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Original article

IMPROVING BASKETBALL JUNIORS PLAYERS TRAINING

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Abstract

Aim The main purpose of our theoretical and methodological approach was to apply and verify the training strategies adequate for learning and perfecting the basketball game technique. Investigating the parameters chosen for the actuating qualities, considered to be eloquent in the study suggested for increasing the players' efficiency.

Methods Scientific documentation, observation, establishing experiment, statistical-mathematical method, trial method and the graphical method.

Results The teams present a good general coordination, which presupposes a proper disposition for the rapid learning of the technique. The players' intellectual qualities demonstrate that the subjects have real possibilities for improvement and self-improvement. Following the application with a new content, shows there is noticed a substantial increase of the indexes in all trials made, improvements of the arithmetical averages, the individual evolution of each player, thus being able to compute correlations among the different trials.

Conclusions Knowing these characteristics is considered necessary for elaborating the „model” of the collective and individual game, valid for every sportive game, “model” that must be prospected and then executed in training. Ignoring the “improved model” and sticking to the “traditional model” determines the technical-tactical stagnation, lack of efficiency, a value difference with respect to the “NEW”, difficult to recover.

Key words: training program, performance, young basketball players

Introduction

Sports training concept can be interpreted as a complex and dynamic system model with known characteristics. The system are governed by laws and principles cyber and adjusts and adjusts itself, sends and receives information (Teodorescu-Mate, 2001).

The sports training strategy role on several stages, which includes: means selection, planning, comparing the results achieved with the correction planned and future actions (Predescu, Negulescu 1998).

In sports games the effort volume indicators becomes an important role in solving some methodological problems such as the amount of training necessary to carry out "qualitative leap". In terms of analogy solving problem and modeling the process of preparation it is necessary to begin from play pattern indicators volume (Colibaba, Bota 1998).

The preparation's aim is to establishing a closer link between the physical and technical qualities, to create a stable sports technique base. In the high training performance, the percentage of specific work becomes considerably. (Manno, 1996). Technical instruction is a motor learning process of different kinds: the so-called motor learning, perceptive motor learning and intelligent motor learning.

Technical outlines the motor structure of each sports game. Superior concept is that the technical motor movements are serving everyday professional and sports situations. Technical mastery is the result of individual and collective training, which

necessarily adds "vocational predispositions" for the game (Colibaba, Bota, 1998). Technical mastery level must be determined by the effective used of the motor potential degree. A very important aspect emerges here: inverse correlation between the technical and physical effort, affects the outcome of sports.

Technical teaching of different sports means to follow the laws and steps for motor acts and actions learning. The improvement technique involves execution of a lot of various exercises (Popescu, 2003).

Optimization of the training methodology means to use a consisting program. The program must be based on concrete operational objectives, which improves the efficiency of the learning process, perfecting of the basketball game techniques.

Tactics is "a sporting activity which conducts all its technical possibilities, physical and mental to gain the best results under the conditions and in the face of different opponents" (Epuran, 1996). The game tactics is "a coherent system of measures selected, planned and prepared in advance for use in the game. The tactical training is depending on the opponents and competition's conditions to fulfill the performance targets". (Colibaba, Bota, 1998).

Intelligent motor learning concerns the solving of problematic situations occurred during the activity or the actions, situations created by the opponent and specific to sports games. Because the learning process - the human adaptation, in fact, consciously

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follows some well-defined self-control goals, all the types of learning are “intelligent”.

Intelligent motor learning is characteristic to *tactical instruction*, but we shouldn't ignore that in sports games any technical element and procedure is learned in connection with the real tactical situations issued within the opposite relations. The learning results are concretized in *technical-tactical type open skills with a self-conducted but also a hetero-conducted character* - when the opponent takes the initiative (Epuran, Holdevici, & Tonița, 2001).

Methods

The main purpose of our theoretical and methodological approach was to apply and verify the training strategies adequate for learning and perfecting the basketball game technique. Investigating the parameters chosen for the actuating qualities, considered to be eloquent in the study suggested for increasing the players' efficiency.

