

**European Journal of Physical Education and Sport Science** 

ISSN: 2501 - 1235 ISSN-L: 2501 - 1235 Available on-line at: <u>www.oapub.org/edu</u>

doi: 10.5281/zenodo.1286323

Volume 4 | Issue 7 | 2018

# THE EFFECTS OF REDUCED GAMES FOR THE DEVELOPMENT OF THE QUALITY OF SPEED IN THE YOUNG ALGERIANS FOOTBALLERS

Messalti Lakhdar<sup>i</sup>, Hamzaoui Hakim

Institute of Physical Education and Sports, University Abdelhamid Ibn Badis, Mostaganem, Algeria

#### Abstract:

Physical quality is an important factor in the modern football and especially the speed, which we considered it necessary to investigate on the article "The effects of games reduced for the development of the quality of speed in the young soccer players of Algerians under the age 14yo in the club of me R. Mécheria", considering that the speed in soccer seems to be neglected in the training (formation) at the level of the young soccer players. Being essential in soccer, our research work recommends using the reduced games (sets) for improving speed qualities. So for our study, we chose the club of Mécheria; for that, we chose 20 players. The training program suggested realizing a positive development between both tests in the tests of speed in favour of the experimental group. This indicates the impact of the workout program in the evaluation of the level of the quality of speed in the (experimental) sample of the search (research). On the basis of all these results (profits) which were statistically significant, it is suggested the need of using the games (sets) reduced for the development of this quality.

Keywords: reduced games, speed, football

### 1. Introduction

The methodology of modern training in football became increasingly more important. Previously, working axes were considerably the same (Dellal, on 2008). Then the reduced games become an inseparable component of the physical and technical training in the modern football (A. Jaquet, 1998), the physical preparation is the component of the training which most evolved certainly, in particular thanks to the research

<sup>&</sup>lt;sup>1</sup> Correspondence: email <u>messalitieps@hotmail.fr</u>

(Weineck, 1997). To date, the physical aspect represents one of quality that the trainers can control (Turpin, 2002)

The speed in football takes and will take more and more importance in the training. Is why, it is important to treat as well of the methodological aspects of the speed with ball (games reduced).

Football contains entrainment exercises for the purpose of developing several quality as the physical quality (speed) by pressing the training load (quality and intensity) and especially for the young footballer. (Weineck, 1997)

The reduced games encourages the repetition gesture in game situation, frequent solicitation of the players and it must be repeated several times (exercise, meeting, microcycle stage ..... etc.) to advance a quality (isolated or in a set of state of sport form). The organization, modulation, the combination or the association of solicitations will lead the athlete in an optimal state of sport form. (Bompa periodization, as a key elment of planning, 1987)

To play the high-level football, it is important more and more to develop from the beginning the athletic qualities and psychological at the young players, by considering their growth, their personal rhythms of development and the potential of performance.

# 2. Methodology

Used the experimental method because it matches the objectives of the research, we chose from the team of Mécheria under 14 years of age whose number is 40 players as follows:

The Clubs	The samples	Numbers
I r Mécheria	Experimental	20
C B R Ain sefra	Control	20
	Total	40

**Table 1:** The population of the research

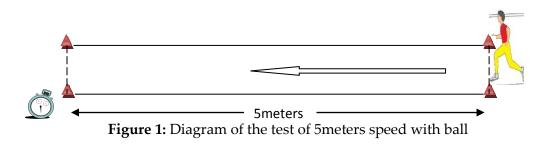
# 2.1 The tests of the speed

# A. Speed Test on 5meters departure with ball

Aim: to assess the capacity of the speed of the conduct of bale. Conduct of tests:

1) The players stand one by one, standing behind the start line.

2) They start at the signal of the timekeeper (Akramov.R, 1990)



# B. Tests of speed on 10 meters without a ball: (departure standing)

Objective: To evaluate the ability to start in an explosive manner. Conduct of tests:

1) The players stand by 2, standing behind the start line.

2) They start at the signal of the timekeeper.

Measurement socket: 2 tests for each test; the best time is recorded.

- The timer is triggered when the signal is given.

- It is stopped when the player cuts the line of arrival.

- The time is measured to a hundredth of a second.

Preparation before the test: Place this test at the beginning of the evaluation session after a good warm-up to basis of flexures, extensions, stretching and small quick race. (Akramov.R, 1990)

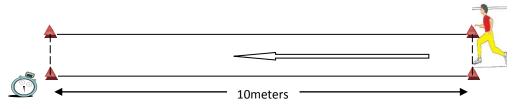


Figure 2: Diagram of the test of 10 meters speed without a ball

# 3. Statistical study

The statistical study of the data collected focused on the calculation of the student's T. The comparisons between the results of two groups were performed using the formula as the student test, the person correlation and the effect size at p value =0.05.

