Talent Development in Tennis – Speaking the Language

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ABSTRACT

When delving into any kind of new or different field of study, one of the first things to do is to familiarize ourselves with the proper terminology. We likely wouldn't feel comfortable taking tennis lessons from someone who talked about "backstrokes" instead of "backhands" or who confused "rally's" and "volley's". We would certainly question the coach's credibility. This same concept is also true in the field of talent development as some confusion exists as to what it really is. However, it is very important for us, as tennis coaches, to understand not only the proper terminology but also the concepts behind them especially in relationship to developing our players properly. Let's take a look at what is currently available in the scientific literature related to this topic.

Key words: Talent, development, sponsorship, terminology.

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WHAT IS TALENT AND HOW DO WE IDENTIFY IT?

If we look up the word "talent" in the dictionary, we see the following definition, "a special and natural ability" and "a capacity for achievement or success". So how do we find the right athletes and attract them to tennis (talent identification) and once they're in the sport of tennis, how do we help them improve in a systematic way (talent development). It has been stated that it is pointless to select talent for a sport unless the talent has first selected the sport (Dick, 1992). In our experience, this may at least be partially true in that "motivation" or "desire to succeed" may be the most important factor in the development of expertise. However, most players get started in tennis with the help of a little push from a parent or other significant person in their life. Tennis has the added benefit, unlike sports like gymnastics and basketball, in that players of many different shapes and sizes can be quite successful.

Deliberate Practice and Deliberate Play

The theory of "deliberate practice" was developed by Ericsson et al (1993) and is based on the idea that proficiency in any domain is tied explicitly to the amount and type of training performed. Their research shows that many characteristics once believed to reflect innate talent are actually the result of intense practice extended for a minimum of 10 years. Deliberate practice is any activity designed to improve current performance, but it is not play, not work and not observing others perform. Practice is always relevant to performance, always effortful, and not inherently enjoyable (Starkes, 2000). Baker and Cote (2006), on the other hand, believe that the emphasis of structured, effortful training indicative of the early specialization approach may have forgotten an extremely salient factor in youth sport involvement - fun. They define "deliberate play" as activities in sport designed to maximize inherent enjoyment. Players can regulate tennis play by utilizing flexible rules adapted from the standardized rules of tennis. The immediate value of deliberate play is the motivation to continue to play tennis and the potential later value is that young players may develop the ability to process information from different sports situations. Davids (2000) states that time and amount of practice should not be viewed as the only constraints on skill acquisition. Issues such as hereditary influences and differences in motivation should also be considered. The fundamental issue may not be the number of hours of accumulated practice necessary to obtain excellence, but rather how to improve the quality of instruction in order to prevent future talents from wasting time during the various phases of the athletic career (van Rossum, 2000).

Chunking

We all know that top-level players look more efficient than beginners in the way they hit the ball. Part of the reason for this is that they have learned to group different components of their movement and

swing from separate items into larger collections. This process is called chunking and allows players to collect sub-elements into a single unit (Schmidt & Lee, 1999). This is also sometimes called a motor program.

Static versus dynamic tasks

A static task involves the performance a specific set of actions, typically in step-by-step progression (think following a recipe). For many areas this is vitally important. A surgeon needs a step-by-step approach to repair a ligament, and a carpenter needs to follow a specific order when building a staircase. This type of activity is benefited most by deliberate practice. Contrarily, dynamic tasks are a combination of static tasks sometimes in random order. Tennis is a sport that is a combination of static and dynamic tasks. Learning an open-stance forehand from a ball machine is a static task which can be practiced for hours and the athlete will improve the ability to hit the open-stance forehand. However, this is a vastly different ability than hitting an open-stance forehand at 5-5 in the third set against a player who hits with very heavy topspin on a slow clay-court.

Once a static skill is learned, research has shown that many individuals consciously or subconsciously avoid future deliberate practice; and instead choose to focus on well-entrenched activities which may limit their future improvements (Ericsson, Krampe et al. 1993).

Creativity

Experts in tennis are characterized by extraordinary creative behavior. Talented players display an individual performance in which creativity is paramount. Creativity can be defined as the ability to produce solutions to a given task that are both novel (original, unexpected) and appropriate (useful). Coaches should understand the importance of helping players develop their creativity by accessing existing knowledge at various levels of abstraction, combining previously separate concepts, and improving attentional skills under pressure situations (Memmert, 2009).

Practice variability (contextual interference).

