



Talent Identification Around The World And Recommendations For The Chinese Tennis Association

By Doug MacCurdy

I have looked into information available on talent identification in tennis. The most useful information came from Miguel Crespo, Piotr Unierzyski, Richard Schonborn, and Paul Roetert. These authors had collected data from other experts or conducted research themselves. I also met with Professor Wang An Li of Beijing Sports University to discuss talent identification in China.

GENERAL INFORMATION

Talent is the adequate aptitude or ability in one direction, above the normal average.

Talent selection is short term, such as picking a team that will compete in a tournament next month. Talent detection can be defined as the prediction of future performance of youngsters or the identification of young players that will achieve success at national or international levels. This paper deals with talent detection, which I will refer to as Talent ID.

Within the concept of Talent ID there are two basic categories:

- Identifying talent in children that are not currently playing tennis and attracting them to the game.
- Identifying talent among children that already play tennis and investing more time, attention and money in their development.

We are concerned with Talent ID among children that already play tennis.

Talent ID in tennis is extremely difficult in tennis. It must be progressive and systematic. To ensure that the Talent ID program is meaningful, it must be done over a long period of time. It must take into account the most important and indispensable parameters for success in tennis.

“Closed Loop” sports which are repetitive in nature such as rowing, canoeing, cycling, weightlifting or swimming use tests that are primarily physical and can be meaningful at relatively young ages.

Tennis is a high skill “Open Loop” sport which requires constant decision-making, response organization, spatial awareness, as well as a wide range of psychological, physical and technical abilities. Any Talent ID scheme in tennis is less likely to have the same accuracy or success rate as those used in “Closed Loop” sports.

There are three basic types of talent:

- General motor talent
- Sports talent
- Sports specific talent

All of these types of talent play in role in the complete development of a tennis player.

The main components of Talent ID can be divided into the following categories:

- Physiological
- Physical
- Psychological
- Technical/Tactical
- Results
- Intangibles



PHYSIOLOGICAL ASPECTS OF TALENT ID

Physiological tests can be used to measure height, weight, arm span, body somatotype and other anthropometric/biometric elements. Although world-class tennis players have gotten taller during the past few decades, there are enough exceptions to proceed with great caution before deciding that a tennis player will not be “big enough” to play top tennis.

The measurements of 11-14 year-old tennis players could be useful in the longer term. It would be valuable for a national association to maintain a database over a long period of time to see if there are certain physiological parameters that can be identified to help in Talent ID. This data could also be used to compare juniors of one nation with their foreign counterparts if information on the foreign players was available.

These measurements could also be useful if they help to predict certain physiological characteristics of the child. If it can be predicted that the child will be exceptionally small or heavy, one could assume that tennis, which requires strength without a lot of weight, would not be the best sport for that particular individual.

PHYSICAL ASPECTS OF TALENT ID

Given the complexity of tennis, physical tests alone are not particularly useful in predicting future proficiency in the sport. However, they may be useful in a negative sense, in that the children who fall short of expected motor qualities in their age range may be not be selected for intensive training or competition. In addition, the situation could occur that there is a selection decision to be made between two players and the one with greater physical skills may be the better choice.

In the younger age groups (10 and 12 & under) playing experience, technical skills and biological maturity are the factors that primarily affect results. As the player reaches 13 or 14 years old, motor abilities specific to tennis, particularly reaction speed and agility, become much more important in determining performance. From around 16 (girls usually earlier), factors such strength, power, other forms of speed, and anaerobic endurance play an increasingly important role in the performance of the player.

Any battery of tests for young players should include evaluating skills such as running, jumping, throwing, catching, coordination, tennis specific speed, agility, power, flexibility, endurance and the like. Specific tests to be used can be those and those appearing in the ITF Advanced Coaches Manual and the ITF Strength and Conditioning Manual. Given the apparent importance of agility in tennis performance, it could be worthwhile to use several different tests for this physical skill.

All physical tests can only be meaningful if used to compare players of a very specific age group, or, preferably, once physical maturity has been reached. Once maturity has been reached, the playing field can be considered level. Otherwise the results are useless.

