

THE FUNCTIONAL AND MOTOR PROFILE OF THE BASKETBALL PLAYERS IN THE POSITION OF POINT GUARD IN U16-U17 MALE CATEGORY

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Abstract. The purpose of this research involves the realization of a relative model of preparation for the position of Point Guard by developing and experimenting with a didactic strategy of individualised training for the position, taking into account the functional and motor particularities specific for this age. For each playing position, means and methods of carrying out sports training must be established, in this case Point Guards position, strategies that ensure the efficient fulfilment of tasks and responsibilities by the occupant of this playing position. The characteristics of the basketball game specific to the position of Point Guard, at the U16-U17 category, involves the creation of a specific physical training program, with well-defined elements that lead to the growth and development of motor skills and sports performance during competitions also it must be adapted according to the morpho-functional requirements of individuals, physical and mental capacities at the level of this age category. In conclusion, the training for the Point Guard at this age must be correlated with the complex, bio-psycho-social changes of the individual, which take place within human development, which involves an extensive and complex physical exercise programme able to contribute to the development of the basketball player's capacities and skills.

Introduction

In the current context, in basketball, specialists have shown that in order to achieve higher performance, special importance should be given to individualised sports training for each individual position rather than at a global level [1].

For each playing position, means and methods of carrying out sports training must be established, which meet the requirements imposed by it, in this case by the position of Point Guard, strategies to ensure the effective fulfilment of tasks and responsibilities by the occupant of this position.[2]

Training practice today cannot be conceived without the fulfilment of certain general requirements, among which we mention:

- forward planning and programming of practice;
- training throughout the year;
- progressively increasing training efforts, even exceeding the value of the competition;
- increased intensity of effort;
- increasing the pace of execution and working tempo up to the value of the competition, as well as alternating them;
- increasing the number of competitions with small or large objectives;
- ensuring the best conditions for accelerating the restoration of the body's functions after exercise [3, 16].

In any training practice programme, the physical training of the athlete, individualised for each position in the sports game, is very important in achieving sports performance, which is why the specific characteristics of the position in question must be taken into account [4].

Characteristic of the game of basketball, the physical training for the Point Guard position of youth players I, implies the design of a specific physical training programme, with well-defined elements that lead to the growth and development of motor skills and sports performance in competitions [5].

The training programme within the specific physical training of youth players I, for the position of Point Guard in basketball, must be adapted according to the morpho-functional requirements of the individuals, requirements imposed by age, physical and mental capacities at the level of this age group [6, 13].

In the current evolution of the game of basketball nationally, there is a growing concern for specific training by position, and not only at team level, which results from the fact that performance in the game of basketball is closely linked to the specific physical training for each position on the basketball court [7].

The Point Guard is one of the standard positions in the game of basketball, with this position playing a particularly important role compared to other positions [8]. The player occupying this position is responsible for leading the team's offence by controlling the ball and ensuring that the ball gets to his/her team-mates at the best possible time, and must understand and agree to all the tactical demands that the coach sets during the game [9, 14].

In the game of basketball, the Point Guard is the one who has to find the best and safest scoring solutions for the other team members as well as for himself/herself, being considered the "*coach on the court*" who can easily protect the ball and distribute it to his/her team-mates [10].

In this context, the specific physical training for the position of basketball Point Guard occupies an important place in order to realise the objectives and the goal of the basketball game, the collective and individual performance [11, 15].

In order to fulfil the tasks and responsibilities assigned to the position of Point Guard in the game of basketball, he/she must meet certain requirements to ensure the realisation of the game plays [12].

Objectives - The objective of this study

The objective of the research is to create a relative training model for the position of Point Guard by developing and experimenting with a didactic training strategy individualised to the playing position.

Material-method

The following research methods were used to carry out the research:

- a) the bibliographical study method, through the documentation of the specialised literature, represented by books, magazines and specialised websites, through whose content and the way of presenting the notions and terms related to the physical training necessary in any training practice, I have acquired and developed my knowledge related to the specific physical training of basketball as a Point Guard;
- b) the observation method, during training practice;
- c) the pedagogical experiment method, based on the use of a longitudinal experiment aimed at developing a strategy focused on optimising the specific training of the Point Guard. The experiment lasted for 6 months, during which time the effects of the implementation of the didactic strategy were monitored by means of control samples and documentary records during the competition system.
- d) testing method, in which we applied the Purdue-Pegboard test and the Knox test.

