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The Examination of the Effect of The 8-Week Combined Training Program on Some Physical Fitness Parameters and Motoric Skills in Male Participants Aged 12-14

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Abstract
The purpose is to examine the effects of the 8-week combined training program on various physical fitness measures and motor abilities in male volunteers between aged 12-14.
Method: The average age of the experimental group between the ages of 12 and 14 in the was 12.9±0.12 years, their height was 145.8±1.6 cm, and their body weight was 40.6±1.5 kg. (n=40) and the control group's average age of 12.7±0.12, height 147.1±1.46 cm and body weight 42.3±1.46 kg (n=40) and these were included in the study (totally 80 male volunteer students). A combined training program was applied to the athletes participating in the study, 3 days a week, for 8 weeks, taking into account the physical and developmental characteristics of the athletes.
Results; 20 m sit-ups (t=3.624; p<.05), left hand reaction (t=-4.759; p<.05), right hand reaction (t=-5.954). ; p<.05), throwing medicine ball backward (5.626; p<.05), T agility test (t=-5.395; p<.05), standing long jump (t=6.207; p<.05), hand claw strength (t=3.637; p<.05), 10 m sprint (t=-3.052; p<.05), 20 m sprint (t=-3.776; p<.05), 30 m sprint (t= -3.927; p<.05) there is a significant difference in their skills. However, there was no significant difference in body mass index (t=-0.827; p>.05) and dribbling skills (t=0.961; p>.05). In general, when the pre- and post-training groups are examined, it has been determined that the group that has combined training has developed more positively.
Conclusion; it was determined that the 8-week combined training program applied to male participants aged 12-14 made positive contributions to some physical fitness parameters and motor skills.
Keywords: *Training, Combined training, Football*

12-14 Yaş Arası Erkek Katılımcılarda 8 Haftalık Kombine Antrenman Programının Bazı Fiziksel Uygunluk Parametrelerine ve Motorik Becerilere Etkisinin İncelenmesi

Özet
Amaç; 12-14 yaş arası erkek katılımcılarda 8 haftalık kombine antrenman programının bazı fiziksel uygunluk parametrelerine ve motorik becerilere etkilerinin incelenmesidir.
Metot; Çalışmaya Ağrı ili Taşlıçay ilçesi Halk Eğitim Merkezi futbol kursu öğrencilerinden 12-14 yaş arası deney grubu yaş ortalamaları 12.9±0.12 yıl, boyları 145.8±1.6 cm, vücut ağırlıkları 40.6±1.5 kg (n=40) ve kontrol grubu yaş ortalamaları 12.7±0.12 yıl, boyları 147.1±1.46 cm, vücut ağırlıkları 42.3±1.46 kg (n=40) olan toplam 80 erkek öğrenci gönüllü olarak katılmıştır. Çalışmaya katılan sporculara haftada 3 gün, 8 hafta süreyle sporcuların bedensel ve gelişim özellikleri göz önüne alınarak kombine antrenman programı uygulanmıştır.

Vücut kütle indeksi, 20 m mekik, sol el reaksiyon, sağ el reaksiyon, top sürme, geriye doğru sağlık topu fırlatma, çeviklik, durarak uzun atlama, el-pençe kuvveti, 10-20-30 m sürat ölçümleri yapılmıştır.
Bulgular; Grupların antrenman öncesi ve antrenman sonrası performanslarının karşılaştırılmasında, kombine antrenman sonrası, 20 m mekik ($t=3.624$; $p<.05$), sol el reaksiyon ($t=-4.759$; $p<.05$), sağ el reaksiyon ($t=-5.954$; $p<.05$), geriye doğru sağlık topu fırlatma (5.626; $p<.05$), T çeviklik testi ($t=-5.395$; $p<.05$), durarak uzun atlama ($t=6.207$; $p<.05$), el pençe kuvveti ($t=3.637$; $p<.05$), 10 m sürat ($t=-3.052$; $p<.05$), 20 m sürat ($t=-3.776$; $p<.05$), 30 m sürat ($t=-3.927$; $p<.05$) becerilerinde anlamlı bir fark olduğu görülmektedir. Ancak Vücut kütle indeksi ($t=-0.827$; $p>.05$), top sürme ($t=0.961$; $p>.05$) becerisinde anlamlı bir fark bulunmamaktadır. Genel olarak antrenman öncesi ve sonrasına bakıldığında kombine antrenmanı uygulanan grubun daha olumlu yönde geliştiği tespit edilmiştir.
Sonuç; 12-14 yaş arası erkek katılımcılara uygulanan 8 haftalık kombine antrenman programının bazı fiziksel uygunluk parametrelerine ve motorik becerilere olumlu katkılar sağladığı tespit edilmiştir.
Anahtar kelimeler: *Antrenman, Kombine antrenman, Futbol*