PSYCHOLOGICAL ASPECTS OF TALENT ID

Sports psychologists can give tests to children. These tests can give insight into areas such as self-confidence, self-esteem, personality or motivation. However, even though some people have a greater predisposition towards developing mental toughness needed for tennis, these skills can be developed significantly in all players.

Perhaps the most important mental characteristics to play well are drive and a desire to compete. Players with these attributes will seek out every possible opportunity to compete and practice their



skills. These players are intrinsically motivated. Other important psychological characteristics include confidence, ability to concentrate and persistence, even in the face of failure.

Coaches can observe some of these psychological traits when the players are quite young. For example, does the player spend a good deal of time hitting on his/her own against a backboard outside of the training session?

As the player develops, evaluation of the player's work ethic, quality of work, enjoyment, poise, concentration abilities and other factor is an on-going process.

TECHNICAL/TACTICAL ASPECTS OF TALENT ID

The technical/tactical aspects of Talent ID are probably the most important and the ones that tennis coaches are best equipped to evaluate.

In the beginning stages (say 7-10 years old) a child should have an average level of mastery in ball and racket handling. At about 12 years old the child should reasonable mastery of the basic shots: serve, forehand, backhand, volleys, and smash.

As the players become teenagers, maintaining basic consistency during points is essential. Players should begin to gradually increase their power on all shots. As the players become mature, true weapons such as a big serve and forehand play an important in performance at the higher levels.

Young players should have fairly good footwork and the ability to make adjustment to adapt to different situations on the court.

Recognizing tactical situations on court and good decision making regardless of the outcome of the points are important.

The ability to learn new skills quickly is an indication of talent in the technical/tactical area.

Some players are gifted and others are not so gifted. It is often the not so gifted that become better players in the long run. Some youngsters that have problems mastering stroke techniques in the first one or two years, but were persistent, enjoyed more success later on. The reason is that they learned the benefits of hard work and determination. This point illustrates the challenges of effective Talent ID programs for tennis. In this case, a mental attribute, persistence, is more important than early talent for stroking the ball.

THE ROLE OF RESULTS IN TALENT ID

It is a big mistake to identify talent based only on the results obtained in 10 and 12 & under tournaments. As mentioned above, playing experience, technical skills, and biological maturity are the key factors in determining who wins at these ages. Tactically, a player can be successful in these age groups standing well behind the baseline and hitting soft shots, without even considering coming to the net. However, a player must obtain at least a minimal level of results in each stage of development or age group to be considered a good prospect.

Over the past 15 years, approximately one half on the boys and girls that were ranked in the top ten in the world in the ITF Junior Ranking obtained a bp 100 ATP or WTA ranking at some point in their careers. So even at the highest level, junior rankings may be an indication of talent to compete successfully in the world game, but there is no guarantee.

Eventually, a player that is viewed as having talent must begin to produce results. The question is whether or not to establish a "deadline." In general, the nature of the ATP and WTA rankings systems



will provide a sort of natural selection. If a player does not win enough matches, they simply will not be able to get into higher-level tournaments.

There are literally thousands of cases where players that had great results as young juniors did not progress very far, and, conversely, there are many players that were not outstanding juniors that have excelled in the professional game. As an example, Pete Sampras never won a major junior title in the United States, although few questioned that he was a very talented young player.

INTANGIBLE ASPECTS OF TALENT ID

Another aspect of Talent ID can be classified as intangibles. This could include many different factors that cannot be classified as physiological, physical, psychological, or technical/tactical. Some examples of intangibles could include getting the most out of ability, possessing good feeling for the ball, being coachable, adjusting well to different conditions, having killer instinct, enjoying the game, playing better in important matches, loving to compete, or having great anticipation or court sense.

Even at the highest levels of the game, these intangibles are very real. Many players, that seem to be less gifted physiologically or, perhaps, physically can be exceptionally successful. Lleyton Hewitt and Justine Henin-Hardenne are not the biggest or strongest players in the game but their results speak for themselves.

