Beyond the 10,000-hour-rule: Experts disagree about the value of practice

By Kevin Hartnett GLOBE CORRESPONDENT MARCH 27, 2016

IN RECENT YEARS, it’s become a matter of conventional wisdom that if you want to get good at something, you have to practice. A lot. There’s always been some intuitive truth to this idea, but it gained greater influence after the 2008 publication of Malcolm Gladwell’s bestseller “Outliers,” which presented research suggesting that the best people in a field got there because they practiced longer and harder than everyone else.

Among researchers, however, the importance of practice for achievement remains an open and hotly debated question. In particular, a group of researchers argues in a recently published book chapter and a forthcoming
paper in Perspectives on Psychological Sciences that the importance of practice has been wildly overstated.

“It’s just not scientifically defensible at this point to say that training history does or could explain all the variation [in talent],” says Brooke Macnamara, a psychologist at Case Western Reserve University.

Macnamara is coauthor of the book chapter, published earlier this year in “The Psychology of Learning and Motivation,” and the forthcoming study. This work follows 2014 research in which she and her coauthors performed a meta-analysis on thousands of studies on skill acquisition in order to estimate exactly how much practice matters in different pursuits. They found that how much a person practices explains about 26 percent of the variation in how good people are at games like chess, 21 percent of the variation in performance playing musical instruments, and 18 percent of the variation in performance in sports.

“Our conclusion is that, of course, deliberate practice is an important factor, but it’s not the only factor or *even the largest factor,*” says coauthor David Hambrick, a psychologist at Michigan State University.

[*Misquote: should read “necessarily even the largest factor”*]

Hambrick and Macnamara’s work is a rejoinder to research by Anders Ericsson, a psychologist at Florida State University and the person most famously identified with the view that the right kind of practice makes all the difference. Ericsson’s research played a starring role in “Outliers,” the book that gave birth to the now famous “10,000-hour rule,” which says that elite performance hinges on practicing the correct way for that amount of time.

Ericsson says Gladwell misstated his research and that he never specifies any amount of practice time as a magic threshold. He takes issue with the 10,000-
hour rule in his new book, “PEAK: Secrets from the New Science of Expertise,” due out in April. More generally, he argues that Hambrick and Macnamara’s research underrepresents the value of practice because it counts training activities that fall short of the kind of focused, deliberate practice that underpins his research. As he sees it, to really make a difference, practice has to be undertaken with the specific goal of improving an aspect of performance and under the supervision of a coach or mentor who can provide skilled feedback.

“Critics have tried to put us into this mindless repetition idea here, and that completely misunderstands [my] view,” he says. “We find that the expert is engaging in this search for finding the best ways of performing and then constantly seeking feedback about where they’re performing suboptimally.”

Ericsson grants that practice is not necessarily everything. He argues that some physical characteristics and personality traits do influence the development of talent — it helps to be tall to play basketball, and people with the right disposition may be better able to sustain hours of deliberate practice. Still, Ericsson continues to view practice as far and away the factor that explains differences in ultimate talent.

“Lacking evidence about what some people actually lack in order to achieve at this very high level, wouldn’t you as a scientist have to say we don’t know?” Ericsson says. “And if we don’t know, let’s not go around saying it’s obvious that some people are able to and others are not.”

Others in the field are less convinced.

“I wouldn’t expect that if my kids got 10,000 hours of piano playing, they’d become professional piano players,” says Jonathan Wai, a visiting researcher at Case Western Reserve University and research scientist at the Duke University Talent Identification Program. “It doesn’t take away from the idea
that practice is important, but it does take away from the idea that anyone can be anything.”

If practice isn’t everything, the next step is to nail down what else matters, and that’s where a number of researchers have turned in recent years.

The answer, Hambrick and Macnamara suggest, is likely to be nuanced. They argue it’s time to get beyond the idea that talent is either “born” (genetic) or “made” (all about practice). Instead they propose what they call a “multifactorial” model. It features arrows going all over the place in an effort to capture how factors like basic ability, personality, and deliberate practice affect each other and the overall development of talent.

If this revised picture of talent acquisition is complicated, it implies at least one simple message: While practice may make perfect, perfect is probably off the table already for most people in most tasks.

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