

A LONGITUDINAL STUDY OF AGILITY AS A PART OF THE PHYSICAL CONDITIONING OF U17-U19 FOOTBALL TEAM OF VLLAZNIA, FOR THE PERIOD 2020-2022

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Abstract

Agility is an undivided part of a sportsman's physical conditioning. Like many studies, they focus on this element of the condition. We're trying to contribute to our study of the perceptiveness of this component.

The Illinois Agility Test (Getchell, 1979) is a commonly used test of agility in sports. It measures the ability to change position and direction. The length of the course is 10 meters, and the width (distance between the start and finish points) is 5 meters. Four cones are used to mark the start, finish and the two turning points. Another four cones are placed down the center an equal distance apart. Each cone in the center is spaced 3.3 meters apart. On the 'Go' command the stopwatch is started, and the athlete gets up as quickly as possible and runs around the course in the direction indicated, without knocking the cones over, to the finish line, at which the timing is stopped.

Results: the average group in 2020 was 15.13 sec, and the average of the same group for 2022 is 15.46 sec. The best time of the pre-escation was 14.17 seconds the best time after two years of the same group is 14.59 sec. While the time with the weak was 16.89 sec and after two years this time is 16.70 sec.

As a result, there is a deterioration in the time of the execution of and that it has not been worked enough in this direction.

Keywords: football, conditioning, agility, longitudinal

1. Introduction

Agility and change-of-direction speeds are essential qualities for athletes who play field sports, such as soccer. Therefore, sprint training for the type of sport, should include the need to accelerate (reaching the highest speed possible in the shortest time period), to decelerate and change direction throughout the game.

Agility is an essential component in most fields requiring high speed action (acceleration, maximal speed) and especially team sports competition. Agility is a combination of speed and coordination. Speed which provides movements, the speed and coordination is an elementary technical demand for sportive performance in football.

The capacity of football player to produce varied high-speed actions and motor skills are known to impact performance. Highspeed actions can be categorized into actions requiring maximal speed, acceleration, RT and agility. Therefore, there is no doubt that the cognitive component of agility is very important (Gabbett et al., 2008; Sheppard et al., 2006).

RT is an important cognitive component. RT is described as the interval between the onset of a signal (stimulus) and the initiation of a movement response (Magill, 2007). RT is one of the factors of great significance in competitive sports, especially in team games like football. To execute a correct movement a rapid response is required with minimal time interval due to the ball velocity and the physical proximity of the adversary. For that, we considered that this cognitive component which is the RT could be associated to agility. In our knowledge, the present study is the first investigation examining the importance of relationship between agility and other physical components such as speed with change of direction and RT in football players.

Agility is the ability to change the direction of the body efficiently and effectively and to achieve this, you

require a combination of:

- Balance
 - The ability to maintain equilibrium when stationary or moving (i.e. not to fall over) through the coordinated actions of our sensory functions (eyes, ears and the proprioceptive organs in our joints)
 - Static Balance - ability to retain the centre of mass above the base of support in a stationary position
 - Dynamic Balance - the ability to maintain balance with body movement
- Speed
 - the ability to move all or part of the body quickly
- Strength
 - the ability of a muscle or muscle group to overcome a resistance
- Coordination
 - the ability to control the movement of the body in co-operation with the body's sensory functions, e.g. catching a ball (ball, hand and eye coordination)

2. Body of manuscript

Material and methods

Subjects: Participants included (n19) student football male athletes. All subjects were found to be in good health. The selected players possessed at least 8 years of experience in football training and competition and took part in National championship at the time of the investigation. They thus continued football training three to four times per week (~ 90 min per session) and played one official game per week. The subjects were told that they were free to withdraw from the trial without penalty at any time. These tests were selected because of their reported validity and reproducibility (Roozen, 2004).

All the testing procedures were completed during the competitive season two months after the beginning of the national championship. The Illinois agility test (IAT) was used to determine the ability to accelerate, decelerate, turn in different directions, and run at different angles. The total testing session was approximately one hour for each subject which included warm-up, ten-minute rest times between tests and approximately three minutes between reps. Each test was explained and demonstrated. Before testing, subjects were given practice trials to become familiar with the testing procedures. Before performing the field test, each player was instructed and verbally encouraged to give a maximal effort during all tests.

The Illinois Agility Test (Getchell, 1979) is a commonly used test of agility in sports. It measures the ability to change position and direction. The length of the course is 10 meters, and the width (distance between the start and finish points) is 5 meters. Four cones are used to mark the start, finish and the two turning points. Another four cones are placed down the center in equal distance apart. Each cone in the center is spaced 3.3 meters apart. On the 'Go' command the stopwatch is started, and the athlete sets off as quickly as possible and runs around the course in the direction indicated, without knocking the cones over, to the finish line, at which the timing is stopped.

