

## **MONITORING THE FOOTBALL PLAYER'S RUNNING SPEED IN THE U7 RANGE IN RESPECT WITH BALL AND WITHOUT BALL**

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**ABSTRACT.** The purpose of the study is to prove that, the ball exercises and the playful form of practice are more effective, than the “less ball exercises” practical training. The two participant groups in the measurement were Gyáli – BKSE U7 and Vecsési FC U7. The monitoring has been made with testing method technique (N=40). We used the slalom sprint and the slalom dribble. To determinate the difference we used the 2-sample t-test. The group of Gyál had a better result in slalom sprint. At the assessment in November, the improvement (0.39 second) was outstanding too and the in following months the improvement's rate showed almost the same tendency. The group's average improvement (0.96 second) progressed. At slalom dribble, the improvement of the group of Vecsés was continuous. The group's average improvement was 5.03 second. The group of Gyál's improvement was continuous as well but its rate is 3.22 seconds. The rate of improvement did not show any significant difference. Therefore, I cannot claim that this method causes much the largest improvement comparing to the traditional method. At both of the groups, the improvement is clearly demonstrable. Despite that the significant improvement is not demonstrable I am going to practise these playful exercises and recommend to my colleagues who work with this generation. Because with this exercises the trainings are more playful and vivid.

**Keywords:** *football, youth coaching, age group training*

### **Introduction**

Nowadays, the focus is more and more on the role of new generations in the inland front rank and the junior clubs in the sight of technique and condition. For now, there are only a few research and study has been made

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referring to the rate of the results using different methods of trainings. Most of the researches do not even concern this range in general and the specialized literature barely analyses it. Since I am working with children at the age of kindergarten and elementary school for four years now, I thought it is necessary to confirm the rate of the development with facts.

What is the role of the range qualification in the inland rising generation? The training of the new generation is between the ages of 6-18 „The range qualification’s main part is considering the speciality of the age to build a standardized, back-to-back system, which aims to broaden the rising generation’s scooping boat, to reach the most optimal improvement” (Nádori, 1983, 1992; Famosi, 1999).

What does the philosophy say about the improvement: „The improvement is such a forward pointing procession which has a beginning and an ending point. (Bicskei, 1998) It is important to note that in a certain age which technical, tactical, conditional skills children could acquire (Zalka, 1991). It is necessary to be conscious of this building the limits of the expectations for the different ranges (Görtl, 2002). The range training is in an up-going system appertain to age from U7 until U19 (Andrew, 1996). The year of birth determines who belongs to which range (Tóth & ifj. Tóth, 2016).

In my experience, it is not fortunate in the U7 range because the same efficiency is not expectable from the children who were born in the early and in the late part of the year. At this age, a few months could make a big influence on the personal improvement, and that affects the whole group’s work. „The rate of the biological development could cause division at this age too. There are the early-developed children who are biologically more mature than their age and the retarded children who are less mature than their age” (Bicskei, 1998). In the view of the training the following aspects (Cabrini, 1999) are important at this age:

- learning by playing;
- having fun;
- make the child to like the sport;
- many sided skill training;
- touching the ball many times, lots of positive experience, huge self-confidence, many friends;
- technical, and slickness training;
- getting to know new techniques, exciting matches;
- ambidexterity(two-footedness), bilaterality;
- trying all the posts.

During my trainer career, I have had the chance to visit trainings in different clubs, and see different methods of training. Visiting the trainings at the front rank (Budapest Honvéd, Ferencváros, Vasas) groups' new generation trainings I experienced that the trainings synthesis followed the classical ideas, that the tasks with and without ball are separated. Through the discussions with my trainer colleagues, we more often talked about touching the ball as many times as it is possible. That is the reason why I had the idea to maintain the trainings at the Vecsés group from now only with ball to make an attempt. To follow this idea (at every task they had to touch the ball) even at the warm-up I gave them exercises connected to the ball.

## **Material and Methods**

### ***The used methodological exercises***

Exercises to improve the movement coordination: normal tig, 30 seconds tig, follow the object, run away from the bear, catch the player with the bib, catch your partner. Exercises to develop the slickness with the connection between the ball and the feet: get the ball, swap the balls, collect the balls, bison hunting, zone swap, Simon Says, stage activity contests. Aiming exercises: stay away from the ball, knock over the cone, keep ball, and blast the ball. The game: one player against another to many goals, three players against three other to two goals. My assumption is that the exercises at Vecsés group caused more efficient technical development.

