

Contributions to the Technical Training of Handball Players Specialized in the Wing Post

¹ Bernicu Andrei Răzvan, ² Mihăilă Ion, ³ Mihăilescu Nicolae
¹ Sports High School Suceava, ^{2,3} University of Pitesti

Correspondence: Bernicu Andrei Răzvan (e-mail: razvan_bernicu@yahoo.com)

Abstract

Aim: The level of performance achieved at the current stage, both internationally and internally, is very high and can only be achieved by players whose performance capability is particularly high and steadily increasing. The field of game technology has expanded a lot. Increasing the spectacularity of this game, coupled with its spread across the continents, has had repercussions on the organization of handball at junior level. New methods have emerged, which performance players perform with high craftsmanship, doubled by special physical qualities. **Methodology :** the experiment took place between September 2016- Jun 2017, in the city of Suceava, with 3 players specialized on the wing position from the under 18 team Suceava Sports High School. During this period the team maintained its regular training program, the wings following our proposed program to analyze its effect on improving the tracking parameters. We estimate that using efficient means of action and adapting them to the post of the wing player will increase the performance of the game and individual value to handball players specializing in the wing. **Results:** the mean results recorded at the technical level, show good differences between initial test (IT) and final test (FT): - dribbling among the rounds: IT= 6,21±0,009 sec., and FT= 5,80±0,02 sec.; - passing in two out of the way: IT= 5,16±0,005 sec., and FT= 4,80±0,01 sec.; - triangle shift, gate throw: IT= 12,48±0,01 and FT= 12,0±0,01, show a breakthrough in all the sustained samples and the statistical analysis demonstrates a homogeneity of the research group. Given the importance of the “wing” role

in organizing and directing the field play in this paper, I presented the tasks in the post, determined by the action areas and the contribution in the attack phases. **Conclusions:** we can assert that the hypothesis from which I left is confirmed and the purposes of the work have been achieved. I think the study has achieved its goal by showing: optimization of the training, due to the selected means of action, the fulfillment of the tasks of the wings in the post, resulting from the registration of the actions in the attack, as well as the efficiency in their areas of action, as revealed by the research.

Keywords: game, performance, methods.

Introduction

Performance sports (in our case, handball) is a component of general education, being an activity by which, under the guidance of a specialized professor, physical exercise is organized in an well-planned way, capitalizing on the motor activity in various forms in order to optimize the morpho-functional and psychological development of motoring capacity, in order to achieve a sporting ideal.

Handball is known as a fast-paced, spectacular development and in line with “the evolution of human material, with its improvement”. (Abalașei, Beatrice, 2012, P.12). The level of performance achieved at the current stage, both internationally and internally, is very high and can only be achieved by players whose performance capability is particularly high and steadily increasing.

The field of game technology has expanded a lot. New methods have emerged, which performance players perform with high craftsmanship, doubled by special physical qualities.

The sphere of individual and collective tactics has also been enriched, and the solutions for solving various game tasks are increasingly diversified.

These changes in the world of seniors' handball have obvious influences in the preparation of future athletes, children's and junior echelons in order to be able to successfully make the exchange of tomorrow at the level of the representative teams.

Handball specialists consider “selection an important point for handball performance”(Cercel, P., 1983). For this it must look for

the most efficient organizational forms for attracting and grinding the most endowed elements: vocational high schools, sports clubs, sports associations, etc. Even though at the moment it is difficult to achieve such an objective in school, with a small number of physical education lessons, but we believe that a good opportunity to work more efficiently, including the game of handball, would be to increase the number of lessons of physical education and sports or the obligation of the school sports circle (Ardelean, Mert, Miuța, 2016).

Increasing the spectacularity of this game, coupled with its spread across the continents, has had repercussions on the organization of handball at junior level.

The content of the technical and tactical training at each stage of the handball base of the performance handball is presented in the game and player models developed for each value level. The technical and tactical components of the models were determined both by the child's age specificity and the requirements imposed by the technical skills of the handball content (Mihăilă, 2014).

At the level of novice children, there is a minimal model of play, a model whose technical - tactical content is much simplified in relation with children's possibilities. For the other echelons, intermediate models have been developed. Their technical and tactical content increases gradually, both quantitatively and as a degree of difficulty, until juniors level I, it is foreseen to acquire the model of play for handball performance.

"The wings are players with a good skill in handling the ball, with an extraordinary ability to accelerate in small space, to execute drive actions and good throwers at the gate from the angles of the field." (Balint, E., 2004, p.18). Therefore, in the following subchapters we will present the content of the tasks of the players specialized in the extreme post, in accordance with the types of training.

