

# The Effect of Compound Exercises Using Compressive Training Method on Some Basic Skills and Maximum Anaerobic Power in Female Futsal Players

Assist. Prof. Dr. Atef Abdulkhaleq Al-Agha <sup>1\*</sup>, Assist. Prof. Dr. Abdullah Mohammed Tiawi, Dr. Qusay Ali Mahmoud Jalil

<sup>1</sup> College of Physical Education and Sports Sciences, Tikrit University, Iraq.

\* Corresponding author: [Ateefalagasport@tu.edu.iq](mailto:Ateefalagasport@tu.edu.iq)

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## Abstract

The research aims to identify the impact of compound exercises using a pressurized training method on some basic skills and maximum anaerobic capacity for indoor soccer female players. The researchers used the experimental method for its suitability to the nature of the research. The research community consisted of women's clubs in Kirkuk province, totaling (4) clubs for the sports season (2021-2022). The research sample was the North Gas Club, consisting of (14) players selected intentionally and randomly divided into two groups (control and experimental) with (6) players for each group, and (2) players were chosen for pilot experiments. Homogeneity was ensured in variables (height, mass, chronological age, training age) and equivalence between the two research groups in basic skills, physical abilities, and maximum anaerobic capacity. The experimental design with pre- and post-tests for both the control and experimental groups was adopted. The researchers used (mean, standard deviation, skewness coefficient, T-test for paired samples, T-test for independent samples). The researchers concluded that the compound exercises using the pressurized training method implemented by the experimental group resulted in a noticeable improvement in all basic skills and maximum anaerobic capacity. The control group also showed improvement in some basic skills and maximum anaerobic capacity.

**Keywords:** Compound exercises, pressurized training method, basic skills, maximum anaerobic capacity.

## 1- Introduction

### 1. Introduction to the Research:

#### 1.1 Introduction and Importance of the Research:

The advancement in sports achievements in recent years has not occurred randomly but using scientific research and proper planning. Futsal (indoor soccer) is a sport that requires high physical capabilities and comprehensive preparation (physical, skillful, psychological, tactical) so that the player can endure the burdens of a strong and fast match. The pressurized training method is considered one of the important techniques in training the skill associated with endurance, focusing on the speed and

accuracy of performance with a duration of (30-60) seconds. This method aims to train skills under fatigue, as happens in matches, and this high skill performance makes the work anaerobic<sup>1</sup>.

The fundamental skills of football "are among the most essential components of the game to achieve the primary objective of mastering the player's handling and performance with the ball. A player's proficiency in these skills means executing all tactical duties accurately, automatically, and quickly with minimal effort and time"<sup>2</sup>.

The development of the speed of motor performance of basic skills in futsal players helps in utilizing time in the best way possible, allowing the player to reach an elevated level of physical and skill proficiency in less time. Moreover, it enhances the maximum anaerobic capacity, which is one of the essential functional requirements for modern soccer players. This enables the player to perform a match (40) minutes or more efficiently without showing fatigue.

The importance of this research lies in the development of basic skills and maximum anaerobic capacity through the preparation of compound exercises using the pressing training method, with an emphasis on using sports training principles in the training units.

### **1-2 Research Problem:**

Through their experience in futsal, being referees and coaches for the university team, the researchers noticed a weakness in the physical and skill abilities in women's teams in Iraq. This is due to the emergence of skill and tactical errors. Most coaches focus on traditional exercises for skills and physical training without integrating them into a single exercise and without using pressing training exercises for women's teams. Thus, the researchers question whether compound exercises using the pressing training method affect some basic skills and maximum anaerobic capacity in futsal players.

### **1-3 Research Objectives:**

The research aims to:

- Identify the effect of compound exercises using the pressing training method on some basic skills and maximum anaerobic capacity in futsal players.
- Identify the differences in some basic skills and maximum anaerobic capacity between the control and experimental groups in the post-test.

### **1-4 Research Hypotheses:**

- There are statistically significant differences in some basic skills and maximum anaerobic capacity between the pre-test and post-test.
- There are statistically significant differences in some basic skills and maximum anaerobic capacity in the post-test between the control and experimental groups.

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<sup>1</sup> \*\*Aya Taqataqa; Modern Football Training Methods:\*\* (Cairo, Dar Al-Kitab Publishing, 2017) p.1.

