**Why The 10,000 Hour Rule Is A Myth**

The following is an excerpt from[*Daniel Goleman's new book, "Focus: The Hidden Driver of Excellence."*](http://www.amazon.com/Focus-The-Hidden-Driver-Excellence/dp/0062114867)

The “10,000-hour rule” -- that this level of practice holds the secret to great success in any field -- has become sacrosanct gospel, echoed on websites and recited as litany in high-performance workshops. The problem: it’s only half-true.

If you are a duffer at golf, say, and make the same mistakes every time you try a certain swing or putt, 10,000 hours of practicing that error will not improve your game. You’ll still be a duffer, albeit an older one.

No less an expert than Anders Ericsson, the Florida State University psychologist whose research on expertise spawned the ten-thousand-hour rule-of-thumb, told me, “You don’t get benefits from mechanical repetition, but by adjusting your execution over and over to get closer to your goal.”

“You have to tweak the system by pushing,” he adds, “allowing for more errors at first as you increase your limits.”
Ericsson argues the secret of winning is “deliberate practice,” where an expert coach takes you through well-designed training over months or years, and you give it your full concentration.

How experts in any domain pay attention while practicing makes a crucial difference. While novices and amateurs are content to let their passive, bottom-up systems take over their routines, experts never rest their active concentration during practice.

For instance, in his much-cited study of violinists – the one that showed the top tier had practiced over 10,000 hours – Ericsson found the experts did so with full concentration on improving a particular aspect of their performance that a master teacher identified. The feedback matters and the concentration does, too – not just the hours.

Learning how to improve any skill requires top-down focus. Neuroplasticity, the strengthening of old brain circuits and building of new ones for a skill we are practicing, requires our paying attention: When practice occurs while we are focusing elsewhere, the brain does not rewire the relevant circuitry for that particular routine.

Daydreaming defeats practice; those of us who browse TV while working out will never reach the top ranks. Paying full attention seems to boost the mind’s processing speed, strengthen synaptic connections, and expand or create neural networks for what we are practicing.

At least at first. But as you master how to execute the new routine, repeated practice transfers control of that skill from the top-down system for intentional focus to bottom-up circuits that eventually make its execution effortless. At that point you don’t need to think about it – you can do the routine well enough on automatic.

And this is where amateurs and experts part ways. Amateurs are content at some point to let their efforts become bottom-up operations. After about 50 hours of training –whether in skiing or driving – people get to that “good-enough” performance level, where they can go through the motions more or less effortlessly. They no longer feel the need for concentrated practice, but are content to coast on what they’ve learned. No matter how much more they practice in this bottom-up mode, their improvement will be negligible.

The experts, in contrast, keep paying attention top-down, intentionally counteracting the brain’s urge to automatize routines. They concentrate actively on those moves they have yet to perfect, on correcting what’s not working in their game, and on refining their mental models of how to play the game. The secret to smart practice boils down to focus on the particulars of feedback from a seasoned coach.

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