The research work necessary for this paper was carried out in the period 2024 - 2025, which involved the study of the literature on the specific physical training of the specialised Point Guard player at the youth players I level.

In this regard, 20-30 specialised works were studied, which contributed to the acquisition and sedimentation of knowledge related to the specific physical training of basketball game in the position of basketball Point Guard.

In addition to the theoretical knowledge acquired through the study of specialised works, the practical experience gained by playing basketball also contributed to the present work.

In order to better reflect the theoretical and practical knowledge related to the specific training in the game of basketball on the position of Point Guard at the level of U16-U17 youth players, we have developed a programme of specific physical training with which we tried to bring to the fore the role and importance of specific physical training in the game of basketball at individual level, and not collectively, corresponding to each specific position of this sport, with a detailed presentation of specific physical training exercises.

In developing the training methodology, we have experimented in our research we have taken into account several requirements and principles of training for the U16-U17 youth players.

Lately, there has been a great interest in the general and specific physical training of basketball players, carried out by athletics personalities with a great deal of knowledge, while coaches in team sports have mainly technical-tactical skills and personal authority to fulfil their function and ensure the psychological leadership of the team, which is not always sufficient to match the demands of physical training with those of technical-tactical training, based on sprints, strategies and optimal use of the athlete within the team roster.

Most athletes, at the specialisation stage of their development, can tolerate more complex training and the demands of competition. The most significant changes in training occur during the 16–17-year-old period. Athletes who have participated in a complex programme with an emphasis on multi-athlete development will now approach exercises and structures that are specifically aimed at peak performance.

In the appropriate training programmes for athletes specialising in a particular position, the following requirements have been met simultaneously:

- closely monitor the development of the athletes during this stage. Athletes will adapt to the increased physical and psychological demands of training and competition;
- checking progressive improvements in motor skills dominant in the sport;
- increasing the volume of training on specific exercises and structures to facilitate improved performance;
- increasing training intensity faster than volume, but gradually;
- involving athletes in the decision-making process as often as possible;
- encouraging athletes to acquire theoretical knowledge of the sport;
- volume and intensity of anaerobic training gradually increase;
- technical procedures in the sport need to be improved and perfected;
- both individual and collective tactics must be improved.
- mental training must be emphasised.

Results

Following the research methods used as well as the proposed means, in order to obtain the best results in the process of developing a strategy for optimising the training of the Point Guard in U16-U17 youth players, we have carried out a series of age-specific control tests: complex set of exercises for the development of specific speed, complex set of exercises for the development of specific guarding skills for basketball, as well as complex set of exercises for the development of explosive force and specific stamina.

During the training sessions, a number of 5 athletes from the U16-U17 U16-U17 youth players' roster were tested, playing as Point Guards.

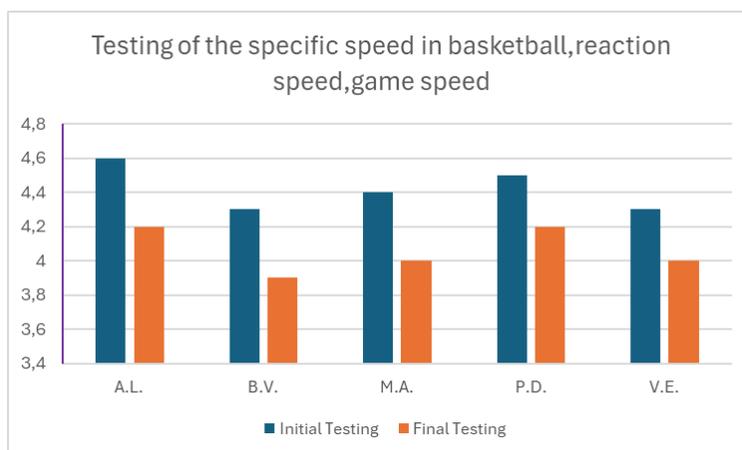


Figure1 .Statistical indicators of testing the specific speed in basketball, reaction speed, game speed.