Introduction

Sport is a physical and mental activity that can be done by individuals of all ages. Sports reduce stress and make a person feel more energetic. An individual who does sports feels mentally at ease and content. Since ancient times, the primary goal of physical education has been to develop a person's physical and mental drive, to build his will, and to gain confidence. It aspires to go far beyond general goals such as high performance expectations, championships, and winning records (Bilge, 2007).

When we look at current society's educational programs, we can observe that sports-related activities begin at a young age. Depending on the program's good qualities, it provides physical and psychological advantages to children. Sport in early childhood education promotes children's comprehension of play and teamwork, as well as physical and mental development in primary school (İri, 2003).

When directing sports, it is critical to consider the child's age, technique, and proclivity for sports. Sports fitness assists a person to learn branch-specific abilities more quickly. Although a person picked based on the degree of branch appropriateness loses power over time, technical skill inadequacies are at a level that cannot be noticed (Mülazımoğlu et al., 2009).

The World Health Organization defines youth as those aged 10 to 19. When physical growth is advanced, physiological, mental, and psychological changes occur. Gymnastics, exercise, sporting activities, and educational games all play an important role in physical development (Bulduk et al., 2000).

Children's physical condition affects their motor skills. Unless the harmony of physical characteristics coincides with the field of sports, it is not possible for motor skills to reach the desired level. (D'Hondt et al., 2009).

The measures applied to children examine the effects of exercise on developmental and health data. The educational levels of children are also evaluated in terms of trainability. (Pekel et al., 2006).

Combined training is the process of optimizing the physical and mental strength, technical and tactical abilities, and the foundation of typical training material via physical and psychological stress. The combined training plays a crucial role in athletes' motor capabilities, technical tactics and game perspective, personality development and training, mental preparation and mental growth. The aim of combined training is to improve an athlete's performance in training and competition by including general and particular workouts and it is to determine goals according to this (Sevim, 2002).

The impact of numerous 8-week training programs between the ages of 12-14 in many branches on various criteria connected to physical fitness is investigated when the literature is examined. However, it was discovered that certain parts are missing and that some parameters are restricted. Considering these situations in the literature, our study, Investigation of the Effect of an 8-Week Combined Training Program in Football on Some Physical Fitness Parameters, is very important in terms of contributing to the literature, particularly the type of training and tests used.

Method

Research Model

The research is the real experimental model, which is the pattern in which the subjects in the randomly created sample of experimental model types are assigned to the groups.

Research Group

The study was carried out between 01.05.2022 – 31.07.2022 reports. The average age of the experimental group between the ages of 12 and 14 in the Taşlıçay district of Ağrı province was 12.9±0.12 years, their height was 145.8±1.6 cm, and their body weight was 40.6±1.5 kg. (n=40) and the control group's average age of 12.7±0.12, height 147.1±1.46 cm and body weight 42.3±1.46 kg (n=40) and these were included in the study. A total of 80 male students participated voluntarily. The tests were held at Taşlıçay District City Stadium and Taşlıçay Boarding Regional Secondary School Sports Hall. It was confirmed that the subjects voluntarily participated in the study by filling in the parent consent form. The subjects did not receive any drug treatment or any nutritional program. Ethics Committee Scientific Study Approval (E-95531838-050.99-40369) was obtained. In the measurements, individuals were asked to use their maximal capacity.

Data Collection Tools

Height and body weight measurements

The height of the athletes participating in the study was measured with the mesilife SW-G06B height meter with a precision of 0.01 m and their body weight with a Goldmaster GM 7175 W Slimfit electronic scale with a precision of 0.01 kg.