EXPERTS' FINDINGS IN TALENT ID

What follows are a number of key concepts and/or additional information related to Talent ID.

- Do not confuse early results with talent.
- Talent ID is multifaceted.
- Often the expression "talent" makes people (especially parents and coaches) feel too good, too often, too soon.
- Talent Development is not Talent ID. Many very successful tennis countries, such as Spain, are much more concerned with talent development than Talent ID. It does not do much good to identify talent if the training and competitive structures are not in place to develop that talent.
- There is no globally accepted model for Talent ID in tennis.
- Heredity can play an important role in determining athletic skills—they are partly innate.
- Medical exams should be given periodically to ensure that the athletes are healthy.
- Talent ID methods for boys and girls can be very similar.
- Athletes should not be "discarded" if at all possible. Instead systems should be set up where there are, for example, A teams, B teams and C teams. Movement of players between those teams should be possible.
- Talented players should not have big "gaps" in their profile. For example, if a player is very slow at age 12, he might still be a champion. However, a slow player cannot be a champion at age 20. Very few individuals are talented in every domain, but they should be at least average in all.



- There are two age groups, 10-11 and 15-16, that are particularly good times to test for talent. This is because at these ages there are the greatest changes in mobility and components of the structure of the mobility are closely linked together.
- Do not take extreme decisions before 16 years old. Big changes occur between 14 and 16.

Piotr Unierzyski of Poland conducted research projects with junior players in Europe from 1994 to 2002. He interviewed and/or tested over 1000 players from some 50 countries. Some of the players included Roger Federer, Kim Clijsters, Guillermo Coria, Justine Henin and many more of today's top players. The players were 12 or 13 years old when tested or interviewed and are now ranked in the top 100 in the world.

Among the interesting findings were:

- They were 3-4 months younger than (within the same age group) than the mean age for the group.
- They were slimmer than the average 12/13 year-old tennis players.
- They were less powerful.
- They were usually faster and much more agile than the top 12/13 year-old players.
- The average starting age of tennis was six years old. They started playing in tournaments at nine and started to play outside of their own country occasionally at age 11.
- They played 45-50 singles matches per year plus 15 doubles matches which was below average for these ages.
- They practiced around 10 hours per week, which was below the average for the group, and two to four hours less than the top 12/13 year-old players.
- They were doing two hours more fitness training per week than the average. They were doing physical training approximately five to six hours per week.
- Usually at least one of their parents was a tennis player.
- The parents were usually very supportive—involved but not overly involved.

SUGGESTIONS FOR A TALENT ID PROGRAM

It is clear that the most important element of Talent ID is the trained eye of coaches. Scientific testing can also be used in combination with the coaches' observations.

Physiological Factors:

- Primarily for including in a database to see there is a correlation between data gathered on young players and future performance.
- Identify players that have a major deficiency that may be difficult to overcome.
- Use VO2max test and other tests.
- Include data on the assessment form.

Physical Factors:

- Top prospects should not have any glaring deficiencies. They should be at least average in most categories.
- Reaction speed and agility are important physical skills are important in young players.
- Keep in mind that the biological maturity will greatly affect the results in physical tests until after puberty.
- If the player's parents were successful in sports it could be an advantage.
- Use the tests provided by Piotr Unierzyski in combination with some of those appearing in the ITF Advanced Coaches Manual and the ITF Strength and Conditioning Manual.
- Include data on the assessment form.

Psychological Factors:



- Use tests provided by Beijing Sports University and by authors such as J.L. Duda, R. Vealey, and M. Weiss to give insight into areas such as self-confidence, self-esteem, personality or motivation.
- Include test results in a database to see if there is a correlation in the future.
- Use the assessment form and include results from rests.

Technical/Tactical Factors:

- Use the assessment form.

Results:

- Keep in mind that great results for younger age groups are usually a matter of playing experience and biological maturity, not necessarily talent.
- Use the assessment form.

Intangible Factors:

- Use the assessment form.