# A. Presentation of the results of tests before and after, for each test of the two groups (experimental and witness)

In this step we are going to proceed to the comparison and the analysis of each of the pre-test and post-test of two groups (G.E and C.G), for the physical parameters (speed) studies.

#### **1.2** Presentation of the pre-test and post-test for G.E. and C.G.

Speed test: To simplify and clarify the presentation of the results of the speed tests, we exhibit them separately, for interpretation.

**1.2.1 Speed Test on 5 meters with ball:** presentation of the results of the test of 5 meters before and after the intervention of the experience put in place for this study.

		Before test		After Test		T	T	D.D.L.	Statistical threshold
	Ν	X	S	X	S	Calculate	Table		threshold
Experimental Group	20	1.36	0.20	1 .14	0.11	9.26	1 70	19	0.05
Control Group	20	1.51	0.18	1.47	0.18	4.28	1.72	19	0.05

**Table 1**: The results of the speed test on 5 meters with ball of E.G/ C.G and before and after

In the experimental group, the statistical threshold  $\alpha$ =0.05 and D.D.L 19, and the T of student tabulated = 1.72. We note that the comparison of the two tests (before and after) of speed on 5meters with a "T" calculate = 9.26 > 1.72 which does leads to say that there is a significant difference between the two tests (before and after) concerning the test of 5 meters in favor of the test after .

In the control group, the statistical threshold  $\alpha$ =0.05 and D.D.L 19, and the T of student tabulated = 1.72. We note that the comparison of the two tests (before and after) of speed on 5meters with a "T" calculate = 4.28 > 1.72 which leads to say that there is a significant difference between the two tests (before and after) concerning the test of 5 meters in favor of the test after.

**1.2.2 Speed test on 10 meters:** presentation of the results of the test of 10 meters before and after the intervention of the experience put in place for this study.

		Bef te	ore st	Test after		T	T	D.D.L.	Statistical
	Ν	X	S	X	S	Calculate	Table		threshold
Experimental Group	20	2.36	0.11	2.22	0.10	7.80			
Control Group	20	2.50	0.28	2.44	0.26	6.32	1.72	19	0.05

**Table 2**: Representing the results of the speed test on 10 meters without a ball of E.G/ C.G and before and after

In the experimental group, the statistical threshold  $\alpha$ =0.05 and D.D.L. 19, and the T of student tabulated = 1.72. We note that the comparison of the two tests (before and after) of speed on 10 meters with a "T" calculate = 7.80 > 1.72 which does leads to say that there is a significant difference between the two tests (before and after) concerning the test of 10 meters in favor of the test after .

In the control group, the statistical threshold  $\alpha$ =0.05 and D.D.L 19, and the T of student tabulated = 1.72. We note that the comparison of the two tests (before and after) of speed on 10 meters with a "T" calculate = 6.32 > 1.72 which does leads to say that there is a significant difference between the two tests (before and after) concerning the test of 10 meters in favor of the test after.

1.3 Presentation of the results of the post-tests for the two groups (G.E. and C.G)1.3.1 Speed Test on 5meters with ball: finding and discussion of the results after the execution of training programs:

		Post-test		Т	Т		Statistical
	Ν	X	S	Calculate	Table	D.D.L.	threshold
Group Experimental	20	1.14	0.11	6.99	2.70	28	0.05
Control Group	20	1.47	0.18	0.99	2.70	38	0.05

**Table 3:** The results of the test after speed on 5 meters with ball

Findings: in this test of 5 meters, we note that the statistical threshold  $\alpha$ =0.05 and D.D.L 38 and the T is tabulated student = 2.70, whereas the T calculate 6.99 > 2.70, there is a significant difference in the two groups (G.E. And C.G.) during this test, which leads us to say that there is a progression noticed for the setting of the speed between the two groups, and that the margin the most significant is in favor of the experimental group.

**1.3.2 Speed test on 10 meters without balloon:** finding and discussion of the results after the execution of training programs

		Post-test		Т	Т		Statistical
	Ν	X	S	Calculate	Table	D.D.L.	threshold
Group Experimental	20	2.22	0.10	2.52	2 =0	20	0.07
Control Group	20	2.44	0.26	3.53	2.70	38	0.05

**Table 4:** The results of the test after speed on 10 meters

Findings: in this test of 10 meters, we note that the statistical threshold  $\alpha$ =0.05 and D.D.L 38 and the T is tabulated student = 2.70, whereas the T calculate 3.53> 2.70, there is a significant difference in the two groups (G.E. And C.G.) during this test , which leads us to say that there is a progression noticed for the setting of the speed between the two groups, and that the margin the most significant is in favor of the experimental group .

