The effect of playing speed exercises on some physical and skill variables in indoor soccer

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- effect of playing speed exercises - some physical and skill - soccer

The importance of the research lies in raising the level of some physical, skill and tactical variables by using speed-of-play exercises prepared according to scientific foundations within an organized training program that is commensurate with the level of the individuals in the research sample. The research problem is through the researcher's follow-up of the Iraq Cup Championship and the qualifying round for the Iraqi Al-Salat Football League, and being a player in this field. He noticed that the skill level of the players does not match the game situations, which increases the errors in implementing the tactical duties that the coach strived for during the training units Which affects the outcome of the match, and the researcher attributes this to the modest level of physical abilities of the players, which does not enable them to continue at the same pace with which the match began, and thus the coach's competition planning goals are not achieved. Hence, the researcher decided to study this problem and find the appropriate treatment for it through the use of speed-of-play exercises. It has a significant impact on the physical level, which in turn affects basic skills . The objectives of the research were centered on identifying differences in the values of some physical variables and skills in futsal for youth for the control and experimental groups in the pre- and post-tests. The researcher assumed that there were statistically significant differences in the values of some physical variables and skills in futsal for youth for the control and experimental groups. In the pre and posttests. . As for the research methodology, the researcher used the experimental method with two equal groups. The population and sample of the research consisted of young players from Dhi Qar Sports Club, who numbered (18) players. As for the research sample, they were chosen intentionally and they were (12) players, and the sample percentage was (66.66%). From the community of origin, the sample was divided into the experimental and control groups randomly by lottery, with (6) players in each group.

1_ Definition of the research

1_1 Introduction to the research and its importance:

Sports, like other aspects of advanced life, have received great and continuous attention from researchers, as those concerned with this field have tried to harness all sciences to raise the level of physical fitness and technical performance, which has the meaning and main goal of reaching the highest levels in various sports, as the sports

sector today represents an important joint of life due to its importance in many different fields, which lies in the continuous research processes on how to advance and promote this vital aspect that flows into multiple axes, the most important of which are the health of society and increasing production, in addition to specialized achievement sports and the creation of champions in group and individual games in general and indoor soccer in particular. Futsal is one of the games that has developed greatly in recent times, and those concerned with it have made great efforts to obtain advanced positions among the games. This did not come in a traditional way, but rather was based on research and study to reach a solution to the problems it faces. It is an organized group game practiced by many players and has become a large popular base all over the world. Therefore, those in charge of the training process in this game seek to develop it and improve the level of achievement in it by relying on the scientific foundations of sports training, as studies and practical research have contributed to developing knowledge of skill, planning and physical variables that can directly affect the achievement of the desired goals of the training process. The physical level represented by the physical and motor qualities that the player possesses takes a large part in the preparation process, as it is essential in developing the level of achievement for most sports games, especially futsal, in which the physical aspect plays an important role in performance, as the player who has a high physical level can continue to perform skills for long periods during the game, as well as implement planning duties in repeated stages of the match and get rid of the defensive pressures to which he is exposed. During playing situations, training methods and techniques play an important and effective role in how to build and prepare the player by improving the physical aspect that has a significant impact on the skill level. Among these methods is the method of playing speed training that works to develop the level of some physical and motor qualities that are employed in training and playing situations. From the above, the importance of the research lies in raising the level of some physical and skill variables by using playing speed exercises prepared according to scientific foundations within an organized training program that suits the level of the research sample individuals.

1_2 Research problem:

Raising the level of skill performance of futsal players in addition to the physical aspect is one of the important factors for developing the level of achievement and performance in the game. By following the researcher for the Iraq Cup Championship and the qualifying round for the Iraqi Football League, and being a player in this field,

he noticed that the skill level of the players does not match the game situations, which increases errors in implementing the tactical duties that the coach strived for during the training units, which affects the result of the match. The researcher attributes this to the modest level of physical abilities of the players, which does not enable them to continue at the same pace at which the match began, and thus not achieving the goals of planning the competitions for the coach. From here, the researcher decided to study this problem and find the appropriate treatment for it by using speed of play exercises because of their great impact on the physical level, which in turn affects the basic skills and game plans.

1_3 Research objectives:

1. Preparing speed exercises to develop some physical and skill variables in youth futsal.
2. Identifying the differences in the values of some physical and skill variables in youth futsal for the control and experimental groups in the pre- and post-tests.
3. Identifying the differences in the values of some physical and skill variables and youth futsal between the control and experimental groups in the post-tests.