### ***Groups involved in the research***

I have been working with two groups at the same age using different methods of trainings and exercises to prove my statement. The vital part of this study is based on the different methods of training. The contrasting of the group's capacity will show the methods efficiency. Finally, I will compare the results of slalom sprint and the slalom dribble. Choosing the tests I considered the motor skills and that the children who attended the trainings- motor performance capacity is only describable if we measure the conditional and the coordination skills together. The two participant groups in the measurement were Gyáli –BKSE U7 and Vecsési FC U7. The attendants were 5-6 years old boys. The monitoring has been made with testing method technique (N=40). This monitoring started in October 2015 and finished in April 2016. It shows the results of assessment of six months (November, December, January, February, March, April). The results of October shows the starting rates, so that is the basis of all results. With the monitoring method of Gyáli – BKSE U7 (N = 20 person), Vecsési FC U7 (N = 20 person).

**Table 1.** Test groups, made by: János Tóth jr.

Team	Number of player	Proportion		Average age
		5 years old	6 years old	
Gyáli – BKSE U7	20	8 player (40%)	12 player (60%)	5,6 year
Vecsési FC U7	20	11 player (55%)	9 player (45%)	5,45 year

The participant children are all boys at both group. At Gyáli – BKSE U7 the age is 5-6, its proportion is 5 years olds are 8 persons, 40%, 6 years olds 12 persons, 60 %, average is 5,6 years old. At Vecsési FC U7 the age is 5-6, it's proportion is 5 years olds are 11 persons, 55%, 6 years olds 9 persons, 45 %, average is 5,45 years old.

### ***The place and period of research***

The trainings at both groups are two times in a week on Tuesdays and Thursdays for one hour. At Gyál it is from 5pm until 6 pm and at Vecsés it is from 3pm until 4 pm. At the group of Gyál they followed the universal method of training to improve the movement coordination with the following exercises: speed and agility drills, tig, balance exercises, stage activity contests from various postures, dexterity exercises with ball (dribbling with fun related drills). The training method at Vecsés is only different from the method above that the children had to do the exercises only with ball. At both groups, trainings are held outside, on fields in the fall season (September, October, November). During the winter (December, January, February) the trainings are in closed place, gym, with plastic surface. The assessments were only held in the closed gym with plastic surface. The assessments were held outside of the training hours, with monthly regularity. At each assessment I explained and presented the exercise, they had to do.

The children wore flat gym shoes, which I checked before the assessments. The assessment took 60 minutes in average with each group, at each time. I continually aimed to guarantee 100% results of the assessment by providing each participant children to have a result. Those children who could not appear at the time of the assessment they could cover it at another time out of the training hours. When choosing the tests, I primarily considered these aspects: they are well founded by the requirements of the tests' conception, eligible according to the speciality of the age, performable at a certain place and in a certain conditions. I was intent on formalize the assessments a happy and frisky

activity. There is a condition of the repetition of the test that the basic test, the method of measurement, the monitored persons, the head of the assessment, and the conditions do not change.

### ***Tests Used***

I choose two tests, the slalom sprint for coordination assessment and the slalom dribble for the technical assessment.

Slalom sprint: I put cones sheer onto the mark 5, 10 and 15 meters away. The sportsman evade the cones in an undulatory line first, than getting around the third cone runs back in an undulatory line and pass the mark. I measured the exercise on the 0,01 second.

Slalom dribble: the participant has to slalom dribble on the field. I put cones sheer onto the mark 5, 10 and 15 meters away. The sportsman evade the cones in an undulatory line first dribble, than getting around the third cone runs back in an undulatory line dribble and stop the ball on the finish line (which is the mark as well). I measured the exercise on the 0,01 second.

At the slalom sprint children line up behind the mark, begins with the pips and in the same time the timer starts, and finishes when the mark is stepped over. In case of irregular start or irregularly performed exercise, the exercise has been repeated. After this, the result was immediately documented.

