

# THE EFFECTS OF PROGRAMMED WORK ON THE DEVELOPMENT OF BASIC MOTOR SKILLS IN YOUNG FOOTBALL PLAYERS

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## Abstract

The aim of this research was to determine the effects of programmed work on the development of basic motor skills in young soccer players. The sample of participants in this research were football players aged 11 and 12 and they were divided into two equal groups of 30 entities. All participants are involved in a systematic training process in their football clubs. The research problem was to determine whether there are positive effects of programmed work on the development of basic motor skills. A total of 16 variables from the area of basic motor skills were used in the research. The experimental work program was carried out over a period of three months and included 38 training units. After initial testing and successfully implemented programmed work and final testing, a significant impact of programmed work on the development of basic (fundamental) motor skills was determined. In general, looking at the total motor abilities that were evaluated from 16 variables in the experimental group, a statistically significant difference was achieved in 11 variables, in the control group 6 with a positive significant difference.

**Keywords:** basic motor skills, football program effects, young soccer players

## INTRODUCTION

In the modern classification of sports activities, football belongs to the group of complex activities, football is a sport characterized by various and numerous complex dynamic kinesiology activities in which, in addition to complex movements, there are also cyclical movements. Starting from the situations in the game, it must be stated that the implementation of attack or defense depends on the player's ability to perform certain movements of different intensity, in different directions and in different parts of the playing field. In the training of young football players, maximum attention should be paid to the development of football technique along with the complete development of psychophysical abilities that are necessary for the technique to reach its peak. Today's game is looking for universal footballers with maximum concentration and precision. Only those players who possess a high level of technical-tactical, psychological and physical preparation can respond to such demands.

In the research (Gabrijelic, M., 1972) with the aim of determining which psychomotor abilities are potentially significant for the success of children in football, author comes to the conclusion that explosive power is significant for the future success of boys in soccer. In a similar study (Petric, D., 1981) on a sample of 82 soccer players aged 15-18 years, a battery of tests (basic motoric and situational) was applied and their association with success in the manifest and latent space was established. The greatest contribution to the

multiple correlation in the manifest space was made by tests of running speed with a change in the direction of movement, and in the latent factor explosive power and precision.

In another study (Rasic, S., 1997) the relationships between the basic-motor and specific-technical abilities of football players who were divided into three age groups (11-13, 14-16, 17-18) were determined. The results of analyzes to assess the differences between the age groups of subjects showed a significant difference between all age groups in all variables of basic motor skills, while in the case of specific technique a significant difference was also obtained between the groups of subjects, except in the variables for assessing precision with the left and right leg.

When it comes to football and the priority of developing certain abilities, it is very important to monitor the period of sensitive phases and the percentage of importance of a certain motor ability in football. Certainly speed, explosiveness and agility play a big role, which are among the most dominant abilities and play a big role in the equation of the specification of the football game. Of course, in modern football, fast movements are common, which are manifested by various sprints of shorter or longer distances, explosive reactions (especially in the jump) and rapid changes in the direction of movement (Ivanjko et al., 2010). In order for coaches to have a better insight and opportunity for the advancement of their players and therefore increase the possibility of achieving better results, a lot of attention is paid to testing and measuring

parameters from the mentioned areas, what is very important is the long-term monitoring of these results, on the basis of which we can assess the state soccer player. The goal of every coach is to improve the sports results of his athletes and teams. In order to succeed in this, he must regularly receive and forward feedback to the athletes about their performance.

## RESEARCH METHODOLOGY

### Participants

The sample of participants in this research were soccer players aged 11 and 12 who were divided into two equal groups of 30 entities. All respondents are involved in the systematic training process in their clubs.

### Variables

#### I) Balance assessment tests:

1) Flamingo test (FL-test) – the subject stands on the balance beam with the dominant leg so that the longitudinal axis of the foot is parallel to the bench. Grab the free leg, bent at the knee on the same side, by the ankle. The subject can use his free hand to maintain balance. Assistance is allowed until he regains his balance, which stops when the test begins. When he loses his balance or drops his free leg, he stops the timing.

2) Standing on two legs lengthwise on a balance beam with eyes open (S2NOO) – leaning on the wall with one hand, the barefoot subject stands with both feet along the balance bench, so that his feet are directly behind each other. The bench is away from the wall by the average length of the subject's arms, and it is placed so that the sides of the bench are parallel to the wall. The examinee places the palm of the other hand against the hip. When the subject feels that he has regained his balance, he moves his hand away from the wall and hugs it to his body. Both hands remain close to the hips during the task. The subject's task is to stay in a balanced position as long as possible.