Although this is based largely on personal opinion, the relative importance of the factors involved in identifying talent a 12 year-old player could be:

- | | |
|------------------------------|-----------|
| • Technical/tactical | 30% |
| • Physical | 25% |
| • Psychological/Intangibles | 20% |
| • Physiological | 10% |
| • Results | 10% |
| • Subjective – “Gut feeling” | <u>5%</u> |
| | 100% |

Children should not be discouraged from playing tennis just because they did not “test” well.

Do not make important decisions too early.

Since coaches’ “expert eye” play a critical role in Talent ID, it is important that this type of information is made available to coaches.



Talent ID Assessment Form

Name of Player: _____ . Date of Birth (confirmed): _____

Name of Coach: _____ . Team or Club: _____

Date of this Evaluation: _____

Dates of Previous Evaluations: _____

1=Poor, 2=Below Average, 3=Average, 4=Above Average, 5=Excellent

Technical/Tactical Factors

Serve Technique	1	2	3	4	5
Forehand Technique	1	2	3	4	5
Backhand Technique	1	2	3	4	5
Volley Technique	1	2	3	4	5
Overhead Technique	1	2	3	4	5
Basic Consistency	1	2	3	4	5
Power (for size)	1	2	3	4	5
Footwork (General)	1	2	3	4	5
Recognizes Five Game Situations And Responds Appropriately	1	2	3	4	5
Good at Decision Making	1	2	3	4	5
Learns New Skills Quickly	1	2	3	4	5
Can Play Close to the Baseline	1	2	3	4	5
Can Solve Problems Presented By the Opponent	1	2	3	4	5
Technical/Tactical Overall Evaluation	1	2	3	4	5



Physical Factors (Where possible base on controlled tests)					
Coordination	1	2	3	4	5
Reaction Speed	1	2	3	4	5
Frequency Speed	1	2	3	4	5
Agility	1	2	3	4	5
Strength	1	2	3	4	5
Power	1	2	3	4	5
Balance	1	2	3	4	5
Flexibility	1	2	3	4	5
Endurance	1	2	3	4	5
Speed (General)	1	2	3	4	5
Speed (Tennis Specific)	1	2	3	4	5
Throwing Skills	1	2	3	4	5
Catching Skills	1	2	3	4	5
Vision	1	2	3	4	5
Physical Overall Evaluation	1	2	3	4	5



Psychological/Intangible Factors (Any test results can be included in this evaluation)					
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Drive	1	2	3	4	5
Desire to Compete	1	2	3	4	5
Persistence/Determination	1	2	3	4	5
Self-confidence	1	2	3	4	5
Quality of Work	1	2	3	4	5
Concentration Skills	1	2	3	4	5
Motivation	1	2	3	4	5
Enjoys the Game	1	2	3	4	5
Self Esteem	1	2	3	4	5
Intelligence	1	2	3	4	5
Killer Instinct	1	2	3	4	5
Will to Win	1	2	3	4	5
Fighting Spirit	1	2	3	4	5
Discipline	1	2	3	4	5
Sportsmanship	1	2	3	4	5
Emotional Control	1	2	3	4	5
Get the Most Out of Ability	1	2	3	4	5
Good Feeling for the Ball	1	2	3	4	5
Anticipation	1	2	3	4	5
Court Sense	1	2	3	4	5
Plays Better in Important Matches	1	2	3	4	5
Poise	1	2	3	4	5
Mistake Management	1	2	3	4	5
Coachability	1	2	3	4	5
Adapts Well to Different Situations	1	2	3	4	5
Overall Psychological/Intangible Evaluation	1	2	3	4	5



Physiological Factors (From tests and interviews)

Body Type	1	2	3	4	5
Size	1	2	3	4	5
Health	1	2	3	4	5
Parents Athletic History	1	2	3	4	5
Overall Physiological Evaluation	1	2	3	4	5

Results

National	1	2	3	4	5
International	1	2	3	4	5

Gut Feeling

Overall Potential	1	2	3	4	5
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Summary Information

Top Prospect at This Point in Time	1	2	3	4	5
Progress Since Last Evaluation	1	2	3	4	5

Comments:

Evaluator(s):