Coaches should create practice environments that provide immediate performance of desired skills. However, in many cases the short-term benefits do not take into account the long-term benefits of various practice strategies.

When players attempt to learn two tenniss kills (forehand and backhand), the coach usually structures the practice in blocks; forehands first until the player has mastered the skill and then backhands. However, motor learning research has shown that practicing skills using a random structure of the practice (hitting some forehands, then backhands, then forehands again, and so on) produces better long-term retention (as long as the basics of the strokes – grips and stroke pattern- have

been previously taught). This is called contextual interference. The combined practice of forehands and backhands generates some shortterm interference (which can be understood as the degradation of performance) when compared to a blocked structure of the practice. This results in possibly more errors in the short term, but better skill acquisition over the long term. Research has supported this view in many sports including tennis (Douvis, 2005).

Birth month and talent identification

There is a bias (usually unintentional) in tennis rankings and selection for national federation teams, age-group squads, programs and scholarships for athletes that are physically mature for their chronological age. Athletes who are born in the first half of the year are usually the players who have greater results and are physically more impressive, relative to their peers. This results in many talented individuals not receiving enough attention from coaches and national associations at a young age because their results are less impressive than athletes who may be 6-12 months older and are physically more mature (Zmajic, 1996; Filipcic, 2001).

There is agreement among researchers and coaches that early talent detection and development is a vital component in the development of elite level athletes (Bouchard, Malina et al. 1997; Lidor and Lavyan

Most world class individuals, including athletes, were first encouraged to participate in their profession (sport) by the instigation or encouragement of a close family member (Bloom 1985; Lidor and Lavyan 2002). A very small percentage of world-class athletes were encouraged to participate in their chosen sport by a physical education teacher or sport coach (Lidor and Lavyan 2002). In some reports, as little as 20% of elite-level athletes stated that they pushed themselves to initially participate in their sport (Lidor and Lavyan 2002). It seems from the literature that it is nearly impossible for an athlete to achieve success at the highest levels without a supportive core family unit (Bloom 1985; Cote 1999).

The literature is inconclusive as to when the perfect age is for an individual to be exposed to their sport and how this age correlates with elite level performance (Lidor and Lavyan 2002). It is not necessarily imperative to initiate a structured training program at a very early age and in sports such as tennis late bloomers can still be highly successful (Bouchard, Malina et al. 1997; Lidor and Lavyan 2002). However, a clear difference was seen between elite and near-elite athletes in the amount of time they practiced and how many sessions they participated in per week during the initial three years of participation in a chosen sport (Lidor and Lavyan 2002). Individuals that achieved elite level sport success retrospectively stated that they performed more practice hours per week during the first three years in the sport as compared to nearelite athletes (Lidor and Lavyan 2002).

Single Sport Specialization versus Multiple Physical Activities

It has been argued by many researchers and coaches that participating in multiple sports or physical activities at a young age should be beneficial during later stages of talent development. This is due the learning effect on multiple motor skills including speed, agility, power stability, multiple varied movement patterns which allows the young athlete to develop a robust and well-organized schemata of movements (Schmidt and Lee 1999).

Motivation and effort

Intrinsic motivation is one of the greatest differences between elite and near-elite athletes. In one study, it was found that 87% of elite levels stated that they were more intrinsically motivated compared to only 32% for near-elite level athletes (Lidor and Lavyan 2002).

Research has examined players,' parents,' and coaches' perceptions of talent development in elite junior tennis and indicates that involvement in elite junior tennis is a team effort whereby players, parents, and coaches fulfill specific roles. Findings have also shown that parents and

players are required to make sacrifices and that parents fulfill the most significant roles in terms of providing emotional and tangible support. However, they are often perceived as a source of pressure when they became over-involved in competitive settings (Wolfenden and Holt, 2005).

Further research with parents in the United States (Gould et al, 2008) has revealed that most parents are positive influences. They espouse an appropriate perspective of tennis, emphasized child development, and are supportive. In contrast, a minority of parents are perceived as negative, demanding, overbearing, and exhibit an outcome orientation.

Managing talent

It is important for the coach to understand that the talent of a player is a component of success, which will assist the player towards the main goal of becoming a better player. Talent is not a goal in itself, but developing talent is.

Managing talent is the ability to merge commitment with the strategic goals of the player and coach. Talent should not be the core concern of tennis programs. Rather, a strategy of a comprehensive long-term player development (LTPD), which combines the physical, mental, tactical and technical development of each player should be embraced.

