
Study on the optimization of the physical component of the training process at the level of juniors a by educating the motor quality resistance

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Abstract: *The theme chosen by us is a topic of great relevance, its importance consisting in trying to find some means and methods for developing motor quality - resistance, which, in the end, contributes to good physical training. Following the implementation of the training program, the results of the football team (juniors A) had a remarkable progression, the team physically performed well and the results confirm what they said.*

Keywords: *resistance, football, athlete, the ball, technical elements.*

INTRODUCTION

Instructive-educational methods are treated differently by specialists in the field, but some of them are used by teachers or permanent coaches: Exercise, personal example, conviction, praise and punishment. The teacher or coach is obliged to know the method of education by persuasion, because its consequences are different. The main weapon is the word.

Moving from teaching in physical education classes to training in football, it should be noted that during the speech the pronouncement of phrases will be slow, following the reaction of the auditor. If questions, misunderstandings or doubts arise from what the coach has reported, the explanations need to be repeated.

In this regard, speaking to a group of players or all team members, the stamp should be increased only if the player is remote, during a friendly or official match, when the conversation becomes difficult due to the presence of the spectators.

At the level of the junior A performance teams, we are witnessing a continuous acceleration of the pace of play. There is also an increase in the force of the attack but also of the defense in the sense that very well trained players appear.

PROBLEM STATEMENT

Motor skills must be discovered and improved by knowing the internal support, on which any of the body's movements are based (Macquet, A-C., Fleurance, F., 2006. pg. 313).

The motor measures of the body are materialized in the harmony and ease of motor expression in various bodily, playful, sporting or expression activities (Hale, D., Lauzon, L., quoted in Neagu, N., 2010, pg. 35), by performing motor activities, requiring either one or more parts or an assembly of body parts, which require the intervention and coordination of important muscle groups (Rigas, E., quoted in Neagu, N., 2010, pg. 35).

Prof. Dragnea Adrian considers that the motor act is a basic element of any movement, performed to build a motor action. This can be reflected as a reflex act (Dragnea, A., Bota, A., 1999, p. pg. 35).

The variety of content and form, the variety of functions performed by human motor activities, carried out at the most diverse ages, whether those with so-called direct or indirect actions, are characterized by the omnipresence of the formative function (Neagu, N., 2012, p. 21).

As an organized educational and educational process, performance sport is a bilateral process, in which, under the leadership of the specialists, subjects are systematically subjected to influences in constant accordance with the objectives of sport in general and those for each stage regarding the improvement of physical development and motor capacity (Turcanu, F., 2013, pp. 9).

The development of general resistance can be achieved using the following methods (Turcanu, F., Turcanu, D.S., 2010, pg. 70):

- Method of uniform efforts
- Method of variable efforts
- Method of repeated efforts
- Interval training method.

In the training of the players, we start from the premise that the athlete is coachable and also that his level of performance capacity changes in a positive sense (Drăgan, A., 2012, pg.7).

The content of the football game must be known both by players and, more importantly, by specialists. Efficiency in the game is demonstrated by the players; they are the ones who demonstrate during the 90 minutes, all the knowledge accumulated in the training process, a process elaborated and led by the coaches (Turcanu, F., Dragan, A., 2014, pg.24).

METHODOLOGY OF RESEARCH

Purpose of the study

The main goal was to design a set of exercises specific to the game of football and its implementation in the sample of subjects (Juniors A) with the role of improving the indices of motor quality – endurance.

The main objective of the study

The acquisition of theoretical knowledge in the field of football, one of the important means of education in general in relation to harmonious physical development, the development of motor quality – resistance, training and improvement of basic and specific motor skills.

The general hypothesis

We assume that by creating and implementing a specially designed set of exercises with specific means of playing football in juniors A (experimental group), we can record higher indices of basic motor quality – resistance to final testing compared to the initial one, but also results close to the norms and requirements of the Romanian Football Federation, specific to this motor quality.

Working methods

Analytical methods – the study of bibliographic materials

Descriptive methods – observation

The experimental method

Method of organizing and presenting data.

