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STUDY ON STAGE OF PHYSICAL COMPONENT DURING THE TRAINING PERIOD AT THE LEVEL OF A SENIOR TEAM – PROGRESUL BUCURESTI

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Abstract

Pourpose The study tries to emphasize the role of physical preparation within a senior team in the context of playing a football match at a high level, in accordance with the requirements of modern football. Also, a correct approach of motric component leads to a development of motric qualities (speed, force, resistance) to superior values applicable both in sport and social-esthetical issues.

Methods The bibliographic study, the method of observation as well as statistical-mathematical one helped me to create a clearer image about the motric potential of players.

Results The parameters followed were improved, being included in the sphere of qualification "good", as well as with excellent and satisfactory evolutions.

Conclusions The results reveal the fact that a special attention paid to motric component leads to a positive manifestation of the payers in the game and represents a new start point for the selection of new standards of physical component,

Key words: football, training, physical preparation

Introduction

In current football, the physical preparation became a component of training as important as the other components of the preparation process namely (mainly): technical preparation, tactical as well as the theoretical and psychological one. The general physical preparation is meant to insure the body a good working capacity during effort, and the special one is concretised by:

- Movements which develop and perfect the physical qualities required by the particularities of technique and tactics of football game;
- Training specific exercises in the technique of the game, such as – running and specific jumps (C. Cernăianu,.2001)

Current football proved that it is not enough to have a very good technical/tactical preparation, to win a game if physical component is not paid special attention, especially that the effort of a player is high enough in a football game. The teams with a high technical/tactical level registered often negative results due to this "problem" concretized in receiving goals at the end of matches, leading to an unjust result in spite of the reality in the field. Due to the requirements of modern football, physical preparation became an extremely important component in the context of higher and higher requirements, with special sportive results. With a view to particularise the training of the player, the physical preparation must include: resistance, force, elasticity, speed (of execution, of reaction, of running, of explosion, of stopping, of acceleration).(M Rădulescu, M.Dima, 2009). In this respect, it is absolutely necessary that physical preparation plays a more important role in the process of preparation in order to have an "answer" as efficient as possible during the football game, but it especially represents a preparing step for training the body for complex efforts at the level of requirements of superior stages of performance.

Hypotheses of the work

This work leaves from the ***hypothesis*** that, by paying special attention to physical preparation specific to football player, we obtain:

- *a physical preparation which may facilitate more the performance of tasks during the game under technical/tactical aspect*
- *a development of motric qualities (speed, force, skill, resistance) to superior values*
- *a development of some moral – volitive and intellectual qualities and traits, of esthetical sense and social responsibilities*

Subjects, period and place of research

The subjects of research are the players of the Group 1995 – Progresul Bucharest who have been supervised for around 2 years, on all components of training process. It must be stated that the team of players is mainly formed of junior players, born in 1992 and 1991; to these are added a few seniors, the physical component being only a transient/momentary one. The research was carried

out on the sport base Cotroceni, during the first part of training period, namely during 05 - 08.01.2010 it continued in the mountains during the centralized period (cantonment) – 27.01.-05.02.2010 and ended on the sport base Cotroceni 15-19.02.2010. In the first part, one concentrated on the development of aerobe capacity, with long running and on different field, focusing on the volume of work, passing subsequently to shorter distances but with heavy charge; afterwards, we have increased the intensity on the same distances. It followed the cantonment which resumed in first instance pure endurance, but on a much higher level, afterwards, there were performed „pieces" on short distances under more difficult conditions and on different field (low temperature, dips, snow, forest road). Under these conditions, it was performed the intermediary trial only as orientation level, opposite to initial and final trial. In the stage before cantonment, they worked in the force room twice a week focusing on superior body, afterwards, the cantonment represented a force training in the force room, continuing to work the same groups of muscles of superior body. On the force trials of superior body one attempted to assess certain specific parameters namely: abdomens, flotations, bar tractions. For force trials, I tried to assure a development of upper body, especially because this component became almost vital in the football game. In this respect, the results were significant, especially if we consider that a great part of them are still juniors (17-18 years) and they have not worked specifically until currently but very little.

