Review Article

Talent Search for Tennis –The Need for New Programs

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Talent identification is widely practiced by tennis coaches, managers and parents but there is a lack of globally accepted models for talent identification in tennis. Because of this in majority of countries it is based on tournament results achieved at a young age. Generally federations and sponsors do not want to invest on players without good results "on court". Because of this many talented players, who do not achieve good results early on are lost from the sport of tennis (Grosser and Schönborn 2002).

Therefore the main aim of this letter is introducing a concept of universal, scientifically based, but practical model for talent search. I hope that it will start a wider discussion concerning this topic among researches, experts and coaches round the world.

Research on talent and talent identification

From research it is known that talent has a complex (multidimensional) nature and the identification of talent is difficult, time consuming, and ongoing. (Williams & Reilly 2000a, 2000b). Generally it is agreed that talent identification program should predict potential for future performance, and that objective data collected by sports scientists can help confirm practitioners' initial intuition with regard to players' strengths and weaknesses" (Reilly et al., 2000; Williams & Reilly, 2000). Such an analysis should not be based on the sports results only, but must take the degree of development of biological age, the level of motor abilities, features of body structure and psychological properties into consideration

(Unierzyski, Madella 2004, Unierzyski, Gracz 2002). Historically there were two „classical" types of talent search models:

- Natural: whereby an athlete starts a sport and is selected or developed due to competition performance or subjective identification by a coach.
- Scientific: an athlete is selected by scientists because he/she possess the inherent physical and mental capabilities for a given sport.

The "natural" model favors early maturing children, often born in first months of respective **year (Malina 2003)** and therefore does not give a good "accuracy rate" because many players, who are not successful at the young age, drop out.

Scientific methods, in which experts searched for "measurable" characteristics of young athletes (like speed, power, technique) were characteristic former communist countries and very effective in "looped sports". Unfortunately they are not that useful in multidimensional, racket sports, because of missing a "holistic look" at a player, and nor defying "hidden" immeasurable factors like e.g. tactical instinct.

For these reasons I believe, that there is a need to crease new programs and methods, which would be affective among lifetime and mass sports (like tennis). In such systems sport science gives objective, measurable data, but all information should be interpreted and amended with opinions of knowledgeable coaches. These experts would be experienced enough to see the subtle, hidden, untapped areas of talent but would work according to precise, objective procedure. Such a procedure, an expert method

(Krolak 1989, Leskosek et. al. 2002), is a simple and effective tool, reducing the possibility of subjective assessment.

Proposition of organization of „ideal" system

Tennis is a typical mass and, same time, a lifetime sport and has a very positive influence on development of young people. It can be practiced both at amateur and professional level, even by people with various disabilities. It is one of the reasons why the holistic (and humanistic) look at a person and its development should be a "signature" of the program. So, on the contrary to selection programs, in e.g. former Communist Bloc (where children are selected, or deselected and demotivated), all young players at every age should have a chance to practice at a level adequate to their talent and skills. Therefore there should be no selection (understood as picking up the best without giving chance to the others), but ongoing search for the most gifted, who possibly like to take part in "performance programs", a program of talent search for tennis must be considered as a process (considering changes together with time) with an inter-disciplinary, scientific approach but dominant role of knowledgeable coaches.

It is crucial that any program should start with a possibly large number of participants-potential champions in order to raise the chance to find most gifted.

Basic principles of a talent search program could be:

1. Everybody has a chance to practice at appropriate level
2. Gifted players are scouted and invited to youth "performance" programs;
3. Initially identification criteria are „wide" (range of acceptability). They become narrower with the age and stages of career. This approach reduces the possibility of making mistakes when assessing potential of young players.

4. All children (also less gifted) should get "treatment" according to their needs. Athletes with similar skills would practice in homogenous groups what helps to plan the work of coaches better. If they progress they will be able to join the "elite" groups.
5. Talent identification and development programs should work together as a one, integrated system.

There are three possible versions of talent search and identification procedures, which depend on access to sport scientists and financial resources:

1. Carried out by researchers (with the use of all possible scientific equipment and staff) but with very important role of knowledgeable coaches
2. Carried out by coaches on an ongoing basis, with the use of "field tests".
3. A mixture of two above mentioned, when coaches work (and analyze players) on an ongoing basis, but the scientific apparatus is used in the most important moments of the players' career, especially when screening more advanced athletes.

