

MOTOR SKILLS TRAINING - A BASIC FACTOR IN TRAINING JUNIOR FOOTBALLERS

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Abstract

One of the basic factors in the sports training of footballers at all levels, including junior level, is motor skills training. Specifically, the junior age coincides, to a large extent, with the sensitive periods of development of most motor skills, which is why this age should be given greater attention by football specialists. Thus, in order to start the differentiated development of specific motor skills at junior level in the game of football, it is necessary to experimentally assess the level of their development for each skill. These data are necessary to be compared with the national standards of Romania for the given age. In this way it is possible to intervene with different modern methods in order to optimize the level of motor skills training of junior footballers.

Introduction

A player's performance in a football match depends on their cognitive, perceptive and motor skills [7], all of which are influenced by technical, tactical, physiological, physical and mental factors [8, 10].

The vast majority of bibliographical sources unanimously state the fact that the motor skills training of junior footballers is one of the basic factors in their sports training [5, 6].

Recently, the role of non-specific motor coordination has been highlighted as an important predictor of talent in young football players [9]. There seems, however, to be a deficit in studies focused on the relationship between GSMS and nonspecific motor coordination which is particularly related to performance in fundamental motor skills (FMS). FMS are commonly grouped into the functional skill categories of locomotor, balance and manipulative skills [4]. According to Galahue's theoretical Triangulated Hourglass Model of motor development, mastering FMS leads to easier learning of sport-specific skills [3]. Given the fundamental nature of this relationship, it follows that mastery in FMS predicts a

higher level of physical activity in players [1, 2] which, in turn, predicts a significantly higher investment of time in practice. Thus, both the quality and quantity of sport-specific motor skills acquired is also increased.

That is to say, at the junior age, in this case 12-13 years old, the foundations of sports training are laid, which will then positively influence their general level of sports training. [11]To this finality, a comparative experiment was carried out in the north-eastern region of Romania, in localities to be named below.

One of the basic objectives of the research was to highlight the level of motor skills training of junior footballers on a regional level, in this case the north-eastern region of Romania, involving athletes from Suceava, Botoșani and Iași. In order to achieve this objective, junior footballers from 12 representative teams from the above-mentioned cities were tested. In this respect, six indicators representing the level of motor skills training of junior footballers were investigated and six tests were applied, one for each indicator.

Material-method

Thus, the following tests were used: Prone torso push-ups (abdominal strength), standing long jump (lower limb explosive strength), arm pull-ups (upper limb strength), 4x10m shuttle (specific endurance), 2000m run (overall endurance) and 30m run (specific speed).

After the players were tested on these indicators, the number of points accumulated for each score was recorded in Table 1 and Figures 1-6, and these scores were compared with the national minimum and maximum standards for each indicator.

Table 1. Indices of motor skill training of junior footballers

Nr. Or.	Control standards	Recorded result		Minimum standard		Maximum standard	
		Result	Score	Result	Score	Result	Score
1.	Torso flexions from the supine position, no. rep.	36.48	75	17	5	53	100
2.	Long jump from the spot, cm	2.14	65	1.70	5	2.60	100
3.	Traction in arms, no. rep.	8.33	80	1	10	14	100
4.	Shuttle 4x10 m, min, s.	10.13	90	12.3	5	9.2	100
5.	Running 2000 m, min., S.	7.34	85	10.22	5	6.04	100
6.	Running 30m, s.	4.38	80	5.3	5	3.9	100

As can be seen in Table 1, the test sequence presented here contains practically all the motor skills needed by a young footballer, in this case at junior level.

Thus, the first test, torso flexion from the prone position, represents the athlete's abdominal strength, both of the upper abdominal muscles and of the lower abdominal ones.