3) Standing on one leg crosswise on a balance bench with eyes open (S1NOO) – the barefoot subject stands with the forefoot of any leg crosswise on the balance bench and touches the ground with the other foot. Place your palms on your hips. The choice of the leg on which to maintain balance is left to the subject, with the condition that after the choice, he performs the entire test on that leg. The subject's task is to, after lifting the leg with which he is standing on the ground, remain as long as possible in a balanced position on one leg with his arms close to the body.

#### II) Speed assessment tests:

4) Running 60 meters from a high start (TRC60M) - two flags are placed at a distance of 60 meters. The examinee takes a stance for a high start at the first flag, and the meter is located at the second flag. At the moment of the start, the timer starts the stopwatch, and it stops when the test subject runs past the second flag.

5) Tapping with the foot (TAPNOG) – the examinee sits on the front part of the chair without leaning his back on the backrest, with his hands on his waist. The taping board is placed in front of the chair so that its longer side rests against the right leg of the chair. The subject, a right-handed person, places his left foot on the ground next to the wooden structure, and his right foot on a board that serves as a stand, on the left side of the partition. At the "now" signal, the subject moves his right leg as quickly as possible from one side of the partition to the other, touching the front part of the foot (or the whole foot) to the horizontal board of the stand (lefties work with the left leg). The task is performed in 15 seconds

6) Tapping with the foot on the wall (TAPNOGZ) - On the wall or any other hard vertical surface, mark a square 20x20 cm, the bottom edge of which is 36 cm away from the ground. The examinee stands in a tight stance, facing the wall on which the square is marked. After several trial attempts, the subject chooses the most favorable distance from the vertical surface. The subject's task is to hit the marked square with double kicks with the front part of the foot, alternating with one leg and the other, as quickly as possible in 15 seconds. The result is the number of correctly performed (double) alternating foot strikes on the marked square surface in 15 seconds.

#### III) Tests for assessment of coordination:

7) Backwards polygon (POLNATR) – A 1-meter-long line is drawn on the ground (start), and another line is drawn parallel to it at a distance of 10 meters (goal). Three meters from the "start" line, the upholstered base of the Swedish box is placed. The place where the crate is placed is marked. At 6 meters from the starting line, the largest box frame is placed transversely on the track, so that it touches the ground with its longer side. The location of this obstacle is also marked. The examinee assumes a quadrupedal position (resting on the feet and palms), with his back to the obstacles. His feet are right in front of the starting line. The subject's task is to cross a space of 10 meters by walking on all fours, overcoming obstacles, after the sign "now"; he

must overcome the first obstacle by climbing, and the second by crawling. During the task, the subject must not turn his head at any time. The task is performed 4 times. The subjects have a break between individual attempts. The task is completed when the subject crosses the finish line with both hands.

8) Figure of eight with bending (OSMSAG) - Two racks are placed at a distance of four meters, and an elastic band is strung between them at the upper level of the pelvic bone. The subject stands in a high start position next to one rack, facing the other. The toes of the front leg are in the plane of the stand next to which he is standing. At the signal "now", the subject goes around the racks as fast as he can, following the imaginary line of the laid number 8, each time bending under the stretched elastic band. After the subject walks around the stand in the described manner four times (8 bends) and runs past the stand, which is swinging his arms forward, he jumps as far as he can. The result of the examinee is the length of the correct jump in centimeters from the marking line to the back part of the heel print that is closer to the point of reflection.

9) Slalom with two balls (SLNO2L) - at a distance of two meters from the starting line, five racks are placed so that the total distance is 10 meters. The subject's task is to guide two balls between the racks (slalom guiding) to the goal line in the shortest possible time. The timer stands at the last stand and starts the stopwatch when the test subject touches one of the balls with his foot at the start, and stops the stopwatch when both balls and the test subject cross the finish line.

#### IV) Tests to assess explosive power:

10) Long jump from a standing position (SKOUDM) – In this test, the subject has the task of jumping forward as far as possible. The standing long jump is performed using a long jump track with a marked measuring scale. The test taker takes the starting position with the tops of the feet positioned at the exact spot of the long jump track. At the timekeeper's signal, he descends into a squat and engages in a coordinated manner, followed by a maximum reflection with a swing of his arms forward, and he jumps as far as he can. The result of the examinee is the length of the correct jump in centimeters from the marking line to the back of the heel of the foot that is closer to the point of reflection.

