EXAMINATION OF THE EFFECT OF VARIOUS DRILLS FOR IMPROVEMENT CONDITIONING AND TECHNICAL ELEMENTS WITH 12 YEARS OLD FOOTBALL PLAYERS

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Abstract: Trends in the development of contemporary children-adolescent's football supposes the necessity of creating a long-term training programme, to cover all aspects of a sport preparation – technical and tactical, physical, psychological and social, and all they being inseparably connected. Training process in the period up to 12 years old individuals, first of all should be connected with the pleasure by the game itself, and through it to develop the qualities of football players, the development of technical skills being a priority. Technical development of contestants should go hand-in-hand with the physical one, taking into consideration all peculiarities of still growing up child's organism.The good physical preparation in football exerts a direct influence to the possibility of football player to disclose the full set of technical and tactical abilities.In the present study, we investigate the influence of expert-selected means on technical and conditional elements typical for the stage of development of 12 years old football players. A preparatory plan is followed by 31 football contestants of the age 11±0.5 years participated in the experiment and in the period of 4 months, worked out in advance, including the means for development of speed, dynamic force, control of passing and leading the ball. Classes directed towards development of the technical preparation were carried out in the first training occupation for the weekly micro cycle during the competitive period of the first half season. As a result of the study we observe an increase in the indices investigated as follows: speed – manifested by tests „10mdash" and „20m dash", respectively(-2.72%)and(-3.51%). Dynamic force manifested by a test „Standing Long jump"– (5.92%).
Leading of ball manifested by test „Dribble"- (-2.98%). Control of passing, manifested by test „Control of passing"-(-7.9%). The offered by us means, arranged in the described sequence give a positive effect on the investigated indices with children footballers of the age 12 years.
Keywords: condition; technique; football;

1. INTRODUCTION

In the contemporary football, the technique of leading and controlling is of decisive significance for the result of the match. These qualities develop since early age by priority, when the ability for learning of new coordination skills is very high (3, 4, 14).Regarding the subject of complexity within learning new technical skills, it is necessary to go step-by-step from easy motor actions to more difficult ones. When even the player with the least technical experience can execute the movement with ease, then we can move on to complicating it. Each step is repeate until the players master the drill during training practice. According to Ivanov P, (2013) "the criteria for mastery is the quality of the main action in the drill regarding its technical and tactical executation".Also, the speed and ability of prompt change of the direction often define an advantage of a certain players compared to others (1, 2, 3, 5, 7, 12, 13).Also, it is appropriate to note that the indicated age limit period is extremely favourable for development of speed, according to the sensitive periods of development (4, 6, 8, 11). In the current study we consider the possibility for improvement of the dynamic force and speed, with 12 years old football players through expert-selected means. *The aim*of the experiment is to make perfect the sport preparation, by studying the scientifically grounded expert methods for conditional and technical preparation with children football players. *Object*of study are expert-selected means for conditional and technical preparation and their influence on the preparation of young football players. In the study participated *a contingent of* totally 31football players of the age 11±0.5, a part of the representative teamU12 ofChildren's and adolescent school with the Professional Football Club Levski, Sofia.

2. AIM, ORGANIZATION AND METHODS OF THE INVESTIGATION

Choice of tests

With the selection of tests about the level of conditional and technical preparation with children football players, we had into consideration the specifics of football game with children, resulting from the form(F5, F7, F9), as well as the age limit specifics of growing up organism. Similar tests have been used by Stoilov (9), in the format futsal (F5). The choice of test battery has been dictated by the following considerations:

- Literature data of reliability, validity and objectivity

- Elimination of indices characterizing with high variability and abnormal distribution of frequencies (high values of asymmetry and excess)
- All tests are maximally simplified and conformed to the age peculiarities of children at starting education.

Test „Dribble“

The aim of the test is to go as quickly as possible and without any faults through the parkour by dribbling the ball. Time for covering is detected by photocells for start and final. At the test the ball is put on the start line, and the starting leg next to it. For test ending the ball should be obligatory stepped on at the final zone. By the test the ability to dribble at maximum speed is examined.