At slalom dribble children line up behind the mark, begins with the pips and in the same time the timer starts, and finishes when the ball is stopped at the mark. In case of irregular start or irregularly performed exercise, the exercise has been repeated. After this, the result was immediately documented.

Equipment: Equipment used during the assessment: 50 meters long sport tape, 6 pieces of 38,1 cm tall, tapered with plastic cone, leather football at size of 3, timer, Fox 40 whistle.

### ***Hypothesis***

Nowadays, more and more high-ranked sports clubs have emphasized the importance of the method of touching the ball as many times as possible in youth coaching of footballers. I consider applying my method to be more efficient with better technical results in case of the team in Vecsés than that of the team in Gyál.

### ***Results***

In the assessment of the speed development the slalom sprint, and in the assessment of the technical development the slalom dribble gave the results of the tests.

### ***Slalom Sprint***

The results and the analysis of the slalom sprint assessment at Vecsési FC U7, Gyáli BKSE U7:

**Table 2.** Gyáli BKSE U7, Vecsési FC U7 slalom sprint, made by: Rudolf Pichler

	<b>October</b>	<b>November</b>	<b>December</b>	<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>
Vecsés:	9,66	9,34	9,37	9,10	8,95	8,89	8,87
<b>Improvement</b>		<b>0,32</b>	<b>0,29</b>	<b>0,56</b>	<b>0,71</b>	<b>0,77</b>	<b>0,79</b>
Gyál:	10,05	9,66	9,59	9,56	9,31	9,32	9,09
<b>Improvement</b>		<b>0,39</b>	<b>0,46</b>	<b>0,50</b>	<b>0,74</b>	<b>0,73</b>	<b>0,96</b>

At Gyáli BKSE U7 the average rate in the beginning was 10,05 seconds, the last one is 9,09 seconds, which means the average improvement is 0,96 seconds. It causes 9,60 % improvement. The difference between the basic rate and the first assessment shows a 0,39 seconds improvement. The difference between the basic rate and the second assessment is 0,46 seconds. The difference between the basic rate and the third assessment is 0,50 seconds. The difference between the basic rate and the fourth assessment is 0,74 seconds. The difference between the basic rate and the fifth assessment is 0,73 seconds.

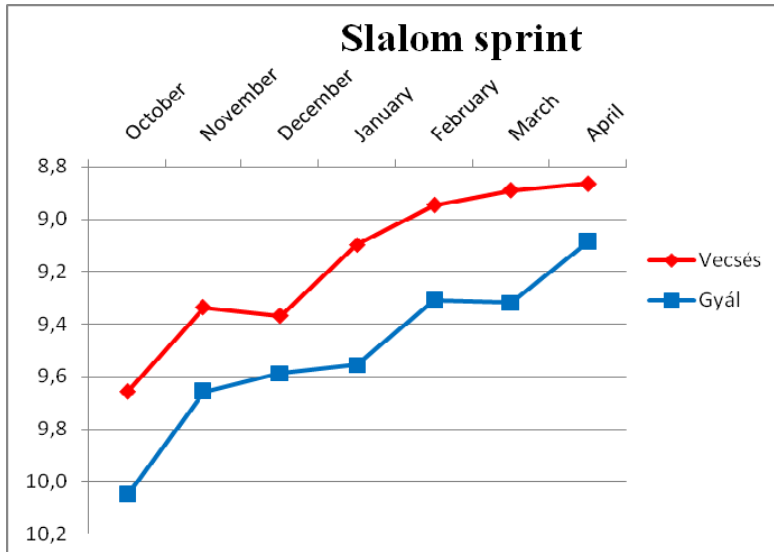
The difference between the basic rate and the last assessment is 0,96 seconds.

At the personal assessments the most significant result shows 2,16 seconds improvement, it is 22,8 % improvement. The smallest improvement is 0,04 seconds and it is a 0,4 % improvement. Nine persons improvement is above the average (9,60 %) in the group and eleven persons improvement is under the average, it is a 45-55% division.

At Vecsési FC U7 the average rate in the beginning was 9,66seconds, the last one is 8,87 seconds which means the average improvement is 0,79 seconds. It causes 8,20 % improvement. The difference between the basic rate and the first assessment shows a 0,32seconds improvement. The difference between the basic rate and the second assessment is 0,29seconds. The difference between the basic rate and the third assessment is 0,56 seconds. The difference between the basic rate and the fourth assessment is 0,71seconds. The difference between the basic rate and the fifth assessment is 0,77seconds.