11) Countermovement jumps with arms (maxSKOUVP)/ (Maximal Counter Movement Jump – The test is performed similarly to the squat jump with preparation, with the difference that the hands are not isolated on the hips, but are in the swing function to achieve the

maximum height of the jump. In the preparatory phase, the hands are in a forward position at chest height. At the signal of the meter, the subject with a coordinated engagement of the hands descends into a squat, until the flexion in the knee joint is 90 degrees, then without stopping, he changes the direction of movement and performs a maximum vertical jump.

12) Counter Movement Jump (SKOUVP) – during the performance of the test, all phases of the jump are connected, i.e., there is no break at the moment of changing the direction of movement. In the preparatory phase, the examinee is in an upright position with hands fixed on the hips due to maximum isolation of the upper extremities during the jump. At the signal of the meter, the subject has the task to lower himself into a half-squat position, with the legs flexed at the knee joint at an angle of 90 degrees, and without stopping at the point of change of direction of movement, perform a maximum vertical jump.

#### V) Agility assessment tests:

13) Arrowhead Agility/Arrow test (ARROWD/ARROWL) – The subject starts the test with his foot behind the starting line, taking a high start position. At the "now" sign, he runs behind the stand in the middle, which is placed at a distance of 10 meters from the starting line, when the arrows test to the right/left side, the subject turns behind the middle stand to the right side and runs to the stand, which is placed 5 meters to the right/left of the central stand, goes around it and runs diagonally inwards towards the most prominent stand which is 15 meters away from the starting line, goes around it in the direction of the starting line where his final position of the test is. The result is read with an accuracy of 0.1 second.

14) Agility T-test (T-test) – In the preparatory phase, the subject is in a high start position on the marked line/marker/cone. At the timekeeper's signal, the subject starts with a maximum sprint forward to the second cone in the middle, which is 10 meters away from the starting position, and strides to the right to the third cone, which is 5 meters away, which he touches with his hand. After that, he returns to the center again and strides to the left side to the end cone that he touches, and again strides back to the starting point, the task is completed. The examinee must not touch the tape when passing under the elastic tape.

15) Steps to the side (KORUSTR) – Two parallel lines 1 meter long and 4 meters apart are marked on the ground. The examinee stands cross-legged inside the lines laterally along the first line. At the signal, the subject now moves as quickly as possible to the side (as far as possible) without

crossing his legs, to the second line. When he steps on the line with his outside foot or crosses it, he stops and, without changing his body position, returns to the first line in the same way, which he must also touch with his foot or cross it. When the examinee crosses a distance of 4 meters 6 times in the described manner and stands on the "starting" line or crosses it with the outside leg, the task is completed.

**Study design**

Initially, initial testing of all respondents was done on the mentioned variables from the area of basic motor skills, and then the respondents were randomly divided into two equal groups. During the duration of the experiment (3 months), the subjects in both groups had identical training load parameters, the same frequency (number) of training per week, the same number of matches played, with the difference that the experimental group performed a technical-tactical football training program that included certain elements intended for improving basic motor skills. The program contained 38 training units lasting 60 minutes per unit. The structure of the program was formed mainly on the basis of sensitive phases, the intensity of the load was adapted to the age, with an emphasis on proper mechanics of work as well as a sufficient level of rest. The experimental program contained warm-up exercises (dynamic stretching, proprioceptive

content or content for the development of high-speed explosive properties). The main part was reserved for the improvement of technical-tactical activities as well as certain exercises for the development of strong and coordinative qualities. The final part of the training consisted of stretching exercises with the additional improvement of soccer precision. At the end of the treatment, both groups were tested again in an identical way as during the initial measurement. The difference between the final and initial measurements represented the realized effects of the training work for both observed groups individually.

**Statistics**

Basic descriptive parameters were calculated for all variables, and the paired t test for dependent samples was used to determine the differences for both groups.

**RESULTS**

Table 1 shows the results of the central and dispersion parameters in the applied variables at the initial and final testing of the experimental group. In addition to the arithmetic mean, the table presents the minimum and maximum values, as well as measures of standard deviation and variance.

