Yetenek Belirleme Yolu "Antrenörler, Aile ve Çevre Gözler"

Seyed Houtan Shahidi [1], J. Derek Kingsley [2], Mehmet Yavuz Taşkıran [1]*

[1] Department of Sports Coaching, Faculty of Sport Sciences, Istanbul Gedik University, Istanbul, Turkey
[2] Cardiovascular Dynamics Laboratory, Exercise Physiology, Kent State University, Kent, OH, USA
*Sorumlu Yazar: houtan.shahidi@gedik.edu.tr

Öz

Sporda yetenek belirleme, anlaşılması için çok fazla bilgi gerektiren karmaşık bir yoldur. Yani yetenek belirleme yolunda antrenörleri bu şekilde hassas olmaya yönlendiren farklı ve önemli bir parametre var. Örneğin, 50 yıl öncesine bakarsanız, araştırmacılar sadece genetik ve performans parametrelerine odaklandılar. Bununla birlikte, günümüzün yetenek belirleme vizyonu tamamen farklıdır ve birçok araştırmacı, yeteneğin var olup olmadığından emin olduğunu belirtmektedir. Genetik ve performansın yanı sıra, seçimi etkileyen başka faktörler de vardır. Örneğin, çocuğun nerede doğup büyüdüğü de onu eğiten antrenör kimdir? Biraz açık gözlerle ve bu konu üzerinde düşünerek, yukarıda bahsedilen konunun çocuğun spora seçilmesi ve seçiminin kaldırılması için hayati önem taşıdığı anlaşılmıştır. Ayrıca, bu yol başka bileşenler de var. Her şeyden önce, en son parametre olan ancak son olmayan parametre olan olgunluk ve büyüme. Olgunluk, çocuğun normal bir olgunluğa sahip olması veya erken ya da geç olması ile ilgilidir. Bu nedenle birçok takım antrenörü erken olgunlaşmaya sahip bir çocuk arıyor, yaşıtlarına göre bazı avantajları var. Bu nedenle, erken olgunlaşanlar daha ağır, daha büyük ve daha uzundur. Bu nedenle yazarlar, yetenek belirlemenin çok zor olduğunu ve okyanusta yönsüz yüzmek gibi olduğunu açıkça belirtmeye çalışırlar. Dolayısıyla antrenörlerin bu yolda daha duyarlı olmaları gerekiyor.

Anahtar kelimeler: Yetenek Seçimi, Büyüme ve Olgunluk, Sporda Başarı, Çocuklar, Zirve Yüksek Hız

Talent Identification Pathway "Coaches, Family, and Environment Eyes"

Abstract

Talent identification in sport is a complex way that needs a lot of knowledge to be understood. So, in the talent identification road, there is a different and important parameter that leads the coaches to be precise in this way. For example, if look at 50 years ago the researchers just focused on genetic and performance parameters. However, today's vision of talent identification is completely different, and many researchers note that are sure whether talent exists or not. Besides genetics and performance, there are other factors that affect selection. For instance, where the child is born and grows also who is the coach that trains him/her? With a little bit, of an open eye and thinking on this topic understood that above mention topics are vital for the selection or deselection of the child into the sport. Besides, in this way, there are other components. First of all, maturity and growth which is the most but not the last parameter. Maturity is related that if the child has a normal maturity or if he/she has an early or late. Due to this, many of the team coaches are looking to find a child who has an early maturation, he/she has some advantages compared to peers. So, early matured are heavier, and bigger and taller. That's why the authors try to clearly note that talent identification is very difficult and it is like swimming in the ocean without any direction. So, the coaches need to be more sensitive in this path.

Keywords: Talent Selection, Growth, and Maturity, Sports Success, Children, Peak High Velocity

Review

The summer Olympic games are a major competition event that is held once every four years. In the Olympic games, 205 nations, and a refugee Olympic team, with 339 events (33 Sports) and 11,656 participations were recently held ("Tokyo 2020,"). Therefore, the modern landscape of the Olympic Games and developing countries were at peace and were friendly, winning, getting medals, and of course, achieving success. Hence, sports organizations, federations, clubs, and coaches are looking to identify children with talent at an early age of year for being future Olympic athletes (Baker, Cobley, & Fraser-Thomas, 2009). One of the most recent questions in mind is, "Does talent exist, or does the athlete choose their sport correctly, or how can policymakers find children with a talent for a specific sport?" Therefore, the concept of talent identification and procedures to identify children with talent is an important topic and concern in the past few decades (K. Till & J. Baker, 2020). Talent Identification and development (TID) within sports can be viewed as immediate or as a prediction process (K. Till & J. Baker, 2020). It has five steps: 1) Talent Detection, 2) Talent Identification, 3) Talent Development, 4) Talent Selection, and finally 5) Talent Transfer (Dehghansai, Pinder, & Baker, 2021). In short, some children are selected by their genetics and physical abilities, and by putting them into the appropriate sport with a rich environment for growth and maturation, then and at the same time there may be a transfer of skills and abilities to other sports (Pion et al., 2020).

