

## A THEORETICAL AND PRACTICAL -METHODICAL APPROACH TO PRIMARY SELECTION IN BASKETBALL

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**Abstract:** The selection is a systematic and continuous process by means of which the specialists aim to identify children with special skills for practicing certain sports, on the basis of certain biological and psychological criteria. It operates continuously and simultaneously to the training process starting from beginner level up to high performances, and implies a set of periodical evaluations intended to emphasize the child's skills to successfully practicing a sport. The selection is a permanent process and is of the utmost importance, since the value of the athlete and implicitly of the team's subsequent performance depends on the quality of such selection. A good selection organization and running shall facilitate the discovery of the children with the highest potential. Otherwise, the coach shall invest work, time and knowledge in preparing certain athletes who later on, upon transition to senior level, would not obtain expected results. The performance is originated in three main sources: athlete's biological and personality value, the intellectual value expressed by the specialists' body managing the training pattern programming, and time. Within this triptych, time is a constant, while the other two sources are variable.

**Key words:** selection, selection criteria, performance,

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### INTRODUCTION

The concept of selection has been used, at first, within an economical-social type action and has been scientifically substantiated ever since the beginning of the 20<sup>th</sup> century. In order to precociously diagnose professional aptitudes and talent orientation towards one profession or another, various tests and methods would be used to the purpose of highlighting manual dexterity, correct and quick reception and learning of several motor scenarios. Due to its not being a clearly outlined concept, sport selection would only suggest the beginning of a sport training action which, along the years, has experienced various forms of expression, from early specialization, standing for the preoccupation to guide the child towards a sport at a very young age, to

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precocious initiation in the '60s, thus reaching the concept of primary selection implying the beginning of the child's sport organized activity in specialized centres, as a consequence to the performance of certain anthropometric, sanogenous measurements and of successful tryouts.

In Romania, the institutionalization of the sole selection and training system of children and juniors took place in the year of 1976, such action being preceded by the analysis of the national and international level accumulated experience. An ideal champion model was described for each sport branch. This is called the body-build biotype and is characterized by certain motor, physical and behavioural specific qualities. The selection uses a complex system of criteria in order to identify subjects that are the closest to this ideal (Nicu, 1999).

The MTS Research Centre and the Institute of Sports Medicine have elaborated together a complex system of subject testing and, as a derivative therefrom, a system of criteria and requirements that are unitarily applied within the actual activity of children selection, which provides certainties concerning the aptitudes for practicing a given sport branch.

The selection was defined as a *“systematic activity to be performed on the basis of certain criteria, tests and tryouts, to the purpose of identifying and guiding subjects with aptitudes above the population average towards the practice of a certain branch of the high-performance sport”*. (Dragnea et al., 2007). The specialists (Nicu, 1993; Dragnea, 1996) agree that sports selection is a process of identifying children with special aptitudes for the practice of various sports or sport branches that is carried out on the basis of certain biological, social-psychological and motor criteria, having a scientifically rigorous, organized and continuous nature (Oncea et al., 2015).

This system blends a multitude of criteria into a unitary whole, that operate in a predetermined order as imposed by a practice-verified methodology, and the selection action is attended by an interdisciplinary team of specialists, each member thereof acting in accordance with the strictness of the measurement and evaluation instruments.

### **AIM**

By identifying the main aspects of the basketball primary selection performance method, we hope to be of help to young coaches by providing a theoretical clarification that is absolutely necessary for the success of such action.

### **OBJECTIVES**

Our goal through this study is to present, from our point of view, the main aspects relating to the preparation of the selection operation, the activity of the teacher-coach in the schools included in the selection scope, the activity at the selection competition itself, as well as the ways of maintaining and increasing motivation for practicing basketball.

From the didactic, operational, biological and sport perspective, we recommend the selection approach on three levels or stages: primary, secondary and final. In this paper, we shall refer only to the issues relating to the first stage including the age period of 4-5 years and up to 8-10 years.