In preparing a handball team and especially players specializing in the extreme, special attention will be paid to the most effective exercises and their application must respect the physiological bases of developing different motor skills. Such a junior class II

will continue to work for speed and skill training (started with children), but work will be done to improve strength and resilience.

For speed training, the basic moral quality in achieving the performance of athletes specializing in the extreme, the priority means will be exercises in the form of competitions and different stages in which the speed capacity is demanded to the maximum.

It will introduce the training method with repetitions - usually by repeating short trials at maximum speed, repeating equal distances running at high intensities (Nicu, A., 1993, p. 340).

Material and method

We estimate that using efficient means of action and adapting them to the post of the extreme player will increase the game's performance and individual value to handball players specializing in the extreme.

The experiment was organized at the juniors' team I of Suceava Sports High School in the competition year 2015 - 2016. The athletes from this group went through the stages of the final selection (although the selection is a continuous process) so that they are now considered complete players, fulfilling the requirements of the handball performance. It should also be noted that the core participated in the mini-hockey, beginner and junior competitions III and II, which means that they also gained a competitive experience as part of the training.

The training took place on the ground and in the gymnasium hall. Both the material endowment and the quality of it proved to be appropriate.

Training scheduling focused on the structure of the school year and the competition calendar of the Romanian Handball Federation (<https://frh.ro>).

To improve the performance of the experiment group we used some tools such as: - speed 5x30m; - pentasalt, - 3x200 m; - throwing the handball from different distances; - 505 agility test; - Illinois test.

The nature of our research is of an applicative type, aiming at using the obtained results and interpreting their modification in the sports practice of the extreme Romanian players and not them only.

Results obtained are quantitative and form a series of data for each studied feature of athletes. These are absolute values, being evaluated directly (Tintiuc et al., 2011). Also, in order to better highlight the results obtained, we calculated the parameters of the central tendency but also indicators of data scattering or variability, at three specific control tests in handball.

The results of the research evaluations were noted on the result sheets and then centralized with statistical processing software.

The centralization and processing of the results was done with Microsoft Excel 2010 and GraphPad Prism 6 software.

Results and discussions

The results recorded at the technical level show a breakthrough in all the sustained samples and the statistical analysis demonstrates a homogeneity of the research group. Below there are the results recorded for each sample.

Dribbling among the probes: the initial test result is 6.21 “, the final test is 5.8” and the progress is 0.41 “. The statistical indicators have the following values: In the initial test, the standard deviation (As) is 0.009, the average error (Em) is 0.0005 and the coefficient of variation (CV) is 0.13. Thus, the final As test is 0.02 Em is 0.001 and Cv is 0.34.

Passing in two out of the way: the initial test result is 5.16 “, the final test is 4.8” and the progress is -0.36 “. The statistical indicators show the following values: At the initial test, the standard deviation (As) is 0.002, the average error (Em) is 0.0002 and the coefficient of variation (Cv) is 0.09. At the final test As is 0, 01 Em is 0.0005 and Cv is 0.20.

Triangle shift, gate throw: The initial test result is 12.48 “, the final test is 12.0” and the progress is 0.48 “. The statistical

indicators show the same values: both initial and final testing: the standard deviation (As) is 0.01, the average error (Em) is 0.0005 and the coefficient of variation (Cv) is 0.08 (Tables 3 and 4).

Table no. 1. Statistical analysis at technical level tests.

Indi-cators statistics	Dribbling among the rounds		Pass in two of the way		Move in the tringle, throw at the goal	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
X	6,21	5,80	5,16	4,80	12,48	12,0
Sd	0,009	0,02	0,005	0,01	0,01	0,01
Em	0,0005	0,001	0,0002	0,0005	0,0005	0,0005
Cv	0.13	0.34	0.09	0.20	0.08	0.08

The experience of the first players analyzed and tested is considerably evident compared to the newly introduced athletes.

The psychomotor qualities are superior, close to the player's performance profile and in accordance with the requirements of the sport microcosm.

The rationale for the creation of 3 players came from the need to apply the means of action in training, correlated with the individualization and the principle of comparison. There is a more careful and motivated participation of the first three players, existing in the investigative approach initiated a year ago.

Continuity can give real data, the longitudinal experiment comes to support the variety of application of actuation means and the accuracy of the evaluation.

Moreover, the calculation of the variability coefficient results in the context of a larger group.

In order to improve the tested parameters we also added new means.

The results of the athletes of the experimental group registered at the initial testing, in accordance with the standards set

by specialists and the characteristics of the position, reveal a good preparation of the wings, compared to the benchmarks described in the theoretical part, as shown in the following table.