Test „Standing long jump”

By the test the explosive force of lower limbs is examined. The investigated individual, at standing position without accelerating jumps forwards with both legs at the same time. Strokeby hands and spring action without separating the feet from the ground is allowed. At sliding or falling, the attempt is not regarded. The two best results out of three attempts are recorded in centimeters with 1 cm accuracy. (10)

Test – „20m dash“

The test shows the level of the speed abilities of individuals investigated.

It is carried out on a filed with artificial grass, and the result is recorded by electronic measuring system – Newtest Powertimer, Finland. The contestant is standing in position high start and runs over the distance as quickly as possible. The best achievement out of two is recorded, at interval of break of 5-7min. The time in seconds is recorded with accuracy – 0,01s. (10)

Test – „Control of passing“

The aim of the test for control of the ball is to realize quickly 6 passes with change of the direction, towards two pass walls from passing zone, and for end of the test the ball should be stopped by the lower part of the foot of the individual examined. Passes are realized only from the zone marked. The ball should be mastered obligatory by one touch prior passing.The test gives us information about the ability of football player to control the ball.

Test – „10m dash“

The test shows the level of speed and start-accelerating abilities of the investigated individuals.It is implemented on a field with artificial grass, and the result is recorded by electronic measuring system – Newtest Powertimer, Finland. The contestant stands in position high start and runs the distance as quickly as possible. The best achievement out of two attempts is recorded, at interval of break of 5-7min. The time in seconds is recorded with accuracy – 0,01s.

Methods of preparation

Lessons directed towards development of the technical preparation have been held in the first training activity for the weekly micro-cycle during the competitive period of first half season with 12 years old ones. These with trend towards development of the condition of contestants have been held respectively in the second training session. Every two weeks the complexity and type of the training means (exercises) have been changed.

Distribution of training means in the weekly micro-cycle

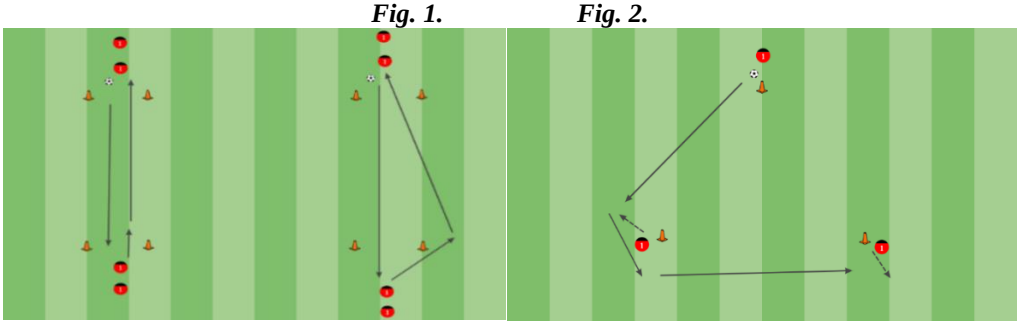
Table 1.

Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Trend	Technique	rest	Condition + football	rest	Football	Match	-

Choice of training means

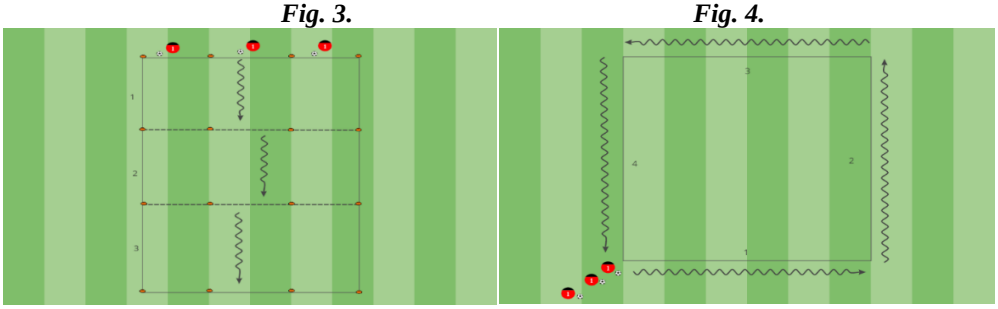
In the following figures we have illustrated the drills used for technical preparation and their trend

