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THE ROLE OF BASKETBALL ELEMENTS AND METHODS IN DEVELOPING THE PSYCHOMOTILE ABILITY

Elena MOLDOVAN[1]

Abstract: *Premises. The impact which psychomotile development has on the athletes that practice basketball imposes as basis the attunement of the practice means as a defining factor in the development process of performance athletes, conditioning the health state and the instructive process towards high performance in basketball. The present paper proposes to experimentally demonstrate that practices, content and tactical and technical actions positively determine the psychomotile development and implicitly the competitional delivery in basketball. This study aims the diversion and improvement of the psychomotile innervation within specific basketball practices. In fulfilling this aim and for verifying certain possible innervation methods that can sustain the psychomotile development, we have emphasized the specific basketball elements and methods that can ensure and influence the psychomotile development*

Key words: *elements and methods, basketball, psychomotile ability.*

1. Introduction

Modern basketball has brought many changes in the individual tactical and technical rapport. Thus, the high rhythm and speed of the game, the fast entries, the fast counterattacks, pressing defense, all have led to the reversal of standing in one place and switching to moving or jumping; in another train of thoughts they are tactical and technical weapons in fighting gigantic waists, who are coping a bit more difficult in this kind of situations. The place of giants has been taken, in the last few years, by less tall players (Tony Parker, Juan Carlos Navarro) whose action, rapidity and mobility skills impose a much dynamic and combative game. The athletic abilities become, in basketball, the core element of training, and if the latter meet a very tall player, the advantage is almost unmatched [1].

The modern basketball game is based mostly on fast attacks and counterattacks, scoring is much easier in power play or in 1x1, 2x2, 3x3 situations because the game space is not as limited as in the positional attack. The teams and players who have the best physical condition stand out in this kind of situations.

Furthermore, the methods that need a precise duration of execution have been replaced with faster ones. Thus, two hand throws have been replaced by one hand

[1] Dept. of Motric Performance, Transilvania University of Braşov.

throw and the methods used (pirouette, hook, semi hook) are far harder to defend now. Jump throwing dominates today the game due to its advantages: releasing the arm, using it in any situation of game while standing or moving in variable distances from the board, etc. as a result, one can notice an increase of the number of baskets and the percentage of tries done during the game, due to the precision and improvement of specific senses (basket, ball) which represents a functional demand of the players' organisms. The high nervous tension risen from trying to maintain attention, the concentration, the ability to adapt to situations as fast as possible, all done in the conditions of certain somatic efforts, represent an important demand of the body's functions and a very good development of the psychomotile ability of the players [2].

The natural character of the specific movements is accessible and pleasant not only to adults, but to children as well, who under the form of mini basketball, introduced on the international arena, is gaining many more participants. The field's and ball's smaller dimensions, the lower placing of the board, reducing the game times and increasing the number of pauses lead to a better adaptation of the growing body, more successfully and quite early [5].

As a result of a permanent and continuous selection, instruction and training process, based on more rigorous scientific characteristics, today we are seeing a continuous increase of skill, both individually and collectively during the game, which determines changes in the competitional basketball orientation game [6].

As a consequence, we take into account the following tendencies of development in basketball, which are today manifested more and more poignantly [3].

-Fighting to impose the team's best game rhythm and tempo, rhythm variation depending on the evolution of score (rhythm breaks).

The increase and usage of air game in fighting to retrieve the ball – determined by the increase in weight and height of the player (the average of a team around 2 m, the constancy of two giants on the field 2.15 – 2.20 m whose bilo motile skills, mobility and speed could be much more appropriate to a medium height player, maintaining in formation one – two players with a relatively reduced weight 1.85 – 1.90).