### **PRIMARY SELECTION (stage I)**

This stage is intended for the initiation in the envisaged sport and has the objectives below (Dragnea, 1996):

- attracting and finding talented children for the sports activity;
- developing children's motor capacity;
- harmonious physical development of the children and, simultaneously, acting on muscle groups that are frequently stressed by the sport branch in question;
- developing motor skills;
- initiation into the base technique of the sport concerned;

- gradual preparation of the children to the purpose of attending competitions, in order to get used to competing requirements;
- education of moral and sport ethics traits.

If depicted from a large mass of tested children and young people, the exceptional talent must be engaged in a considerably intense activity, a long-term no sparing work, pushing the maximum biological and psychological limits. Analyzing the two aspects, namely the talent and the work capacity, which are absolutely necessary in order to reach exceptional performances, we may state that they form an integral part of the training process substantiating it (Todea, 2006). In our opinion, when determining the algorithm used in basketball primary selection, we must address the following issues:

- what are the characteristics of the effort in basketball;
- what are the modern orientations manifested in a basketball game;
- which are the progress determining factors;
- which is the optimal selection age;
- what must the ideal (modern) basketball player look like;
- selection criteria;
- selection tryouts (including scoring system);
- primary selection performance modalities;
- ways of maintaining and increasing motivation for practicing the chosen sport branch.

### **SELECTION CRITERIA**

The *genetic and anthropologic* selection criteria are basically outlined in the medical – sports history (which includes both personal and family-related antecedents), the cultural and educational level, the attitude of parents and children towards sport, etc.

*Sanogenesis* remains the criterion of the highest stability along various selection stages. The *physique/body-build biotype criterion* intervenes in the selection in a new vision thereof: somato-physiological, motor, psychic, biochemical. *Neuropsychological and neuromuscular criteria* also intervene in the selection process, and it would be ideal if they were applied upon the primary selection level. The *endocrinology – metabolic criteria* are useful both within the initial selection and also particularly within the secondary, puberty selection. The *cardiorespiratory criteria* have the utmost significance for most of the sport branches of a predominantly dynamic nature. There are also *radiological criteria* deemed useful for the selection. The selection criteria and standards relating to women's sports have their particularities as well.

Lowering the optimum age for high performances has proven that the motor test alone cannot stand for an optimal and all-embracing solution for the selection action. The biological and psychic regularities of the modern sport training and competition have claimed the identification of the subjects that may provide, by their genetic base, health state, body vital functions and organs' adaption potential, drive, temperamental and character particularities, the entirety of qualities required by great sport performance.

The level of future players' performances reflecting on the results of the team shall depend on the very quality of the initial selection. Therefore, it is imperative that the coaches know the basketball game specific selection criteria and tryouts very well and adjust same to the material conditions and possibilities available to them (King, 1998).

As a starting point, the coach must be aware of the factors facilitating performance in basketball, whether we refer to somatic, motor or functional factors. The future basketball players should have these qualities at the highest level possible, the exigency of the selection being rather high particularly when it comes to qualities under a strong genetic determination (somatic sizes, motor qualities such as speed, handiness, vertical). The goal of basketball primary selection must

be, in our opinion, to select the fastest and the handiest children, who have the potential to increase height and grow taller than the average, in adult state.

According to modern training methodology, the current trend is to work on formative levels, more precisely it is advisable that a technician be specialized on one preparation/training level (selection – initiation, juniors, II, II, I). Considering such assumptions, as well as the material/financial possibilities existing in most of our sports clubs, we propose the following selection criteria:

### 1. **Somatic criterion**

#### **Anthropometric type evaluation**

As far as the anthropometric criterion is concerned, it is rather difficult to formulate a doubtless prognosis regarding a child's subsequent physical development, but the coach has several assessment criteria at disposal. The highest relevance in achieving high performance in basketball lies in the longitudinal sizes of the body and segments thereof: body-build, palm spread and length. According to Brugsch's classification, the basketball player must fall under the category of hyper tall people, at the adult age (Teodorescu, 1979). Amongst the multiple morphological parameters, the following play a decisive influence on the selection process:

- **Height** (stature) the subject is going to reach during various moments of his/her growth, may be foreseen by using the percentage relation existing between the country - level height average at the age of 18 and the country-level height average per each age between 10 and 18 years of age (table no. 1).