The difference between the basic rate and the last assessment is 0,79 seconds. At the personal assessments the most significant result shows 1,67seconds improvement, it is 16,5 % improvement. The smallest improvement is 0,14 seconds and it is a 1,6 % improvement. Eleven persons improvement is above the average (8,20 %) in the group and nine persons improvement is under the average, it is a 55-45% division. (Table2, Graph1)

**Graph 1.** Gyáli BKSE U7, Vecsés FC U7 slalom sprint, made by: Rudolf Pichler



### **Slalom Dribble**

The results and the analysis of the slalom dribble at Vecsési FC U7, Gyáli BKSE U7:

**Table 3.** Gyáli BKSE U7, Vecsés FC U7 slalom dribble, made by: Rudolf Pichler

	October	November	December	January	February	March	April
Vecsés:	22,03	20,64	20,62	19,18	18,99	18,41	17
<b>Improvement</b>		<b>1,39</b>	<b>1,41</b>	<b>2,85</b>	<b>3,04</b>	<b>3,62</b>	<b>5,03</b>
Gyál:	19,2	18,35	17,3	17,08	16,83	16,67	15,98
<b>Improvement</b>		<b>0,85</b>	<b>1,90</b>	<b>2,12</b>	<b>2,37</b>	<b>2,53</b>	<b>3,22</b>

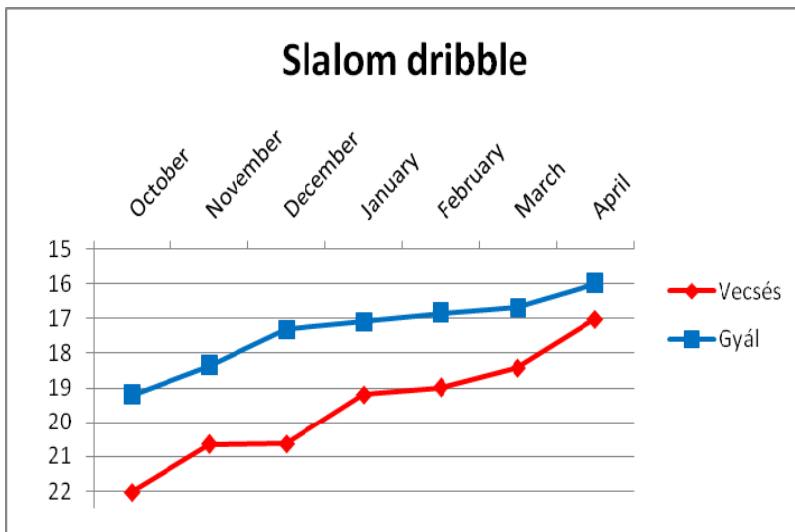
At Gyáli BKSE U7 the average rate in the beginning was 19,20 seconds, the last one is 15,98 seconds, which means the average improvement is 3,22 seconds. It causes 16,80 % improvement. The difference between the basic rate and the first assessment shows a 0,85 seconds improvement. The difference between the basic rate and the second assessment is 1,90 seconds. The difference between the basic rate and the third assessment is 2,12 seconds. The difference between the basic rate and the fourth assessment is 2,37 seconds. The difference between the basic rate and the fifth assessment is 2,53 seconds.

The difference between the basic rate and the last assessment is 3,22seconds. At the personal assessments the most significant result shows 8,62 seconds improvement, it is 39,2 % improvement. The smallest improvement is 1,5 seconds and it is a 7,1 % improvement. Twelve persons improvement is above the average (16,8%) in the group and eight persons improvement is under the average, it is a 16,8 % division. (Table 3, Graph 2)

At Vecsés FC U7 the average rate in the beginning was 22,03seconds, the last one is 17,01 seconds, which means the average improvement is 5,03 seconds. It causes 22,80 % improvement. The difference between the basic rate and the first assessment shows a 1,39seconds improvement. The difference between the basic rate and the second assessment is 1,39seconds. The difference between the basic rate and the third assessment is 2,85seconds. The difference between the basic rate and the fourth assessment is 3,04seconds. The difference between the basic rate and the fifth assessment is 3,62seconds.