Research premises:

- It is considered that the athletes comprised in the research create a homogeneous group;
- It is considered that the subjects' health condition at the trial moments is proper;
- It is considered that subjects are cooperative in the data harvesting activity;
- The directed and opportune application of the data obtained by research and scientific assistance contributes to improving the present individual technique in view of the optimum capitalization during training and competitions (accuracy and efficiency);

The used methods were: scientific documentation, observation, establishing experiment, statistical-mathematical method, trial method and the graphical method. For performing the experimental study the following tests and trials were used:

- In anthropometric plan – 9 measurements
- General motor – 7 tests;
- Specific motor – 6 tests;
- Precision – 6 tests;
- Specific position – 4 tests;
- Perceptual motor – 3 tests.

The research data harvesting was performed in three stages:

Stage 1 had as tasks:

- Establishing the level of somatic development;
- Initial testing to the suggested trials;
- Assessing the level of general intelligence, personality and general coordination.

Stage 2 consisted of the application of the training program having as purpose the increase in the players' efficiency in official games by learning and perfecting the game technique within the individual technical-tactical actions and of the combinations of 2 and 3 players in adversity relations.

- It is considered that there is coherence between the game pattern and the training one, by establishing biunique-type relations;

- It is considered that the selection and the alignment of the training of the athletes investigated were performed considering the sportive criteria in the basketball game and the competition exigencies at that stage;

- It is also considered that the training program had distinct instructional objectives, which were accessible to the athletes' level of training.

Research hypothesis:

- If during training, the technique is classified within the technical-tactical actions of attack and defense in a relation of adversity, then this approach leads to the improvement of the efficiency indexes of the game pattern parameters;

- The level of the general and special physical training corresponding to the training stage of juniors determines the correct learning of the basketball game technique and the optimization of the technical-tactical actions in the official games;

- The including in the training sessions of creative methods and means for solving the technical-tactical actions of attack and defense which will stimulate the players' intelligence and personality ensure the development of sportive artistry, and, implicitly, the evolution of their achievements.

The samples investigate consist by basketball players, under 18, 16 and under 14 of the two teams of School Sports Clubs, from Bucharest.

Stage 3 proposed to highlight the modifications occurred during the research, at the level of the components analyzed:

- General motor - tests;
- Specific motor - tests;
- Precision - tests;
- Positions - tests.

The technique is important first of all due to the economy of the movement and its efficiency. It must not be understood in an isolated manner, but being conditioned to a large extent by the other components of the sportive training, especially by the physical training. It is a basic rule in training beginners to ensure, in the first place, the physical availabilities necessary for learning the technique.

The objective of the technical training is to create to the athlete the possibility to use with efficiency, permanently, the functional potential in his competition actions. The actuation skills are consciously elaborated during training. Their repetition progressively leads to the automation of the main coordination structures.

The technical artistry represents the result of individual and collective training in the training

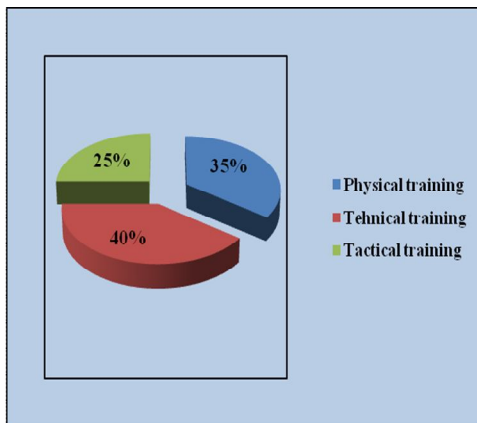
process to which those “vocational predispositions” for game are added.

During the training process, apart from the technical-tactical game preparation, other aims are the development of the psychic ability in the informational and regulatory aspect, intellectual, affective, will and personality traits training, the development of the self-adjustment ability.

