European Journal of Physical Education and Sport Science
ISSN: 2501 - 1235
ISSN-L: 2501 - 1235
Available on-line at: www.oapub.org/edu

doi: 10.5281/zenodo.1117867 Volume 3 | Issue 12 | 2017

EXAMINING THE EFFECTS OF FOOTBALL BASIC TRAININGS APPLIED TO 12-YEAR-OLD MALE CHILDREN ON SOME MOTORIC PROPERTIES

Barış Baydemir[1i],
Mahmut Alp[2],
Tugay Çalışkan[1]
[1]Çanakkale Onsekiz Mart University,
Physical Education and Sports High School,
Çanakkale, Turkey
[2]Süleyman Demirel University,
Sports Sciences Faculty,
Isparta, Turkey

Abstract:
The purpose of the present study is to examine the effects of football basic trainings applied to 12-year-old male children on some motoric properties. 40 male children at the age of 12 were included in the study after "Parents Information Forms" were approved by their legal guardians. The average height of the children was 150,20±9,97 cm, the average weight was 46,40±6,42 kg and Body Mass Index average was 20,51±2,56 kg/m^2. Basic trainings that are specific for football were applied to the children 3 days a week, for at least 12 minutes for 12 weeks. Before and after the training, standing long jump, flexibility, and 30-m speed tests were applied to the children. The statistical package program was used in analyzing the data. The "Dependent Sampling t-Test" was applied to determine whether there was a difference between the measurements or not. The results were analyzed according to "0,05" significance level. The differences determined between standing long-jump, flexibility, 30-m speed pretest and posttest values of the footballers were found to be statistically significant ($p<0,05$).

Keywords: football, sports, training, children

[i] Correspondence: email barisbaydemir@hotmail.com

1. Introduction

Today, a more sedentary lifestyle is adopted by individuals due to the technological developments in every field. One of the age groups influenced by this lifestyle is childhood. Movement is extremely important for the bodily development of a child. Participating in physical activities in childhood has some positive effects. Among these positive effects, it is possible to name better growth and development, adopting an active lifestyle, reducing possible future risks, preventing excessive weight gain. In this context, physical activities and dealing with a regular sports branch are important for bodily development of children one of these activities is games (Çelik and Şahin, 2013).

Physical development in children is related with physical structure, and the balancing period of the changes in neural and muscular system. Some physical and physiological tests applied to monitor development are performed to evaluate the effects of activities on growth and development of children. Football is considered to be a proper sports branch for the physical development of children in this period.

The jumps that are outside the conditions, dual fights, falls-standing, changing directions and positive and negative accelerations are important in this sport. Although there are differences according to game areas, it was reported in previous studies that physical structure enables the individual to have athletic body shape, brings advantage in defense and attack, and affect performance in a positive way. Since football is played in a long-term high tempo, basic motoric properties like force, speed, endurance are extremely important as well as other components like agility, activity, flexibility, balance and coordination. In addition, jumping, shooting, turning, drawing the ball, sprint, ball control under pressure, running at different speeds, and changing directions are important in football, and therefore, both aerobic and anaerobic energy systems are used in it (Castanga et al., 2006; Stolen et al., 2005).

Football is one of the popular sports branches. Success in football requires high-level technical, tactical, psychological and physical skills like aerobic and anaerobic force, muscle force, flexibility and agility (Chaalali et al., 2016).

Although football is that popular, children's football is always left behind the scenes, which causes that children's football trainings are performed with less conscience. In the end, future footballers either perform trainings according to the rules of adult footballers or are exposed to random approaches (Eniseler, 2009). For this reason, different training methods must be applied to children for their physical developments and age groups. In the present study, the effects of basic football trainings on some motoric properties of 12-year-old boys were examined.

2. Material and Method

40 male children at the age of 12 were included in the study after "Parents Information Forms" were approved by their legal guardians. The average height of the heights was 150,20±9,97 cm, the average weight was 46,40±6,42 kg and Body Mass Index average was 20,51±2,56 kg/m^2. Basic trainings that are specific for football were applied to the children 3 days a week, for at least 12 minutes for 12 weeks. Before and after the training, standing long jump, flexibility, and 30-m speed tests were applied to the children.