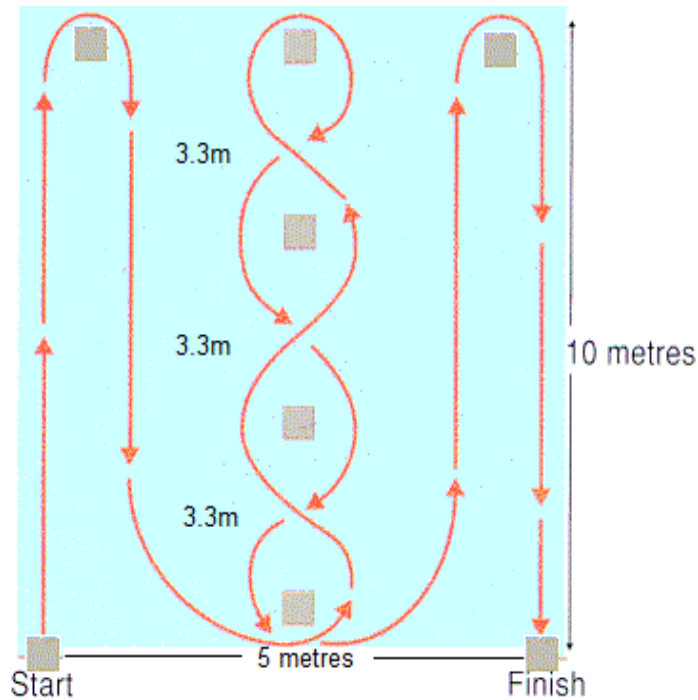


Fig 1.

Table 1. Of the new rite The Illinois Agility Test (Getchell, 1979)

Gender	Excellent	Above Average	Average	Below Average	Poor
Male	<15.2 secs	15.2 - 16.1 secs	16.2 - 18.1 secs	18.2 - 19.3 secs	>19.3 secs
Female	<17.0 secs	17.0 - 17.9 secs	18.0 - 21.7 secs	21.8 - 23.0 secs	>23.0 secs

3. Table figures and equations

Results

The results drawn from this test show that the average of the group in 2020 was 15.13 sec, while the average of the same group in 2022 is 15.46 sec. The best realization time was 14.17 seconds, whereas the best time of the same group after two years is 14.59 sec. The slowest time in 2020 was 16.89 sec, whereas after two years this time is 16.70 sec.

AGILITY TEST

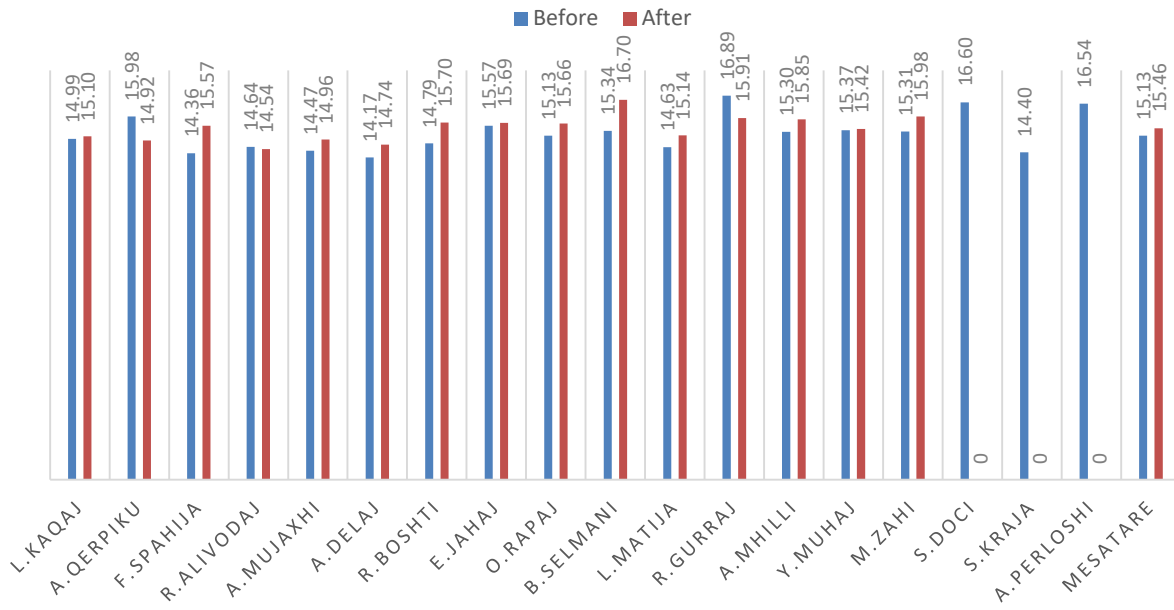


Fig 2.

