you're thinking. How can stereotypes of East African distance runners affect children's beliefs about effort and success—and actual performance? Well, think of it this way. What if I modified that stereotype to say Americans are good at distance running? Or American boys are good at distance running? Or boys are good at running, period? Or good at athletics? Or math? The point is that any broad generalization about any group's talent promotes the belief that talent is innate—a gift—rather than earned. This belief can discourage effort: The gifted don't need to work hard, and the ungifted—well, why bother?

At least that's the theory behind some provocative new research from psychological scientists Andrei Cimpian of the University of Illinois and Yan Mu of Sun Yat-sen University. These scientists are interested in how children form intuitive theories about the world, specifically about natural ability, work and achievement. A robust body of research has shown that telling individual children that they're smart leads to the maladaptive belief that effort is pointless, while praising kids as hardworking actually spurs them to work harder. The scientists wanted to build on this idea—to see if such destructive beliefs are shaped not just by individual praise, but by much more subtle and insidious influences—notably by the use of broad stereotypes.

To test this idea, the scientists ran a couple experiments in which young children had to perform challenging tasks. In the first experiment, 4- and 5-year-olds were required to draw shapes within shapes, but before they started, the instructor told about half of them: "Girls (or boys) are good at this game." That's the laboratory equivalent of saying East Africans are good at distance running. The other half were told: "There's a girl (or boy) who is very good at this game." In other words, some kids were primed with a social stereotype, others with the idea of individual excellence. All the kids played a practice round, after which the instructor criticized their performance just a bit. This was to make them unsure of themselves and their likelihood for success. Then they all played again, this time for real. The instructor scored their performances.

The results were clear. As [described in the on-line version of the journal *Psychological Science*](#), the kids who heard about group stereotypes—talented boys or talented girls—performed more poorly than did the kids who heard about talented individuals. What’s more—and this was surprising—this debilitating effect occurred even if the instructor praised the child’s own social group. That is, boys were impaired even if they heard that boys excelled as a group; and the same with girls. It was the *idea* of any group having an innate talent—the group caricature—that made them perform poorly.

The second experiment used a more difficult game, and included some older kids as well—up to age 7. The game involved mentally rotating objects, but otherwise it was similar to the first experiment. Again, some kids were primed with the idea of group differences; others, with the idea of individual differences. And again, those primed to believe in group talent did much worse than the others, presumably because their belief in innate talent sabotaged their motivation and diminished their effort. Importantly, the more challenging the mental rotation, the worse they did: Faced with a higher likelihood of failure, kids rely more on their beliefs in stereotypes about ability and success.

This is disturbing. Both of the games in these experiments were unfamiliar experiences for the children, so they had no preconceptions about any group possessing special talent for these games. Yet a simple statement by a stranger was enough to foster maladaptive beliefs—beliefs so powerful that they actually impaired performance in the face of difficulty.

It appears that young children are exquisitely sensitive to new stereotypes, which can quickly become threatening. Even more worrisome is the possibility that chronic exposure to such stereotypes—linking this or that group to this or that talent—could over time foster a broad belief that innate talents are needed for most of life’s challenges, and that effort is of little consequence. And all this could start with a reckless generalization about long-distance runners.

Wray Herbert’s book, *On Second Thought*, devotes a chapter to the risks of stereotypical thinking. Excerpts from his two blogs—“We’re Only Human” and “Full Frontal Psychology”—appear regularly in [The Huffington Post](#) and in *Scientific American Mind*.