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# THE ROLE OF BASKETBALL IN ACHIEVING THE OBJECTIVES OF PHYSICAL EDUCATION AND SPORT

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**Abstract:** The physical education lessons have as an objective learning the basketball elements and procedures that must respect the specific methodical principles of physical education by building a strong motile basis. The purpose of the paper is to highlight the role of specific basketball means in the physical education lesson to influence the physical development of junior high pupils.

The paper's hypothesis comes from the premise that promoting certain methods and means specific to the basketball game within the physical education lesson enhances the stimulation and emulative character of the latter determining significant alterations of the physical development parameters.

In the study we have used specific basketball means implemented within the physical education lessons, for a class with normal program (VI), statistically following the dynamic evolution of the physical development in the children. The study was done during one semester. In order to evaluate the contribution of the specific basketball methods within the physical education lessons, we have used the test battery EUROFIT

Key words: basketball, the objectives of physical education and sport.

## 1. Introduction

The components of education as bases of forming the individual are the key to a durable development and the art of developing moral, intellectual, artistic and physical qualities that the child has in his potential state of mind. The significance and efficiency of the formative act determine education availabilities in rapport with the numerous influences of the social environment. Education as a structure, objective and content is permanently wired up to the tasks and the evolution of the social and cultural environment, level of the psycho-body motion activity, [1], [2].

As an absolute priority, education is an important process in preparing the children to become active citizens in a dynamic society that is constantly changing and can be defined as a full capitalizing instrument of children's potential, as an ensuring of chance equality, thus contributing to the

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permanent process of improving the quality of life. The modern conception of education claims a prospective, systemic, formative and dynamic character centered on general human and national values. In achieving any type of activity for thinking outside the box, one needs a motivational, affective and spiritual participation which involves a certain originality of things effectuated depending on each individual's personal note [3].

Within the physical education activities, executing the motile actions automatically, at the command of the one leading the activity, does not always lead to the hoped effects or to realizing the wanted progress due to certain factors that maintain the psychological structure of the ones actually working and the one that outlines such a way of doing things. Many times the lack of actual participation or mechanically applying the sporting activities is an unwanted cause and often inexplicably leading finally to failures [4].

The school physical education activity, component of education and learning, component with an exclusively practical specific, must be permanently improving the content and shape, to enter the imposed rhythm of the current school life. The activity of the physical education teacher must be complex, having the purpose of strengthening the children's organism and the way he/she does this depends on the future results of the children. Where there is interest and professionalism, adapting the means of physical education to the conditions of each school, with optimal results, can be the merit and the success of the physical education teacher. Finding certain new ways attracts attention to a certain creative act in the field of physical education and this is the fruit of certain documented researches that have ิล regulatory role in sporting activities [4].

Basketball is part of sporting activities, the components of basketball recording progress, sometimes illegal, nevertheless the modifications brought to the rules of the game try to keep a permanent balance between content and game efficiency and are found in the lessons of physical education to all cycles of learning [5].

These preoccupations show us that without bringing into discussions other arguments, the physical education lessons regarding basketball are part of the lessons that motivate the active and conscious participation of the students.

Giving the fact that school activity claims enhanced intellectual efforts, basketball can permanently ensure a harmonious physical development under all circumstances if the means used are selected according to age, sex and preparation.

Practicing basketball also develops motile qualities, the muscular and tissue systems, the cardiovascular and respiratory being strongly influenced. systems basketball claims Moreover, ability. coordination, speed, expansion, agility and versatility, qualities that can be improved by practicing the game, by repeating the technical executions within the pre tactic exercises and the numerous individual and collective tactics. When talking motility, practicing basketball positively influences the development of motile qualities both generally and specifically. Motility claims and also develops the technical and tactical characteristics of the game, massively contributes to the development of basic motile skills, one of the main objectives of school physical education - respectively, running, jumping, throwing - for the aforementioned skills are by far the foundation of basketball technique [6]. The formative value characteristics of basketball explain his wide spread in the school environment, being even the motivation for promoting it by teachers to the sporting degree of "signally scholarly". Regarding the formative value of basketball to what motile qualities are concerned, we mention the influences it has on the children [7, p. 99].We have already mentioned that the formative influences of basketball regarding motility and physical development have a lot of commune characters with individual sports and other forms of practicing physical Psychologically exercise. speaking, basketball brings special educative contributions the multilateral in development education and of an individual's personality. Among these we mention: educating the solidarity spirit (collective, team), organizational spirit and conscious discipline (therefore, freely consented). Moreover, it must be also highlighted the contribution of practicing development basketball to the and education of initiative, combination and will of overcoming hardships [8].

## 2. The purpose of the paper

The purpose of the paper is to highlight the role of specific basketball means in the physical education lesson to influence the physical development of junior high pupils.

The paper's hypothesis comes from the premise that promoting certain methods and means specific to the basketball game within the physical education lesson enhances the stimulation and emulative character of the latter determining significant alterations of the physical development parameters. In the study we have used specific basketball means implemented within the physical education lessons, for a class with normal program (VI), statistically following the dynamic evolution of the physical development in the children. The study was done during one semester. In order to evaluate the contribution of the specific basketball methods within the physical education lessons, we have used the test battery EUROFIT as follows:

- 1. Balance through the Flamingo balance test (EFL);
- 2. Versatility by longitudinally flexing the trunk (FLT);
- 3. Force by long jumping without takeoff for testing the explosive force (SLE) and the manual dynamometry (DYM) for testing static force;
- Muscular endurance and strength by lifting up the trunk while sitting (RTA) for testing the abdominal muscular strength and maintaining while hanging with flexed arms (MBF) for testing the functional endurance;
- 5. Speed for testing the segmentary speed through the "Kick the boards" trail and for testing speed and coordination through the "Shuttle trail 10×5m" (CAN);
- 6. Cardio respiratory endurance through the following tests: shuttle trail 20m (CNR) and ergo cycle trial (CTI70). 25 cycles are being done, afterwards the command is given.