1_4 Research hypotheses:

1. There are statistically significant differences in the values of some physical and skill variables in youth futsal for the control and experimental groups in the pre- and post-tests.
2. There are statistically significant differences in the values of some physical and skill variables in youth futsal between the control and experimental groups in the post-tests.

1_5 Research areas:

1_5_1: Human field: Dhi Qar Club youth players in Dhi Qar / Nasiriyah.
1_5_2: Spatial scope: Indoor sports hall / Sumer Youth Forum.
1_5_3: Time scope: 10/18/2023 to 8/11/2024.

2- Research methodology and field procedures

2-1 Research methodology

The researcher used the experimental method, as it is a method that is appropriate to the nature of the problem. The researcher also used the method of two equal groups, which are the control group and the experimental group, so that the two

groups are "completely equal in all their circumstances, except for the experimental variable, which affects the experimental group (1).

2-2 Research community and sample.

The research community consisted of young players from Thi Qar Sports Club, numbering (18) players. As for the research sample, it was chosen intentionally, and they were (12) players. The sample percentage was (66.66%) of the original community. The sample was divided into the experimental and control groups randomly by drawing lots, with (6) players in each group.

2-2-1 Sample homogeneity

In order to achieve homogeneity between The research sample individuals and avoiding the influence of factors that may affect the results of the experiment in terms of individual differences present in the sample, so the researcher conducted homogeneity for some specifications and measurements, including these measurements (training age, mass, height) .

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

Coefficient of skewness	Standard deviation	Arithmetic mean	Unit of measure	Variables	N
1.11	1.91	172.13	cm	Height	1
3.34	2.32	69.37	kg	Mass	2
8.91	4.16	46.65	month	Age Training	4

2-2-2 Equivalence of the two research groups:

One of the important things that the researcher must follow is to attribute the differences to the experimental factor. **Table (2) shows the arithmetic means, standard deviations, calculated t-test and significance value for the control and experimental groups in the pre-test**

2-3 Methods, devices and tools used in the research:

Observation - Personal interviews - Tests - Arabic and foreign sources and

Significance	Sig.	t	Pre-test Experimental		Pre-test Control		Unit of measure	Processors / Variables	N
			s	x	S	X			
Non-moral	0.830	0.221	0.094	3.516	0.104	3.504	Second	Transitional speed	1
Non-moral	0.787	0.278	1.323	30.301	1.44	30.08	Meter	Speed power	2
Non-moral	0.938	0.079	1.437	39.208	1.255	39.146	Second	Speed endurance	3
Non-moral	0.549	0.620	0.428	3.166	0.516	3.33	Degree	Dampening	4
Non-moral	0.734	0.349	0.983	2.166	0.632	2	Degree	Handling	5

references - Data entry form - Programs and applications used on the computer - Various measuring tools (tape measure) - Manual calculator type (hp) - Indoor football field - iPhone 14 Pro Max camera number (4) - Balls number (10) - Various indicators - Whistle - Stopwatch - Barriers with a height of 30 cm number (8) - Data entry forms (stationery, papers, pens**).**

2-4 Field research procedures:

2-4-1 Determining research tests:

The researcher determined the physical variables and basic skills in indoor soccer and chose the test for each variable after conducting a number of personal interviews with experts in addition to the experience and guidance of the supervisor.

2-4-2 Tests used in the research

1- Physical tests used:

First: The maximum distance hopping test in (10) seconds [(1)]

Test name: The maximum distance hopping test in (10) seconds.
Test objective: To measure the speed-characteristic strength of the legs.
Tools used: Stopwatch, whistle, measuring tape, and recording form.
Performance method: The tested player stands behind a specific mark on the ground, and after hearing the whistle, the player hopping on one leg, at the player's choice, in a specific straight line, as quickly as possible.

Recording: The distance covered by the tester during the (10) seconds period is recorded, and the tester is given only one attempt.

Second: Speed Endurance Test [(2)]

Test name: Running with the ball for a distance of (5.2 x 30) m without stopping.
Purpose of the test: Measuring the speed endurance of football.
Tools used: - Stopwatch - (2) indicators - Football - Measuring tape - Whistle.
Performance description: From the high starting position, the player stands behind the starting line and the ball is on the starting line and with the start signal, the player runs with the ball at maximum speed for a distance of (30) m to the finish line and turns around the finish line indicator and returns with the ball repeating the test (5.2) times continuously.

Test instructions: Determine a distance of (30) m and mark the start and finish line by means of two indicators as in Figure (1) and the player performs only one attempt.