Trials of control

In order to deal with physical problems we have set forth the following control trials:

1. ***Cooper test – 12 minute –*** represents a somehow difficult test which shows the level of preparation of aerobe/anaerobe component (resistance on speed)- fair enough. The intermediary testing was performed on different field, with snow and slopes of 30 degrees, on forest road. The final trial was performed on athletic field under standard conditions, each of them running as much as possible during 12 minutes .
2. ***2000m -*** running on different field, with snow and dips with a slope of 30 degrees, on forest road. The final trial was performed on athletic field under standard conditions. The maximum time accepted with the qualification excellent 9.00min
3. ***1000m –*** running on different field, with snow and dips with a slope of 30 degrees, on forest road. The final trial was performed on athletic field under standard conditions. The final trial was performed on athletic field under standard conditions. The maximum time accepted was of 4.00min.
4. ***100m flat*** – under the same conditions as on 50 m flat. The maximum time accepted was of 12.2sec.
5. ***50m plat*** – when we had 3 trials (initial, intermediary and final), with the amendment that the intermediary trial was performed in the mountains in cantonment at Voineasa, on flat forest road and on snow. The maximum time accepted was of 6.4sec.
6. ***Abdomen –*** there were registered values at the beginning of training period, in cantonment and after cantonment during the final trial. There were registered correct executions for a period of 30 seconds (the performer has to touch the floor with the back)
7. ***Flotations –*** the same situation as for abdomens – there were registered correct executions for a period of 30 seconds (the performer has to bend the arms on 90 degrees)
8. ***Bar tractions*** the same situation as for abdomens - there were registered correct executions for a period of 30 seconds (the performer has to start with extended arms and to raise the chin over the fixed bar)

Methods of research used

We have elaborated this paper grounding on a range of methods of research which play a very important role in the performance of a real study of the team on this level of performance. Among the methods used:

- ***study of bibliography*** – we have considered a range of manuals and specialised books of some coaches famous in practice and theory of football game
- ***method of observation*** – we have watched a range of games and trainings, performing records of registration for the matches played by Progress Bucharest, as well as protocols of observation on training
- ***method of statistical-mathematical processing of data*** – we have calculated the arithmetical average for each trial, comparing the results with the ones specific to physical trials of football players on the level of performance specific to 4th League.

Interpretations of results

The best results obtained by the players of Progresul Bucharest team are included in the category of good and very good results, although the excellent ones were rare. Leaving from the idea that however the profess performed is a relative one, we may say that the parameters registered are good for a senior team of 4th League. Taking each parameter separately, we may say that some players have obtained considerable values the others being included in the average of the team.

On **Cooper test,** the average on final trial, under normal conditions of performance, was of 3056m within 12 minutes, result considered good (over 3000m – good, over 3100m – very good, over 3200m – excellent), although there have been players with very good results (3130m,3120m,3150m).

On the trial of **2000m** the average of distance crossed was of T1 – T2 - T3 (10.54min.-10.13min.-9.35min.) interpreted as being good (under 9 minutes – excellent); and here the results are non-homogenous, with results almost excellent (9.10minutes) as well as with satisfactory results (10.58 minutes).

On the trial of **1000m**, 4.22 represent the average which we consider to be very good (under 4 minutes – excellent). The majority of players respected the margin of 4 minutes, with slight exceptions (3.58min, as well as 5.26 min.).

The trial of **100m flat** had an average of the group on final trial of 12.28 sec, an average considered good, with a well enough progress on each player considering that the speed is genetically conditioned. The progress registered was of 0.20sec, being possible to result from the other motric qualities (force) . We may say the same for the trial of **50m plat** with an average of 6.38sec on last trial which represents an important progress opposite to initial testing, -0.14sec.

On force trials, the results were significant, especially if we consider that the majority of them are still juniors and did not work specifically until now but very little.

On **abdomens** the progress registered between T1 and T3 was of 6 units, reaching an average of 34 repetitions on last trial, being considered very good. On **floations** the evolutions of results from T1 to T3 was of 25.9 – 28.1 – 30.6 with a progress of 4.7 units, being interpreted as being good towards very good. **The tractions** on fixed bar presented the following evolution: 11.05 – 12.5 – 14.05; with a progress of 3 units. It is a pleasant surprise especially that the players did not work on this chapter; the results obtained were considered very good.