Following the tests on specific development shown in Fig.1, carried out for the five subjects, a complex set of means was approached to determine both the reaction speed of the athletes and the speed during the game by executing means on offensive and defensive transition. The evaluation of the results of this test was done by awarding marks on the grid.

Table1 .Improvement and summary statistics

	Improvement
count	5
mean	0,36
std	0,054772
min	0,3
25%	0,3
50%	0,4
75%	0,4
max	0,4

The analysis shows that the mean improvement in test times is about 0.36 seconds, with a standard deviation of 0.054. The minimum improvement observed is 0.3 seconds, while the maximum is 0.4 seconds.

The correlation coefficient between initial and final test times is approximately 0.915, indicating a strong positive relationship. This suggests that higher initial test times are associated with higher final test times.

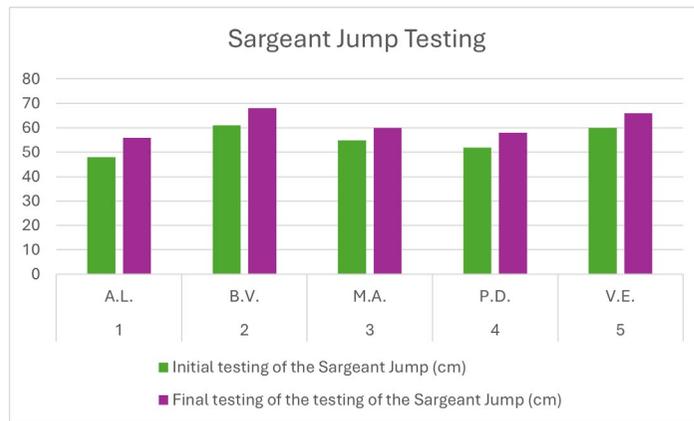


Figure2 . Statistical indicators of the Sargeant Jump Testing

Following the tests on explosive force development shown in Fig.3, carried out for the five subjects, a complex set of means to establish vertical leap was approached by means of the Sargeant Jump Test. The evaluation of the results of this test was done by assigning grades on the grid.

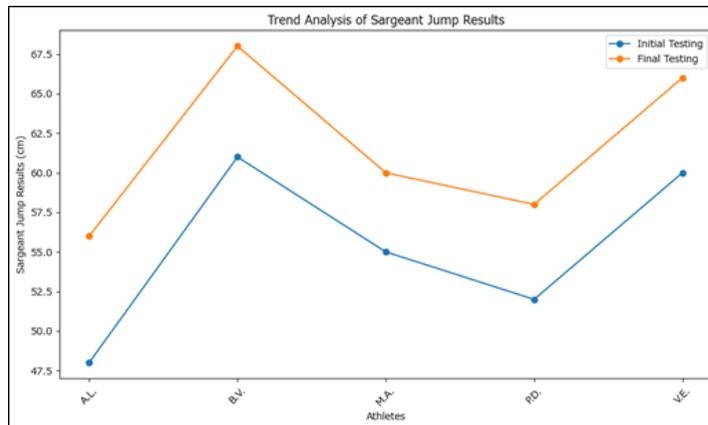


Figure3 .Trend Analysis of Sargeant Jump Results

Trend analysis has been viewed showing initial and final Sargeant Jump results for each athlete. This highlights trends for improvement.

Table2 . Statistical Summary

Metric	Value
0 Mean Improvement	6,4
1 Correlation Coefficient	0,978
2 T-Statistic	-12,55
3 P-Value	0,00023

4	Effect Size	5,61
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The statistical table gives an overview of the key values in the analysis:

1. Mean improvement: The mean improvement in Sargeant Jump results is 6.4 cm.
2. Correlation coefficient: a value of 0.978 indicates a very strong positive relationship between the initial and final test results.
3. T-statistic: The t-statistic of -12.55 is used in the paired t-test to assess the significance of the improvement.
4. P-value: A p-value of 0.00023 indicates that the improvement is statistically significant.
5. Cohen's effect size of 5.61 shows a very large improvement in performance.