However, the most important and challenging part is that this meaning is not related to just one factor. Many important factors such as genetics, growth, and maturation (relative age effect) affect selection and biases (Kelly, Jackson, Barrell, Burke, & Till, 2021). Interestingly, nature and nurture affect this identification and will change across the lifespan (Figure 1). For example, there are growth-related changes in measurable variables such as height and weight. There is also the maturation variable, which refers to factors of body functional improvement (Kelly & Williams, 2020). Physical factors such as agility, speed, power, strength, and endurance have been affected by the maturation tempo. For instance, maturation can be early, on time, or late, there are different patterns regarding improvement in physical abilities for each (Johnston, Wattie, Schorer, & Baker, 2018). Also, these factors can make coaches and practitioners make inappropriate decisions. Hence, ignoring and de-selecting other children can hurt their careers, and may result in drop-out from their sport just because of the selection of other children as being more talented. So, the question is, "how can coaches and practitioners estimate the change of these factors throughout maturation?"

Hence, one solution that coaches and practitioners use is the relative age effect (RAE) phenomenon to identify athletes as talented at an early age in their careers. However, the RAE phenomenon is not well understood nor is it recognized in all sports and countries (Côté, Allan, Turnnidge, & Erickson, 2020). For instance, in some sports such as Soccer, Ice hockey, Cross country skiing, and Basketball a researcher reported that the RAE phenomenon is present but in other sports, such as Martial arts. It is clear, more research and investigations are needed to precisely select children (Jakobsson, Julin, Persson, & Malm, 2021). However, just because of their chronological age distribution with early, on-time, and late maturation, they have different physical characteristics. Therefore, the coaches often select the first early birthday quarter month (January, February, and March). The decision to move more mature athletes to national teams offers these children more opportunities to work with high-level coaches, with better teammates, and allows for a better training environment and facilities. However, at this time many children drop out of the sport because they are left with the understanding that they don't have any talent or physical ability to train with their peers at a higher level (Smith, Weir, Till, Romann, & Cobley, 2018). Therefore, to combat this issue researchers are trying to use the Bio-banding method instead of chronological age (Faber, Damsma, & Pion, 2020). The Bio-banding method declares that coaches instead of selecting athletes based on their chronological age, r to instead use physiological characteristics for grouping children for training and also for sports competition. Consequently, one of the classifications for attending children to sports and competition events can be based on physiological age. Oft this, the classification difference between children of the same, or different, ages can be minimized (Kelly et al., 2021). Accordingly, children can feel successful and motivated to continue their sports (Seyed Houtan Shahidi & Hassani, 2020).
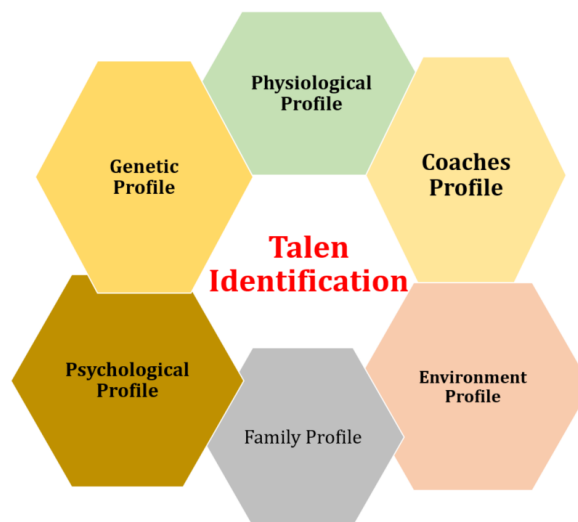
Figure 1. Talent Identification and Development Model

Figure 1 Talent identification has a multifactorial process and many of them with high and low impact can affect the other factors. Therefore, as shown in this picture, the environment has a huge impact on children's behavior.

Therefore, to be the best athlete that is separate from the rest is the primary purpose of many federations, coaches,

policymakers, and many countries and collectively they invest a huge amount of money. However, sometimes the definition of the selection of an elite athlete can be tricky and illusory such that many vital factors related to children are disregarded. (Baker et al., 2009). Therefore, the aim is for the improvement of countries to evolve and engage all children and then at the same time use their talent program.