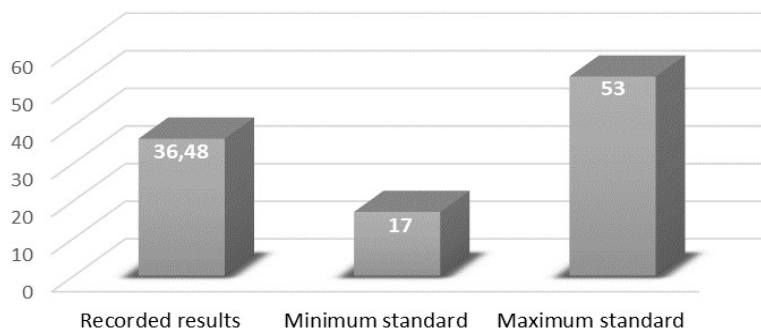


Fig. 1. Torso flexions from the prone position, number of repetitions

Looking at the recorded result, it can be seen that the junior footballers recorded 36.48 torso lifts. Comparing with the national standards on this indicator, we can see that the result is relatively lower compared to the maximum standard (53.0), but it is much higher compared to the minimum standards on this indicator, which is only 17 repetitions.

The results of the second indicator, the long jump from a standing position, which represents the level of development of explosive strength of footballers, which is one of the basic qualities of footballers at any level, do not differ significantly. The average long jump from the spot of the footballers of the 12 teams tested is 2.14 m, and according to the score shown in the table above, they accumulate 65 points out of a maximum of 100 standard maximum points, the result for this score being 2.60 m. Comparing the data with the national standards, the lowest score in this table is 1.7 m, for which the minimum score of 5 points is awarded.

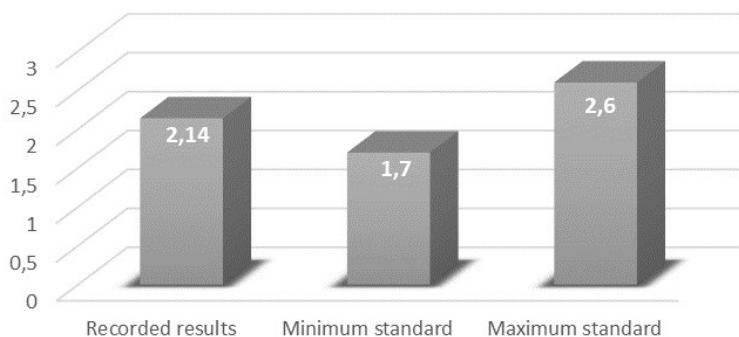


Fig. 2. Long jump from the spot, cm

The next test, conducted with junior footballers, was one that registers arm strength, this one being arm pulls at the fixed bar. Here the rules presented are relatively low, which is explained by the fact that arm strength is not the most necessary quality for a footballer, even if he is a junior. Thus, the footballers tested recorded, on average, a result equal to 8.33 pull-ups. According to the results table, athletes with this result are awarded 80 points out of a maximum of 100 points.

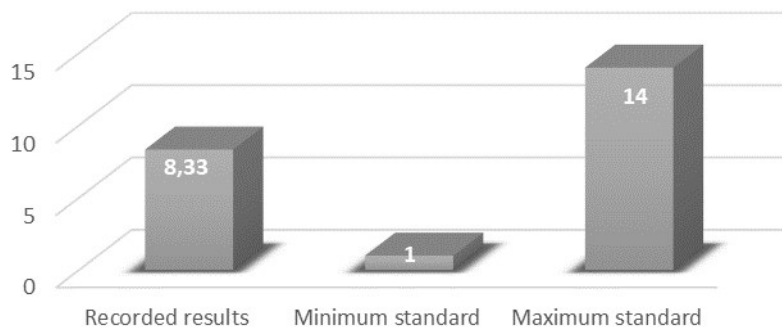


Fig. 3. Tractions in arms, no. rep.

The result recorded was a relatively good one, at which the athletes did quite well. It should be noted that the maximum number of fixed bar shots in the standards table is 14 shots for which 100 points are awarded. At the same time the minimum number of points (5) is awarded for a number of only one fixed bar pull.

Another test carried out with junior footballers was the endurance speed test, which was the 4x10 m run. According to the data recorded, the footballers of the 12 teams tested recorded, on average, a result equivalent to 10 minutes and 13 seconds. According to national standards, this result is awarded 90 points in the table. This means that the result is quite good and perfectly in line with national standards for this complex quality. For the athletes to accumulate the maximum number of points (100), they had to cover the distance in question in 9 minutes and 2 seconds. The lowest score that could be recorded to meet the national standards for the given age is 12 minutes and 30 seconds.

