

IMPROVING DETENTION IN FOOTBALL PLAYERS

Eduard Leonard GUȚĂ¹

Abstract: *“In this paper are highlighted the main concepts of training and improvement of detention to football players. Detention is an extremely important ingredient in football, as it is a combination of power, conditioning, flexibility and competence. Such features are essential to the success of a footballer and can be improved by appropriate training. For football players, detention is essential and can be and is commonly used as a measurement tool to assess the strength, explosive power and ability of the footballer to use power. Death to footballers can be enhanced by physical exercises in which muscles exercise maximum force at short intervals to increase dynamic performance. Through these exercises, the muscles are subjected to rapid elongation followed by an immediate shortening. In many situations, football players are attributed to their opponents in the air during some jumping to hit the ball. So, in order to win a duel in the air, the former should be able to make a higher jump. At the same time, a footballer with a longer flight has the ability to keep his body balanced in the air, making head strokes.”*

Keywords: *soccer, strength, effort.*

1. Introduction

For football players, detention is essential and can be and is commonly used as a measurement tool to assess the strength, explosive power and ability of the footballer to use power. Death to footballers can be enhanced by physical exercises in which muscles exercise maximum force at short intervals to increase dynamic performance. Through these exercises, the muscles are subjected to rapid elongation followed by an immediate shortening. In many situations,

football players are attributed to their opponents in the air during some jumping to hit the ball.

So, in order to win a duel in the air, the former should be able to make a higher jump. At the same time, a footballer with a longer flight has the ability to keep his body balanced in the air, making head strokes.

When a footballer jumps to a head, he performs a jump that is an important skill, because through such a jump the outcome of a football match can be influenced.

Given the importance of footballers' ability to make jumping as high as possible,

¹ Faculty of Medical and Behavioral Sciences in Târgu-Jiu

football coaches will consistently seek effective strategies to improve player detention.

Different exercises and techniques to improve detention in footballers can be implemented taking into account the strengths and weaknesses of each player and as required.

2. Presentation of the Batch on which the Research will be Carried out

The present research is a cross-sectional study that seeks to identify the results obtained by footballers in detention determinations. The results were gathered and centralized from a team of junior soccer players from Tg-Jiu.

So the fundamental purpose of this research was to measure and evaluate the strength of the expanding muscles, of the junior footballers.

The experiment was carried out on the football field in Târgu Jiu, where the CS Pandurii Lignitul 2 Târgu Jiu football team performs some training and competitions.

Table 1

Components of experimental group - anthropometric criteria

Nr. crt.	Initial name	Height	The weight (Kg)	Age (years)
1.	A.C.	1,70	63	16
2.	S.S.	1,69	58	15
3.	O.R.	1,72	65	16
4.	L.C.	1,66	59	16
5.	R.M.	1,68	61	16
6.	A.D.	1,71	64	15
7.	O.V.	1.80	71	16
8.	D.L.	1,68	61	16
9.	Al.S.	1,70	64	15
10.	R.U.	1,64	61	16
11.	R.F.	1.65	60	16

The research compared several steps that consisted of general and specific theoretical information, assertion of hypotheses, design and implementation of the experiment, as well as analysis and interpretation of the data. The whole research lasted more than six months and began in August 2018.

Analyzing the sample from an age perspective, we can see an average age of 15.72 years. The junior football players of CS Pandurii Lignitul 2 Târgu Jiu must meet certain conditions that guarantee a very good health condition. Health can also be appreciated from weight-related reporting. How the height and the health status illustrated by the Body Mass Index is very important for the increase of the performance in the cave, the sample will be analyzed from this perspective.

In order to meet the performance standards, junior players of CS Pandurii football team Lignitul 2 Târgu Jiu must meet certain criteria of height. For the experimental group, as can be seen from the data table, most footballers subscribe to the height standards required by football (170 cm - mean value).

An average height can be appreciated for the entire junior football team of 169.36 cm.

By reporting the experimental group to the football-specific standards, it can be estimated that 45.45% of the subjects subscribe to these standards.

Analyzing the junior players of CS Pandurii Lignitul 2 Târgu Jiu in terms of weight one can notice that the average weight of the whole sample is 62.45 kg.

This average weight relative to the average height is part of the standards that guarantee health, as the World Health Organization indicates, an index of 21.77, which is a value between 20 and

24, which indicates the fact that the junior players of *CS Pandurii Lignitul 2 Târgu Jiu* are healthy.

Under these conditions it can be appreciated that the junior players of *CS Pandurii Lignitul 2 Târgu Jiu* meet the specific conditions for entering the experiment.

The analysis of the junior footballers of *Pandurii Lignitul 2 Târgu Jiu* from the two perspectives (height and weight) is necessary in order to argue the force of detention and its modification following specific training, because these are the essential elements that make up the power of effort.