Certainly, today's vision and attention to professional and Olympic sports are more than ever, and the developed countries of the world have invested heavily in various organizations and sports federations to achieve success, which today is extremely competitive and requires well-qualified and accurate scientific planning. One of the strategies for this success is the approach of identifying and developing sports talents. This integrated and accurate system, commonly known as the sports talent identification and development system, has attracted the attention of many researchers and officials of various sports organizations for the last 15-20 years (Côté, Baker, & Abernethy, 2007). One of these application programs used by Johan Pion identified talented children in the sport. Recently, Pion and colleagues reached a good position for improving children as talent and also at the same time transferring athletes from a different sport to another sport (Faber et al., 2020).

For reaching these goals, also society and policymakers need to focus on improving children's skills (Hassani, Shahrbanian, Shahidi, & Sheikh, 2020; Seyed Houtan Shahidi, Kingsley, Svensson, TAŞKIRAN, & Hasssani, 2021; Seyed H Shahidi, Stewart Williams, & Hassani, 2020). Therefore, two important concepts that are used are for getting success and improvement. The literature research in sport science shows training frameworks during childhood (Seyed Houtan Shahidi & Hassani, 2020; Seyed Houtan Shahidi et al., 2021). Ericsson and colleagues 1993 (Ericsson, Krampe, & Tesch-Römer, 1993) published the theory of "deliberate practice or sport specialization" and then Côté and colleagues announced, the "Developmental Model of Sports Participation or deliberate play" (Côté et al., 2007; Ericsson et al., 1993). Deliberate practice prescribed that domain-specific deliberate practice should begin early in childhood to achieve expertise and success and just focus on a single sport and leave from other sports (Güllich, 2018; Thomas & Güllich, 2019). In contrast, the Developmental Model of Sports Participation proposed little or no deliberate practice and extensive "deliberate play" in various sports during childhood (6-12 Years) to achieve fundamental movement and sports skills (Côté et al., 2007; Güllich, Faß, Gies, & Wald, 2020). The development model of sport participation refers to 4C; Confidence, Competence, Connection, and Character. Confidence is about the self-belief to be successful in sport, competence refers to physical ability and sport skill that can do all the techniques correctly, connection means that one can interact with other children and others, and in the end, character refers to moral behavior (Côté, Bruner, Erickson, Strachan, & Fraser-Thomas, 2010). So, many researchers and coaches announced that children in childhood should

participate in different activities such as sports, painting, singing, and education to build all the aspect of children behavior (Seyed Houtan Shahidi & Hassani, 2020; Seyed Houtan Shahidi et al., 2021; Seyed Houtan Shahidi et al., 2020). One of the theories which present by Margaret Whitehead is Physical Literacy (PL) declared that PL is motivation, confidence, competence and the knowledge to sustain PL for life (Seyed Houtan Shahidi & Hassani, 2020; Seyed Houtan Shahidi et al., 2021). Therefore, the foundation and concept of PL is fundamentally to improve children's long-term development to be active through whole the life (Whitehead 1, 2001). Therefore, many countries used this concept for improving and build the society with literacy environment such Canada which now they have Canadian sport for life and they assessment children fundamental movement skills by Play tools (Tremblay & Lloyd, 2010).

On the other side, the English Premier League is reported to invest between 2.3 million and 4.9 million a year in the club, while the UK Department of Sport spends more than 100 million a year examining and developing the country's sporting talent Allocates budget(Kevin Till & Joseph Baker, 2020). Therefore, the process of talent identification and development is a very complex process that requires accurate knowledge of physiological, psychological, individual, and social and culture information so that the talent identification method can be most efficient. Therefore, many developed countries have presented programs and schemes for identifying sports talents applications and in many sports, they have reached a very good direction in recognizing sports talents [4]. Some of the important factors that can help the scientist to be precise are coaches, athletes and family knowledge information background. It is worth to note that to coaches' information about making a good scheme is very helpful and named as a "Coach Eye" on the other side, elite athlete knowledge and perspective data research can give us some key points and we can name them as an "Athlete Eye". Further, family and living information can be an amazing factor for pursuing and transferring knowledge to scientific research and we name as "Family Eye". Hence, future longitudinal studies design are aiming and running to focus on understanding talent eye by longitudinally and follow up research project on coaches, athlete, and family information and making a specific talent program tools for each sports federations.

References

Baker, J., Cobley, S., & Fraser-Thomas, J. (2009). What do we know about early sport specialization? Not much! High ability studies, 20(1), 77-89.

Côté, J., Allan, V., Turnnidge, J., & Erickson, K. (2020). Early Sport Specialization and Sampling. Handbook of Sport Psychology, 578-594. doi:10.1002/9781119568124.CH27

Côté, J., Baker, J., & Abernethy, B. (2007). Practice and play in the development of sport expertise. Handbook of Sport Psychology, 3, 184-202.