<sup>2</sup> Ghazi Saleh Mahmoud, Riyad Mazhar; Futsal (Indoor Football), 1st ed. (Baghdad, Al-Nibras Office, 2014), p. 49.

**1-5 Research Fields:**

**1-5-1 Human Field:** Futsal players of the North Gas Club in Kirkuk for the 2021-2022 sports season.

**1-5-2 Spatial Field:** The sports activity hall in Kirkuk.

**1-5-3 Temporal Field:** 13/12/2021 – 11/2/2022.

**3- Research Methodology and Field Procedures:****3-1 Research Methodology:**

The researchers used the experimental method with the control and experimental groups to suit the nature of the research.

**3-2 Research Community and Sample:**

The research community was determined by the futsal clubs in Kirkuk, totaling (4) clubs: North Gas, North Oil, Al-Thawra, and Sulaf clubs, with a total of (58) players. The research sample was deliberately chosen from the North Gas Club, with a total of (14) players, representing (27.58%) of the research community. Two players were selected for the exploratory experiments, leaving (12) players for the research sample, divided into two groups: control and experimental, each consisting of (6) players.

**3-3 Homogeneity of the Research Sample:**

Homogeneity was conducted in variables (age, height, mass, training age), as shown in Table (1), which presents the means, standard deviations, median, and skewness coefficient.

Table (1) shows the homogeneity of the research sample:

Variables	Unit of Measurement	Mean ( $\pm$ SD)	Median	Skewness Coefficient
Age	Years	18.25 $\pm$ 1.680	17	0.135
Height	cm	164 $\pm$ 5.287	160	1.48
Mass	kg	60.25 $\pm$ 5.636	58	1.12
Training Age	Years	3 $\pm$ 0.280	2	0.97

**3-4 Sample Homogeneity:**

Table (2) illustrates the sample homogeneity in the research variables.

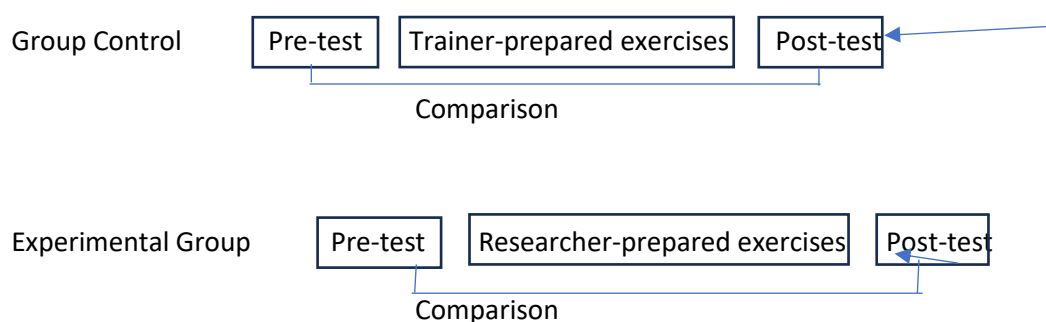
No.	Variable	Measurement Unit	Group	Mean	Standard Deviation	t Value	Probability Level
1	Motor Speed	Seconds	Control	9.151	0.455	0.195	0.898
			Experimental	9.005	0.410		
2		Seconds	Control	4.950	0.121	0.850	0.500

	Transitional Speed		Experimental	4.900	0.105		
3	Response Speed	Seconds	Control	4.006	0.385	0.445	0.780
			Experimental	4.110	0.398		
4	Speed-Accented Power for Men	Meters	Control	13.380	1.050	0.805	0.530
			Experimental	13.450	1.095		
5	Agility	Seconds	Control	8.950	0.550	0.560	0.885
			Experimental	8.800	0.545		
6	Rolling	Seconds	Control	11.250	1.250	0.185	0.905
			Experimental	11.950	1.345		
7	Passing	Degrees	Control	12.200	4.950	0.995	0.400
			Experimental	12.100	5.005		
8	Scoring	Degrees	Control	14.500	5.200	0.351	0.875
			Experimental	14.000	5.150		
9	Maximum Anaerobic Capacity	Watts	Control	295.100	29.850	0.165	0.990
			Experimental	299.200	31.800		

Based on Table (2), the probability levels range between (0.400) and (0.990), all of which are greater than the significance level (0.05), indicating no statistically significant differences exist.