**Table 1 (descriptive parameters of the experimental group - initial/final)**

Variables	INITIAL					FINAL				
	Min	Max	Mean	SD	Variance	Min	Max	Mean	SD	Variance
<b>Balance tests</b>										
1. FL-test	6	15	10,87	2,27	5,15	6	14	10,20	2,10	4,44
2. S2NOO	2,5	28,1	8,75	6,90	47,64	4,40	60,06	13,39	11,60	134,59
3. S1NOO	2,10	19,80	5,27	4,03	16,28	2,60	17,20	6,30	3,60	13,02
<b>Running speed and segmental speed</b>										
4. TRC60M	8,78	13,50	10,50	1,02	1,05	7,50	11,63	9,39	0,74	0,55
5. TAPNOG	29	42	37,70	2,95	8,70	33	43	39,16	2,65	7,04
6. TAPNOGZ	15	23	18,67	2,18	4,78	17	26	21,46	2,34	5,49
<b>Coordination</b>										
7. POLNATR	8,55	26,03	13,24	3,70	13,75	8,20	24	11,88	3,32	11,07
8. OSMSAG	11,69	18,75	15,30	1,41	1,99	13,10	18,13	15	1,11	1,24
9. SLNO2L	7,30	14,03	9,31	1,57	2,49	7,10	14,50	9,30	1,61	2,62
<b>Explosive power (vertical jumps)</b>										
10. SKOUDM	120	190	157,60	19,47	389,28	116	195	158	19,93	397,58
11. maxSKOUIVP	17	42,1	25,94	5,36	28,82	18,1	45,8	27,93	5,62	31,62
12. SKOUIVP	16	35,2	22,41	4,44	19,77	15,2	37,2	23,7	4,59	21,06
<b>Planned agility</b>										
13. ARROWD	8,30	11,20	9,65	0,59	0,35	8,30	10,80	9,48	0,62	0,39
14. ARROWL	7,80	10,50	9,51	0,66	0,43	8,20	11,10	9,68	0,68	0,47
15. T-test	11,31	15,18	13,05	0,90	0,82	11	15,20	12,85	1,06	1,13
16. KORUSTR	8,68	12,40	10,05	0,91	0,84	8,32	11,75	9,46	0,71	0,51

LEGEND: FL test Flamingo test; S2NOO standing on two legs lengthwise on a balance beam with eyes open; S1NOO Standing on one leg crosswise on a balance beam with eyes open; TRC60M Running 60 meters from a high start; TAPNOG Tapping with the foot; TAPNOGZ Tapping with foot on the wall; POLNATR Backward polygon ; OSMSAG Eight with bending; SLNO2L Slalom with two balls; SKOUDM Long jump; maxSKOUIVP Vertical jump with arms; SKOUIVP counter movement jump; ARROWD/L-D Arrowhead Agility test (left or right); T-test Agility test 10m; KORUSTR - steps to the side

**Table 2 (descriptive parameters of the control group - initial/final)**

Variables	INITIAL					FINAL				
	Min	Max	Mean	SD	Variance	Min	Max	Mean	SD	Variance
<b>Balance tests</b>										
1. FL-test	5	19	11,27	3,14	9,88	6	18	1,65	2,88	8,31
2. S2NOO	3,70	26,60	7,77	4,80	23,11	3,18	41,75	8,69	7,44	55,41
3. S1NOO	1,90	9,12	4,72	2,02	4,09	2,19	10,01	4,89	1,75	3,08
<b>Running speed and segmental speed</b>										
4. TRC60M	9,10	13,10	10,72	1,13	1,28	8,60	12,84	10,12	1,13	1,29
5. TAPNOG	31	46	38	3,48	12,16	32	51	39,35	4,07	1,63
6. TAPNOGZ	16	25	20,62	2,36	5,60	16	27	21,58	2,63	5,93
<b>Coordination</b>										
7. POLNATR	9,74	22,84	15,30	3,29	10,87	9,78	21,10	14,21	3,24	10,50
8. OSMSAG	13,41	18,19	15,08	1,15	1,33	13,51	17,70	14,83	0,98	0,96
9. SLNO2L	6	12,10	9,28	1,66	2,78	7,99	15,22	10,43	1,93	3,73
<b>Explosive power (vertical jumps)</b>										
10. SKOUDM	107	181	150,92	21,35	455,99	105	185	145,54	23,31	543,45
11. maxSKOUPV	20	32,4	25,73	3,54	12,55	20,4	34,6	25,89	3,89	15,15
12. SKOUPV	15,8	29,6	22,52	3,54	12,55	18,1	35	23,45	3,42	11,73
<b>Planned agility</b>										
13. ARROWD	8,80	16,10	10,25	1,42	2,04	9,01	11,66	10,19	0,76	0,58
14. ARROWL	8,90	11,20	10,07	0,73	0,53	9,22	11,65	10,30	0,60	0,37
15. T-test	11,22	15,41	13,20	1,08	1,17	40,92	16,50	13,66	1,34	1,81
16. KORUSTR	8,43	12,52	10,04	0,93	0,87	9	12,24	10,16	0,79	0,80

