Talent Identification and Development

in Tennis

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Accurately identifying individuals at a young age who are most likely to excel in a given sport remains a pursuit for coaches, parents and national governing bodies worldwide. In a sport such as tennis, the financial investment needed to support a player's development is substantial, although this is offset by the vast sums of money that are on offer for those few elite players who reach the very top of the game. As such, tennis can be considered to represent a high risk, high reward venture, where the value of being able to better identify those who are likely to 'make it' takes on extra emphasis.

The debate surrounding the timeless 'nature versus nurture' conundrum rumbles on and shows no sign of abating. The relative contribution that deliberate practice (Starkes & Ericsson, 2003) as opposed to genetics (Tucker & Collins, 2011) play in the development of champions remains a contentious issue. Popular texts such as 'Bounce' (Syed, 2010) and communications intended specifically for tennis coaches (Roetert, Kovacs & Crespo, 2009) have served to engage a wider community in the debate. It is the intention of this short article to summarize the key points emerging from this body of work and to offer some guidance to coaches moving forward.

Accounts of players who reached the pinnacle of the game having hit thousands of balls with parents, coaches or siblings at a young age, are now sporting folklore (e.g., Serena and Venus Williams, Andre Agassi, Andy Murray). Such anecdotal evidence would appear to provide compelling support for the role that practice plays in reaching the top. Anders Ericsson's headline grabbing conclusion that 10,000 hours of deliberate practice over 10 years is needed to become elite has, in some instances, been shown to provide a useful gauge of the investment needed by athletes and coaching teams.

It should be noted, however, that in sports involving a significant psychomotor and decision making component, the amount of practice required and the age at which a player reaches the top of the sport have been shown to be more variable (Helsen, Starkes & Hodges, 1998). The idea of 'talent transfer' may account for some of this variability as athletes apply patterns of movement, decision making skills and physical attributes honed in one sport early in life to a new and different sport as they reach adolescence. For example, patterns of movement, balance and coordination developed in the pre-teen years in a sport such as badminton, would appear to provide a good foundation upon which tennis specific striking and tactical awareness can subsequently be developed. It is, however, problematic quantifying the extent to which 'transfer' has occurred from one sport to another and, as such, this line of enquiry provides little additional insight in to addressing the relative contribution that talent or practice alone make to achieving expertise. Genetic factors have been identified as influencing development in a number of areas pertinent to sports performance (sex, height, VO_2max). Although work in this area is ongoing, we are still some way off being able to isolate the exact combination of genetic factors that may be used to predict sporting potential (see Tucker & Collins, 2011 for a full review).

It would appear that currently, the academic literature is unable to provide tennis coaches with definitive guidance on the issue of talent. It is clear that there is no consensus as to which physiological, psychological, technical or psychomotor tests (or combination thereof) reliably inform coaches of a junior's talent for tennis. In Great Britain, the national governing body for tennis, the Lawn Tennis Association (LTA) has devised a set of physical tests by which to judge which seven and eight year olds are selected to receive central training and/or funding. However, a child's performance on the day of the test can be affected by myriad factors, the most common being how often the tests have been practiced previously, the child's ability to deal with performance pressure, the length of time and amount of coaching the child has previously accessed, and the month in the year in which the child is born (at the age of seven, being a few months older appears to make a lot of difference developmentally).

It would be remiss to not pause and consider the wider philosophical debate surrounding talent identification and the inherent message that is being conveyed when we implement talent identification programs. According to the Cambridge English dictionary, to possess talent is to have "a natural ability to be good at something, especially without being taught". This definition is supported by popular belief that talent is a stable, enduring characteristic and is possessed in differing quantities by individuals as governed by hereditary factors. Accepting this description implies that some children are blessed with the potential to go further in our game than others. The reality here is, of course, that a player's progress in tennis is significantly influenced by the amount and quality of coaching and playing opportunities that the individual receives. Our concern however, is that the championing of 'Talent Identification Days' (or similar schemes depending on the country in which you reside) is misguided. It can be argued that what is on display and being recorded at such days is in fact not strictly talent, but more a snapshot of that child's previous experience.