Results measured for each athlete in seconds. Before and after two years, which were analyzed.

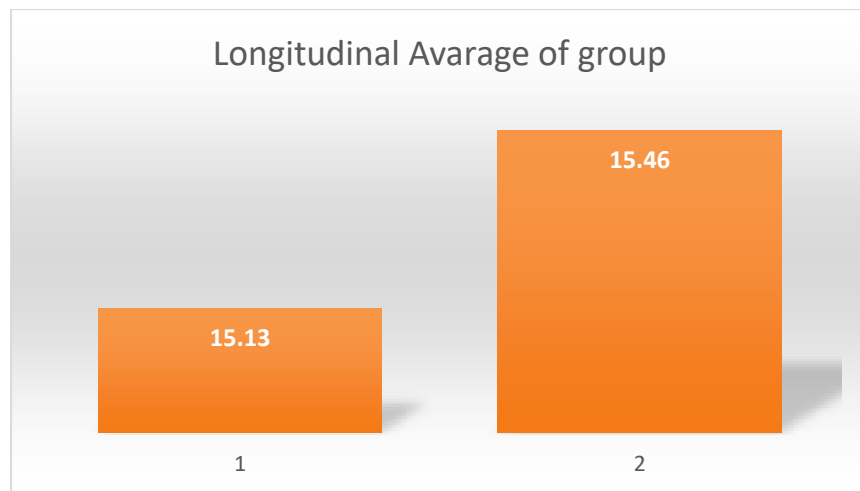


Fig 3.

The results drawn from this test show that the average of the group in 2020 was 15.13 sec, while the average of the same group in 2022 is 15.46 sec.

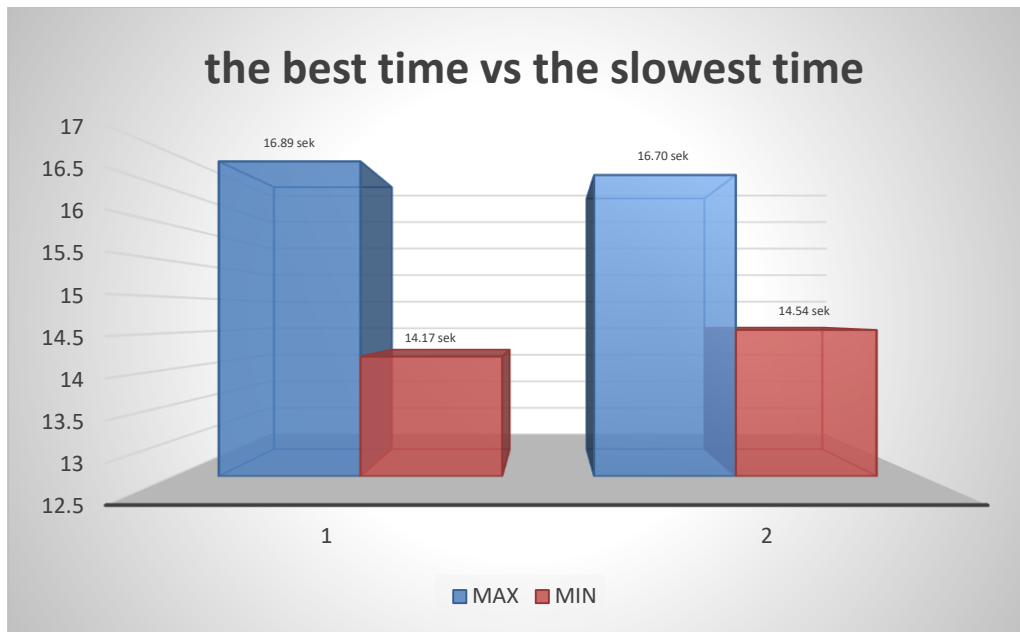


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4. Conclusions

As a result, there is a deterioration in the time of the execution and that it has not been worked enough in this direction.

Given that this age group is characterized by physical and physiological development, we are aware that this component must be taken more in consideration by coaches.

It takes a lot of focus on this component as this age group is increased to worsen performance in agility.

We shouldn't just focus on sterilising a category of components like strength, speed or resistance.

The exercise with agility characteristics must be added.

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