A. Standing Long Jump Test: The distance between the line at the jumping point and the last trace of the footballer was measured after the footballer jumped without gaining speed at the standing point with both legs. The test was retreated twice, and the best score was recorded (Sevim, 1997).

B. Flexibility Test: For flexibility test, the sit-stretch test was used. The testing device was placed on a smooth surface. The footballer was asked to take of his shoes and place his feet at the "0" reference point. The measurement rules were placed at -25 cm. during the measurement, pressure was applied to the knees of the footballer to avoid him bend his knees. Then, the footballer was asked to reach as far as he could by pushing the measurement board without allowing him to make sudden pushing movements or short hits. Right at this point, the distance was recorded after the footballer stayed in this position for 2 seconds. Two rights were given to the footballers. The best score was recorded as the flexibility performance (Diker and Müniroğlu, 2016).

C. 30-m Speed Test: This test was performed with 59 footballers with spikes, shorts and uniforms on a dirt surface. The results were taken with photocell device that worked on light sensitivity. The footballers were allowed to depart 2 meters away from the start line. Forced Vital Capacity (FVC) measurements of 66 footballers were performed three times with hand-held memory spirometer (MIR SPIROBANK A-23-740060), and the best score was taken for evaluations (Temoçin et al., 2004).

3. Result and Discussion

The Standing Long Jump, Flexibility, 30-m Speed Pre-Posttest values of the footballers were compared and the difference was found to be statistically significant ($p<0,05$).

Kürkçü et al. conducted a study and found that the average flexibility value of the footballers was 14,05±4,13 cm, and 30-m. sprint value was 4,15±0,50 s, and the values showed significant difference, which is parallel to our study (Kürkçü et al., 2009).

Güler conducted a study and determined the flexibility values as 16,2±5,9 cm, Standing Long Jump values as 143,4±24,9 cm, 30-m Speed run as 6,11±0,68 s; and reported that the difference between the results were statistically significant (Güler, 2009).

Saçaklı conducted a study and reported that there was significant difference between the Pretest and Posttest values in 30-m sprint test after a specific training program applied to 14-year-old footballers.

Loko et al. conducted a study and compared the 30-m sprint values of 10-17 age children who did regular exercises, and determined that these children were faster than those at the same age with them.

Diallo et al. applied exercises for 3 days to 10-12 age children 3 days a week, and found significant differences between the 20, 30 and 40-m sprint values, which is similar to the findings of our study.

Kara conducted another study on 10-12 age group male sports players, and applied 12-week specific training program; and reported that there were significant differences between the Pretest and Posttest values in flexibility test.

Ateş and Faigenbaum conducted a study on footballers who were at developmental age, applied specific trainings, and reported that the training program had positive effects on flexibility performance (Ateş, 2007; Faigenbaum 2007).

Bavlı conducted a 12-week study and reported that the Pretest and Posttest scores of the study group were different at a statistically significant level when compared with the control group after field and pool plyometric exercises (Bavlı, 2011).

Saygın conducted a study and determined that 30-m speed performance developed at a positive level after 5-week specific trainings (Saygın, 2009).

Ateş et al. conducted a study on 24 footballers and applied a specific training program that consisted of 10 weeks as 2 days a week on the study group while the study and control groups continued their regular football trainings. It was determined at the end of the study that the study group had better 30-m speed values than the control group (Ateş, 2007).

4. Result and Recommendations

By considering that bio-motoric properties are important factors affecting the performance of an individual, we believe that the results of the present study of ours will contribute to tennis trainers and athletes as a reference in terms of monitoring performance. Our study also provides recommendations to trainers and sports scientists for future studies in terms of the contents and intensity of training models.