- The apparition of stable couples;
- Simplifying the buildup of the collective attack determined by the finish of the direct fight with the opponent – 1 vs 1 and doubling the attacker, accelerating execution speed in the final phase of the action, increasing the counter attack share and generalizing the jump throw;
- Increasing the defense ability by combining defense systems through permanent aggression, generalizing the temporary pressing, increasing the interception share and tactically closing entries, especially for super players;
- Harmoniously combining the technical, theoretical, temperamentally and psychologically characteristics of each player as an individual with the general and specific training characteristics for covering the modern game's complex tasks;
- Capitalizing to the highest level the individual potential of each player, without jeopardizing the collective game;
- The ability of each team to adapt to this tendency depending on their own possibility, remains a great factor in orienting the practice, even from an early stage;

- Manifesting a more conscious attitude towards practice, most of the times leading to sacrifice, and towards a correct posture even outside the practice, different from the high-level performance and competitional game.

Thus, psychomotility appears as well as ability and complex function of fitting the individual behavior. We can say that it includes the participation of different processes and psychological functions that ensure both the reception of information and the adequate execution of the response act [4]. If we refer to the definition of psychomotility, we can observe that the specialization literature avoids defining psychomotility as a notion that does not overlap in totality the one of motility, which means that there is not a clear definition between the two. In most cases, the term of motility includes movement in all its complexity, covering moth the motile side as well as the psychological one. In synthesis, we can consider that its activity presents itself as a complex system, made of sub systems (actions) regulated in a synergic way to accomplish an efficient action. The activity represents a succession of actions, with a specific architecture, hierarchically organized in operation of actions and gestures. The motile and psychomotile activity is unitary, conscious and based on anticipation and sustained by a conscious motivation. It is a complex phenomenon, which, more often that none, bears the mark of the individual's personality [4]. Psychomotility represents, generically, any motile action, attitude or behavioral model which is under the influence pf psychological processes, its two sides (motile and psychological) couldn't be separated.

2. The objective of the paper

The paper wishes to make a study regarding children aged 10 – 12 with the final objective of improving the psychomotile indexes through basketball.

3. The hypothesis

One assumes that the usage in tactical and technical practice of certain elements and methods specific to the basketball game, can lead to the development of the psychomotile ability, expressed through values of the general, static, balance, speed and laterality coordination.

The experiment had the objective of verifying the efficiency of using the elements, methods and means of practice specific to basketball destined to develop psychomotility. We have established an experimental group, formed by athletes that have been practicing basketball for 3–4 years.

4. The indexes of the research

In aiming to analyze the psychomotility development of the participants, the following teste have been done:

- Static coordination: the Flamingo Balance Test;
- General dynamic coordination: the Balance Beam Test;
- Balance: The Stork Stand Test;
- Rapidity: The T Test,
- Illinois Test
- Laterality: The Specific Basketball Drill

The experiment consisted of implementing through pedagogical practice of the basketball specialization of a model based on specific trainings destined to develop psychomotility with the accent on the elements and technical methods specific to basketball.

This way of training was based on:
- Developing the sensorial motile abilities;
- Developing the thinking and decision thinking abilities;
- Developing the instruction through sporting games;
- Agility exercises with skills ladder;
- Skills ladder exercises which facilitate the development of several abilities.

4.1. Presenting the results of the research

For evaluating the static coordination we have used the flamingo Test, adapted to 10 – 11 year olds. The test was 60 seconds in which we have evaluated how many mistakes have been identified in maintaining the original balance position, on a gymnastics bench. As a result of the initial testings, the experimental group has made 1.53 mistakes, on average. To the final testing there has been a more significant result, with a better average of 0.73 (figure 1)