Body mass index

The measurement was calculated by dividing the kg value by the square of the height in m (kg/m2).

Visual Reaction Time

Measuring Visual Reaction Time with the Newtest 1000-NT Instrument consists of two separate parts and the tool can deliver three stimuli. In the first, there is the selected time and warning device, in the second, there is a warning sign that is placed on the table and allows the subject to receive the stimulus. One of these stimuli is sound, the others are more than one light stimulus. Stimuli are given (manually) by the practitioner from a place that the subject cannot see. The tool gives values of 1/1000th of a second. With the Newtest 1000, visual or auditory stimuli can be given individually, as well as mixed stimulus.

Hand grip strength

Hand-grip strength of the subjects were performed with Takei-el dynamometer . After the dynamometer was adjusted according to the hand size of the athletes, it was determined by squeezing with the maximum force they could apply without any support, with their arms

extended to the side to make an angle of 10-15 degrees from the shoulder. The test was repeated twice for the dominant hand, and the best value was recorded.

Standing long jump test

The explosive strength characteristics of the athletes were measured by applying the standing long jump test. The athlete was asked to jump to the best distance he could jump with both feet from the back of the line, at a level that would not violate the specified line, and the two repetition results were recorded with the mesilife SW-G06B with the best distance precision degree of 0.01 m.

Agility Test (t-test)

The quickness skills of the athletes were measured with the agility test. Three funnels were arranged at a distance of five meters. Gama Teknoloji photocell stopwatch was placed 10 meters behind the area where the middle funnel was located. In the beginning, the athlete first reached the funnel in the middle from the photocell by running at a maximum sprint of 10 m, then turned 90 degrees to the funnel on his left and reached the funnel at a maximum sprint of 5 m away, then turned around with an angle of 180 degrees and then ran 10 m to the funnel located in the far corner, turning around the funnel at an angle of 180 degrees and returning to the center and after turning 90 degrees from the outside of the funnel, he reached the photocell by running backwards and finished the test. The elapsed time was measured in seconds.

20 m shuttle run test

Starting and returning places were determined at 20 m intervals in the hall. Athletes were asked to run the determined interval with the signal tone determined in the program. The running level, which started with the beep, was increased every 10 seconds. The athlete, who could not reach the determined area with the signal sound, had to close the distance he missed in the second 20 m with the second signal sound. If he could not close it, the test was terminated with the third signal sound.

Dribbling Test

For the track, 12 funnels with a diameter of 18 m and 4.5 m intervals were arranged in a circle. The test begins with the athlete dribbling the ball from 1 m outside the circle. The athlete can start the test clockwise or counterclockwise. It starts with the athlete dribbling the ball through the funnels and ends when he returns to the starting point. After two attempts, the best second rating is recorded.

Throwing a Medicine Ball

The farthest place where the athlete threw the medicine ball (2 kg) from the top of the head to the back area was measured in metre. While throwing the medicine ball, it flexed the shoulder area while extending the hip, leg and trunk. The distance between the place where the medicine ball arrived and the heel was calculated in meters (mesilife SW-G06B).

10m Sprint Test

Gamma Technology photocell stopwatch was placed on the start and finish lines of the distance determined at 10 m intervals. When the athlete was ready by waiting 50 cm behind the starting line, he started the sprint test. The best score was recorded after two attempts.

30m Sprint Test

Gama Technology photocell stopwatch was placed on the start and finish lines of the distance determined at 30 m intervals. When the athlete was ready by waiting 50 cm behind the starting line, he started the sprint test. The best score was recorded after two attempts.

20m Sprint Test

Gama Technology photocell stopwatch was placed on the start and finish lines of the distance determined at 20 m intervals. When the athlete was ready by waiting 50 cm behind the starting line, he started the sprint test. The best score was recorded after two attempts.

Training Program

The training program was applied for 8 weeks, 3 times a week, as combined exercise + technical training, as 24 training sessions. The selected combined training exercises were applied from easy to difficult. The control group continued their football training without applying the combination training.