**Table no. 1 Percentage values regarding final height reached at various ages**

(Source: *Criterii, probe și norme pentru selecția în baschet*, 1986)

At 17, the height of the boys stands for 99.47% of their final height

“16”	“	“	“	98.01%
“15”	“	“	“	95.28%
“14”	“	“	“	91.26%
“13”	“	“	“	87.18%
“12”	“	“	“	84.82%
“11”	“	“	“	80.95%
“10”	“	“	“	78.21%

At the age of 17, the height of the girls stands for 99.87% of the final height.

“16”	“	“	“	99.56%
“15”	“	“	“	99.05%
“14”	“	“	“	97.67%
“13”	“	“	“	95.35%
“12”	“	“	“	91.83%
“11”	“	“	“	87.75%
“10”	“	“	“	84.38

In reference to the same matter of height forecasting, after the age of 15 a series of medical tests may also be carried out, such as:

- “sella turcica” imaging;
- imaging of the growth cartilages of the forearm distal extremities;
- sexual maturity extent;
- GH (Growth hormone) plasma dosing;
- insulin tolerance test.

The specialized literature emphasizes also the contribution of the hereditary factor to achieving a certain height when adult. During his heredity issue approach, Mendel asserts that the

transmission of certain traits to descendents is made “cross-like” against the gender thereof. For example, taller little girls usually have tall fathers and short or average height mothers.

- Arm span or **reach** must exceed, on basketball players, the sizes stated by Mayet and Godin for regular human beings of identical stature or age (Teodorescu, 1979). It is recommended that at the age of:

13, the reach should stand for 103% of the subject’s height

16 “ “ “ “ “ 105% “ “ “ “

18 “ “ “ “ “ 106% “ “ “ “

- **Palm length** which must be higher than that of a normally developed subject (104% of the body height), since basketball requires having a larger palm (Teodorescu, 1979)

## **2. Motricity criterion**

The criterion consists of a series of tests that must:

- emphasize the presence of the qualities required for basketball practicing;
- be adjusted to age particularities of tested children;
- be in accordance with available financial possibilities.

We propose the following tryout elements for motor function evaluation:

- **Speed**

The test consists of a 20 m standing start speed running. The test is repeated twice. The indicative values suggested by the specialized literature are between:

3.2 seconds – 4.5 seconds (baby-basketball category – 8 to 10 years of age);

3.2 seconds – 3.8 seconds (mini basketball category – 10 to 12 years of age).

- **Handiness**

We propose the use of the “*shuttle (potato picking)*” test, from the well-known “*Standard Fitness Test*” of the International Federation for Physical Education, measuring a very important quality for a future basketball player, namely agility. The reference values fall between:

17.9 seconds (for 30 points) and 11.7 seconds (for 80 points) – for children aged 6;

15.4 seconds (for 30 points) and 8.9 seconds (for 100 points) – for children aged 7.

- **Lower limbs explosive power**

We use the long jump from standing fixed position, the values falling between:

137-147 cm (for 50 points) and 149-159 cm (for 70 points) for boys aged 7-8;

137-152 cm and 146-160 cm for the same score for girls.

## **3. Health state criterion**

The health state criterion shall have elimination relevance. All criteria are evidently relevant, but from several children having a good state of health and functionality, we shall prefer those who, given a superior motor function, present a physical development corresponding to the practice of the sport in question.

## **4. Psychological selection criteria**

We believe that it is absolutely mandatory to know psychological particularities of the subjects involved in the selection procedure, respectively the correspondence thereof to a series of requirements relating to high performance activities (Rodrigues, 2005). The champion model must be seen through the image of the personality structure thereof (Tudos, 2000).

