

Title	The 10,000 hours rule and why young athletes need to know about it.
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Audience	Coaches, Junior Athletes, Parents, Teachers, Sports Development Officials
Background	This document is based upon the author's personal opinion and is not a scientific study. Hopefully it stimulates some debate and internal reflection amongst readers.

The 10,000 Hours Rule

In 1985 Benjamin Bloom, a professor from Chicago published a book called *Developing Talent in Young People* in which he studied 120 elite performers in many fields and discovered that there were no early, childhood indicators of talent such as the performers IQ. The only differences between elite and non-elite performers were in sport. (See my earlier blog on Relative Age Effect).

So how did these 120 seemingly normal children suddenly “develop” talent?

There has been a lot of interest in the subject of talent acquisition over the years and in the 1970's a Hungarian family decided to act as the subject of their own experiment. László and Klara Polgár wanted to challenge the popular assumption that females had inferior special awareness to males as they believed that it came down to differences in education. They started to teach their daughters at home rather than at school and they also started to teach them chess at a young age. As an outcome of their regular chess practice, all three girls went on to make the world top 10 by the year 2000 and the youngest was a Grand Master at the age of just 15, breaking the previous record set by the famous Bobby Fischer.

In the early 1990's a Swedish psychologist called K. Anders Ericsson completed several studies on the acquisition of expertise looking at experiments like Polgár's. As a result, he established that it takes at least 10,000 hours to become skilled enough to be a world class performer, regardless of the activity involved. Based upon a reasonable assumption of training hours per week, these 10,000 hours also roughly equate to 10 years of training.

In newspapers we often see sports stars hailed as “Overnight successes” but Ericsson discovered that many such prodigies had actually spent in excess of 10,000 hours practicing before they achieved their success.

Famous people such as the composer Mozart, golfer Tiger Woods and the tennis playing Williams Sisters, Venus and Serena have all been described in this manner, but behind each lies a story of extreme and possibly obsessive dedication to practice and also expert supervision.

Mozart started creating music at a very early age; however, his most acclaimed pieces came as he got older. In the meantime, he had been learning under the tutelage of his father, (at the time considered Europe's greatest music teacher) and if, as some people suggest, he was studying for 32 hours per week from the age of 2 then he would have reached 10,000 hours of practice by his eighth birthday. This was before his greatest pieces were composed.

Tiger Woods also started his training at the age of 2. Encouraged by his father Earl, (who was a single figure handicapper and former sportsperson himself) he quickly developed. Tiger appeared on the Bob Hope show on TV at 3 years old, broke 80 shots at 8 years old and won the Junior World Golf Championship for the 1st time at 13 years old. **That's just over 10 years since he started training!**

Why is it important for young athletes to understand this?

I find that many young athletes joining our club already *think* that they are good at athletics. Many have been sent by a teacher because they showed promise at school or won the annual sports day. Some are realistic and know that they still have much to learn, however many think that they are the finished article and expect to always win events against similar age children.

A very high percentage of new members don't stick around once they lose a race and realise that:

Sustained Success = Hard Work + Dedication / Commitment

I call it the X-Factor phenomenon. They see regular people turn up for an audition on TV, go through a few rounds of judging and 10 weeks later they get a contract, go on tour and earn a fortune, simple!

Except sport isn't like that, as Tiger Woods, Venus Williams, Jonny Wilkinson, David Beckham and Jessica Ennis will all testify. You have to put in hours and hours of practice, regardless of all other factors in your life.

You also have to accept that 10,000 hours is a long way off and you won't win everything in the meantime. In his book *Talent is Overrated*, Geoff Colvin tells of a Japanese Ice Skater called Shizuka Arakawa. He estimated that between the age of 5 and when she won the Olympics in 2006 she had fallen "on her butt" twenty thousand times. Most people would have given up after the first few painful landings, but it takes not only extraordinary commitment to keep trying, but also an understanding that every fall is an opportunity to learn. What worked well, what didn't and what do I need to do next time?

World famous and extremely successful basketball star Michael Jordan is accredited with a quote that sums this up perfectly. *"I've missed more than 9000 shots in my career. I've lost almost 300 games. 26 times, I've been trusted to take the game winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed."*

The disappointment of defeat is often seen amongst our young athletes following a meeting. Some never return to training, some shrug it off and don't care, but every now and again you spot an athlete that has just become even more motivated. They become inquisitive as to what the coach saw, they note the opponents that just beat them and they seem to give an extra effort in training over the next few sessions.

What needs to be done?

Parents and **athletes** should obviously heed Ericsson's findings and accept that they are going to have to work hard and long to achieve world class skills. They won't win every race or jump further every time BUT, they will be offered an opportunity to learn that they can either ignore or grasp.

Of course, it is possible to get better and to a good standard with less than 10 years of practice so they should set more realistic short and medium term goals so that they can see that progress is being made. **These targets should not be purely results based, they should also focus on skill acquisition.** (In a previous blog on Relative Age Effect I warned of the dangers of comparing performance amongst young athletes with the same chronological age but a different stage of physical development.)

Focusing entirely on one sport to clock up the 10,000 hours is also risky. Too much focus on training the body for one outcome (e.g. a Triple Jump) is likely to lead to excessive stress on a developing body and therefore injury. I would therefore recommend that **athletes** think broader and develop all of the skills and attributes needed to succeed by trying different activities. For example, develop core strength for jumping by swimming, or develop leg strength and balance for running by climbing. Not only will this relieve some pressure on the body, it will also be more interesting.

There are exceptional circumstances where focus and specialist training are required. In a later blog post I will explain how studies into Long Term Athlete Development (LTAD) have identified important windows of trainability.

Further Reading / References

<http://www.coachingmanagement.nl/The%20Making%20of%20an%20Expert.pdf>

<http://www.squidoo.com/10000-hour-rule>

Outliers by Malcolm Gladwell

Bounce by Matthew Syed

The Talent Code by Daniel Coyle

Talent is Overrated by Geoff Colvin