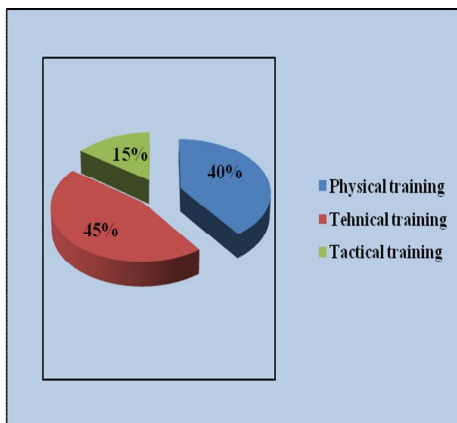
Results

Following the application of the suggested curriculum with a new content, in the training of basketball players, juniors I, II and III and in processing the data obtained with the occasion of the two tests (initial and final), there is noticed a substantial increase of the indexes in all trials made, improvements of the arithmetical averages, the individual evolution of each player, thus being able to compute correlations among the different trials.

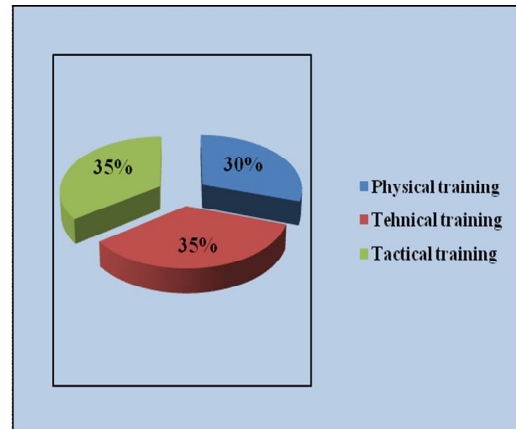
The teams present a good general coordination, which presupposes a proper disposition for the rapid learning of the technique. The players’ intellectual qualities demonstrate that the subjects have real possibilities for improvement and self-improvement.



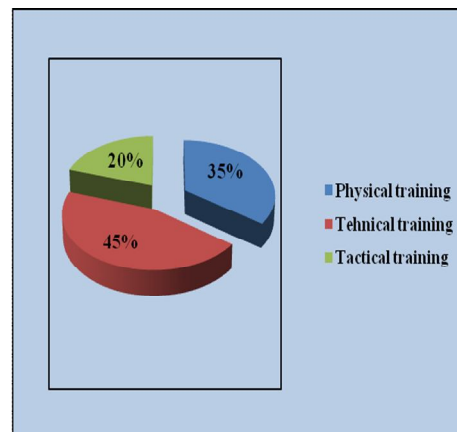
Graph no. 1.1 Training model – under 14 years old Romanian Basketball Federation



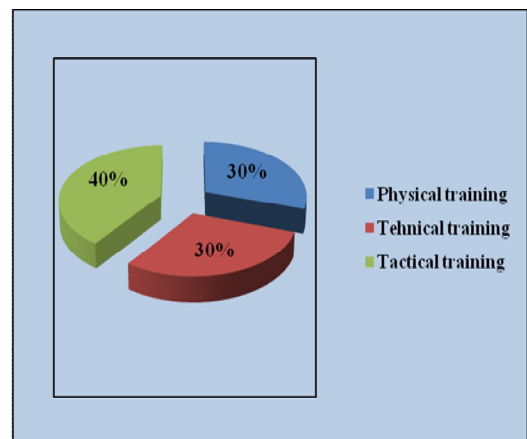
Graph no. 1.2 Training model – under 14 year Personal model



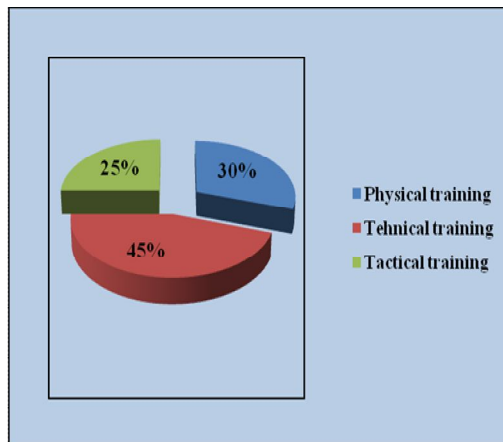
Graph no. 2.1 Training model – under 16 years old Romanian Basketball Federation