The graphic method

Mathematical-statistical method

Method of classification/ordering

The comparison/reporting method

To determine the performance level of motor quality – endurance, we used running over a distance of 2000 meters (control test used for testing junior football players):

Assigned score: (Table 2)

Table 2

PUNCTE	14-15 ani	16 ani	17 ani	18 ani	19-20 ani
100	6.04	5.57	5.57	5.49	5.59
95	6.49	6.40	6.45	6.33	6.35
90	7.07	6.58	7.01	6.50	6.52
85	7.20	7.11	7.12	7.03	7.04
80	7.30	7.22	7.20	7.12	7.13
75	7.39	7.31	7.28	7.21	7.22
70	7.47	7.40	7.35	7.29	7.30
65	7.55	7.47	7.42	7.37	7.38
60	8.03	7.55	7.48	7.44	7.45
55	8.10	8.02	7.54	7.51	7.52
50	8.17	8.10	8.00	7.58	7.59
45	8.25	8.17	8.06	8.06	8.06
40	8.33	8.25	8.13	8.13	8.13
35	8.41	8.34	8.20	8.21	8.21
30	8.50	8.43	8.27	8.30	8.30
25	9.01	8.53	8.35	8.40	8.40
20	9.13	9.04	8.46	8.52	8.51
15	9.28	9.18	8.59	9.06	9.07
10	9.49	9.37	9.21	9.25	9.32
5	10.22	10.07	10.03	9.55	10.15
0					

Research Methods

➤ *Technical complex 1:*

The athlete throws from the edge into the line. Athlete B moves toward A, takes a 180 degree turn, picks up the ball and crosses the ball. Athlete A goes on the long corner of the field (10 m) and C on the short corner. The completion is done alternately (Figure 1):

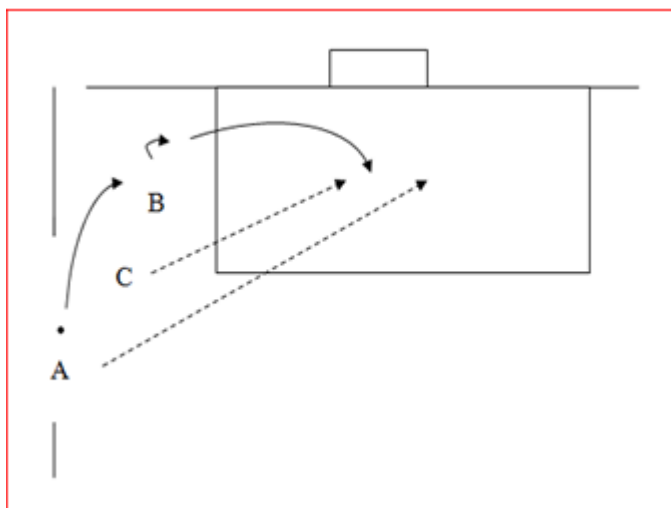


Figure 1

➤ *Technical complex 2:*

The athletes are arranged in groups of 3 such: Athletes B and C near the side bars of the football goal at a distance of 1.5 m., while the athlete A (with the ball) at the side of the field. The athlete A

cu performs a autopasa, followed by the ball centering in the box to clear the other two who, through energetic execution, hit the ball as far away as possible from the goal. The athlete who has not released, runs a run launched to retrieve the ball (Figure 2):

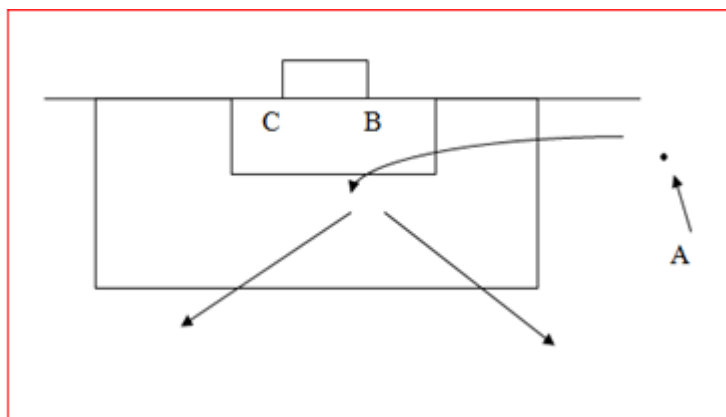


Figure 2

➤ **Technical complex 3:**

Two strikers (X1 and X2), half-way with the ball, try to overcome an athlete as a defender (O) by a two or two preceded by doubling. The two later perform a goal-cut (Figure 3):