### 4. Discussion

The football has evolved in recent years and the methods of training and physical preparation as well as training of the players have been adapted to this evolution. We understand today that coaches are looking for a balance in training and the activity of players in the game Coutts A. et al (2007; 2008).

They have more and more in a complete conception of field practice (Raja Faraz E, Impellizzeri spread, en 2007), (Impellizzeri spread, 2004); (Coutts spread, 2004; 2007), to make more efficient in the training process to increase the performance in the face of the physical and tactical competition of the other team. The players can learn to play football and to develop their physical quality (speed) which takes and will take more and more importance in the football modern. Because that, it is important to handle as well methodological aspects of the speed (the quantity, the intensity) as the more practical aspects with a succession of exercises suited to the soccer to develop this quality (Weineck, 1997) indeed, the reduced games(sets) can allow to develop all the qualities necessary for performance. They have the advantage to be used everywhere in the season (preparation competition) and as well with all the categories of age and sex.

As well, according to Jones, B., et al., (2007), the reduced games can be integrate at once, the physical work, through the actions short and intense, the changes of direction, duels, but also the technical work, tactical and mental. They also allow working all the specific themes of the football, in general, and of the match, in particular, as the conservation of the bale, the animations of offensive and defensive, the psychological aspects

At the end has been confirmed that the statistical hypothesis are statistically significant. They show that the program proposed with the reduced games has a positive impact for this parameter (the speed), we can say that the reduced games can allow to develop the speed and integrate the physical and technical aspect which is inseparable in the modern football. (A. Jaquet, 1998) They had a positive effect for the improvement of the speed of the two groups (G.E. and C.G.), except that the effect of the program used is higher (G.E.), has the method used by the (C.G.), which leads us to say that there is a development on the quality of speed in the young footballers and what we confirms that the lack and poor management of the process of training is the main problem of the gaps at the level of the speed among young footballers, and well on through all these findings we can say that the physical level of the young players Algerians does not respond to the requirements of modern football. Accordingly, the other studies which presented by Adda Ghoual 2010, and Monkam Tchokonte 2011 and Tikeniouine Yagoub 2013, are in agreement that the physical preparation plays a role very important to development of the speed among young people footballers and approve also the study of the researcher Youcef Mekki, 2014, which stresses the need to practice the speed by pyramid method and the use of specific exercises of the speed and the study of Mokami 2011 in which is emphasized the importance of modernizing our physical work in the reduced games in reduced surfaces.

### 5. Conclusion

Modern football is characterized by versatility and it requires from players to be capable to much more effort (physical, tactical, mental) on the ground and in energy spending. Leave the Power and consider as one of the determining factor of performance and the ability to chain short and intense action that characterizes the players because in the modern football all the player attacks and defend together at the same time. This requires to combine technical training, tactical training and physical effort in order to improve long-term performance under competitive conditions.

# References

- 1. Akramov, R. (1990): Selection and preparation of young footballers, O.P.U,(84).2.
- 2. Cometti G. (1997), The physical preparation in football. Paris. Amphora (294).
- 3. Coutts, A. J., Reaburn, P., Piva, T. J., and Murphy, A., (2007). Changes in selected biomechanical, muscular strength, power, and endurance measures during deliberate overreaching and tapering in rugby league players. International Journal of Sports Medicine, 28, 116-124.
- Coutts, A.J., Rampinini, E., Marcora, S.M., Castagna, C., Impellizzeri, F.M., (2009). Heart rate and blood lactate correlates of perceived exertion during small-sided soccer games.J Sci Med Sport. 12(1):79-84
- 5. Dellal A., Owen A., Wong D. P., Van Exsel M., Mallo J. (2010) Technical and physical demands of small-sided games vs. match-play with a special reference to comparison of playing position in elite soccer. *J Strength Cond Res* (I.F. 0.815)
- 6. Impellizzeri, F.M., Rampinini, E., Marcora, S.M., Coutts, A.J., Sassi A.(2004).Use of RPE-Base training load in soccer. Med sci Sport Exerc. 36(6):1042-1047
- 7. Rampinini, E., Impellizzeri, F. M., Castagna, C., and al., (2007). Factors influencing physiological responses to small-sided soccer games. J Sports Sci. 25(6):659-66.
- 8. Turpin B. (2002): Preparation and training of the footballer (physical preparation). Paris, Amphora, (211).
- 9. Weineck (1997). "Manual for training", 4nd edition, Paris. Vigort. (426).

Creative Commons licensing terms

Authors will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Physical Education and Sport Science shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a <u>Creative Commons attribution 4.0 International License (CC BY 4.0)</u>.