The difference between the basic rate and the last assessment is 5,03seconds. At the personal assessments the most significant result shows 9,66 seconds improvement, it is 40,2% improvement. The smallest improvement is 0,43 seconds and it is a 2,1 % improvement. Twelve persons improvement is above the average (13,8 %) in the group and sixteen persons improvement is under the average, it is a 80-20 % division. (Table 3, Graph 2)

**Graph 2.** Gyáli BKSE U7, Vecsés FC U7 slalom dribble made by Rudolf Pichler





## Conclusion

This study aim to point out the opportunities of the improvement in Hungarian football's rising generations and particularly in the youngest age. Setting the international standard as an example, we can understand the opportunity of the improvement in the coordination of movement and in the technical skills. The ability to learn movements of the nervous system is significantly high at this age. The primary task is to guarantee the children's need of movement with games as a material, the various reiteration of games, improving the sense of the ball, ensure the regular experience of success. The suitable qualification give us rope to accomplish the realization of state (even if it is elementary) and the solution of state. Characteristically he groups of 10-15 persons are able to achieve efficient outcomes in the field of movement coordination and the techniques.

The difficulties of the chosen tests are well proportioned to the speciality of this age. The results of this assessment points out its rates at this age. Each groups standards show complex improvement without exception. My aim was by using two different methods of training to show a measurable result through the tests about the efficiency of this method. As it was expected at Vecsés group the technical improvement was more efficient where I used the exercises with ball as it is written above. I was expecting a bigger rate between the difference of the improvement but significant (rate of signification  $P = 0,05$ ) improvement is not demonstrable.

In order to determinate the difference I used the 2-sample t-test. For the proper preparation, I intentionally chose such game with ball, which causes the most optimal result. Comparing the average record of the two groups at slalom sprint the rate of improvement was almost the equal. At Vecsés SE U7 the footballers improvement were more impressive in November, the interesting fact is that in this group in December there is a minor (0,03 second) drop. At the last assessment in April there is outstanding improvement. The average improvement of the group is 0,79 second comparing the basic rate.

The group of Gyál had a better result in slalom sprint. At the assessment in November the improvement (0,39 second) was outstanding too and the in following months the improvement's rate showed almost the same tendency. The group's average improvement (0,96 second) progressed.

At slalom dribble, the improvement of the group of Vecsés was continuous. The group's average improvement was 5,03 second. The group of Gyál's improvement was continuous as well but its rate is 3,22 second. The hypothesis that the improvement is more successful through exercises with ball is verified. However, the rate of improvement did not show any significant difference. Therefore, I cannot claim that this method causes much the largest improvement comparing to the traditional method. At both of the groups, the improvement is

clearly demonstrable. Despite that the significant improvement is not demonstrable I am going to practise these playful exercises and recommend to my colleagues who work with this generation. Because with this exercises the trainings are more playful and vivid.

## REFERENCES

- Andrew, C. (1996). *Soccer Coaching ages 5-12*. Pennsylvania: Reedswoain. INC Spring City.
- Bicskei, B. (1998). *Utánpótláskorú labdarúgók felkészítése*. Budapest: Paginarum.
- Cabrini, M., (1999). *The psychology of soccer*. Pennsylvania: Reedswoain. INC Spring City.
- Farmosi, I. (1999). *Mozgásfejlődés*. Budapest-Pécs: Dialog Capus.
- Görtl, B. (2002). *Labdarúgás lépcsőről lépésre*. Budapest: Magyar Sporttudományi társaság.
- Nádori, L. (1983). Motoros képességek fejlesztésének elméleti-módszertani alapjai: *A TF közleményei*. 51-55.
- Nádori, L. (1992). *Az edzés elmélete és módszertana*. Budapest: Egyetemi Tankönyvkiadó.
- Tóth, J.& ifj.Tóth, J.(2016). *Az utánpótlás korú labdarugók felkészítésének szakmai követelményei*. Budapest: TF.
- Zalka, A. (1991). *A labdarúgásedzés elmélete és módszertana*. Budapest: Sport Kiadó.