#### 3. Presenting the data of the research

#### Table 1

Tests	Initial (I)	Final (F)	Progress	Δ
EFL	1.19	0.92	I > F	0.27
FLT	11.46	11.88	I < F	0.42
SLE	160.57	163.84	I < F	3.27
DYM	21.73	22.30	I < F	0.57
RTA	28.46	29.04	I < F	0.58
MBF	151.92	177.30	I < F	25.38
LP	176.15	168.46	I > F	7.69
CNA	235	223.84	I > F	11.16
CNR	73.42	74.38	I < F	0.96

Comparative dynamic values to the EUROFIT tests (average) (Nr of subjects=26

Legend: EFT- Flamingo balance test; FLT- longitudinal trunk flexion; SLE- long jump; DYM- manual dynamometry; RTA- lifting up the trunk while sitting; MBF- maintaining while hanging with flexed arms; LP- "kick the boards" trial; CNA- "shuttle trial 10x5m"; CNR- "shuttle trial 20m".



Fig. 1. Comparative results to the EFT tests



Fig. 2. Comparative results to the FLT tests



Fig. 3. Comparative results to the SLE tests



Fig. 4. Comparative results to the DYM tests



Fig. 5. Comparative results to the RTA tests



Fig. 6. Comparative results to the MBF test



Fig. 7. Comparative results to the LP tests



Fig. 8. Comparative results to the CAN test



Fig. 9. Comparative results to the CNR tests

#### 4. Interpreting the results obtained

The values recorded by the subjects of the VI grade after applying the initial and final testing for the 9 EUROFIT trials are presented in table 1.

To all the applied 9 trials we indicate the progress made by the subjects in table 3.

As a follow-up we shall analyze the obtained results to the 9 trials of evaluation.

## 1. "Flamingo" test:

To the initial testing the subjects obtained an average of 1.19 points which means that the 26 subjects have lost balance 1.19 times while to the final testing they have obtained an average of 0.92 points which means that the subjects have failed less with 0.27 points.

#### 2. Longitudinal flexion trunk:

The subject that reaches with the tip of his/her fingers to his/her toes shall accomplish 15 points. The one surpassing this value – for example 7 cm – shall accomplish 22 points.

Initially, the subjects obtained an average of 11.46 points while at the final testing they have progressed with 0.42 points more thus obtaining an average of 11.88 points.

## 3. Long jump without take-off:

The score has been done as following: 1cm=1 point. To the initial testing the subjects obtained an average of 160.57 points while to the final testing they have progressed with 3.27 points thus obtaining an average of 163.84 points.

## 4. Manual dynamometry:

To the initial testing the subjects obtained an average of 21.73 points which is equivalent to 21.73 kg obtained by squeezing the dynamometer.

Here the subjects have progressed as well, obtaining to the final testing an average of 22.30 points, with 0.57 points more than the initial testing.

## 5. Lifting up the trunk while sitting:

The result of the test was given by the number of cycles executed correctly in 30 seconds.

To the initial testing the subjects obtained an average of 28.46 points while to the final testing 29.04 points thus obtaining a progress of 0.58 points.

6. *Maintaining while hanging with flexed arms*:

Calculating the score was done as following: 1sec=10 points.

Initially the subjects have managed to obtain 151.92 points while to the final testing, with a progress of 23.38 points, they managed to reach an average of 177.30 points.

I would like to mention that for this trial, initially, there were only 9 subjects that obtained 0 points, being incapable of maintaining the body hanged with flexed arms to the fixed bar, while to the final testing only 3 of them making a certain progress managing to make over 30 points.

7. "Kick the boards":

The value of the points obtained to this trial is determined based on the time in which a tested person makes the 25 complete cycles of action. Score: 1sec=10 points.

To the initial testing the subjects obtained 176.15 points and to the final testing 168.46 points thus obtaining a progress of 7.69 points.

8. "Shuttle trial 10x5m":

Score: 1sec=10 points Initially the subjects obtained an average of 235 points while to the final testing 223.84 points thus obtaining a progress of 11.16 points.

#### 9. "Shuttle trial 20m":

The score was done recording the level in which the subject stops (the testing was measured using the smart phone app "Beep Test" which can be found, downloaded and used free of charge on "Google Play Store").

To the initial testing the subjects obtained a score of 73.42 points while to the final testing they have progressed with 0.96 points thus obtaining an average of 74.38.

#### **5.** Conclusions

The means and methods used for accomplishing the proposed goal have proven to be efficient confirming the process we had anticipated in the paper's hypothesis.

From the methodological point of view, in the training process regarding the general physical development, through specific basketball means, we shall follow the assimilation as correct and precise as possible of the technical and theoretical procedures. Second of all, we shall try to educate the skills for applying the motile qualities, while conditions are ever changing when moving. The development of every basic motile quality represents an objective necessity in practicing maximum physical exercises. The methods elaborated in the specialty literature are perfectible, needing to acquire a dynamic character by the permanent reporting to the experience and practice of technicians and specialists who activate in such a field of expertise.

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