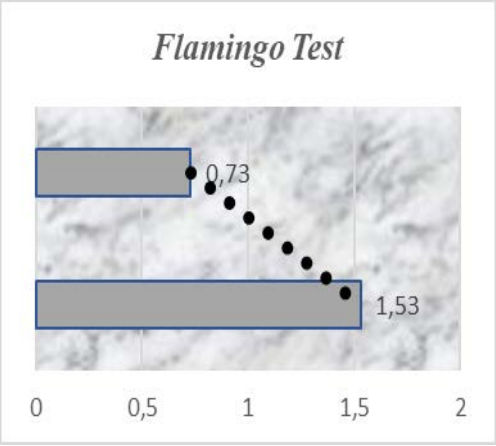

Fig. 1. *Flamingo Test*

With the help of the Balance Beam Test we have evaluated the dynamic coordination of female athletes while walking. The evaluation has been done based on the subjective observations. In the first tests the average of the results concluded in 4, and at the final testing a slight down grade of 4.2 (figure 2).

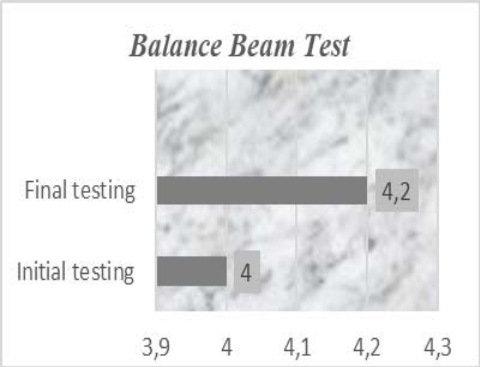

Fig. 2. *Balance Beam Test*

Measuring balance has been done with the Stork Stand Test, the time obtained after the testings being evaluated according to the score of the respective testing. 5 categories have been established: weak (<10 seconds), below average (10 – 24 seconds), average (25 – 39 seconds), good (40 – 50 seconds), excellent (>50 seconds). To the initial testing we have receives a value below average (22.9 seconds). To the final testing, there has been a slight progress, here receiving an average value (26.7 seconds), confirming the hypothesis.

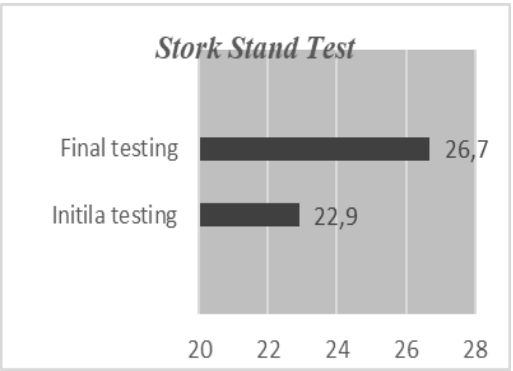

Fig. 3. *Stork Stand test*

Rapidity has been evaluated though 2 specific tests, the results after T Test being

is 14.4 respectively 14.9 seconds, contradicting the hypothesis (figure 4).

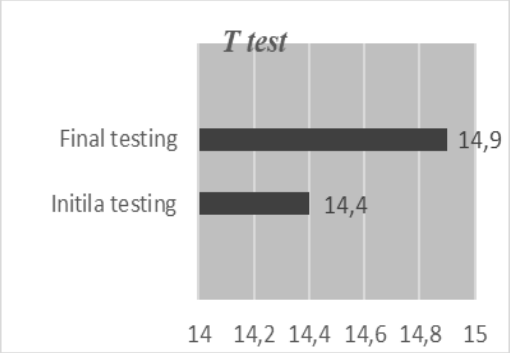

Fig. 4. *T test*

The second test in evaluating rapidity was done though the Illinois Test. To the initial testing there has been a value of 18.6 seconds, respectively 18.7 to the final testing. The results of the test contradict the hypothesis, showing low values to the initial testing rather than the final one (figure 5).