Recording method: - The time taken to go and return is calculated five times and recorded to the nearest second.

Third: Running test (20)m from standing to measure transitional speed [(3)]

[1]( ) قاسم حسن حسين وبسطويسي احمد . التدريب العضلي الأيزوتوني في مجال الفعاليات الرياضية . بغداد : مطبعة الوطن العربي ، 1979 ، ص154.
[2]( ) ابو علي غالب؛تحديد مستويات معيارية لبعض عناصر اللياقة البدنية بكرة القدم: (رسالة ماجستير)،جامعة بغداد،كلية التربية الرياضية،2000)ص106.

Test name: Running (20)m from standing.
Test objective: Measure transitional speed.
Tools used: Running area, whistle, measuring tape, stopwatch and recording form.
Performance method: The tester stands at the starting line and when he hears the whistle, he runs a distance of (20)m.
Recording: The time taken for the tester to run a distance of (20)m is recorded and he is given one attempt

2- Skill tests used:

First: Handling test towards a small target from a distance of (10 m) (

Test name: Handling towards a small target from a distance of (10 m).
The aim of the test - measuring the accuracy of handling.
The tools used - indoor soccer ball (3) and a measuring tape and a small target with the following dimensions: width (1.20 cm) and length (68 cm).
Performance and recording method: The tester stands with the ball at a distance of (10 m) from the target and upon hearing the signal, the tester handles the ball towards the target. Each tester is given (3) attempts, as two points are given for a successful attempt, one point for an attempt that touches the crossbar and posts, and zero for a failed attempt.

Further: Suppression test [(1)]

Test name: Ground motion suppression).
The aim of the test: measuring the accuracy of suppression.
Performance method - The player stands outside the designated area and when the handover is given, he moves forward to extinguish the ball sent to him from a distance of (6) meters inside the drawn area and returns it to the sender after extinguishing.
Scoring: If the examiner extinguishes the ball in area (1) of one stage, he is given (3) points.
If the examiner extinguishes the ball in area (1), he is given (2) points.
If he extinguishes the ball and controls it in area (2), he is given (1) points.
If he extinguishes the ball and it is to the side outside the designated area, he is given a point (zero).

2-4-3 Exploratory experiments

2-4-3-1 The first exploratory experiment

In order to know the negative and positive aspects and variables that will face the work, the researcher conducted a first exploratory experiment on Tuesday (11/7/2023) at three o'clock in the afternoon in the closed hall for sports games / Sumer Youth Forum on a sample of (6) players from the Dhi Qar Sports Club who are outside the research sample. The aim of this was:

- To know the appropriate tools for conducting these tests.
- To know the sample's ability to perform the selected tests.

[3]( ) وميض شامل كامل :تأثير تمرينات خاصة في تطوير القدرات والمهارات الأساسية وعلاقتها بدقة التهديف من الثبات والحركة بكرة القدم للصالات ، أطروحة دكتوراه ، كلية التربية الرياضية ،جامعة بغداد ،2012، ص59

[1]( ) فرج عبد الجليل عبد الرضا : تأثير استخدام أسلوبي (الإتقان والإقران)في تعلم وتطوير مستوى الأداء لبعض المهارات الأساسية والمعرفية للناشئين بكرة القدم للصالات ، رسالة ماجستير غير منشورة ، جامعة البصرة ،2012 ، ص66.

- To know the appropriate time and place to conduct them

.2 -4-3-2 The second exploratory experiment

The researcher conducted a second exploratory experiment on Tuesday (11/14/2023) at three o'clock in the afternoon in the closed hall for sports games / Sumer Youth Forum on the members of the experimental group by applying speed of play exercises. The following matters were verified:

- The suitability of speed of play exercises for the experimental group.
- Knowing the time required to apply the prepared training vocabulary.
- Extracting the maximum training intensity rate in performing the exercises to standardize the training loads in the training program.
- Extracting stability by re-applying the test to the players of the exploratory sample.

2 -4- 4 Scientific foundations for tests

• Test validity:

The researcher found the validity of the content after the test was presented to a group of experienced and specialized people, and they confirmed that these tests are valid in their content and the purpose for which they were developed.

• Test stability:

In order to find the stability coefficient, the researcher re-tested the same individuals in the exploratory experiment sample, and the first test was conducted on (11/7/2023) in the morning in the closed hall for sports games / Sumer Youth Forum in, and the (second) test was re-applied under the same conditions on (11/14/2023), i.e. seven days after the first test.

