# The Myth of Talent and the Power of Practice

**Author:** Paul Stimpson

**Posted On:** April 20, 2011

When we watch Wang Liqin or Timo Boll in action we are invariably astounded. We are electrified by their virtuosity, the intricacy of their skill and the diversity of their shot-making. Their abilities seem so far beyond the reach of us ordinary mortals as to occupy a different planet.

The same perspective applies to other types of world-beaters, whether it is chess grandmasters or virtuoso pianists. They possess such artistry, vision and audacity as to seem like a special breed, touched by a genetic miracle that eluded the rest of us.

Talent is the word we use to rationalise these skills, the idea that sporting stars are born with greatness encoded in their DNA. How else to explain how Boll can perform a counter-topspin in the blink of an eye or how Wang is able to stroke a backhand winner from the back of the court?

It boils down to the idea that sporting excellence is reserved for a select group of individuals – winners in a genetic lottery that passed the rest of us by.

But what if this seductive idea is all wrong? What if our deepest assumptions about success in table tennis – indeed, about life itself – are entirely misconceived? What if talent itself is not just a meaningless concept, but a corrosive one, robbing ourselves and our children of the incentive to work hard and excel?

After all, what is talent? We all think we know it when we see it. We really believe that we can spot giftedness in a young player according to how she hits the ball, moves her feet, and reacts to the shots of her opponent. Many table tennis associations even have talent identification programmes.

But how do we know that this player, who looks so gifted, hasn't had many hours of special training behind the scenes? How do we know that the initial differences in ability between her and the rest will persist over years of practice? In fact, we don't, as several studies have demonstrated.

A ground-breaking investigation of British musicians, for example, found that the top performers had learnt no faster than those who reached lower levels of attainment: hour after hour, the various groups had improved at almost identical rates. The difference was simply that top performers had practiced for more hours. Further research has shown that when top performers seem to possess an early gift, it is often because they have been given extra tuition at home by their parents.

Precisely the same insight is revealed by looking at child prodigies; boys and girls who reach world class levels of performance in their teens. At first sight, they seem to have been blessed with amazing skills; skills that have enabled them to take a shortcut to eminence. But a closer inspection reveals a very different story.

When the Williams sisters burst on the scene, they were considered miracle tennis players. "These girls are the most super talented players for a generation," was the assessment of one newspaper. But now consider that the sisters started playing before the age of five, that they endured sessions that began at 8am and lasted till 3pm, that by the age of ten they had clocked up more hours of practice than most semi professionals achieve in a lifetime. Far from being players zapped with special powers that enabled them to circumvent practice, the Williams sisters embody the rigours of practice.

Examine any sporting life where success has arrived early, and the same story keeps repeating itself, whether it is Jan-Ove Waldner's legendary work ethic in Sweden or the extraordinary collective endeavour of the Chinese table tennis team in Beijing, who train with an intensity unmatched in other parts of the world.

The illusion of talent arises because we only see a tiny proportion of the work that goes into the construction of virtuosity. If we were to examine the incalculable hours of practice, the many years ingraining excellence, the

thousands of baby steps taken by world-class performers to get to the top, the skills would not seem quite so mystical, or so inborn.


Ding Ning and Coach

Indeed, extensive research has shown that there is not a single top performer in any complex task who has bypassed the 10 years of hard work necessary to reach the top. As Zhuang Zedong, the legendary Chinese player, puts it: “There is no way to reach the top in table tennis except through hard work. That was true when I was playing in the national team, and it is true now”.

Of course, none of this is to deny that some kids start out better than others; it is merely to suggest that the starting point we all have in life is not particularly relevant. Why? Because over time, with the right kind of practice, we change so dramatically.

It is not just the body that changes, but the anatomy of the brain. The region of the brain responsible for controlling fingers in young musicians, for example, is far larger than for the rest of us. But they were not born with this; it grew in direct proportion to the number of years of training.

Similarly, a study of London taxi drivers discovered that the area of the brain governing spatial navigation is substantially larger than for non-taxi drivers – but it did not start out like this, but developed with time on the job.

To put it simply, the secret of success does not lie in talent, but in hard work, will and opportunity. It is a truth that should be stapled to the wall of every table tennis club on the planet.

Matthew Syeds book, Bounce is available here.