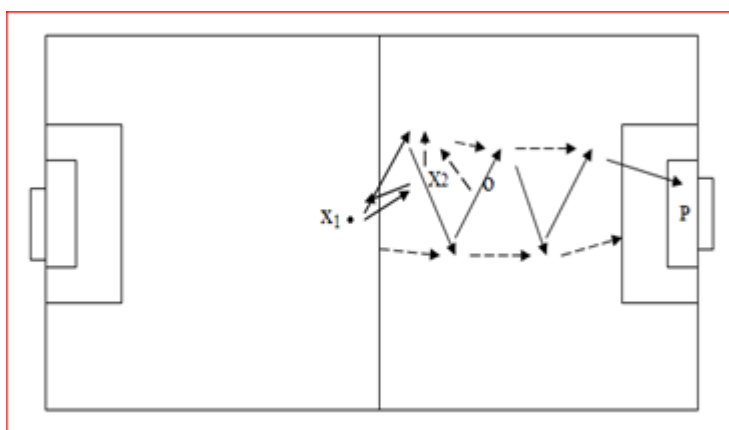


Figure 3

Findings

Table 2 resistance 2000 m. (sec.) Experimental group

No crt.	Name and first name	Initial testing	Final testing
1.	V.S.	7'40"	7'10"
2.	F.B.	7'58"	7'35"
3.	B.R.	7'30"	7'10"
4.	M.C.	7'43"	7'13"
5.	B.B.	7'44"	7'21"
6.	G.C.	7'43"	7'13"
7.	U.M	7'12"	7'00"
8.	K.B.	7'45"	7'15"
9.	R.R.	7'54"	7'44"
10.	S.C.	8'02"	7'44"

11.	B.P.	7'15"	7'05"
12.	M.Z.	7'58"	7'38"
13.	M.T.	7'30"	7'25"
14.	G.E.	7'43"	7'30"
15.	T.A.	7'24"	7'11"
16.	T.R.	8'43"	8'13"
17.	D.L.	7'12"	7'00"
18.	D.E.	7'24"	7'02"
19.	K.G.	7'34"	7'31"
20.	T.S.	7'05"	6'34"
21.	I.C.	7'15"	6'00"
22.	V.D.	6'58"	6'28"
23.	H.D.	7'30"	7'11"
AVERAGE		7'37"	7'10"

The test values converted from seconds to points (according to F.R.F table) corresponding to the experimental group are shown in Table 3:

Table 3 resistance 2000 m. (points)/ experimental group

No crt.	Name and first name	Initial testing	Final testing
1.	V.S.	60	80
2.	F.B.	50	65
3.	B.R.	70	80
4.	M.C.	60	75
5.	B.B.	60	75
6.	G.C.	60	75
7.	U.M	80	85
8.	K.B.	60	75
9.	R.R.	50	60
10.	S.C.	45	60
11.	B.P.	75	80
12.	M.Z.	50	60
13.	M.T.	70	70
14.	G.E.	60	65
15.	T.A.	70	80
16.	T.R.	20	75
17.	D.L.	80	85
18.	D.E.	70	85
19.	K.G.	65	65
20.	T.S.	80	90
21.	I.C.	75	95
22.	V.D.	90	95
23.	H.D.	70	80
AVERAGE		63,91	76,30

DISCUSSIONS

From the study of tables, a progress can be observed between the resistance values (expressed in seconds) of the two tests corresponding to the experimental group: Initial and final testing. This progress is exemplified by Figure 4:

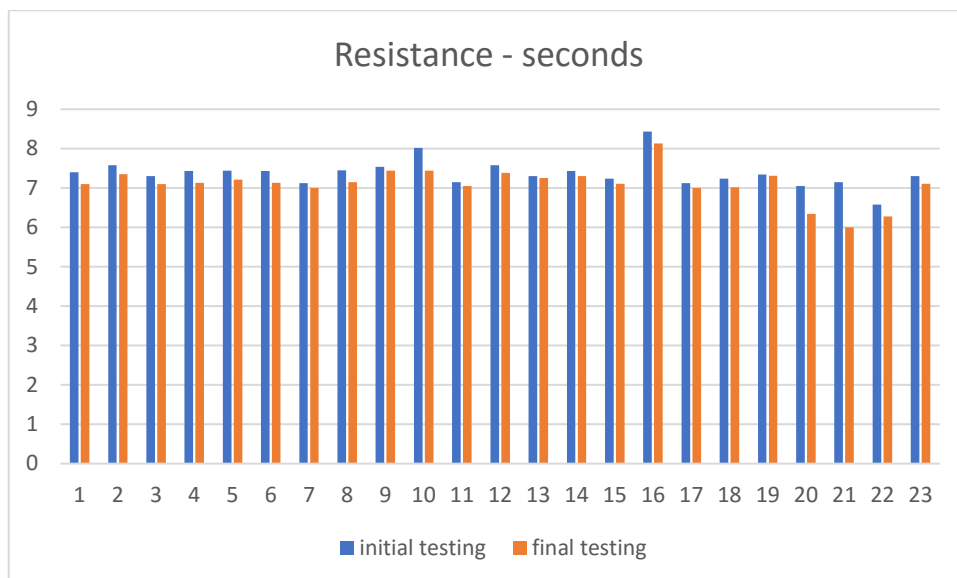


Figure 4

Also, from the study of tables, a progress can be seen between the resistance values converted into points of the two tests corresponding to the experimental group: Initial and final testing. This progress is exemplified by Figure 5:

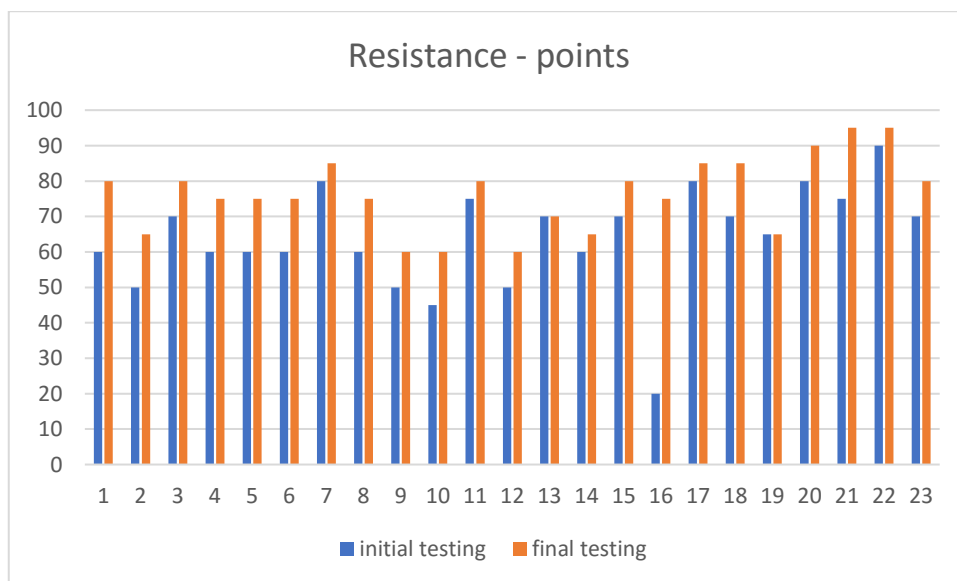


Figure 5

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Following the conduct of this study, the research hypothesis is confirmed in the sense that, by introducing specific technical complexes for football games in juniors A (experimental group), we can record higher indices of basic motor qualities – resistance to final testing compared to initial testing. Following the implementation of the training program, the results of the football team

(juniors A) had a remarkable progression, the team physically performed well and the results confirm what they said.

Recommendations

Diversifying the content of the training for the secondary school students by introducing the game of football in the physical education classes;

The most diverse use of the technical elements and procedures of the football game in the football terminal classes;

Using as many teaching materials and diversifying means in order to attract physical education classes in sports classes but also in training.

BIBLIOGRAPHY

1. Dragnea, A., Bota, A., *Theory of modern Sports Training*, Aldis Publishing House, Bucharest, 1999;
2. Drăgan, A., *Concepts regarding the deepening of training in football*, Editura Universităţii Dunarea de Jos, Galaţi, 2012;
3. Drăgan, A., Turcanu, F., *Concepts regarding the deepening of football training*, Editura Universitară Dunarea de Jos, Galaţi, 2012;
4. Dragan, A., Turcanu, F., *Methodics of teaching football in school at grades V-VIII*, Editura Universitară Dunarea de Jos, Galaţi, 2014;
5. Hales, D., Lauzon, L., *An invitation to health*, Nelson Education, Toronto, 2004;
6. Macquet, A-C., Fleurance, F., *Des modeles theoriques pour etudier l'activite de l'expert en sport*, Revue Science et Motricite, Nr. 2, Paris, 2006;
7. Neagu, N., *Theory and practice of human motor activity*, University Press Publishing House, Tîrgu Mureş, 2010;
8. Neagu, N., *Human motor – psycho-pedagogical foundations*, University Press Publishing House, Tîrgu Mureş, 2012;
9. Turcanu, F., *theoretical foundations of university teaching activities in physical education and sport*, University Press Publishing House, Târgu Mureş, 2013;
10. Turcanu, F., Turcanu, D.S., *TMDS – Volleyball, course notes*, lithographed UMF Tîrgu Mures, 2010;
11. Turcanu, F., Dragan, A., *FOOTBALL – Scientific foundations*, Dunarea de Jos University Foundation Publishing House, Galati, 2014.