3. Methods and Techniques that Can Be Used to Measure the Detention of Footballers

The ability of the junior footballer to make quick and high jumps is fundamental to his personal performance and football team performance. [2]

To analyze in detail the methods and techniques used to measure the detention of footballers, 11 junior footballers, aged over 15, were analyzed.

The soccer players that have been analyzed have never made specific jumping training, which highlights the fact that football coaches do not place a great deal of emphasis on this type of training.

The 3-Step Death - is carried out with a three-step elbow, with an arm extended to the panel so that it can touch the panel as high as possible (the touch which is marked by the footballer who makes the leap with a sign left with the powder of talc that has impregnation on hand).

Under these conditions, both the height reached by hand and the height of the ground release during the flight can be measured. [4]

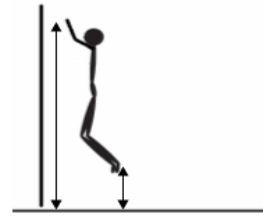


Fig. 1. *Death with 3 steps*

Death on two legs is accomplished by taking an impetus with the arms, the impulse force being imprinted by the force of the legs in order to detach the entire body from the ground.

Both the level of touch of the top panel (hand impregnated with talcum powder), but also the distance to which both feet are raised by the ground during the flight, will be measured. [1]

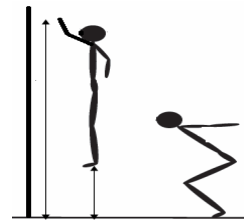


Fig. 2. *Death on two legs on the spot*

The tests performed by junior footballers of *CS Pandurii Lignitul 2 Târgu Jiu* were actually two types of vertical jumping, a 3-step jump and a two-leg jumping on the spot.

3.1. Initial Assessment of the Detention of Junior Footballers

In the initial research to confirm the importance of training for the development of football players' detention, we used a series of scientific methods that led to a good documentation, argumentation and interpretation of the recorded statistical

data, giving the research a scientific aspect.

The method of the experiment is the basic method that outlined the practical - applicative part of the research, i.e. the practical application of the studied theory [3]. For the evaluation of exercise sets, measurements were made both in the initial phase of the experiment and in the final phase of the experiment. To measure the detent, both the height reached by hand during flight and the distance from the ground to the beating leg, measurements were used in cm.

Then the two initial (and final) evaluation situations were compared, with the difference resulting in the change of detention, which illustrated the effectiveness of the exercises used in the development of the junior football players' detention.

Table 2

Detention values (initial phase)

Nr. crt.	Initial name	Death with 3 steps elk (cm)	Death on two legs on the spot
1.	A.C.	115	75
2.	S.S.	122	68
3.	O.R.	114	69
4.	L.C.	119	84
5.	R.M.	131	90
6.	A.D.	116	72
7.	O.V.	112	77
8.	D.L.	120	73
9.	Al.S.	133	91
10.	R.U.	117	82
11.	R.F.	124	75

According to the data in table 2 it can be noticed that the median of 3-step detention for CS Pandurii Lignitul 2 Târgu Jiu football team is 120.27 cm. Thus, 54.54% of CS Pandurii Lignitul 2 Târgu Jiu junior footballers fall below the

team average in terms of 3-step detention.

At the same time, within the table 2 it can be noticed that the mean of the two-leg detention on the spot for CS *Pandurii Lignitul 2 Târgu Jiu* football team is 77.81 cm.

According to the data presented, we can say that there are many football players experienced in the *CS Pandurii Lignitul 2 Târgu Jiu* team who have a narrow margin over the team average, but we can see that there are also cases where they have a great capacity to make a jump, but they are not used as they should.

Based on the results of the initial testing, we appreciated that they can be improved through exercises aimed at developing detention for football players.

3.2. Exercises Used in Developing Detention for Football Players

In simple terms, the exercises by which the development of detention is aimed at footballers are those exercises that have the basic structure as jump. [6]

So these exercises can be: repeated jumping, jump jumping, rope jumping, one-leg jumping, jumping from one foot to the other, jump jumping, jump jumping.

The most important exercises for developing detention are:

- jumping in deep with two-legged landing, followed by 2 vertical jumps;
- jumping on certain obstacles or between certain obstacles (crates) positioned at a distance of about 1 meter;
- jumping on one foot on a gym and vice versa on the gym;
- jumping with knees at the chest, the starting position of the players being standing and returning to their original position;
- followed by a step-by-step lifting of both arms in succession of 4 assemblies of movements.

Exercises used in developing detention develop muscle fiber velocity. They are based on the understanding that a concentric contraction is much stronger when it is immediately followed by an eccentric one. [6]

Applying sets of exercises to improve the detention of football players are preceded by a careful healing of the lower limbs through various stretching exercises.