### 3-5 Experimental Design:

The researchers employed an experimental design known as randomized equivalent groups with pretest-posttest control.



This figure illustrates the experimental design for the research.

**3-6 Instruments, Tools, and Methods Used in the Research:****3-6-1 Data Collection Methods:**

- Arabic sources.
- Internet resources.
- Personal interviews.
- Measurements and tests.
- Paper forms for data recording.

**3-6-2 Devices Used in the Research:**

- Pulse measurement device.
- German-made electronic scales, quantity (2).
- Stopwatch, quantity (3).
- Monark exercise bike.

**3-6-3 Tools Used in the Research:**

- Indoor football field.
- Markers, quantity (24).
- Measuring tape.
- Size four footballs, quantity (20).
- Adhesive tapes.

**3-7 Identification of Physical Fitness, Basic Skills, Tests, and Maximum Aerobic Capacity:****3-7-1 Identification of Physical Fitness and Skills:**

The researchers analyzed the content of the sources and scientific studies (Ammar Shahab Ahmed, 2008)<sup>3</sup>, (Rabie Khalef Jameel, 2009)<sup>4</sup>, (Ammar Shahab Ahmed, 2023)<sup>5</sup>, (Alaa Jasim

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<sup>3</sup> Ammar Shahab Ahmed; Design and Construction of Some Offensive Skills Tests for Futsal Players: (Unpublished Master's Thesis, University of Mosul, College of Physical Education, 2008).

<sup>4</sup> Rabie Khalef Jameel; Design and Construction of Tests to Measure Some Elements of Physical Fitness for Football and Futsal Players: (Unpublished Master's Thesis, University of Mosul, College of Physical Education, 2009).

<sup>5</sup> Ammar Shahab Ahmed; Design and Construction of Some Functional, Mental, and Predictive Indicators for Skill Performance of Futsal Players: (Unpublished Doctoral Dissertation, University of Mosul, College of Physical Education, 2013).

Mohammed Tayawi, 2015)<sup>6</sup>, (Naghah Muayyad Mohammed, 2013)<sup>7</sup>, (Adham Saleh, 2015)<sup>8</sup>, (Mahmoud Hamdoun and others, 2017)<sup>9</sup>.

### 3-8 Physical Fitness, Skills, and Aerobic Capacity Tests Used in the Research:

1. Treadmill running test around (8) markers, to measure agility<sup>10</sup>.
2. (10) consecutive jumps test for distance, to measure explosive strength in men<sup>11</sup>.
3. Rotating legs around an indoor football, to measure motor speed in men<sup>12</sup>.
  4. Running against the signal test, to measure response speed<sup>13</sup>.
  5. Running (30) meters from a moving start test, to measure transitional speed<sup>14</sup>.
  6. Ground pass test using the front side of the foot on a divided bench, to measure passing<sup>15</sup>.
  7. Dribbling the ball around (5) cones using the Barrow method, to measure dribbling<sup>16</sup>.
  8. Shooting from motion on overlapping divisions drawn within the goal, to measure shooting<sup>17</sup>.
  9. Rast test, to measure anaerobic power and fatigue index<sup>18</sup>.

**3-9 Field Research Procedures: 3-9-1 First Pilot Experiment:** The first pilot experiment was conducted on Monday, December 13, 2021. The aim of the experiment for the exercises prepared by the researchers using the pressure training method was:

- Determining the time each exercise takes.
- Identifying appropriate rest periods.
- Recognizing errors and obstacles.

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<sup>6</sup> Alaa Jasim Mohammed Tayawi; The Effect of Compound (Physical - Skill) Exercises on Developing Performance Endurance and Some Basic Skills for Advanced Futsal Players: (Unpublished Master's Thesis, University of Tikrit, College of Physical Education and Sports Sciences, 2015).

<sup>7</sup> Nagham Muayyad Mohammed; The Effect of Skill Exercises on several Special Physical and Functional Abilities and Basic Skills for Futsal Players: (Unpublished Doctoral Dissertation, University of Mosul, College of Physical Education, 2013).

<sup>8</sup> Adham Saleh; The Impact of Some Tactical Formations on several Physical Variables, Aerobic Capacity, and Performance Level of Futsal Players: (Unpublished Doctoral Dissertation, University of Mosul, College of Physical Education and Sports Sciences, 2015).