• Objectivity:

One of the most important features of a good test is the high degree of objectivity, and the objectivity of the test is originally due to the clarity of the instructions for applying the test, as the recording is done using units of distance, time, and repetition and using known devices, as the use of these tools will reduce the error to a great extent, so these tests are considered to have good objectivity. ( )

2-4-5 Pre-test of the research sample:

The researcher conducted the pre-test for the experimental and control groups before starting to implement the training curriculum on Saturday 11/25/2023 at three o'clock in the afternoon in the closed hall for sports games / Sumer Youth Forum. All members of the research sample, numbering (12) players, attended. The researcher tested the sample with the supervisor and the assistant work team for physical and skill capabilities.

2-4-6 Main experiment:

The researcher, in cooperation with the supervisor, prepared 24 exercises (physical, skill) to suit the members of the study sample. As for the components of the

training load, they were adjusted in light of the training methods used, as the researcher used the high-intensity interval training method and the repetitive training method in performing the exercises, as the repetitive training method is similar to the high-intensity interval in exchanging performance, rest, and speed of exercise performance, but differs from it in the intensity of exercise performance and the number of repetitions

The following are some clarifications about the curriculum:

- Duration of speed exercises (8 weeks).
- The training program began on 11/28/2023
- The training phase that suits the curriculum (special preparation phase)
- The number of training units per week (3) units.
- The time of the exercises in the main section is approximately (39-59) minutes from the main section in one training unit. This variation in time occurred as some exercises take a different time than others according to the requirements of each exercise.
- The method of forming successive load degrees, the researcher used model (2-1).

2-4-7 Post-tests for the research sample

The post-tests for the research sample were conducted on Tuesday 1/30/2024 in the closed sports hall / Sumer Youth Forum after the completion of the 8-week application period of the curriculum. The researcher was keen to provide the pre-test factors and procedures followed for physical and skill abilities tests.

2-5 Statistical methods:

The researcher used the appropriate statistical methods to process the data through the (SPSS) system.

3 - Presentation, analysis and discussion of the results

3-1 Presentation, analysis and discussion of the results of the values of the study variables for the pre- and post-tests of the control group

Table (3) shows the values of the arithmetic means, standard deviations and the calculated (T) value for the values of the study variables for the pre- and post-tests of the control group

Signif	Sig	F s	F x	T	Post-test control	Pre-test Control	of meas	Processors	N

					S	X	S	X			
moral	**0.003**	**0.022**	**0.05**	**5.42**	**0.113**	**3,45**	**0,104**	**3,504**	Second	Transitional speed	**1**
Non-moral	**0.001**	**0.697**	**2.136**	**6.869**	**1.676**	**32.21**	**1.44**	**30.08**	Meter	Speed power	**2**
moral	**0.170**	**1.958**	**1.280**	**1.601**	**1.341**	**37.86**	**1.255**	**29.14**	Second	Speed endurance	**3**
moral	**0.041**	**1.169**	**1.166**	**2.530**	**1.04**	**4.50**	**0.516**	**3.33**	Degree	Dampening	**4**

Significance	Sig	F s	F x	T	Experimental posttest		Pre-test Experimental		Unit of measure	Processors Variables	ت
					S	X	S	X			
moral	**0.002**	**0.121**	**0.301**	**6.062**	**0.104**	**3.215**	**0.094**	**3.516**	Second	Transitional speed	**1**
-moral	**0.000**	**1.385**	**3.885**	**7.509**	**1.137**	**34.18**	**1.323**	**30.301**	Meter	Speed power	**2**
moral	**0.001**	**1.256**	**4.090**	**7.972**	**0.643**	**35.11**	**1.437**	**39.208**	Second	Speed endurance	**3**
moral	**0.000**	**0.54**	**2.50**	**0.620**	**0.516**	**5.666**	**0.428**	**3.166**	Degree	Dampening	**4**
moral	**0.001**	**0.752**	**3.833**	**7.746**	**0.408**	**5.833**	**0.632**	**2**	Degree	Handling	**5**

Through the results in Table (3), it was shown that there were significant differences in the results of the tests of the control group that implemented the components of the trainer's curriculum between the pre- and post-tests in all variables

and in favor of the post-test, except for the speed tolerance variable, which showed insignificant differences between the pre- and post-tests. The variables were presented and analyzed as follows.