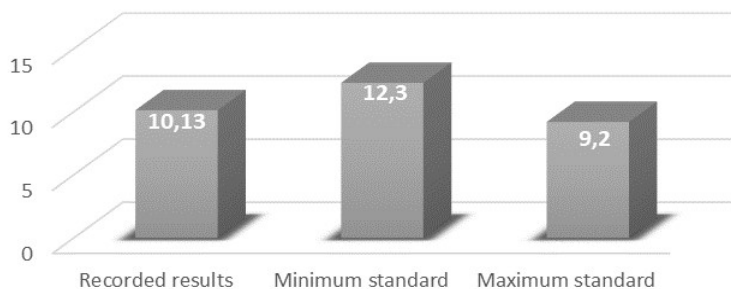


Fig. 4. Shuttle 4x10 m, min and seconds

The next test was one that determined the degree of development of general endurance in junior footballers, this was presented by the 2000m run test. As can be seen from the data presented in the table above, in this test too the tested athletes performed quite well, coming quite close to the maximum score indicated in the table. Thus, the average endurance run of the tested footballers was 7.34 min, which corresponds to a score equal to 80. To obtain the maximum score of 100 points the athletes would have had to achieve a result equal to at least 6.04 min.

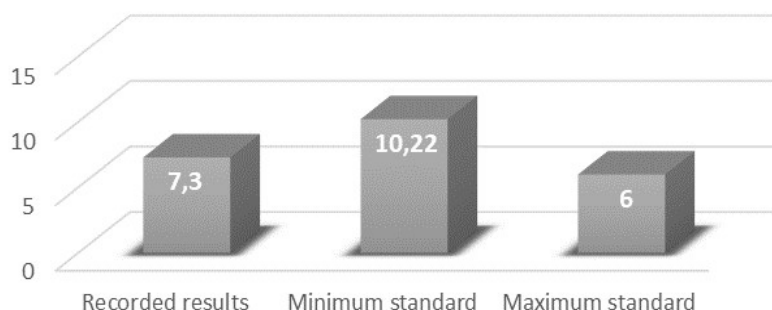


Fig. 5. Run 2000 m, min., sec.

Although this result was demonstrated by several athletes, however, there were also children who scored lower, resulting in the average shown above. The result for which athletes are awarded a minimum number of points (5) is 10.22 minutes and for results lower than these athletes are not awarded any points.

The sixth test with junior footballers was the one that assesses the level of development of motor skills-speed, one of the most demanded skills in football at all levels, the 30m run. According to the table presented, the footballers tested recorded an average result of 4.38 seconds. Comparing this result with that of the national standards table shows that this result is awarded 80 points out of a maximum of 100, which is a fairly good result for the age of the test subjects.

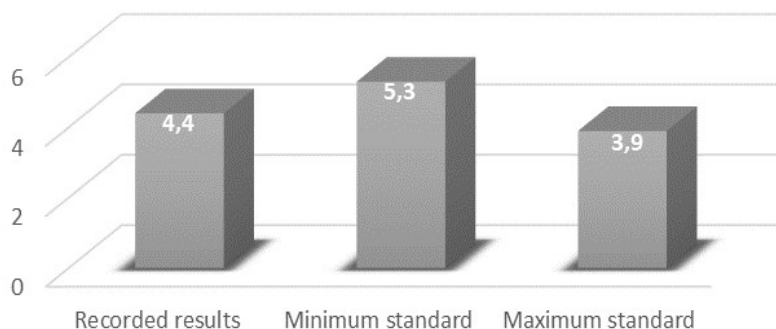


Fig. 6. Run 30m, sec.

Conclusions

Comparing the maximum and minimum results, in the first case the athletes had to record an average equal to or greater than 3.9 seconds and in the second case the result had to be no less than 10.32 seconds. For all results lower than the minimum indicated, athletes are not awarded any points.

Therefore also in this test the tested footballers scored quite close to the national standards, as in the other tests performed on the sample.

If we look at the whole development of general and specific motor skills, we see that the results for all the tested events are relatively homogeneous and the athletes have had a relatively good development in this respect. Even if there are some differences in the results, this can be explained by the content of the activities that each player has individually depending on the position, the general level of motor skills training and the anatomical constitution of each individual athlete. By coming up with a number of methodological recommendations, the specialists are able to improve one parameter or another, depending on the objectives they set themselves in one training period or another, taking into account the structure and content of each individual playing position.

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