Exercises used in developing detention are not addressed to all athletes, and exercises used to develop detention are not for amateurs; they are an advanced form of training for experienced junior footballers, and if they are not properly executed, they can cause important imbalances in the joints. The level of the bone system and in the untensioned muscles. [7]

A higher detention has the role of improving the posture, shape of the body and the ability of the footballer to withstand opponents. Given the importance of developing detention for football players, it is recommended that the exercises presented be taken over by as many football coaches as possible and introduced into the training programs, while respecting all the particularities of their rhythm and execution.

These specific training can be introduced starting with junior athletes, in case the athletes' age and physical development are respected. Exercises through which the development of detention in soccer players in their individual form, combined with certain technical procedures, is an exciting and effective means of physical training regardless of the position played by a football player due to its unique character and lack of monotony the exercises of this kind.

3.3. Final Assessment of the Junior Football Players' Detention

In order to make observations on the evolution of the time of the detention of junior players of CS Pandurii Lignitul 2 Târgu Jiu, following the specific training, the final values were centralized in the following table.

Table 3
Detention values (final phase)

Nr. crt.	Initial name	Death with 3 steps elk (cm)	Death on two legs on the spot
1.	A.C.	117	76
2.	S.S.	124	70
3.	O.R.	116	70
4.	L.C.	123	86
5.	R.M.	133	91
6.	A.D.	119	74
7.	O.V.	115	79
8.	D.L.	123	75
9.	Al.S.	136	92
10.	R.U.	118	83
11.	R.F.	125	76

In table 3 it can be noticed that the median of 3-step detention for *CS Pandurii Lignitul 2 Târgu Jiu* football team is 122.63 cm, an improvement of 2.36 cm from the initial test.

Also in table no. 3.2. it can be seen that the average of the two-legged detention on the spot for *CS Pandurii Lignitul 2 Târgu Jiu* football team is 79.27 cm, which represents an average improvement of 1.46 cm from the initial test.

As we can see, there is an ascending trend in the evolutions of all the junior footballers of *Pandurii Lignitul 2 Târgu Jiu*, so it can be said that the exercises used in the development of the detention are efficient and can lead to the increase of the footballers' performance if they have a predetermined program in depending on the competition periods.

Taking into account the fact that the high values of the BMI considerably decrease the values of the increase of the detente, it can be seen in the experiment that there are exceptions, which can be argued by the special ability of the photoblist to achieve the jump.

The variation between the initial test and the final test over 2 cm in the case of 3-step detention may be influenced on the one hand by the individual skills, on the other hand by the Body Mass Index.

The data from the measurements made in the experiment underline the fact that the efficiency of the exercises used in the development of detention is very high in improving the performance of the junior footballers.

4. Conclusions

A good brawl, allows soccer players to make jumping so they get high positions and enough space to hit the ball. At the same time, getting high jumps allows the soccer player to have better control over the ball. So it's very important for football players to have a good shot.

The data provided by the measurements made shows that the detention of a footballer clearly differs within a team. Improving detention is therefore very important as it will help improve the performance of junior footballers.

The football game has seen an accelerated and impressive evolution lately. The level of performance achieved at the current stage, both domestically and internationally, is very high and it has been found that it can only be achieved by football players whose performance capacity is high enough and steadily increasing.

Taking into account the proven and

scientifically proven effectiveness of the exercises used in the development of detention, it is recommended that they be taken over by as many football coaches as possible and introduced into the training programs, while respecting all the particularities of their rhythm and execution. These specific training can be introduced from the junior level, if the athletes age and physical development are respected.

References

1. Cernaianu, C.: *Fotbal. Manualul antrenorului profesionist (Football. Professional coach's manual)*. Bucureşti, Editura Rotehpro, 2002.
2. Chu, D. A.: *Jumping into plyometrics*. Champaign, IL: Human Kinetics, 1998.
3. Cojocaru, V. : *Fotbal de la 6 la 18 ani. Metodica pregătirii (Football from 6 to 18 years old. Methodology of training)*. Bucureşti, Editura Axis Mundi, 2000.
4. Drăgan, A.: *Bazele teoretico-metodice ale fotbalului (The theoretical and methodical basis of football)*. Galaţi, Editura Fundaţiei Universitare „Dunărea de Jos” din Galaţi, 2012.
5. Motroc, N.L.: *Jocurile dinamice cu tema de fotbal în lecţia de educaţie fizică (Dynamic games with the theme of football in the lesson of physical education)*. Bucureşti, Editura ASE, 2009.
6. Neagu, N., Teodorescu, S.V., Boingiu A.: *Pregătire sportivă practică. Fotbal (Practical sports training. Football)*. Bucureşti, Editura Litera, 2017.
7. Ţiriac, B.: *Exerciţii sub formă de joc în antrenamentul de fotbal (Exercises in the form of a game in football training)*. Bucureşti, Editura UCFS, 1988.