LEGEND: FL test Flamingo test; S2NOO standing on two legs lengthwise on a balance beam with eyes open; S1NOO Standing on one leg crosswise on a balance beam with eyes open; TRC60M Running 60 meters from a high start; TAPNOG Tapping with the foot; TAPNOGZ Tapping with foot on the wall; POLNATR Backward polygon ; OSMSAG Eight with bending; SLNO2L Slalom with two balls; SKOUDM Long jump; maxSKOUPV Vertical jump with arms; SKOUPV counter movement jump; ARROWD/L-D Arrowhead Agility test (left or right); T-test Agility test 10m; KORUSTR - steps to the side

**Table 3 (T-test of the initial and final and the size of the achieved effects by groups (%) (Level of statistical significance of the t test: (\* p < 0.05 \*\* p < 0.01. \*\*\* p < 0.001)**

VARIABLES	EKSPERIMENTAL (initial-final)	CONTROL (initial-final)
<b>Balance tests</b>		
FL-test	6,1%***	3,3%
S2NOO	53%*	11,6%
S1NOO	19,5%**	3,6%
<b>Running speed and segmental speed</b>		
TRC60M	11,8%***	6,4%**
TAPNOG	3,8%**	3,5%**
TAPNOGZ	14,9%***	4,6%
<b>Coordination</b>		
POLNATR	10,2%***	7,1%*
OSMSAG	1,9%	1,6%*
SLNO2L	0,1%	12,3%*
<b>Explosive power (vertical jumps)</b>		
SKOUDM	0,25%	-3,3%*
maxSKOUPV	7,6%***	0,6%
SKOUPV	5,7%**	4,1%*
<b>Planned agility</b>		
ARROWD	1,76%*	0,5%
ARROWL	-1,7%	-2,2%*
T-test agility	1,5%	-3,4%*
KORUSTR	5,8%***	-1,1%

LEGEND: FL test Flamingo test; S2NOO standing on two legs lengthwise on a balance beam with eyes open; S1NOO Standing on one leg crosswise on a balance beam with eyes open; TRC60M Running 60 meters from a high start; TAPNOG Tapping with the foot; TAPNOGZ Tapping with foot on the wall; POLNATR Backward polygon ; OSMSAG Eight with bending; SLNO2L Slalom with two balls; SKOUDM Long jump; maxSKOUPV Vertical jump with arms; SKOUPV counter movement jump; ARROWD/L-D Arrowhead Agility test (left or right); T-test Agility test 10m; KORUSTR - steps to the side

Table 2 shows the results of the central and dispersion parameters in the applied variables at the initial and final testing in the control group. In addition to the arithmetic mean, the table presents the minimum and maximum values, as well as measures of standard deviation and variance.

Table 3. presents the indirectly recalculated sizes of the achieved effects in both groups, expressed in percentages. A negative sign refers to a drop in results in the final measurement. A paired t test was used to determine the difference in the achieved effects.

## DISCUSSION

Considering the results of the research, it can be stated that out of 16 variables from the field of basic motoric skills, a significant difference was achieved in 11 variables in the experimental group, and in 6 variables in the control group. Based on the presented results, we can conclude that the subjects in the FI-test variable (flamingo test-balance) in the experimental group achieve a significant difference (6.1%<sup>\*\*\*</sup>) compared to the control group. Also, the other two variables from the balance field, standing on two legs on a balance bench with eyes open (S1NOO) and standing on one leg crosswise on a balance beam with eyes open (S2NOO) demonstrate significant differences only in the experimental group (S2NOO – exp - 53%<sup>\*</sup>; S1NOO - exp - 19.5%<sup>\*\*</sup>). A significant number of trainings for the experimental group in the work program included proprioceptive exercises of a unilateral character, and it is very certain that this significantly influenced the transformation towards improving results in the area of balance. Variables for speed assessment achieved positive results in both groups, except for the variable for speed assessment of movement frequency - segmental speed (TAPNOGZ) and that only in the control group. Namely, the variable running 60 meters from a high start (TRČ60M) achieved significant differences in both groups (exp - 11.8%<sup>\*\*\*</sup>; con - 6.4%<sup>\*\*</sup>), but it is important to emphasize that the achieved percentage of improvement in results in favor of the experimental group. The same applies to the foot tapping variable (TAPNOG) with a slightly smaller effective difference (ex - 3.8%<sup>\*\*</sup> / con - 3.5%<sup>\*\*</sup>). While the variable taping the foot against the wall (TAPNOGZ) achieves a significant difference only in the experimental group (exp - 14.9%<sup>\*\*\*</sup>). It is evident that in the applied work program of the experimental group in each training unit, one or more contents for the development of speed-explosive abilities are vacant. According to some researches (Vistica F., 2001), it is stated that at the