Table 2. Wing player results from the experiment group, initial testing

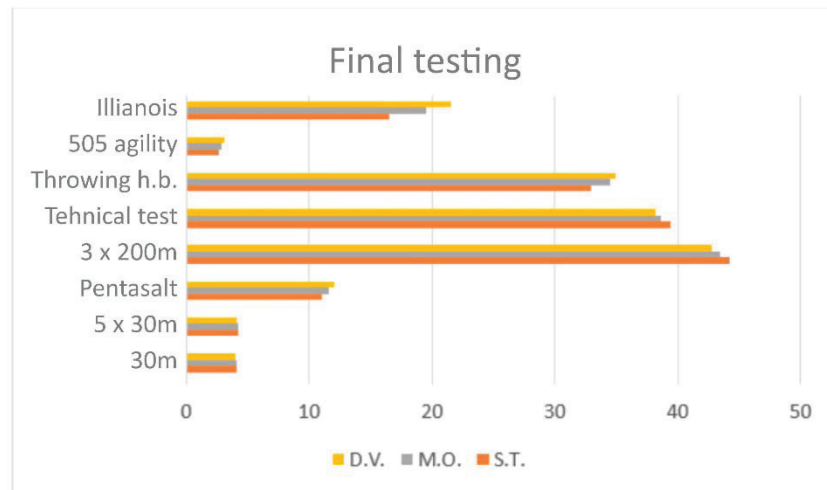
Sample/ topic	30m (s)	5x30m (s)	Pent- asalt (m)	3 x 200m (s)	Tech- nical test (s)	Thro- wing h.b. (m)	Test 505 agility	Test Illianois
S.T.	4''3	4''5	9,80	46''8	41''2	31,0	2,79	17,8
M.O.	4''2	4''4	10,30	46''0	40''2	32,0	2,84	21
D.V.	4''2	4''3	10,80	45''8	41''6	31,5	3,12	22,9

At the end of the experiment, the final testing of the subjects of the experiment group was performed, using the same evaluation samples. The results recorded for each player are recorded in the following table.

Table 3. Wing players results of the experiment group, final testing

Sample/ topic	30m (s)	5 x30m (s)	Pent- asalt (m)	3 x 200m (s)	Tech- nical test (s)	Thro- wing h.b. (m)	Test 505 agility	Test Illianois
S.T.	4''1	4''2	11,10	44''2	39''4	33,0	2,65	16,5
M.O.	4''1	4''2	11,60	43''4	38''7	34,5	2,84	19,5
D.V.	4''0	4''1	12,10	42''8	38''2	35,0	3,12	21,6

We found that following the application of the didactic strategy experienced in this group, a significant increase of results is obtained, after the period of application of specific exercises: if in the Illianois test, the ST subject obtained the value 17, 8, in the final test the result is 16, 5. Subjects MO and DV, progress by 1.5 s and 3.4 s, respectively.



Graph 1. Peculiarities of the level of specific training, final testing.

The graphical representation of the obtained results, compared to the initial testing, is an x-ray of the evolution of the players at the age of accumulation. We notice a good agility and the detachment of the ST player from the values of the group.

The arithmetic mean and the coefficient of variability are kept within the limits of the group homogeneity values, except for the Illinois test, demonstrating the accuracy of the preparation and the setting of objectives in accordance with the requirements of the job performance profile.

Conclusions

The training program has resulted in good results, but any planning can not achieve perfection, requiring continuous improvements, gait adjustments and additions in line with the requirements of modern handball.

The way of conceiving the work and the stages in its execution sought to meet the requirements of a methodical - scientific work in the field of physical education.

Given the role of the “extreme” role in organizing and directing the field play in this paper, I presented the tasks in the post, determined by the action areas and the contribution in the attack phases. I can assert that the hypothesis from which I left is confirmed and the purposes of the work have been achieved.

I want to emphasize the particular concern I have expressed about the deepening of the current trends in handball performance and the theoretical grounding of the theme. The “bibliography” contains the titles of the best handball specialists.

The wing player’s actions are based on the initiative, good maneuvering and possession of the ball, rich tactical knowledge and a variety of technical techniques without and with the ball.

To train and deepen the knowledge of the wing we intertwined the analytical method with the global one. Through the analytical method we sought to deepen individual tactical actions, tactical combinations of two players as well as the basic movements of ball and semicircle players. Through the global method and training modelling, the integration of the wing player into the game phases was pursued.

In conclusion, I believe that the study has achieved its objective by showing: the optimization of the training due to the selected means of action, the fulfilling of the tasks of the extremes in the post (resulting from the registration of the actions in the attack, as well as the efficiency in their areas of action) things proven by the research (it is possible that in other circumstances, at the level of another female handball team, the results are different, therefore, the results of the research are not general, but only indicative).

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