Conclusions

The physical training in the context of current football, must insure to football player the "necessary energy" to deal with the game who began to be more and more "athletic". What must be retained from this paper, is the fact that the approach of physical preparation must become an essential condition in the success of football performance. More the physical component is worked (without neglecting the other components of the preparation process) more the technical-tactical elements will be performed on high level, which leads to the increase of football show.

Table 1 Table with results on trials of resistance

No. crt	Name surname	Cooper test – 12 minutes				2000m				1000m			
		I	II	III	Progress	I	II	III	Progress	I	II	III	Progress
1	N.O.	2850	2960	3080	230m	10.36	9.36	9.12	1.24	5.52	5.05	4.26	1.26
2	L.A.	2780	2950	3100	320m	10.15	9.54	9.15	1.00	5.25	4.56	4.21	1.04
3	S.D.	2950	3000	3120	170m	10.16	9.52	9.10	1.06	4.51	4.20	4.12	0.39
4	I.G.	3000	3090	3150	150m	10.15	10.00	9.21	0.54	4.30	4.20	4.08	0.22
5	I. A.	2960	3000	3100	140m	10.32	10.05	9.26	1.06	5.00	4.36	4.15	0.45
6	G. P.	2820	2950	3070	250m	11.03	10.16	9.33	1.30	5.00	4.36	4.20	0.40
7	G. C.	2750	2950	3000	250m	11.01	10.21	9.45	1.16	5.00	4.48	4.19	0.41
8	G. F.	3000	3050	3150	150m	11.01	10.01	9.33	1.28	5.00	4.48	4.05	0.55
9	M. C.	2750	2900	3000	250m	11.58	11.03	10.05	1.57	6.00	5.17	5.03	0.57
10	D.T.	2850	2960	3020	170m	10.49	10.19	9.36	1.13	5.12	4.36	4.21	0.51
11	D. O.	2650	2800	2900	250m	12.45	12.20	10.58	1.47	6.15	5.34	5.26	0.49
12	A. A.	2880	2950	3080	200m	10.35	9.55	9.17	1.18	4.35	4.15	4.10	0.25
13	S. B.	3000	3050	3130	130m	10.26	9.50	9.19	1.07	5.27	4.42	4.18	1.09
14	B. D.	2960	3050	3100	140m	10.26	9.35	9.12	1.14	5.23	4.17	4.00	1.23
15	G. S.	2950	3000	3120	170m	10.27	9.43	9.22	1.05	5.08	4.23	3.58	1.10
16	B. A.	2700	2890	3020	320m	10.55	9.47	9.23	1.32	5.19	4.47	4.11	1.08
17	L. C.	2870	2950	3050	180m	10.28	9.50	9.21	1.07	5.09	4.32	4.16	0.53
18	S. B.	2830	2960	3050	220m	11.36	11.11	10.38	0.58	5.15	4.32	4.20	0.55
19	H. A.	2900	3000	3060	160m	10.37	9.48	9.14	1.23	5.00	4.39	4.12	0.48
20	A. V.	2650	2760	2850	200m	12.17	11.15	10.29	1.48	5.58	5.16	5.08	0.50
21	N.M.	2900	2950	3040	140m	10.38	9.54	9.25	1.13	5.05	4.40	4.25	0.40
Media		**2857**	**2960**	**3056**	**199m**	**10.54**	**10.13**	**9.35**	**1.18**	**5.15**	**4.42**	**4.22**	**0.53**