3-2 Displaying and analyzing the results of the values of the study variables for the pre- and post-tests of the experimental group and discussing them

Table (4) shows the values of the arithmetic means, standard deviations, and the calculated (T) value for the values of the study variables for the pre- and post-tests of the experimental group

Through the results in Table (4), it became clear that there were significant differences in the results of the tests of the control group that implemented the

Signific	Sig	T	Experimental post-test	Post-test Control	of meas	Processors Variables	N

vocabulary of the trainer's curriculum between the pre- and post-tests in all variables and in favor of the post-test. The variables were presented and analyzed as follows.

3-3 Presentation and analysis of the results of the values of the study variables for the post-tests of the control and experimental groups and their discussion.

Table (5) shows the values of the arithmetic means, standard deviations, and the calculated (T) value for the values of the study variables for the post-tests of the control and experimental groups

			S	X	S	X			
moral	**0.004**	**3.780**	**0.104**	**3.215**	**0.113**	**3,45**	Second	Transitional speed	**1**
moral	**0.041**	**2.349**	**1.137**	**34.18**	**1.676**	**32.21**	Meter	Speed power	**2**
moral	**0.001**	**4.524**	**0.643**	**35.11**	**1.341**	**37.86**	Second	Speed endurance	**3**
moral	**0.03**	**2.445**	**0.516**	**5.666**	**1.04**	**4.50**	Degree	Dampening	**4**
Moral	**0.000**	**7.07**	**0.408**	**5.833**	**0.408**	**4.166**	Degree	Handling	**5**

Through the results in Table (5), it became clear that there were significant differences in the results of all study variables for the post-tests between the control and experimental groups in favor of the experimental group. The variables were presented and analyzed as follows.

3-5 Discussion of the results

Through tables No. (4) (5), it was shown that there are significant differences between the pre- and post-tests in the study variables. The researcher attributes these differences to subjecting the members of the experimental group to speed-of-play exercises prepared by the researcher on scientific foundations and principles, in which the specificity of the game was taken into account to reach the required adaptations, while taking into account increasing the load in a scientific and logical manner according to the level of the players. All of these principles led to the success of the program and the rise in the physical skill level of the experimental group. This was confirmed by (Mohamed Hassan) "Alawi, that standardizing the training load must be compatible with the training condition is considered one of the most important factors for the success of the training program and thus improving the level of performance in general" [(1)], as the development achieved in the physical variables under study (transitional speed, strength characterized by speed, speed endurance) indicates the positive effect of the training program prepared by the researcher, since some of the exercises used depend on the performance of the muscular strength produced by the lower extremities, which in turn increases the player's ability to resist gravity, which increases the motor speed, which in turn is reflected in the transitional speed in performance, as it is one of the basic factors in Football is determined by the level of development of the player's physical qualities, speed of thinking, and speed of switching from one movement to another [(2)], and the player's possession of good transitional speed and the ability to implement skills of various types, simple and

[1]( ) محمد حسن علاوي وأبو العلا احمد: ، **فسيولوجيا التدريب الرياضي,** القاهرة ، دار الفكر العربي **,2000، ص292.**

[2]( ) زهير قاســـــم الخشاب (وآخرون) : **كرة القدم** ، ط 2 ، موصل ، دار الكتب للطباعة والنشر ، 1999 ، ص 70 .

complex, generates a superior ability to perform all other movements and change them according to the playing conditions, in addition to that, working to increase the ability of the muscles working to produce the muscle strength required to implement exercises characterized by speed leads to increasing the efficiency of the lower limbs in the fast ability, which is a combination of strength and speed, and thus performing fast movements at every moment. This is what the experimental group sample trained on in using some exercises that work on strength and developing the strength characterized by speed, such as the hoop exercises and jumping on the compound signs within the skill exercises. This was confirmed by (Abu Al-Ala Ahmed Abdel Fattah) from the characteristics of developing the strength characterized by speed, as it represents the ability to express the ability to quickly fill the largest number of muscle fibers at the beginning of the movement, and therefore exercises must be performed that increase the difficulty at the beginning of the movement and then reduce it in the following stages of the movement, and the player's continued implementation of exercises characterized by high speed for long periods will lead to the development of the speed endurance characteristic, and this is what football players should be distinguished by Hall players who perform continuous transitional movements between defense and moving to attack and then returning to defense when losing the ball and this continues throughout the match, so developing this trait in them helps them to perform continuously with high intensity, resisting fatigue and thus maintaining the best levels of performance. This is what (Muwaffaq Majeed Al-Mawla) confirmed, that "enduring speed is of decisive benefit to the soccer player as it gives the player the ability to continue performing skillfully with high efficiency." (1)