<sup>9</sup> Mahmoud Hamdoun and Others; The Effect of a Training Program According to Play Forms on several Physical and Skill Variables and Performance Endurance of Futsal Players: (Published Research, Mosul, Cultural Journal, 2017).

<sup>10</sup> Rabie Khalef Jameel; Previous Source, (2009), p. 74.

<sup>11</sup> Rabie Khalef Jameel; Previous Source, (2009), p. 64.

<sup>12</sup> Rabie Khalef Jameel; Previous Source, (2009), p. 68.

<sup>13</sup> Rabi' Khalaf Jamil; Previous source, (2009), p. 80.

<sup>14</sup> Ali Salloum Jawad; Tests, Measurement, and Statistics in the Field of Sports: (Al-Qadisiyah, Ministry of Education, 2004) p. 113.

<sup>15</sup> Ammar Shihab Ahmed; Previously mentioned source, (2008), p. 50.

<sup>16</sup> Ammar Shihab Ahmed; Previously mentioned source, (2008), p. 75.

<sup>17</sup> Ammar Shihab Ahmed; Previously mentioned source, (2008), p. 95.

<sup>18</sup> Ahmed Abdulghani Al-Dabbagh and (others); The Effect of Accumulated Anaerobic Effort on Some Blood Variables and Functional Variables: (Published Research, Mosul, College of Basic Education, Vol. (3), No. (3), 2006) p. 65.

**3-9-2 Second Pilot Experiment:** The second pilot experiment was conducted on Tuesday, December 14, 2021. The aim of the experiment was to verify the feasibility of the physical and skill tests and the recording method.

**3-10 Pre-Tests (Physical, Skill, and Anaerobic Capacity):** Pre-tests were conducted from Wednesday, December 14, 2021, to Thursday, December 16, 2021. First day: (Motor speed test - speed-strength test - agility test - response speed test - transitional speed test). Second day: (Dribbling test - passing test - shooting test - anaerobic capacity test).

**3-11 Design and Implementation of the Pressure Training Method Used in the Research:** After analyzing sources and scientific studies, a set of pressure training exercises (Appendix 1) was designed, including (12) exercises each serving a specific training goal. After completing all the pre-tests, the pressure training method designed by the researchers was implemented on the experimental group from December 18, 2021, to February 9, 2022, while the control group performed exercises prepared by the coach. The following were considered during the implementation of the pressure training method:

- All training sessions started with general warm-up followed by specific warm-up to prepare all body muscles.
- The pressure training method was applied during the main part of the training session.
- Training sessions were conducted (Saturday – Monday – Wednesday).
- The pressure training exercises were performed for (8) weeks, totaling (24) training sessions.
- High-intensity training method was used.
- Exercises were performed with ideal performance.

**3-12 Post-Tests:** Post-tests were conducted on Thursday and Friday, February 10-11, 2022. First day: (Motor speed test - speed-strength test - agility test - response speed test - transitional speed test). Second day: (Dribbling test - passing test - shooting test - anaerobic capacity test).

**3-13 Statistical Methods:** Statistical methods were applied using the Statistical Package for the Social Sciences (SPSS) (Mean – Standard Deviation – Coefficient of Variation – Skewness – T-test).

**4- Presentation, Analysis, and Discussion of Results: 4-1 Presentation of Pre- and Post-Test Results for Basic Skills and Anaerobic Capacity for Control and Experimental Groups:**

**4-1-1 Presentation of Basic Skills and Anaerobic Capacity Results for the Control Group:**

Table (3) shows the means, standard deviations, calculated t-values, and probability levels for the basic skills and anaerobic capacity of the pre- and post-tests for the control group:

No.	Variables	Unit	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD	Calculated t-value	Significance Level (sig)
1	Dribbling	Sec	11.250	1.250	11.000	1.050	2.380	0.032
2	Passing	Points	12.200	4.950	11.900	4.600	3.250	0.006
3	Shooting	Points	14.500	5.200	14.100	4.950	2.190	0.039
4	Anaerobic Capacity	Watts	295.100	29.850	300.110	21.200	2.300	0.043

Based on Table (3), the following is evident:

There are significant differences between the means of the pre-tests and post-tests in the basic skills and maximum anaerobic capacity in the control group, with the calculated t-values being (2.380, 3.250, 2.190) and the calculated t-value for the maximum anaerobic capacity being (2.300) at probability levels of (0.032, 0.006, 0.039, 0.043). These values are smaller than (0.05).