Fig. 1. ***Fig. 2.***



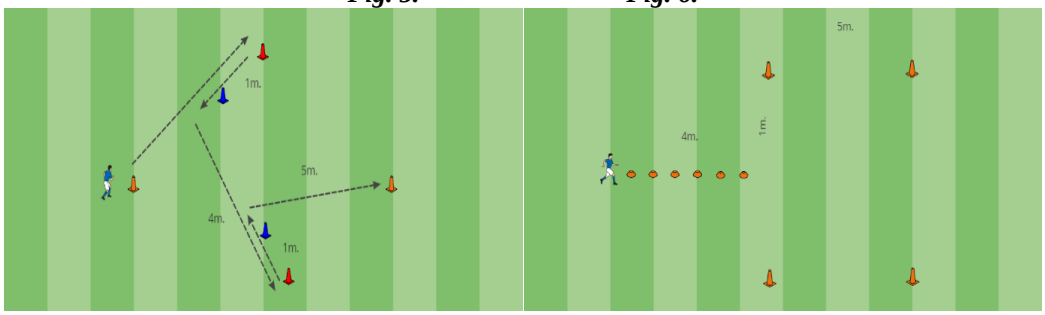
Cones are put at intervals of 8m distance, forming goals. Football players make different types of mastering: - by the lower part of the foot, by the inner part of the foot, by the outer part of the foot. 3 series of 5 min each are implemented.
Variant1 – mastering through the goal;Variant 2 – mastering aside the goal;
Cones are placed at intervals of 7 m distance, forming a triangular. Group is divided into triads. 2 touches are worked out. Different types of mastering of the ball are used – by the inner part of foot, by the outer part of foot. 4 series of 4 min each are implemented.

Fig. 3. ***Fig. 4.***



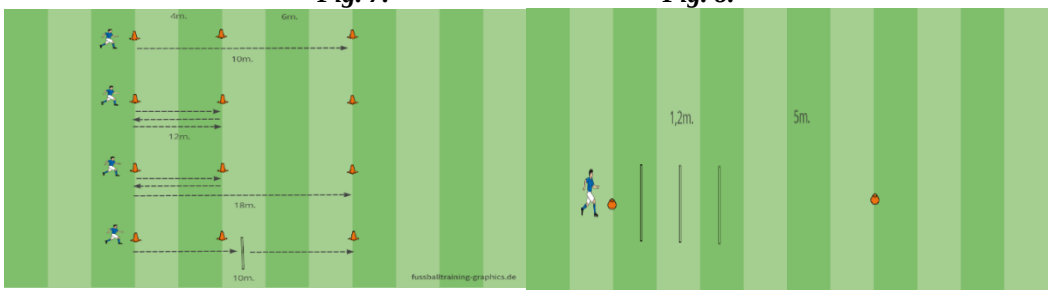
The field is divided into three zones. In each zone, footballers fulfill different type of ball leading – leading only by right foot, leading only by left foot, leading between the legs, leading by ball rolling, leading outside/ inside (by one or two legs). Such types of exercises help building up a feeling to the ball, improving the skills for dribbling and increasing the speed. 2 series of 4 min each are implemented.
On the field,a square is drawn by markers of sizes 10x10m.Footballers lead the ball making different types of leading the ball on each side of the square. In each zone, the footballers implement different types of leading the ball – leading by right foot only, leading by left foot only, leading between the legs, leading by ball rolling, leading by outside and inner part (by one or both legs). Similar types of exercises help building a feeling to the ball, improving the skills for dribbling and increasing the speed. 2 series of 4 min each are implemented.
On Figures 5, 6, 7 and 8 also have been presented the means for development of speed and dynamic force.