Table 1. Exercises performed in 15-minute warm-up exercises in the initial phase

Exercise	**Duration**	**Rest**
Running – Walking	5-10 min	1 min
Flexing the feet forward	5-7 sec	5-10 sec
Flexing with feet sideways	5-7 sec	5-10 sec
Paired stretching	5-7 sec	5-10 sec
Stretching the body back	5-7 sec	5-10 sec
Stretching forward and sideways to the knees	5-7 sec	5-10 sec
Stretching forward bending knee	5-7 sec	5-10 sec
Ropeless jump	5-7 sec	5-10 sec

Table 2. Exercises performed in 10-minute cool-down exercises in the finishing phase

Exercise	**Duration**	**Rest**
Stretching by pulling one arm to the side	5-7 sec	5-10 sec
Stretching in a semi-sitting position	5-7 sec	5-10 sec
Pulling one leg back in an upright position	5-7 sec	5-10 sec
Leaning forward in a sitting position	5-7 sec	5-10 sec
Stretching by tilting the torso forward	5-7 sec	5-10 sec
Stretching hands (closed) up	5-7 sec	5-10 sec
Sitting tall on the floor knees bent back under the torso	5-7 sec	5-10 sec
Yawning sideways and backward	5-7 sec	5-10 sec

Table 3. Eight (8) week combined training program

	MONDAY	WEDNESDAY	FRIDAY
1st Week	15 min warming, stretching	15 min warming, stretching	15 min warming, stretching
	Educational game (You have my hand)	Educational game (Foot Tennis)	Educational game (5 on 2 game)
	5m-10m-20m output	Skipping rope	Standing long jump
	Slalom with ball	Push-ups - sit-ups	Obstacle jump
	10 min cooldown	10 min cooldown	10 min cooldown
2nd Week	15 min warming, stretching	15 min warming, stretching	15 min warming, stretching
	Educational game (Come This Side)	Educational game (Camel Dwarf)	Educational game (Foot Volleyball)
	Vertical jump with pulling knees	Squat	One foot jump
	Depth leap downstairs	Squat jump	Push-ups-sit-ups
	10 min cooldown	10 min cooldown	10 min cooldown
3rd Week	15 min warming, stretching	15 min warming, stretching	15 min warming, stretching
	Educational game (Dodgeball)	Educational game (Lay-Up)	Educational game (Fast Rabbit)
	10m-20-30m output	3x30 sec foot pulling exercise	Output run (short distance)
	Passing work in narrow space	Dribbling with the Ball	Slalom with ball
	10 min cooldown	10 min cooldown	10 min cooldown
4th Week	15 min warming, stretching	15 min warming, stretching	15 min warming, stretching
	Educational game (Splashing Stick)	Educational game (Crab Race)	Educational game (Pass Race)
	3x7 min jog (long distance)	Output with ball, Dribbling	Output run (short distance)
	10 min cooldown	Slalom with ball	Push-ups - Sit-ups
		10 min cooldown	10 min cooldown
5th Week	15 min warming, stretching	15 min warming, stretching	15 min warming, stretching
	30 min cross country run	Educational game (Head Ball)	Educational game (5v5 miniature goal match)
	10 min cooldown	Zig-zag running in slalom	single leg stair jump
		Zig-zag run with the ball	double foot stair jump
		10 min cooldown	10 min cooldown
6th Week	15 min warming, stretching	15 min warming, stretching	15 min warming, stretching
	Educational game (Skipping Rope)	Educational game (Goal from the ground)	Educational game (Driving Ball)
	10m-20m-30m output	Zig-zag running in slalom	Single leg stair jump

	Push-ups - Sit-ups 10 min cooldown	Zig-zag run with the ball 10 min cooldown	Double foot stair jump 10 min cooldown
7th Week	15 min warming, stretching Educational game (Wolf and Lamb) 3x7 min jog (long distance) 10 min cooldown	15 min warming, stretching Educational game (Back to Back) Output with ball, Dribbling Slalom with ball 10 min cooldown	15 min warming, stretching 30 min cross country run 10 min cooldown
8th Week	15 min warming, stretching Educational game (7 vs 7 Football Match) 10 min cooldown	15 min warming, stretching Educational game (Handkerchief Grab) Output run (short distance) Push-ups - Sit-ups 10 min cooldown	15 min warming, stretching Educational game (2 Forward 1 Back Leap) Skipping rope Obstacle jump 10 min cooldown