The researcher attributes the development in basic skills to the effectiveness of using speed of play exercises and through continuous tactical exercises, which led to an increase in the players' ability to perform the required skills, especially since the exercises prepared by the researcher contributed to developing the basic skills (suppression, handling) for the players, as these exercises were performed in an organized manner and in training units that had a successful impact in improving the players' performance. These exercises are characterized by diversity and similarity in their performance to the nature of the game and competition, which increased the development of the players and some of them reached high levels of skills. In addition, repeating the exercises had a significant impact in raising the skill level in addition to physical abilities, as the development of the physical level has a fundamental role in the development of skills. This was confirmed by Kazem Al-Rubaie, who stated that the general development of the body in terms of morphology and function is essential in the training process, as comprehensiveness is not based on controlling the ball and good tactics only, but above all, it is based on the effective activity of the internal systems and the effective contribution of the central and peripheral nervous systems, which require comprehensive preparation ((2)). The technical advancement of training activities through complex exercises, their diversity and the goals designed for them

[1]( ) **موفق مجيد المولى :**الاساليب الحديثية في تدريب كرة القدم ،**ط1: عمان ،دار الفكر للطباعة،2000،ص200.**

[2]( ) **كاظم الربيعي وموفق المولى :** الأعداد البدني بكرة القدم ، **جامعة الموصل ، دار الكتب للطباعة والنشر ، 1988 ، ص 23 .**

plays a major role in developing skills. In addition, regular training with the ball with repetition of the skill brings the player to an advanced stage in accuracy and skill performance in general. The researcher believes that the development of the skill of handling (passing) is one of the important things that affect the speed of play, and this in turn is positively reflected in the speed of planning implementation, since handling is one of the most used skills in indoor soccer, as it is an important means of implementing game plans and moving to the opponent's goal in the shortest possible time, indicating that the content of the curriculum has affected the level of performance of this skill towards the best. (Mufti Ibrahim Hammad) refers to "the important effect of the coach in directing his players to master the skill of handling in its various types as a means of moving to the opponent's court and implementing the required plans, because handling is faster than the player and is more used in the match." ([1])

4-1 Conclusions and recommendations

4-1-1 Conclusions

1. The results showed that the speed of play exercises gave a clear picture of their superiority over the followed program through the results shown by the experimental group and their superiority over the control group.

2. The exercises used in the speed of play style aimed to improve the level of physical qualities under study (speed endurance, speed-specific strength, transitional speed), **as appeared in the results of the post-tests of the experimental group.**

3. The training in the speed of play style had a positive effect in raising the level of skill performance, especially in the skills (suppression, handling), **as appeared in the results of the post-tests of the experimental group**

4-2 Recommendations:

1- Adopting speed exercises in training curricula for indoor soccer players and other sports.
2- Conducting similar studies for other physical fitness elements that were not addressed in the study.
3- Conducting similar studies for other age groups and other relevant training methods to develop the skill aspect and know the results of these studies.

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Model of the training program used during one week

First training unit

Objective of the training unit: Developing physical variables and basic skills

Intensity: 75%

Exercise time: (39_59) minutes Today: Sunday

Total time	Rest between sets	Groups	rest between reps	Repetition	Exercise time	Exercise number	Unit sections
14.51M	60	4	40	4	13.17	7	Main Section
13M	60	4	33	4	11.28	12	
17.59M	60	4	50	4	17.24	2	
Total rest between exercises: 3 minutes					Total exercise time: 48.1 minutes		

Second Training Unit

Objective: Developing physical variables and basic skills

Intensity: 80%

Exercise time: (39_59) minutes Today: Tuesday

Total time	Rest between sets	Groups	rest between reps	Repetition	Exercise time	Exercise number	Unit sections
16.86M	90	4	50	4	12.63	15	Main Section
15.11M	90	4	42	4	10.57	3	
19.56M	90	4	60	4	15.23	14	
Total rest between exercises: 4.5 minutes					Total exercise time: 56 minutes		

Third training unit

objective: Developing physical variables and basic skills

Intensity: 75%

Exercise time: (39_59) minutes Today: Thursday

Total time	Rest between sets	Groups	rest between reps	Repetition	Exercise time	Exercise number	Unit sections
16.13M	60	4	35	4	11.85	4	Main Section
15.6M	60	4	40	4	13.76	13	
12.59M	60	4	33	4	11.24	21	
Total rest between exercises: 3 minutes					Total exercise time: 43.35 minutes		