Talent is worthless if kept in isolation, underdeveloped or overemphasized. Talent loses all its power if it is left without direction or guidance. Talent reveals all its value if it is "switched on" and aligned with the LTPD. By doing this, the coach will be able to develop all the competences needed by the player.



It is important to note, that when managing talent, coaches should be aware of the relevance of the so-called "intangibles". These include, but are not limited to; knowledge, skill (know how), intelligence, autonomy, responsibility, values, work-ethic, effort, respect, ability to learn, ability to adapt, innovation, creativity, and many others.

GUIDELINES FOR DEVELOPING TALENTED TENNIS PLAYERS

The role of a coach is to increase the on-court performance of his or her players. There are many methods, strategies and techniques to achieve improved performance, but all teaching and coaching must be based around the paradigm that the coach is a talent facilitator through learning and development - not a talent creator.

In order to effectively coach talented tennis players, the coach can work on the following aspects:

• Create an atmosphere of commitment, hard work and effort in which the climate is geared towards performance, co-operation and achieving the best each player can be.

- Build rapport with the players by using empathetic listening and understanding, and sharing common goals and beliefs that will help create a "performance culture".
- Develop awareness by helping players understand themselves using self-reflection and valuing the views of significant others.
- Motivate always. Keep the process, not the outcome relevant. Keep practices organized, purpose-driven and challenging. Help players enjoy and appreciate the values and rewards of the hard work. Encourage and reward hard work, discipline and dedication to the task.
- Generate the adequate confidence through a view of realism. Help them to "keep their feet on the ground" but raise their arms to "reach the stars".
- Communicate directly, effectively and openly. Listen closely to the players' needs. Ask a few more questions and mainly use open questions. Shift your behavior from giving advice to allowing the player to provide suggestions and take ownership of the practice sessions, drills and ultimately much of their tennis development.
- Provide specific, constructive and meaningful feedback.



- Help players to focus on their goals by creating the appropriate mindset in each situation. Concentration is often lost if talented players or their entourage focus mostly on short-term goals and forget the big picture.
- Encourage players to think and act by themselves. Make them responsible for the outcome of their actions.
- Offer empowerment, not advice, and be ready to accept the solutions generated by the players.
- Support players to learn other skills apart to those from tennis that will

help them develop into great players (ethical behavior, respect to rules, sportsmanship, attention to detail, etc.).

- Be flexible and treat each player individually based on their needs, strengths and weaknesses.
- Understand when to be more directive or autocratic; when players do not have the necessary experience to make the decision, when under pressure situations, or when they do not have all relevant information.
- Use knowledge and technology in all its forms (information, research and innovation) to improve coaching that will directly benefit talented players.

References

Bloom, B. S. (1985). Developing talent in young people. New York, Ballantine Books.

Bouchard, C., M. Malina, et al. (1997). Genetics of fitness and physical performance. Champaign, IL, Human Kinetics.

Cote, J. (1999). "The influence of family in the development of talent in sport." The Sport Psychologist 13: 395-417.

Douvis, S. J. (2005). Variable practice in learning the forehand drive in tennis. Perceptual and motor skills. Vol. 101, no2, pp. 531-545

Ericsson, K. A., R. T. Krampe, et al. (1993). "The role of deliberate practice in the acquisition of expert performance." Psychological Review 100(3): 363-406.

Filipcic, A. (2001). Birth date and success in tennis, ITF Coaching and Sport Science Review, 23, 9-11.

Gould, D.; Lauer, L.; Rolo, C.; Jannes, C.; Pennisi, N.. (2008). The Role of Parents in Tennis Success: Focus Group Interviews With Tennis Coaches. The Sport psychologist; 22 (1), 18-37

Guest, C. B., G. Regehr, et al. (2001). "The life long challenge of expertise." Medical Education 35: 78-81.

Lidor, R. and N. Lavyan (2002). "A retrospective picture of early sport experiences among elite and near-elite Israeli athletes: Developmental and psychological perspectives." International Journal of Sport Psychology 33: 269-289.

Memmert, D. (2009). Noticing unexpected objects improves the creating of creative solutions – inattentional blindness by children influences divergent thinking negatively. Creativity Research Journal, 21 (2-3), 302-304.

Schmidt, R. A. and T. D. Lee (1999). Motor Control and Learning: A Behavioral Emphasis. Champaign, IL, Human Kinetics.

Zmajic, H. (1996). Are the top tennis players born in January, ITF Coaching and Sport Science Review, 9, 3-4.