Table 2 Table with results on speed trials

No. Crt.	Name surname	100m				50m			
		I	II	III	Progress	I	II	III	Progress
1	N.O.	12.88	12.46	12.18	0.70	6.47	6.42	6.25	0.22
2	L.A.	12.45	12.39	12.21	0.24	6.41	6.35	6.28	0.13
3	S.D.	12.62	12.56	12.41	0.21	6.38	6.33	6.27	0.11
4	I.G.	12.63	12.57	12.48	0.15	6.81	6.76	6.62	0.19
5	I. A.	12.34	12.25	12.13	0.21	6.32	6.28	6.20	0.12
6	G. P.	12.98	12.77	12.71	0.27	6.68	6.57	6.51	0.17
7	G. C.	12.67	12.58	12.53	0.14	6.96	6.85	6.72	0.24
8	G. F.	12.22	11.84	11.79	0.43	6.55	6.51	6.42	0.13
9	M. C.	12.34	12.34	12.28	0.06	6.84	6.79	6.72	0.12
10	D.T.	12.76	12.68	12.59	0.17	6.76	6.72	6.65	0.11
11	D. O.	12.92	12.85	12.84	0.08	6.56	6.51	6.44	0.11
12	A. A.	12.34	12.10	12.06	0.28	6.43	6.39	6.29	0.14
13	S. B.	12.68	12.57	12.50	0.18	6.65	6.52	6.46	0.19
14	B. D.	12.26	12.08	12.04	0.22	6.43	6.37	6.27	0.16
15	G. S.	12.04	11.96	11.95	0.09	6.32	6.25	6.18	0.14
16	B. A.	12.08	11.91	11.86	0.22	6.22	6.19	6.12	0.10
17	L. C.	12.10	12.05	12.04	0.06	6.43	6.30	6.24	0.19
18	S. B.	12.30	12.27	12.24	0.06	6.44	6.36	6.29	0.15
19	H. A.	12.00	11.94	11.93	0.07	6.21	6.18	6.09	0.12
20	A. V.	12.55	12.50	12.31	0.24	6.63	6.55	6.49	0.14
21	N.M.	12.85	12.79	12.76	0.09	6.52	6.47	6.40	0.12
Media		**12.48**	**12.35**	**12.28**	**0.20**	**6.52**	**6.46**	**6.38**	**0.14**

Table 3 Table with results on force trials

No. Crt.	Name surname	abdomens				flotations				Bar tractions			
		I	II	III	Progress	I	II	III	Progress	I	II	III	Progress
1	N.O.	27	31	36	9	22	25	30	8	12	14	16	4
2	L.A.	28	34	39	11	25	27	31	6	11	12	14	3
3	S.D.	30	34	37	7	22	24	26	4	12	14	15	3
4	I.G.	27	29	33	6	26	28	32	6	11	12	13	2
5	I. A.	30	33	38	8	25	27	29	4	9	11	12	3
6	G. P.	29	32	38	9	28	29	32	4	10	12	13	3
7	G. C.	31	35	40	9	26	28	30	4	12	13	15	3
8	G. F.	29	32	35	6	25	27	30	5	11	13	14	3
9	M. C.	27	30	32	5	26	28	33	7	12	13	14	2
10	D.T.	28	31	35	7	27	29	31	4	9	10	12	3
11	D. O.	27	29	32	5	25	29	30	5	10	12	14	4
12	A. A.	31	32	33	2	26	27	30	4	11	12	14	3
13	S. B.	26	28	30	4	28	30	34	6	12	13	15	3
14	B. D.	29	33	35	6	26	29	31	5	14	15	16	2
15	G. S.	30	32	33	3	27	30	32	5	12	13	14	2
16	B. A.	29	31	32	3	28	31	32	4	11	12	14	3
17	L. C.	30	32	34	4	26	28	29	3	12	14	16	4
18	S. B.	28	30	33	5	25	28	30	5	11	13	14	3
19	H. A.	32	35	40	8	26	29	31	5	9	11	13	4
20	A. V.	26	29	31	5	27	29	30	3	10	12	13	3
21	N.M.	28	31	32	4	28	29	31	3	11	12	14	3
Media		**28.6**	**31.5**	**34.6**	**6**	**25.9**	**28.1**	**30.6**	**4.7**	**11.05**	**12.5**	**14.05**	**3**

Table 4 Average of results on trials on each trial as well as the progress registered

Nr. crt	trial	T1	T2	T3	Progress registered
1.	Cooper test -12 minutes	2857	2960	3056	199m
2.	2000m	10.54	10.13	9.35	1.18
3.	1000m	5.15	4.42	4.22	0.53
4.	100m	12.48	12.35	12.28	0.20
5.	50m	6.52	6.46	6.38	0.14
6.	abdomens	28.6	31.5	34.6	6
7.	flotations	25.9	28.1	30.6	4.7
8.	Bar tractions	11.05	12.5	14.05	3

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