

TALENT SELECTION PROCEDURES

By Jaan Loko

Talent selection is a long-term procedure that requires careful planning in order to achieve the expected results. In the following text the author, a lecturer at the University of Tartu, Estonia, outlines his views on the organization of talent identification and selection in several stages. The article is based on translated extracts from the author's book Sportlik Valik, published by the Physical Education Department of the University of Tartu. Re-printed with permission from Modern Athlete and Coach.

It is accepted that talent identification and selection is a long-term procedure over several years of an athlete's career. At present there appears to be no particular selection method that would allow instantaneously and precisely to identify talent for a particular event.

How can talent identification and selection be successfully organized? There are several problems to be solved in the organization that usually takes place in three or four stages. These problems include the length of each stage and the choice of the most effective tests. The last brings up the question of what is more efficient, testing 10,000 youngsters by using only one test, or testing 1,000 and using 10 tests?

A simplified talent selection is sometimes based on a standard training program. All young athletes in a group follow the same training means and loads. Youngsters who have made best progress over a certain time period are selected as potential talent. Obviously a multi-year selection procedure, that takes into consideration the dynamics of sporting results according to the biological characteristics, the development of physical and psychological capacities and the adaptation to increased training loads, provides a far more efficient method.

This method of talent selection over several years is made up of stages with precise tasks, durations and criteria. Each following stage sets higher demands than the previous one and is completed by an evaluation of the progress made during the stage. The evaluation is not simply based on competition results but includes pedagogical observations and physiological indicators for a particular age.

The organization of the selection procedures aims to cover the largest possible number of potential candidates for selection and attempts to utilize effectively the selection means by employing the most suitable diagnostic methods. All this takes place in the following phases that coincide with the corresponding preparation stages:

- The preliminary selection phase

- The basic preparation stage
- The basic selection phase
- The provisional specialization stage.
- The profound selection phase
- The final specialization phase.

THE PRELIMINARY SELECTION PHASE

The following major tasks apply to the preliminary selection phase:

1. Pedagogical observations to evaluate interest in sport and the level of movement activity of the youngster.
2. A preliminary selection into potential event groups (speed and explosive power events, endurance events), based on observations and an evaluation of general and specific physical performance capacities.

Young potential athletes are now divided into general and sport specific training groups. The general group is made up from youngsters with insufficient physical performance capacities. They continue to train with emphasis on general physical development. Athletes selected to the other group follow a more intensive general training program that includes some sport specific elements. Their main training means are made up from movement games, relays, gymnastics exercises, running and jumping.

The testing procedures in the preliminary selection phase are based on a small but complex physical development and physical performance test battery that includes a medical check-up. Our experience has indicated that the following tests can be recommended:

- The evaluation of physical development includes height, weight, chest circumference, vital capacity, dynamometric hand strength, arm length and foot length.
- The evaluation of physical performance includes 30m sprint from standing start, 10 sec. maximal speed running on the spot, 3 x 10m shuttle run, 5 minute run, standing long jump, vertical jump, medicine ball (2kg) throw with two hands from a sitting position, pull-ups, push-ups and flexibility.

A planned choice from the above listed simple tests makes it possible to evaluate speed, explosive strength, flexibility, endurance and strength endurance potential of children in the 8 to 10 yrs. age range. This, in turn, allows one to make some

predictions about their physical capacities potential, because most of the chosen indicators have stable inherited characteristics and are hardly influenced by environmental changes (training). Studies have clearly indicated that the majority of children with good physical performance indicators maintain this advantage when they grow older. Changes in the genetic structure are extremely limited and it appears likely that heredity does not only decide the potential level of physical capacities but also their trainability.

Studies have also shown that the same training processes produce different rates of improvement in the development of physical capacities in different young athletes. The rate of improvement is frequently considerably faster than the predicted values for a certain age range. It is consequently important to understand that prediction of potential capacities depend, besides the initial level, also on the rate of improvement. The initial level among younger children is considerably less than the rate of improvement.

It is not advisable to evaluate the potential of young athletes only according to the results of the various tests. The principle of many-sided physical preparation must be stressed during the whole preliminary selection phase. Nevertheless, ideal anthropometric measurements and physical capacity evaluation tables allow one to assess with some accuracy the potential suitability of youngsters for a certain group of events.

THE BASIC SELECTION PHASE

The main aim of the basic selection phase is a precise control and evaluation of the development of the young athletes who have passed the requirements of the preliminary selection, taking into consideration event specific demands.

Their potential talent for a particular event is determined by event specific capacities and the development rate during the preceding preparations. Physiological and medical controls are now increased and the psychological evaluation pays particular attention to such aspects as activeness, independence and the mental capacity to perform under competitive stresses. Laboratory evaluations, when available, provide additional information on the functioning of the nervous system, sensory motor reactions, sensory motor coordination etc. It is important to stress here that studies have clearly shown the importance to base the directional selection mainly on the rate of improvement. A second evaluation should therefore take place about a year after the first to calculate the improvement rate of all capacities and performance indicators which are then classified as "very poor", "poor", "satisfactory", "good" and "very good".

While the first directional selection is based on the arithmetical mean, the second evaluation requires at least a "good" classification that is calculated from the arithmetical mean plus a standard deviation of ± 0.5 to ± 1.5 . This procedure reduces considerably the number of candidates and we are now faced with the

problem finding the most effective training means for the remaining potential talent.

It is important here to avoid narrow specialization that can have a negative influence on the development of other potential physical capacities. The best solution appears to be a balanced event specific and compulsory all-round physical development program. This approach in the basic selection phase assures that youngsters, who have not displayed their capacity for one or another group of events in the earlier part (9 to 11 yrs) of the selection, will be directed to their potential event in the second stage (13 to 14 yrs). Their many sided physical development has at the same time not suffered from narrow specialization.

The employment of the above described preliminary and basic selection phases has the following advantages:

- The method provides a reasonably reliable information system to find children with potential physical capacities and aptitudes for sport.
- An evaluation of physical and anthropometric capacities over several years makes it possible to follow individual developmental progress and to discover aptitudes towards certain event groups or events.
- The method creates from mass evaluations a data bank for future changes and corrections of training procedures, thus providing for a more rational and reliable selection system.

THE PROFOUND SELECTION PHASE

The third phase of the selection procedures covers several years and is based on the evaluation of capacities that emerge from practical sporting participation, as well as pedagogical observations, control tests and physiological and psychological studies.

Particularly important in this selection phase are competition revealed parameters and event specific physical preparation indicators. These should correspond to potential elite performer's requirements at the end of the profound selection phase when the biological development is practically completed and the functional capacities well defined (14 to 15 years for girls, 16 to 17 yrs for boys). The profound selection phase is regarded to be reliable in the determination of physical capacities and functional potential for the final selection. This begins with an evaluation of single indicators for a particular event and is followed by a complex evaluation of morphological prerequisites, physical performance capacities, functional systems and psychological assessments.

Finally, it is important to stress the fact that the development of truly talented youngsters is revealed during training processes, in which the rate of improvement plays a decisive part in the selection procedures and the correlation between the biological age and test results must be correctly interpreted. The differences between the actual and the biological ages can in extreme situations exceed four years and even more.