Analysis of Data

SPSS version 23.0 software (Statistics Package for Social Sciences; SPSS Inc., Chicago, IL, USA) was used in all statistical analyzes and these analyzes were performed through this software. The data in each variable obtained from the pre-post test used in the study were provided by the kurtosis-skewness values in order to comply with the normal distribution. The findings show that the variables are between +2 and 2, which is the normal distribution value, and that the normal distribution is provided. Another assumption is the control for the homogeneity of groups. The variables were checked with the Levene test and it was determined that the variables were not significant as a result of the test ($p>.05$). For this reason, "Paired Sample T Test" was used for the differences between the pre-test and post-test within the groups, and "Independent Sample T Test" was used for comparisons between groups. The error level was accepted as 0.01 and 0.05 for all statistical methods.

Result

The demographic (age, height, body weight, body mass index) characteristics of the individuals participating in the study are given in Table 4.

Table 4. The demographic characteristics of individuals

Variables (n=80)	Age (Year)	Height (cm)	Body weight (kg)	Body mass index (kg/m^2)
Average	12.863	146.500	40.988	18.9753
Standard deviation	.8073	9.7863	9.3287	3.36436
Minimum	12.0	127.0	23.0	14.26
Maximum	14.0	172.0	62.0	27.56

Table 5. The normality characteristics of individuals according to kurtosis and skewness values

Variables (n=80)	Skewness		Kurtosis	
Age	,258	,269	-1,417	,532
Height	,285	,269	-,432	,532
Weight	,451	,269	-,219	,532
Body Mass Index	,777	,269	,050	,532
20 m sit-ups	,836	,269	,924	,532
Reaction Left Hand	,440	,269	,477	,532
Reaction Right Hand	,293	,269	-,353	,532
Dribbling	,048	,269	-,841	,532
Throwing a Medicine Ball Backward	,667	,269	,072	,532
T Test	-,272	,269	-,587	,532
Standing Long Jump	1,028	,269	1,734	,532
Claw Force	1,055	,269	1,512	,532
10 m Sprint	-1,676	,269	1,284	,532
20 m Sprint	-,090	,269	,086	,532
30 m Sprint	-,134	,269	-,582	,532

Table 6. The homogeneity characteristics of individuals according to Levene test

Variables (n=80)	Levene Statistic	Sig.
Age	,120	,730
Height	,836	,363
Weight	,131	,719
Body Mass Index	,882	,351
20 m sit-ups	2,867	,094
Reaction Left Hand	,494	,484
Reaction Right Hand	1,955	,166
Dribbling	4,185	,044
Throwing a Medicine Ball Backward	4,032	,048
T Test	,531	,468
Standing Long Jump	3,572	,062
Claw Force	6,624	,012
10 m Sprint	,769	,383
20 m Sprint	1,505	,224
30 m Sprint	,826	,366

Table 7. The comparison of in-group pre- and post-test values of combined training

Variables	Experimental group				Control group			
	Pre-workout (n=40) X	Post Training (n=40) X	t	p	Pre-workout (n=40) X	Post Training (n=40) X	t	p
Body Mass Index	19,0343	18,6095	2,556	,015	18,9163	19,1590	-1,749	,088
20m Shuttle Run	38,450	46,700	-9,167	,000	37,825	37,850	-,042	,966
Reaction Left Hand	32,250	30,225	4,024	,000	33,525	36,350	-7,631	,000
Reaction Right Hand	31,250	29,750	2,342	,024	34,250	37,275	-11,774	,000
Dribbling	24,4000	73,3520	-,971	,337	24,9208	25,0358	-4,260	,000
Throwing a Medicine Ball Backward	5,5530	5,7733	-4,488	,000	4,4593	4,3885	8,612	,000
T Agility Test	13,5085	12,8718	7,027	,000	13,8893	13,9803	-8,046	,000
Standing Long Jump	161,425	174,725	-6,643	,000	154,950	149,375	8,599	,000
Hand Grip Strength	20,8083	26,668	-9,270	,000	21,5500	23,175	-2,790	,008
10 m Sprint	2,1933	2,1388	6,267	,000	2,2688	2,3130	-10,563	,000
20 m Sprint	3,9178	3,8290	4,531	,000	4,0663	4,1155	-6,540	,000
30 m Sprint	5,5883	5,4518	4,947	,000	5,7825	5,8410	-7,556	,000