Another point of relevance here is the message that such talent initiatives send to junior players and parents. Carol Dweck has covered this in great detail in the education literature and warns against promoting a 'fixed' mindset where children are institutionalized to believe that an inherent, uncontrollable factor is in some way responsible for their progress. This has been shown to demotivate children, as it imparts the idea that it's who you are, not what you do, that leads to success. Adopting the alternative position and dispelling the notion of talent entirely would appear to level the playing field and promote an effort based reward system where players have an equal opportunity to reach the top. We are conscious however, that this position only prevails if all players have equal access to playing and coaching provision - this is plainly not the case! The 'truth' inevitably lies somewhere between these two extremes, but our point here is that coaches should be mindful of the message that is being conveyed to players and parents as they project their personal standpoint through their coaching provision.

In trying to provide some guidance for coaches in this area, Anshel and Lidor (2012) make what appears to be a very sound recommendation, "provide athletes of all ages the opportunity to select sports that interest them and in which they demonstrate competence" (p.259). In promoting the opportunity for individuals of any age to engage with tennis, you limit the potential to overlook players at a young age who have either a) not started playing tennis yet, b) only play sparingly and have limited experience in the sport, or c) under perform on the day that they are assessed for 'talent'. The demonstration of competence is also of critical importance, as we know that individuals are motivated by, and enjoy, activities where competence is experienced. Moreover, when the competence is deemed to have resulted from a personally controllable input, i.e., effort expended during practice, then perceptions of autonomy increase and the player becomes more intrinsically motivated. This sequence will have a positive longterm outcome for the future of the individual in the sport.

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The challenge of making tennis affordable and therefore accessible, not just as a one-off 'taster' session, but as a longterm pursuit, is significant and, in our opinion, still unresolved in many countries. Answering this sizeable challenge is beyond the scope of this paper, however our recommendation would be to research and remove as many barriers to participation and competition as possible in order to increase the pool of players in our game. Given our academic and practical experiences of the tennis system in Great Britain, we would argue that the concept of talent identification, and the manner in which this is delivered to juniors and parents, may serve as one such obstacle. It would appear prudent to suggest that the vast sums of money currently being spent on talent identification might be better allocated to implementing a series of barrier removal schemes. We are conscious not to oversimplify or trivialize the complicated web of factors that contribute to player development, but we would urge coaches to avoid adopting an 'in/out' system with children of a young age, as this appears to be an expensive and counterproductive pursuit. Note: We can speak from our experience and appreciate that this does not reflect the approach adopted in all countries.

The following points serve as the take home message for coaches:

- Seek to continually increase the pool of players entering the sport, irrespective of age
- Adopt a philosophy of development, support and growth
- Move away from cross sectional judgments of potential
- Identify and work to remove barriers throughout the entire player pathway

The goal of this article was to summarize some of the current thinking around talent identification and development, and to offer a sense of perspective for coaches and governing bodies involved in talent identification. Although we hope that we have achieved these aims, we are acutely aware that this brief article offers only an insight to an otherwise complicated sphere of inquiry. What is clear is that interest as to the best way to facilitate elite performance will remain long after our racquets have been retired!

References

Starkes, J. L. & Ericsson, K. A. (2003). Expert Performance in Sports: Advances in Research on Sport and Expertise. Human Kinetics; Champaign, IL.
Tucker, R. & Collins, M (2012). What makes champions? A review of the relative contribution of genes and training to sporting success. British Journal of Sports Medicine, 46, 555-561.
Syed, M. (2010). Bounce: The Myth of Talent and the Power of Practice. Harper Collins; Hammersmith, UK.
Roetert, P., Kovacs, M., & Crespo, M. (2009). Talent development in tennis – speaking the language. ITF Coaching and Sport Science Review, 16(49), 2-4.
Helsen, W., Starkes, J. L., & Hodges, N. J. (1998). Team sports and the theory of deliberate practice. Journal of Sport and Exercise Psychology, 20, 13-25.
Anshel, M. H. & Lidor, R. (2012). Talent detection programs in sport: The questionable use of psychological measures. Journal of Sport Behavior, 35(3), 239-265.