#### 4-1-2 Presentation of the basic skills and maximum anaerobic capacity results for the experimental group:

Table (4) shows the means, standard deviations, calculated t-values, and significance levels for basic skills and maximum anaerobic capacity in the pre-tests and post-tests for the experimental group.

No.	Variables	Unit	Pre-test Mean ( $\bar{S}$ )	Pre-test SD ( $\sigma$ )	Post-test Mean ( $\bar{S}$ )	Post-test SD ( $\sigma$ )	t-value	Significance Level (sig)
1	Dribbling	sec	11.950	1.345	10.100	0.638	3.650	0.002
2	Passing	pts	12.100	5.005	18.200	2.950	4.150	0.003
3	Shooting	pts	14.000	5.150	19.100	2.210	5.120	0.001
4	Anaerobic Capacity	watts	299.200	31.800	365.100	37.920	2.960	0.019

Based on Table (4), the following is evident:

There are significant differences between the means of the pre-tests and post-tests for all basic skills and maximum anaerobic capacity in the experimental group. The calculated t-values for dribbling, passing, shooting, and anaerobic capacity are (3.650, 2.950, 2.210, and 2.960) at significance levels (0.002, 0.003, 0.001, and 0.019) respectively, and these values are less than (0.05).

#### - Discussion of Pre-test and Post-test Results for Control and Experimental Groups:

The researchers attribute the development in basic skills and maximum anaerobic capacity shown in Tables (3) and (4) for the experimental group to the importance of the nature of the exercises used and the increase in their frequency between training units. Additionally, the organization and progression in training basic skills are crucial factors. Organizing and repeating exercises help develop basic skills, as "the repetition of skills by players effectively contributes to improving their skills"<sup>19</sup>.

The researchers attribute the development of the maximum anaerobic capacity in the experimental group to the training method used, which includes endurance-related exercises that benefit both the physical and skill aspects. They attribute the improvement in basic skills and maximum anaerobic capacity to the various exercises designed according to scientific principles, considering the

<sup>19</sup> Mufti Ibrahim Hamad; "Athletic Training for Both Genders from Childhood to Adolescence," Cairo, Dar Al-Fikr Al-Arabi, 1996, p. 174.

intensity of the exercises, rest periods, and training volumes appropriate to the players' skill and physical abilities.

Moreover, the gradual and varied exercises in terms of difficulty levels, starting from simple to complex, and the individual and group exercises, led to the development of the basic skills used in the research and the maximum anaerobic capacity. "A good coach can design graduated exercises that start from the simple to the advanced, which develop skills and strategies" <sup>20</sup>.

#### 4-1-3 Presentation of Post-Test Results for Basic Skills and Anaerobic Capacity for the Control and Experimental Groups:

Table (5): Means, Standard Deviations, Calculated (t) Values, and Significance Levels for Post-Test Basic Skills and Anaerobic Capacity for the Control and Experimental Groups

No .	Variab les	Unit of Measureme nt	Contr ol Group Mean	Contr ol Group SD	Experimen tal Group Mean	Experimen tal Group SD	(t) Valu e	Significan ce Level
1	Dribblin g	Seconds	11.000	1.050	10.100	0.638	2.00 5	0.041
2	Passing	Points	11.900	4.600	18.200	2.950	4.33 0	0.000
3	Shootin g	Points	14.100	4.950	19.100	2.210	4.25 0	0.000
4	Anaerob ic Capacity	Watts	300.11 0	21.200	365.100	37.920	0.50 6	0.020

From Table (5), significant differences are evident in the mean scores of post-tests for basic skills and maximum anaerobic capacity between the control and experimental groups. The calculated (t) values were (2.005, 4.330, 4.250) for skills (Dribbling, Passing, Shooting) and (0.506) for maximum anaerobic capacity, with significance levels of (0.041, 0.000, 0.000, 0.020), all below the threshold of 0.05.

#### Discussion of Post-Test Results for Both Groups:

The table (5) illustrates the significant development in basic skills and maximum anaerobic capacity for the experimental group. Researchers attribute this improvement to the structured training exercises directly linked to endurance, benefiting both physical and skill-based aspects.