age of 10-14 years, there is an accelerated development of muscle strength, which simultaneously has a positive effect on running speed and segmental movement speed. Testosterone secretion in boys at this age has a positive effect on strength and consequently on speed.

Coordination variables, primarily the variable backward polygon (POLNATR) achieved a significant difference in both groups, with a slightly superior result in the experimental group (exp - 10.2%<sup>\*\*\*</sup> / con - 7.11%). The variables figure (slalom) eight with bending (OSMSAG) and slalom with two balls (SLNO2L) achieved significant differences only in the control group (OSMSAG con - 1.6%<sup>\*</sup>; SLNO2L - 12.3%<sup>\*</sup>). Accordingly, in the research of basic and specific exercises for the development of coordination of U9 and U10 soccer players, it was stated that basic coordination in soccer represents that coordination whose manifestation is not related to soccer technique (Jambrusic, 2020). As the reason for the inferior result of the experimental group in the mentioned variables, we can take the association of movement structures in the variables with specific movements in football. In a very small percentage, we have movements in the game as explained by these two variables. These variables showed minimal improvement but no significant difference.

The variable for evaluating explosive strength, standing long jump from (SKOUDM) did not show significant differences in the experimental group, while in the control group there was a drop in the results on the observed variable (- 3.3%<sup>\*</sup>) Considering that it is age 10 and 11 years, this coincides with the finding that the explosive strength of the horizontal and vertical jump type increases linearly in boys from 5 to 18 years of age. According to Issurin (2008), explosive strength can be most influenced by training from the age of 11 to 13, despite this, the explosive strength variables of the vertical component of the maximum high jump with preparation (counter movement jump with arms) (maxSKOUVP) and counter movement jump (legs only) (SKOUVP) in the experimental group achieved significant results (maxSKOUVP – exp 7.6%<sup>\*\*\*</sup> ; SKOUVP – exp 5.7%<sup>\*\*</sup>). Namely, the results of the experimental group show that there was an improvement in the results on the variables for the assessment of vertical jump.

Planned agility in the control group showed different, mostly opposite results. On the ARROWD variable, there was a significant improvement in the results of the experimental group of 1.76%<sup>\*</sup>. However, on the second variable, ARROWL, there was a significant worsening of the results in the control group (-

2.2%\*). Such a result probably corresponds to the reason for the mechanics of the foot position when changing the direction. Stagnation, i.e., a minimal drop in results despite the applied content for the development of agility, can also be a stagnation of the ability to sense rhythm, as well as the ability to synchronize movements, which had its intensive development in the period from 6 to 8 years. (Mackovic, 2019) Also, accelerated growth and development, which is intense in the period of 11 years, disrupts intermuscular coordination, which can have an impact on the ability of fast coordinated movements, as well as agility. Lateral agility, which was evaluated by the variable steps to the side (KORUSTR), achieved a significant difference in the experimental group (5.8%\*\*\*). Such results demonstrate that the designed training program had a positive effect on the improvement of lateral planned agility. Regardless of the achieved results on all the selected variables of planned agility, it would be interesting in future research to see the contribution of unplanned (randomized) agility, which in addition to the motor component also includes a cognitive aspect, because this form of

agility is encountered much more often in real sports situations on the field.

## PRACTICAL VALUE

Research of this type has equal theoretical and practical importance and can be classified in the group of applied research. In today's development of young athletes, it is extremely important to generally develop all abilities that directly and indirectly affect the game itself, especially in the period when the body of a soccer player develops quickly, both physically and mentally. Great attention should be paid to the sensitive stages of this age in order to rapidly and timely develop abilities in the period when it is the best time for that. The practical value of this research consists globally of a battery of variables from the area of basic motor skills, on the basis of which, by applying them in practice, problems related to sports orientation and the choice of boys in football will be more effectively solved. The obtained results can contribute to easier and more specific planning and programming of the training process of young football players, which is extremely important in their development.

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