Graph no. 2.2 Training model – under 16 year Personal model



Graph no. 3.1 Training model – under 18 years old Romanian Basketball Federation



Graph no. 3.2 Training model – under 18 year
Personal model

Discussion

In sportive games, the technical progress of the athlete and the discipline must continuously evolve by a practically infinite combination of elements. In order to understand performance in sportive games, we must start from the structure of the actuation act, which may be schematically reported to three fundamental points: movement finality, movement programming and actuation execution.

In the process of learning and perfecting the actuation skills, specific actuation alignments form and perfect, which are characterized by the athlete's psychic mobilization and attention focusing towards the task given, even before starting the execution and, subsequently, during the execution.

Psycho-actuation, in the context of actuation learning, is the result of integrating education and synergy maturity and of adjoining the actuation and psychic functions not only with respect to noticeable movements and expressions, but also with respect to those determining and accompanying them: will, affectivity, needs, impulses.

Children like to be noticed, especially in physical activities. Collective activities participation encourage them to interact, sports games being good opportunity (Sabau, 2002).

The graphs represents the comparison between the two training models: Romanian Basketball Federation and the model suggested by author. The analysis suggests more technical training for all groups.

For the subjects aged under 14 we suggest more technical exercises. That means 45% versus 40% recommended by Romanian Federation. It is an important percentage form federation, but our argue is that the biological background is the most favorable for motor learning (Graph no. 1.1 & Graph no. 1.2). This is the period of life with the most learning acquisitions.

The age of adolescence (aged under 16) for sportive games must be used for perfecting most of the technical elements, of the execution technique of

the individual technical-tactical actions and of the collective technical-tactical combinations such as, at the same time with integrating the best in the performance teams, they will not suffer a handicap in comparison to the devoted athletes (Graph no. 2.1& Graph no. 2.2).

For the subjects aged under 18 the stress of the training falls on technical-tactical combinations which perform the aspects of the technical's game (Graph no. 3.1& Graph no.3.2).

The complex system of basketball player's personality can be underline by an "engine" of tactical thinking, activated by intelligence.

A characteristic of modern training consists of the existence of a technical-tactical alignment transfer between the different sportive games; in its turn, this transfer allows generalizations, synthesized and characteristics of the activities and tendencies in the process of affirmation.

Knowing these characteristics it is considered necessary for elaborating the „model” of the collective and individual game, valid for every sportive game, “model” that must be prospected and then executed in training. Ignoring the “improved model” and sticking to the “traditional model” determines the technical-tactical stagnation, lack of efficiency, a value difference with respect to the “NEW”, difficult to recover.

For selecting the sportive specialization, the establishment of the future training methods and the assessment of the results of the previous training, the degree of sportive preparation and the level of physical development are determined.

At present, due to the technical evolution, there is the possibility to use a high number of functional parameters, but their utility remains especially in the field of research and not in that of immediate efficiency in medical-biological aligning of the training process. Lately, the intra-effort watching of the behavior and of certain neuron-psychic qualities involved with priority in the specific effort (such as central and distributive attention, psycho-reactivity,



resistance to stress, the spirit of cooperation and anticipation, especially in sportive games) begins to gain increasing significance.

Conclusions

The study notes the technique is important in basketball players training. Technical training is more important at early ages.

According to Štrumbelj & Erčulj (2014), the training and assessment process in adolescent basketball players need to stress basketball-specific skills, competitive performance indicators, and psychosocial components.

Sachanidi et al. (2013)'s study underline a technical training aspect, as: the ability of the young players to pass the basketball is significantly related to their overall performance. The greater passing ability a player has the better performance he will present during the game.

Acknowledgments

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