Researchers attribute the differences in maximum anaerobic capacity favoring the experimental group to the effective training methodologies employed. These methodologies have positively

<sup>20</sup> Hanafi Mahmoud Mokhtar; Practical Application in Football Training: (Cairo, Dar Al-Fikr Al-Arabi, 1995) p. 17.

influenced physiological adaptations and specialized abilities compared to the control group, which followed a standard curriculum. The exercises designed by researchers were scientifically grounded, considering exercise intensity, frequency, and inter-session rest periods tailored to the players' capabilities<sup>21</sup>.

"A good coach can design progressive exercises, starting from simple to advanced, which enhance skills and plans," the study emphasizes<sup>22</sup>.

## **5- Conclusions and Recommendations:**

### **5-1 Conclusions:**

1. Exercises using the compressive training method have a positive effect on developing basic skills (dribbling, passing, shooting) for the experimental group.
2. Exercises using the compressive training method have a positive effect on developing maximal aerobic capacity for the experimental group.

### **5-2 Recommendations:**

1. Researchers recommend the necessity of using these exercises by coaches for youth and junior categories.
2. It is essential to apply training curricula based on correct scientific principles regarding exercise preparation, training volume, intensity, and rest periods.
3. Conducting similar research and studies on distinct categories of youth, juniors, and advanced players is recommended.

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<sup>21</sup> Hassan El Sayed Abu Abdo; Skill Preparation for Football Players (Alexandria, Al-Ishaa Press, 2001) p. 39.

<sup>22</sup> Abdul Rahman Abdelhamid Zaher; Training Strategies for Track and Field (Cairo, Al-Kutub Publishing Center, 2020) p. 113.

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### **Appendixes one**

#### **First: Purpose of Rolling Exercise**

1. Jump over (10) hurdles at a height of (20) cm with both legs, with a distance of (1) meter between hurdles, then run for (20) meters, followed by rolling the ball between (10) markers with a distance of (2) meters back and forth, (45) seconds.
2. Vertical jumps in place for (20) seconds, followed by running for (20) meters, then rolling the ball between (10) markers with (2) meters, (45) seconds.
3. Sprint for (20) meters, followed by running between (10) markers with (2) meters, then running for (10) meters, and then rolling the ball between (10) markers with (2) meters, (45) seconds.

4. Running between (10) markers with (2) meters, then jumping over (5) hurdles at a height of (20) cm with (1) meter between hurdles, followed by rolling the ball between (10) markers with (2) meters.

### Second: Purpose of Passing Exercise

5. Vertical jumps in place for (20) seconds, followed by running for (20) meters, then passing the ball between two markers over (15) meters with (3) meters between them, (30) seconds.

6. Jumping over (5) hurdles at a height of (20) cm with a distance of (1) meter between hurdles, followed by running for (20) meters, then running between (5) markers with a distance of (1) meter between them, then passing the ball over a distance of (15) meters between two markers with a distance of (3) meters between them, (30) seconds.

7. Front support for (20) seconds, followed by running for (40) meters, then passing the ball from (15) meters between two markers with (3) meters between them.

### Third: Purpose of Scoring Exercise

9. Vertical jumps in place for (25) seconds, followed by running for (30) meters, then scoring one goal from (15) meters, (30) seconds.

10. Running for (20) meters, then jumping over (10) hurdles at a height of (20) cm with a distance of (1) meter between them, followed by running between (5) markers with a distance of (2) meters between them, then scoring on goal from a distance of (15) meters, (30) seconds.

11. Front support for (25) seconds, followed by running for (20) meters, then scoring on goal from (15) meters, (30) seconds.

12. Holding the right leg for (12) seconds, then holding the left leg for (12) seconds, followed by running for (30) meters, then scoring on goal from (15) meters, (30) seconds.