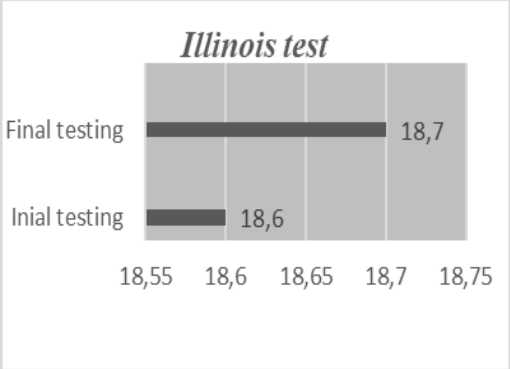

Fig. 5. *Illinois test*

Laterality has been evaluated with a specific trial of basketball, which consisted of executing certain series of 10 throws with the left hand and 10 with the right hand. We can see that there is no significant improvement to the throwing percentage, but the difference between the final testing with the left hand and the one with the right hand has decreased over the initial testing, thus confirming the hypothesis (figure 6).

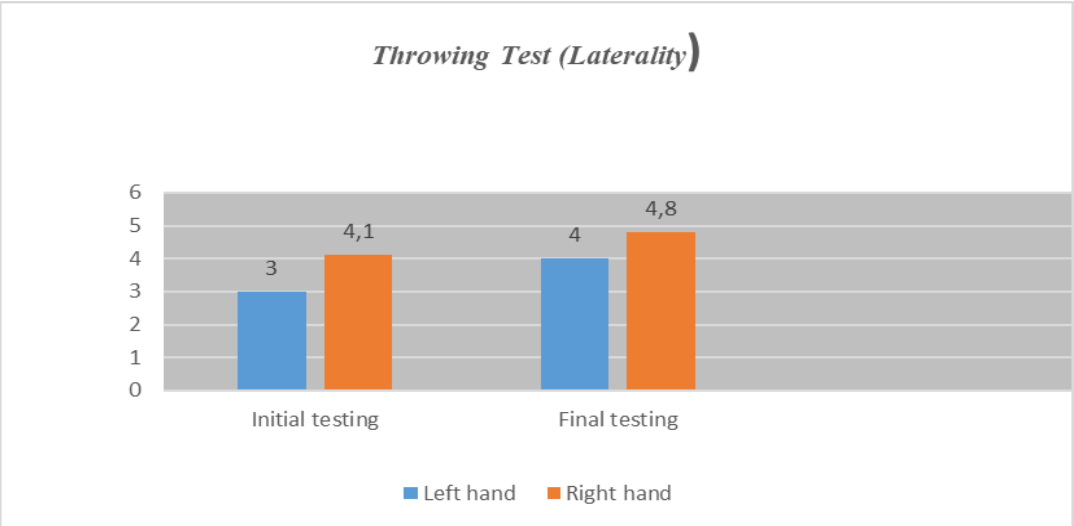

Fig. 6. *Throwing Test for laterality*

The statement regarding the confirmation of the hypothesis of the experimental research though which using the elements and methods specific to

basketball leads to improving psychomotility is relevant but not sufficient for such a conclusion. The originality of the experimental research remains in determining the influence of the basketball game on the psychomotile development. Developing multilateral psychomotility though the basketball game has pedagogical support from the coaches, the collective games representing moments of relaxation, pleasure and personal satisfaction by accomplishing certain objectives closer to the needs of the teenagers, basketball being quite appropriate for this. The results of this study confirm the hypothesis in which psychomotility can be educated within a learning process, with efficiency though action systems carefully selected, through sporting games.

After concluding the research, we have drawn out the following practical and methodical conclusions and recommendations:

1. The development of psychomotility represents a demand of the modern basketball game, the sporting life requiring a sophisticated grasp of these qualities.
2. The psychomotile qualities must be developed during the puberty period, and nit after.
3. In the tactical and technical preparation one must take into account the fact that children go through different and various physical and intellectual progresses, thus the training need to be planned depending on these changes.
4. The results of the pedagogical experimental method prove the efficiency of the training model destined to the development of psychomotility, thus confirming the hypothesis of the research.
5. The experimental research has generated a conclusion that can represent, through inference, an essential idea of improving the contribution of the basketball game to the development of psychomotility.

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