Final Remarks - Conclusions

As a life-time and mass sport, tennis needs different approach and solutions than classical "Olympic" disciplines, e.g. rowing, wrestling, canoeing, weight lifting, judo, in which selecting the most gifted early might be more important than creating a large participation base. Examples of most victorious tennis nations (France, Germany, Spain, Australia, The Netherlands) confirm that possessing a large population of players of any age is base for the success in serious game.

I believe that using achievements of sport science and experience of sport practitioners in a one common system will help to form models suitable to many nations.

Table 1. The major Talent Identification procedures that should be performed during the different stages of development.

FUNdamental 5-10 boys 5-9 girls	BEFORE START - DETECTION	Should child be encouraged to practice tennis Motor abilities, behavior
Learning to Train 10-13 boys 9-12 girls	END OF MINI-TENNIS - GENERAL TID	Does kid has a chance to become a sportsman/tennis player ? Specific development technical, tactical, mental (1) and physical
Learning to Compete 14-17 boys	BEFORE PUBERTY - SPECIFIC TID (1)	Does player has a chance Does player has a chance to become a serious one ? Specific development technique &,tactics, mental and physical, anthropometrical, social
Learning to Win 17+ boys 16+ girls	AFTER PUBERTY GAME-TYPE SPECIFIC TID (2)	Does kid has a chance to become a serious tennis player ? Specific development technique &, tactics, mental and physical, anthropometrical, social

References

Grosser, M. and Schönborn, R. (2002) Competitive Tennis for Young Players. Aachen: Mayer and Mayer.

Królak A. (1989) *Introduction to modern tennis.* AWF Warszawa. (in Polish).

Malina, R.M. (2003) Selection and development of talented young athletes: status, progress, and issues. *Presentation at 8th International Scientific Conference "*Sport Kinetics" Rydzyna.

Reilly, T., Williams, A.M., Nevill, A., and Franks, A. (2000) A multidisciplinary approach to talent identification in soccer. *Journal of Sports Sciences,* **18**, 695–702.

Unierzyski, P., Gracz J., (2002) Temperament and Achievement Motivation - Critical Permanent Psychological Factors in Tennis. *Studies in Physical Culture and Tourism,* **9**, 125- 131.

Unierzyski, P., Madella, A.(2004). Success and failure of young tennis players. *Scuola dello Sport. Revista di cultura sportiva, Anno XXIII-nuova serie-numerro* **60-61,** 69-74.(in Italian).

Williams, A.M., Reilly, T.(2000a). Editorial. *Journal of Sport Sciences.* **18**, 655-656*.*

Williams, A.M. Reilly, T. (2000b).Talent identification and development in soccer.*ournal of Sports Sciences,* **18**, 657- 667.

Main research interests:

tennis; players development, factors affecting performance, talent identification, learning and training methodology, planning and periodization, performance and notational analysis.

Best moments for more detailed Talent Id

TRAINING STAGE (appr. age)	Desired information	MAJOR PROCEDURES
TALENT DETECTION Beginning of training (5-7)	Should child be encouraged to practice tennis?	Basic motor abilities (simple motor tests e.g. 20m, shuttle run, broad jump, tennis ball throw-and-catch against the wall) combined with observation of kid's behaviour (e.g. is she/he clever, competitive etc.)
GENERAL TID After a Mini/Midi-tennis stage court (9-10)	Does kid has a chance to become a sportsman/tennis player?	General motor abilities, tennis-specific skills, incl. technical/tactical development, (is the general tennis technique well developed?) Main stable mental features (achievement motivation, temperament, emotional stability, intelligence).
SPECIFIC TID before puberty starts 11-12 girls 12-13 boys)	Does player has a chance to become a serious player?	Specific development technique &, Tactics (all round game style, all major shots), mental and physical (more specific motor tests), anthropometrical, social
GAME-TYPE SPECIFIC TID After main phase of puberty 16-17 boys, 15-16 girls	Does kid has a (big) chance to become a professional (top 200) tennis player	Specific development technique &, Tactics (own game style), mental and (detailed) physical, anthropometrical, social