## Appendix 2

### Exercises

#### Week one

Day	Exercise	Time	Repetitions	Rest Between Reps	Sets	Rest Between Sets	Total Exercise Time	Total Rest Time	Total Exercise + Rest Time	Time in Minutes	Duration
Saturday	1	45 sec	5	90 sec	1	2 min 30 sec	225 sec	510 sec	735 sec	12 min 15 sec	30 min 15 sec

	5	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
	9	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
Monday	2	45 sec	5	90 sec	1	2 min 30 sec	225 sec	510 sec	735 sec	12 min 15 sec	30 min 15 sec
	6	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
	10	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
Wednesday	3	45 sec	5	90 sec	1	2 min 30 sec	225 sec	510 sec	735 sec	12 min 15 sec	30 min 15 sec
	7	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
	11	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	

## Week two

Day	Exercise	Time	Repetitions	Rest Between Reps	Sets	Rest Between Sets	Total Exercise Time	Total Rest Time	Total Exercise + Rest Time	Time in Minutes	Duration
Saturday	4	45 sec	5	90 sec	1	2 min 30 sec	225 sec	510 sec	735 sec	12 min 15 sec	30 min 15 sec
	8	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
	12	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	

Monday	1	45 sec	5	90 sec	1	2 min 30 sec	225 sec	510 sec	735 sec	12 min 15 sec	30 min 15 sec
	5	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
	9	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
Wednesday	2	45 sec	5	90 sec	1	2 min 30 sec	225 sec	510 sec	735 sec	12 min 15 sec	30 min 15 sec
	6	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
	10	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	

## Week three

DAYS	Exercise	Time	Repetitions	Rest Between Reps	Sets	Rest Between Sets	Total Exercise Time	Total Rest Time	Total Exercise + Rest Time	Time in Minutes	Duration
Saturday	4	45 sec	5	90 sec	1	2 min 30 sec	225 sec	510 sec	735 sec	12 min 15 sec	30 min 15 sec
	8	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
	12	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
Monday	1	45 sec	5	90 sec	1	2 min 30 sec	225 sec	510 sec	735 sec	12 min 15 sec	30 min 15 sec

	5	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
	9	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
Wednes day	2	45 sec	5	90 sec	1	2 min 30 sec	225 sec	510 sec	735 sec	12 min 15 sec	30 min 15 sec
	6	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	
	10	30 sec	5	60 sec	1	2 min 30 sec	150 sec	390 sec	540 sec	9 min	

## Week four

Day	Exercise	Time	Repetitions	Rest Between Reps	Sets	Rest Between Sets	Total Exercise Time	Total Rest Time	Total Exercise + Rest Time	Time in Minutes	Duration
Saturday	2	45 sec	6	90 sec	1	2 min 30 sec	270 sec	600 sec	870 sec	13 min	34 min
	6	30 sec	6	60 sec	1	2 min 30 sec	180 sec	450 sec	630 sec	10 min 30 sec	
	10	30 sec	6	60 sec	1	2 min 30 sec	180 sec	450 sec	630 sec	10 min 30 sec	
Monday	3	45 sec	6	90 sec	1	2 min 30 sec	270 sec	600 sec	870 sec	13 min	34 min
	7	30 sec	6	60 sec	1	2 min 30 sec	180 sec	450 sec	630 sec	10 min 30 sec	
	11	30 sec	6	60 sec	1	2 min 30 sec	180 sec	450 sec	630 sec	10 min	

										30 sec	
Wednesday	4	45 sec	6	90 sec	1	2 min 30 sec	270 sec	600 sec	870 sec	13 min	34 min
	8	30 sec	6	60 sec	1	2 min 30 sec	180 sec	450 sec	630 sec	10 min 30 sec	
	12	30 sec	6	60 sec	1	2 min 30 sec	180 sec	450 sec	630 sec	10 min 30 sec	

## Week five

Day	Exercise	Time	Repetitions	Rest Between Reps	Sets	Rest Between Sets	Total Exercise Time	Total Rest Time	Total Exercise + Rest Time	Time in Minutes	Duration
Saturday	1	45 sec	7	90 sec	1	3 min	315 sec	720 sec	1035 sec	17 min 15 sec	42 min 15 sec
	5	30 sec	7	60 sec	1	3 min	210 sec	540 sec	750 sec	12 min 30 sec	
	9	30 sec	7	60 sec	1	3 min	210 sec	540 sec	750 sec	12 min 30 sec	
Monday	2	45 sec	7	90 sec	1	3 min	315 sec	720 sec	1035 sec	17 min 15 sec	42 min 15 sec
	6	30 sec	7	60 sec	1	3 min	210 sec	540 sec	750 sec	12 min	