In the comparison of the pre-test and post-test performances of the athletes participating in the study, the body mass index (t=2.556; p<.05), 20 m shuttle (t=-9.167; p<.05), left hand reaction (t) in the combined training group =4.024; p<.05), right hand reaction (t=2.342; p<.05), throwing medicine ball backward (t=-4.488; p<.05), T agility test (t=7.027; p< .05), standing long jump (t=-6.643; p<.05), hand claw strength (t=-9.270; p<.05), 10 m sprint (t=6.267; p<.05), 20 m sprint (t=4.531; p<.05), 30 m sprint (t=4.947; p<.05) there is a significant positive difference. However, there is no significant difference in dribbling skills (t=-0.971; p>.05). In general, it was determined that the post-test averages were significantly improved compared to the pre-test averages. In the comparison of the pre- and post-test performances of the control group in which combined training was not applied left hand reaction (t=-7.631; p<.05), right hand reaction (t=-11.774; p<.05), dribbling (t=-4.260; p<.05), backward medicine ball throw (t=8.612; p<.05), T agility test (t=-8.046; p<.05), standing long jump (t=8.599; p<.05), hand claw strength (t=-2.790; p< .05), 10 m sprint (t=-10.563; p<.05), 20 m sprint (t=-6.540; p<.05), 30 m sprint (t=-7.556; p<.05) there is a significant difference. However, there is no significant difference in body mass index (t=-1.749; p>.05), 20 m shuttle (t=-0.042; p>.05), skills. In the control group, it was determined that there was a negative level of differentiation in general.

Table 8. The comparison of pre-test and post-test values between groups before and after training

Variables	Pre-workout				Post Training			
	Experimental Group (n=40) X	Control group (n=40) X	t	p	Experimental Group (n=40)	Control group (n=40)	t	p
Body Mass Index	19,0343	18,9163	,156	,877	18,6095	19,1590	-,827	,411
20 m Sit-Ups	38,450	37,825	,225	,823	46,700	37,850	3,624	,001
Reaction Left Hand	32,250	33,525	-,979	,331	30,225	36,350	-4,759	,000
Reaction Right Hand	31,250	34,250	-2,104	,039	29,750	37,275	-5,954	,000
Dribbling	24,4000	24,9208	-1,226	,224	73,3520	25,0358	,961	,340
Throwing a Medicine Ball Backward	5,5530	4,4593	4,278	,000	5,7733	4,3885	5,626	,000
T Test	13,5085	13,8893	-1,746	,085	12,8718	13,9803	-5,395	,000
Standing Long Jump	161,425	154,950	1,553	,125	174,725	149,375	6,207	,000
Hand-Claw Force	20,8083	21,5500	-,573	,569	26,668	23,175	3,637	,000
10 m Sprint	2,1933	2,2688	-1,333	,186	2,1388	2,3130	-3,052	,003
20 m Sprint	3,9178	4,0663	-1,995	,050	3,8290	4,1155	-3,776	,000
30 m Sprint	5,5883	5,7825	-1,882	,064	5,4518	5,8410	-3,927	,000

When the table is examined, the comparison of the pre-training and post-training performances of the groups, combined pre-training Body mass index (t=0.156; p>.05), 20 m sit-up (t=0.225; p>.05), left hand reaction (t=-0.331) ; p>.05), dribbling (t=-1.226; p>.05), T agility test (t=-1.746; p>.05), standing long jump (t=1.553; p>.05), hand claw strength (t=-0.573; p>.05), 10 m sprint (t=-1.333; p>.05), 20 m sprint (t=-1.995; p>.05), 30 m sprint (t =-1.882; p>.05) there is no significant difference in their skills. However, there is a significant difference in right hand reaction (t=-2.104; p<.05) and throwing medicine ball backward (t=4.278; p<.05). In general, when the pre-training groups were compared, it was determined