Fig. 5. ***Fig. 6.***



Quick change of the direction; the cones are arranged as shown on Fig. 5. Change of the direction and sprint to the distant cone as quick as possible is required. 4 repetitions are implemented with a break of 45sec between each one.
Contestants start by frequent running of the marked 4-meters distance. In the end the direction of movement is changed by side running, going round the side cone from the outer side and sprinting to the distant cone.3 series of 2 passes each are implemented.

Fig. 7. ***Fig. 8.***



Sprint activity of different length. 2 runs for each variant, at 45 sec rest are implemented. The break between the different variants is not less than 1.5 min. Change of the direction is made by putting the closest leg on the imaginary line between the cones.
Jump over hurdle with holding and sprint. Hurdles on height not more than 20см; 3 passes by each leg at 45 sec break are implemented.The last series consists of two passes by two legs at 30 sec break.

3. ANALYSIS OF THE RESULTS

Variation analysis of data from the testing for the Experimental group – initial test

Table2.

Index	n	X min	Xmax	R	X	S	V	As	Ex
10m	28	1.93	2.43	0.5	2.17	0.12	5.31	-0.01	0.155
20m	28	3.35	3.99	0.64	3.74	0.16	4.21	-0.659	0.837
Jump	28	155	211	56	178.57	14.28	8.00	0.531	-0.063
Dribble	28	9.38	12.68	3.3	11.07	0.75	6.75	-0.036	0.143
Control	28	8.27	13.3	5.03	10.32	1.21	11.77	0.716	0.637

As evident from the variation analysis, results from the testing with the Experimentalgroup have normal distribution. Data of asymmetry and excess show values within the range of normal for the volume of the excerpt. Coefficient of variation defines the excerpt as significantly homogeneous for the index „Control of passing“,and extremely homogeneous for all remaining indices.
Variation analysis of data from the tests for Experimental group – final testing

Table3.

Index	n	X min	Xmax	R	X	S	V	As	Ex
10m	31	1.87	2.3	0.43	2.11	0.10	4.83	-0.235	-0.254
20m	31	3.25	3.88	0.63	3.60	0.14	3.90	-0.168	0.318
Jump	31	172	213	41	189.52	11.04	5.83	0.395	-0.476
Dribble	31	10.03	12.83	2.8	10.98	0.74	6.77	0.603	-0.389
Control	31	8.41	11.11	2.7	9.53	0.72	7.52	0.318	-0.593

Similar to the first study, from the variation analysis of the final one we could conclude that the data show normal distribution. Coefficient of variation defines the excerpt as significantly homogeneous for the index „Control of passing“,and extremely homogeneous for all other indices. The values of asymmetry and excess are within the norm. So, the data from Tables 3and4give us possibility to apply a method of comparative analysis, in order to establish the significance of growth of the results from the tests for both groups.
Comparative analysis for dependent excerpts, between the growth from first and second study

Table4.

Index	n	Beginning		End		Statistical significance of differences			
		X1	S1	X2	S2	d	d%	t	P (t)
10m	28	2.17	0.12	2.11	0.10	-0.06	-2.72	2.28	96.96
20m	28	3.74	0.16	3.61	0.13	-0.13	-3.51	3.07	99.52
Jump	28	178.57	14.28	189.14	10.57	10.57	5.92	3.21	99.65
Dribble	27	11.08	0.76	10.75	0.60	-0.33	-2.98	2.15	95.86
Control	28	10.32	1.21	9.50	0.74	-0.82	-7.90	3.20	99.65

Data from the comparative analysis shows clearly the significance in growth between the average values of both investigations. All indices studied show statistically significant differences – P(t) > 95%, in favour of the results from the final testing.

4. CONCLUSIONS

In view of the investigation carried out and the data got from testing the conditional and technical indices with 12 years old children-footballers, we could conclude that the methods offered for development of motor qualities and technical skills give a positive result and increases significantly the level of preparation of young footballers.

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