										30 sec	
	10	30 sec	7	60 sec	1	3 min	210 sec	540 sec	750 sec	12 min 30 sec	
Wednesday	3	45 sec	7	90 sec	1	3 min	315 sec	720 sec	1035 sec	17 min 15 sec	42 min 15 sec
	7	30 sec	7	60 sec	1	3 min	210 sec	540 sec	750 sec	12 min 30 sec	
	11	30 sec	7	60 sec	1	3 min	210 sec	540 sec	750 sec	12 min 30 sec	

Week six

Day	Exercise	Time	Repetitions	Rest Between Reps	Sets	Rest Between Sets	Total Exercise Time	Total Rest Time	Total Exercise + Rest Time	Time in Minutes	Duration
Saturday	4	45 sec	7	90 sec	1	3 min	315 sec	720 sec	1035 sec	17 min 15 sec	42 min 15 sec
	8	30 sec	7	60 sec	1	3 min	210 sec	540 sec	750 sec	12 min 30 sec	
	12	30 sec	7	60 sec	1	3 min	210 sec	540 sec	750 sec	12 min 30 sec	

Monday	1	45 sec	7	90 sec	1	3 min	315 sec	720 sec	1035 sec	17 min 15 sec	42 min 15 sec
	5	30 sec	7	60 sec	1	3 min	210 sec	540 sec	750 sec	12 min 30 sec	
	9	30 sec	7	60 sec	1	3 min	210 sec	540 sec	750 sec	12 min 30 sec	
Wednesday	2	45 sec	7	90 sec	1	3 min	315 sec	720 sec	1035 sec	17 min 15 sec	42 min 15 sec
	6	30 sec	7	60 sec	1	3 min	210 sec	540 sec	750 sec	12 min 30 sec	
	10	30 sec	7	60 sec	1	3 min	210 sec	540 sec	750 sec	12 min 30 sec	

## Week seven

Day	Exercise	Time	Repetitions	Rest Between Reps	Sets	Rest Between Sets	Total Exercise Time	Total Rest Time	Total Exercise + Rest Time	Time in Minutes	Duration
Saturday	3	45 sec	8	90 sec	1	3 min	360 sec	810 sec	1170 sec	19 min 30 sec	47 min 30 sec
	7	30 sec	8	60 sec	1	3 min	240 sec	600 sec	840 sec	14 min	

	11	30 sec	8	60 sec	1	3 min	240 sec	600 sec	840 sec	14 min	
Monday	4	45 sec	8	90 sec	1	3 min	360 sec	810 sec	1170 sec	19 min 30 sec	47 min 30 sec
	8	30 sec	8	60 sec	1	3 min	240 sec	600 sec	840 sec	14 min	
	12	30 sec	8	60 sec	1	3 min	240 sec	600 sec	840 sec	14 min	
Wednesday	1	45 sec	8	90 sec	1	3 min	360 sec	810 sec	1170 sec	19 min 30 sec	47 min 30 sec
	5	30 sec	8	60 sec	1	3 min	240 sec	600 sec	840 sec	14 min	
	9	30 sec	8	60 sec	1	3 min	240 sec	600 sec	840 sec	14 min	

Week eight

Day	Exercise	Time	Repetitions	Rest Between Reps	Sets	Rest Between Sets	Total Exercise Time	Total Rest Time	Total Exercise + Rest Time	Time in Minutes	Duration
Saturday	2	45 sec	8	90 sec	1	3 min	360 sec	810 sec	1170 sec	19 min 30 sec	47 min 30 sec
	6	30 sec	8	60 sec	1	3 min	240 sec	600 sec	840 sec	14 min	
	10	30 sec	8	60 sec	1	3 min	240 sec	600 sec	840 sec	14 min	
Monday	3	45 sec	8	90 sec	1	3 min	360 sec	810 sec	1170 sec	19 min 30 sec	47 min 30 sec

	7	30 sec	8	60 sec	1	3 min	240 sec	600 sec	840 sec	14 min	
	11	30 sec	8	60 sec	1	3 min	240 sec	600 sec	840 sec	14 min	
Wednes day	4	45 sec	8	90 sec	1	3 min	360 sec	810 sec	1170 sec	19 min 30 sec	47 min 30 sec
	8	30 sec	8	60 sec	1	3 min	240 sec	600 sec	840 sec	14 min	
	12	30 sec	8	60 sec	1	3 min	240 sec	600 sec	840 sec	14 min	