that there was not much difference. In the comparison of the pre-training and post-training performances of the groups, after combined training, 20 m sit-ups (t=3.624; p<.05), left hand reaction (t=-4.759; p<.05), right hand reaction (t=-5.954). ; p<.05), throwing medicine ball backward (5.626; p<.05), T agility test (t=-5.395; p<.05), standing long jump (t=6.207; p<.05), hand claw strength (t=3.637; p<.05), 10 m sprint (t=-3.052; p<.05), 20 m sprint (t=-3.776; p<.05), 30 m sprint (t= -3.927; p<.05) there is a significant difference in their skills. However, there was no significant difference in body mass index (t=-0.827; p>.05) and dribbling skills (t=0.961; p>.05). In general, when the pre- and post-training groups are examined, it has been determined that the group that has combined training has developed more positively.

Discussion and Conclusion, Suggestions

The average age of the experimental group between the ages of 12 and 14 in the Taşlıçay district of Ağrı province was 12.9±0.12 years, their height was 145.8±1.6 cm, and their body weight was 40.6±1.5 kg. (n=40) and the control group's average age of 12.7±0.12, height 147.1±1.46 cm and body weight 42.3±1.46 kg (n=40) and these were included in the study. A total of 80 male students participated voluntarily. A combined training program was applied to the athletes participating in the study, 3 days a week, for 8 weeks, taking into account the physical and developmental characteristics of the athletes. Body mass index, 20 m sit up, left hand reaction, right hand reaction, dribbling, throwing medicine ball backward, agility, standing long jump, hand-claw strength, 10-20-30 m sprint measurements were made.

In our study, there was no significant difference (p>0.05) between the control and experimental groups in body mass index in both pre-test and post-test. We think that this is due to the fact that both groups are on the move. Extra combined training was applied to one group. It was seen that our study was not supported in the literature (Şahin et al., 2011).

Quickness is an important parameter in football, as it is in every sport. It is a parameter that can greatly affect the winner and loser. T-test is an effective performance measurement method in determining these parameter values. There was a significant (p<0.05) improvement in the experimental group. When the literature is examined, it is seen that our study is supported (Singh et al., 2015; Davaran et al., 2014; Khorasani et al.,2010).

The reaction performance was found to be significant (p<0.05) in our study. The scientific studies we have researched have a quality that supports the significance we have found (Günay et al., 2019, Ceylan and Saygın 2018; Crocetta et al, 2018; Duncan et al., 2015).

When we look at the literature, it is seen that combined training creates significant (p<0.05) effects in the 10-20-30 m sprint test. It is seen that it progresses in parallel with our study. The findings support the data we obtained (Weineck, 2011).

One of the parameters that make a difference in sports branches is the power parameter. The backward medicine ball throwing test is a performance test to determine high power (Kethüda, 2023). The data we obtained by throwing medicine balls supports the significance (p<0.05) by showing parallelism with the literature studies.

When examining the literature on strength skills, significant results were seen in the standing long jump test. Yılmaz et al. (2014) found a significant difference in the long jump

test by standing in their study named the effect of 8-week strength training on some physical fitness parameters in children aged 13-16 ($p<0.05$). The literature shows parallelism with our study.

The 20 m sit-ups run test is an important parameter in terms of determining the aerobic capacity of the athletes. Pancar et al. (2018) found a significant difference ($p<0.05$) between the experimental group and the control group in the sit-ups test. The literature supports our study in parallel with our study.

The dribbling skill, which is one of the branch-specific skills in football, gives important data with the dribbling test. Malina et al. (2005) conducted tests by considering the maturation periods of 69 male football players in the 13-15 age group. Malina et al. (2005), as a result of football-specific basic technical tests, athletes; 8.1±1.1 s for the dribbling test and 14.0±1.2 s for the fast dribbling test determined them as points. The studies do not support our research positively ($p<0.05$).

Hand claw strength is another type of test that examines strength parameters. When the literature is examined, it is seen that it supports our study (İbiş, 2002).

In conclusion; It has been determined that the 8-week combined training program applied to male participants between the ages of 12-14 has positive effects on some physical fitness and motoric parameters. Since football is a fast-paced game that requires strength, it can be recommended to apply repetitive sprint exercises to develop branch-specific skills.

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