The study of personality traits and the physical development of selected children is a long-term process taking place after the actual initial selection. Besides knowing possible personal and family-related pathological antecedents, same may also be identified by means of joint activities (training sessions, trips, competitions, training camps), as well as through discussions with the children’s school teachers.

### **affectivity**

- cheerful, gentle, introvert, aggressive;
- degree of emotiveness, shyness or courage;

- attention or lack of attention;
- seriousness, discipline, modesty;
- capacity of adaptation to sporting environment;
- sociability, level of group adherence.

#### **willpower**

- attitude towards permanently increasing demands in the training process, as well as the stress generated by the training and competition conditions;
- eagerness, struggle for victory, determination, stout-heartedness or resignation, carelessness;

#### **memory**

- visual, auditory;
- capacity to reproduce certain motor acts, combination, coordination or succession thereof.

#### **imagination**

- vivid, rich or poor;
- contribution of intuition, representations and suggestions (*Criteria, probe și norme pentru selecția în baschet, 1986*).

### **SELECTION ACTION PREPARATORY ACTIVITIES**

1. determination of the age and the number of children to be selected;
2. determination of the criteria and the tryouts types (the financial/material base shall also be considered);
3. determination of the team of coaches (teachers) to participate in the actual selection procedure, distribution of responsibilities and training there of;
4. determination of the selection areal (depending on the gymnasiums/sports halls' proximity, etc.).

### **ACTIVITY IN THE SCHOOLS INCLUDED IN THE SELECTION PROCEDURE**

1. establishing the connection with the school principal/management staff;
2. establishing the connection with the physical education teachers or the elementary school teachers;
3. attending physical education classes or performing visits to proposed classrooms for selection purposes;
4. choosing the children for the selection contest (depending on the anthropometric criterion, the motor criterion or the information provided by the elementary school teacher in reference to parents' stature, etc.);
5. distributing invitations for the selection contest/tryouts.

### **ACTIVITY RELATING TO THE ACTUAL SELECTION CONTEST**

1. Prior organization of the activity (materials, markings, tasks for the team of specialists: who performs table registration, who carries out measurements, who is in charge with timing, which is the order of tryouts, etc.).
2. Participants' table registration (optionally we may also evaluate the estimated height of the parents);
3. Tryouts and insertion of the results in the related table.
4. Results processing (according to standardized tables or own scaling).
5. Communication of the results and of the training schedules.

### **OTHER MEASURES**

1. Popularization of the selection action (in the media, on the Internet, posters posted in the schools included in the selection scope).
2. Entering into partnerships with the respective schools.

## WAYS OF MAINTAINING AND INCREASING MOTIVATION FOR PRACTICING BASKETBALL

These may be applied already from the first year of training:

- competition (of a friendly, official or training nature) - weekly games with teams from other schools or between teams of the same group;
- growing attachment and love to the colors and tradition of the club, the feeling of belonging to the club;
- drawing up and displaying monthly / quarterly / annual rankings for: the most disciplined athletes, the best defender, etc.
- end of year awards for: the best training session attendance, the best defender, the best shooting guard, etc.
- participation to competitions in other localities, combined with touristic and cultural sightseeing, etc
- demonstrations (relays, technical circuits, throwing contests, ball handling demonstrations, demonstrative games) held before the games or during the recesses of Division A games or of other sports competitions;
- group watching of top-level competitions (school division, division A, international games) and commenting on them;
- homework tasks ("invisible training");
- presentation by the coach of models of great champions in basketball or volleyball;
- training with the participation of committed well-known athletes or top-class athletes;
- various prize awarding (of a symbolic nature) upon training completion.

## CONCLUSION

We can state that the weighing factor for obtaining high performances is assigned to selection—up to 70% according to some specialists, with the remaining 30% assigned to the training process. It is obvious that scientific selection is the key to performance in contemporary sport (Anastasi, 2011). A scientifically conducted, performed and continued selection on the initial - secondary - ending interval, shall determine the superior valences of the training process and this, in turn, shall contribute to the optimization of future selections.

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