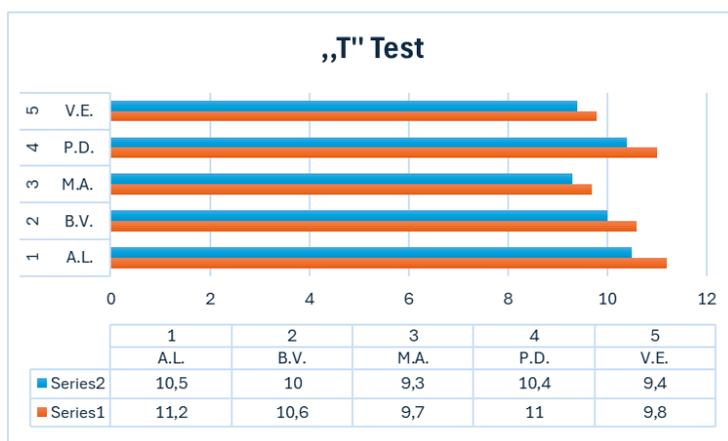


Figure 5. Statistical Indicators of "T" Test

Following the tests on the development of guarding abilities shown in Fig.5, performed for the five subjects, a complex set of means was used to determine the vertical leap by means of the 'T' test.

Table 3. Statistical Analysis

Statistic	Value
0 Mean	0,54
1 Median	0,6
2 Standard Deviation	0,134164

The results of the statistical analysis summarise the improvement values as follows:

- Mean The mean improvement is about 0.54 seconds.
- Median: the average value of the improvement data is about 0.60 seconds.
- Standard deviation: Data vary by about 0.13 seconds from the mean.
- Variation: the spread of the data is about 0.018 seconds squared.

Discussions

In the course of this scientific approach, an attempt was made to create a relative training model for the Point Guard position by elaborating and experimenting a didactic training strategy individualised to the training position, which is influenced by age particularities, the characteristics of each athlete and the knowledge acquired by them during the training periods.

Conclusions

As an instructive-educational process, training practice is based on numerous principles and requirements that must be respected throughout the training of high performance and high-performance athletes.

Continuous improvement of the quality and efficiency of the basketball player's training process is a major concern for all those who select, train and accompany the athletes in competitions, the desire being to achieve the best possible performance, not only at the collective, team level, but also at an individual level.

Based on its character as an instructive - educational process, sports training is based on numerous principles and requirements, which must be respected throughout the entire training of high performance and high-performance athletes.

In this sense, sports training cannot be carried out without strictly observing the general didactic principles of increasing human performance, in accordance with the requirements of practical activity, which implies active and conscious participation, rationalisation and systematisation, continuity and rhythmicity, accessibility and thematic appropriation, all these principles being the basis of the systems and subsystems of physical education and sport.

In modern basketball the process of training practice has a stage-like nature. Each stage has its own instructive-educational objectives, content, methodology, respectively appropriate to the age and gender particularities, as the position in the field.

Therefore, the specific physical training in youth players I, in the position of Point Guard, must take into account the quantitative and qualitative transformations that define human development and evolution, from the physical, psychological and

social point of view, the level of training being the one that determines the performance in competition.

The specific physical training for youth players I, playing as Point Guards, must be realised according to the particularities of the occupant of this position, as it is known that a Point Guard is generally not very tall, but is fast, agile, has a very good vision of the game (he/she is considered to be the brain of the team).

In conclusion, the specific physical training of the player occupying the position of Point Guard in youth players I category must be correlated with the complex bio-psycho-social changes of the individual, which take place during human development, which requires a broad and complex exercise programme able to contribute to the development of the basketball player's capacities and abilities.

The optimisation of the specific physical training process of the player specialised in the Point Guard position in the youth players I category, implies the elaboration and observance of a training practice programme within which specific physical exercises for this category are well defined, classified according to the motor qualities with which each player is endowed and which he/she can develop, reaching the performance level.

Also, within the physical training programme in the game of basketball, it is necessary to take into account the way the competition is conducted at the level of the youth players I category, being necessary to systematically plan the physical training throughout the competition.

The level of specific physical training of players specialising in the position of Point Guard can be optimised on the basis of a training programme focused on instructional-educational objectives in the development of specific speed, specific coordination skills and specific endurance.

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