Côté, J., Bruner, M., Erickson, K., Strachan, L., & Fraser-Thomas, J. (2010). Athlete development and coaching. Sports coaching: Professionalisation and practice, 63-84.

Dehghansai, N., Pinder, R. A., & Baker, J. (2021). "Looking for a Golden Needle in the Haystack": Perspectives on Talent Identification and Development in Paralympic Sport. Frontiers in Sports and Active Living, 3(75). doi:10.3389/fspor.2021.635977

Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. Psychological Review, 100(3), 363.

Faber, I., Damsma, T., & Pion, J. (2020). Finding Talent and Establishing the Road to Excellence in Table Tennis: The Dutch Case. In Talent Identification and Development in Sport (pp. 115-129): Routledge.

Güllich, A. (2018). Sport-specific and non-specific practice of strong and weak responders in junior and senior elite athletics–A matched-pairs analysis. Journal of Sports Sciences, 36(19), 2256-2264.

Güllich, A., Faß, L., Gies, C., & Wald, V. (2020). On the empirical substantiation of the definition of "Deliberate Practice"(Ericsson et al., 1993) and "Deliberate Play"(Côté et al., 2007) in youth athletes. Journal of Expertise, 3(1), 1-19.

Hassani, F., Shahrbanian, S., Shahidi, S. H., & Sheikh, M. (2020). Playing games can improve physical performance in children with autism. International Journal of Developmental Disabilities, 1-8. doi:10.1080/20473869.2020.1752995

Jakobsson, J., Julin, A. L., Persson, G., & Malm, C. (2021). Darwinian Selection Discriminates Young Athletes: the Relative Age Effect in Relation to Sporting Performance. Sports Medicine-Open, 7(1), 1-18.

Johnston, K., Wattie, N., Schorer, J., & Baker, J. (2018). Talent identification in sport: a systematic review. Sports Medicine, 48(1), 97-109.

Kelly, A. L., Jackson, D. T., Barrell, D., Burke, K., & Till, K. (2021). The relative age effect in male and female English age-grade rugby union: Exploring the gender-specific mechanisms that underpin participation. Science and Medicine in Football, 1-8.

Kelly, A. L., & Williams, C. A. (2020). Physical characteristics and the talent identification and development processes in male youth soccer: a narrative review. Strength & Conditioning Journal, 42(6), 15-34.

Pion, J., Teunissen, J. W., ter Welle, S., Spruijtenburg, G., Faber, I., & Lenoir, M. (2020). How similarities and differences between sports lead to talent transfer: a process approach. In Talent Identification and Development in Sport (pp. 184-196): Routledge.

Shahidi, S. H., & Hassani, F. (2020). Physical activity during COVID-19 quarantine. Acta Paediatrica (Oslo, Norway: 1992).

Shahidi, S. H., Kingsley, J. D., Svensson, M., TAŞKIRAN, M. Y., & Hasssani, F. (2021). Training Wiser Instead of Training Harder: A Complex Training Program (CPX). Journal of Health and Sport Sciences, 4(1), 15-18.

Shahidi, S. H., Kordi, M. R., Rajabi, H., Malm, C., Shah, F., & Quchan, A. S. K. (2020). Exercise modulates the levels of growth inhibitor genes before and after multiple sclerosis. Journal of Neuroimmunology, 341, 577172.

Shahidi, S. H., Stewart Williams, J., & Hassani, F. (2020). Physical activity during COVID-19 quarantine. Acta Paediatrica.

Smith, K. L., Weir, P. L., Till, K., Romann, M., & Cobley, S. (2018). Relative Age Effects Across and Within Female Sport Contexts: A Systematic Review and Meta-Analysis. Sports Medicine, 48(6), 1451-1478. doi:10.1007/s40279-018-0890-8

Thomas, A., & Güllich, A. (2019). Childhood practice and play as determinants of adolescent intrinsic and extrinsic motivation among elite youth athletes. European journal of sport science, 19(8), 1120-1129.

Till, K., & Baker, J. (2020). Challenges and [Possible] Solutions to Optimizing Talent Identification and Development in Sport. Frontiers in Psychology, 11, 664. doi:10.3389/fpsyg.2020.00664

Till, K., & Baker, J. (2020). Challenges and [possible] solutions to optimizing talent identification and development in sport. Frontiers in Psychology, 11, 664.

Tokyo 2020. Retrieved from https://olympics.com/tokyo-2020/en/

Tremblay, M., & Lloyd, M. (2010). Physical literacy measurement: The missing piece. Physical and health education journal, 76(1), 26-30.

Whitehead 1, M. (2001). The concept of physical literacy. European Journal of Physical Education, 6(2), 127-138.