References

1. Ates¸ M, Ates¸og˘lu U, 2007. The Influence of Pliometric Training on the Upper and Lower Extremity Force Parameters of 16-18 Age Group Male Soccer Players, Sportmetre Physical Education and Sports Sciences Journal, 4: 21-28.
2. Bavlı O, 2011. Comparison of the effects of water plyometrics and land plyometrics on body mass index and biomotorical variables of adolescent basketball players. "International Journal of Sport and Exercise Science, 4 (1): 11-14 required.
3. Chaalali A, Rouissi M, Chtara M, Owen A, Bragazzi NL, Moalla W, Chamari K, 2016. Agility training in young elite soccer players: promising results compared to change of direction drills. Biology of sport, 33(4), 345.
4. Castagna C, Impellizzeri FM, Chamari K, Carlomagno D, Rampinini E, 2006. Aerobic fitness and Yo-Yo continuous and internittent tests performances in soccer players: A correlation study. J. Strenght Cond. Res. 20: 320-325.
5. Çelik A, Şahin M, 2013. Sports and child development. The Journal of Academic Social Science Studies JASSS-International Journal of Social Science, 6(1): 467-478.
6. Diallo O, Dore E, Duche P, Van Praagh E, 2001. Effects of Plyometric Training Followed By A Reduced Training Programme on Physical Performance in Prebubescent Soccer Players. J Sports Med Phys Fitness. 41(3): 342-8.
7. Eniseler N, 2009. Football Training in Children and Young People. TFF FGM Football Training Publications, İstanbul, Turkey.
8. Faigenbaum AD, McFarland JE, Keiper FB, Tevlin W, Ratamess NA, Kang J, Hoffman JR, 2007. Effects of a short-term plyometric and resistance training program on fitness performance in heights age 12 to 15 years, Journal of Sports Science and Medicine, 6: 519-525.
9. Güler D, 2009. Evaluation of Some Physical and Physiological Characteristics of Male Children in 10-13 Age Group Participating in Summer Football Courses Mehmet Akif Ersoy University Journal of Education Faculty,17: 17-27.
10. Kara M, Physical Fitness and Respiratory Parameters of 12-Week-old Group 12-Week Training Program for Male Athletes, Graduate Thesis, Institute of Health Sciences, Physical Education and Sports Department, Gaziantep University, Gaziantep.
11. Kürkçü R, Afyon YA, Yaman Ç, Özdağ S, 2009. Comparison of some physical and physiological characteristics of 10-12 age group players and badmintoncurs. International Journal of Human Sciences, 6(1): 547-556.

12. Loko J, Aule R, Sikkut T, Ereline J, Viru A, 2000. Motor Performance Status In 10 to 17 year old Estonian girls and heights. Scand J Med Sci Sports. 10(2): 109-13.
13. Saçaklı M, 1998. Little-Stars 14/16 Determination of Force Parameters in Young Team Soccer Players and the Effect of Talent Selection. MU Institute of Social Sciences, Unpublished Master Thesis. S: 36, İstanbul.
14. Saygın Ö, 2009. Physical Activity Levels and Physical Suitability of 10-12 Year Old Children, Doctoral Thesis, Marmara University Health Sciences Institute Physical Education and Sports Department,, (Yayınlanmamış), Istanbul.
15. Sevim Y, 1997. Training Information. Ankara, Turkey.
16. Stolen T, Chamari K, Castagna C, Wisloff U, 2005. Physiology of soccer. Sports Med. 35: 501-536.
17. Temoçin S, Ek RO, Tekin TA, 2004. The Effect of Speed and Durability on Respiratory Capacity in Football. Spormeter Physical Education and Sports Sciences Magazine, 2(1): 31-35.

Appendix: List of Tables

Table 1: Physical data of the children

	N	Minimum	Maximum	Average	Std. Dev.
Age (years)	40	12,00	12,00	12,00	,00
Height (cm)	40	132,00	168,00	150,20	9,97
Body weight (kg)	40	33,00	57,00	46,40	6,42
Body Mass Index (kg/m^2)	40	15,20	26,60	20,51	2,56

Table 2: Comparison of Pretest-Posttest Values of Motoric Properties of the Children

	Test Order	Average	Std. Dev.	t	p
Standing Long Jump (cm)	Pretest	121,44	8,02080	-11,12	,000
	Posttest	124,35	7,91309		
Flexibility (cm)	Pretest	12,76	1,94651	-20,40	,000
	Posttest	14,74	1,95612		
Speed (s)	Pretest	5,57	,76851	10,12	,000
	Posttest	5,05	,57550		