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The effect of a training program with a good sleep regimen in improving some of the physical abilities of futsal players

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ABSTRACT

The research aimed to identify the impact of the training program designed to improve the physical abilities of futsal players, and to determine a good sleep system to improve the physical abilities of futsal players, as well as to identify the impact of a training program with a good sleep system on improving the physical abilities of futsal players, and the researchers used the experimental approach due to its suitability to the nature and objectives of the research, by adopting a program design for one group, and representing the research community of the Erbil Sports Institute team players 2023/2024 AD, The sample of the research was selected from the players of the Erbil Sports Institute / (2023-2024) team, numbering (13) players, and they were randomly selected, and they were distributed to one training group by (10) players, while their number reached the members of the exploratory study sample (3) players, and in order to obtain the data, the researchers prepared a training program, with the preparation of a test to measure the physical abilities of female football players, and the measure of a good sleep system, and then the researchers conducted tests, extracted the results and processed them statistically, Based on these findings, the researchers drew the following conclusions:

- A good sleep regimen has an impact on improving the physical abilities of female futsal players.
- The training program has an impact on some good physical abilities and moral.

Introduction

A futsal game requires high physical abilities and masterful individual skills. For this reason, coaches and players are trying to improve their physical abilities to enhance their performance individually and collectively. A good sleep regimen is one of the main factors that affect athletic performance. Hence the importance of this research, where we will study the effect of an integrated training program with a good sleep system on improving some of the physical abilities of futsal players.

Futsal is one of the most popular games, but it is the largest community of sports lovers as a simplified mass sport that does not require prior preparations, felt by both the player or the fan, young or old, and loved by men and women, even writers and readers.

Football occupies one of the first positions among all sports, which is characterized by the multiplicity of motor skills that the player must possess, and through which many plans can be implemented when the required level of physical fitness is available, and with the development that has occurred in football in most countries of the world in the recent period in terms of playing styles and plans, the high intensity of competition, the convergence of levels and strong performance within the limits of the law of the game, this has called for more attention to all aspects of the process. Training to reach the highest possible levels (1 : 13)

1 2 Search problem

Physical abilities are one of the basic elements that contribute to raising the level of sports performance of female players, and these abilities are affected by several factors, most notably training programs and the daily regimen of the players, especially the sleep system. It has been observed that many players suffer from fluctuations in the level of physical performance, which may be due to poor sleep quality or the absence of scientifically designed and balanced training programs.

Although there have been studies that have examined both training programs and sleep separately, there is a dearth of studies looking at the combined effect of a training program with a good sleep regimen on the development of some of the players' physical abilities. Hence, the research problem stems from the need for a scientific study that shows the effectiveness of this integration in improving physical abilities, which contributes to providing an applied vision that can be used in developing the level of sports performance of female players.

1.3 Research Objectives:

1 3 1 Identify the impact of the training program designed to improve the physical abilities of female futsal players.

1 3 2 Determine a good sleep regimen to improve the physical abilities of futsal players.

1 3 3 Recognize the effect of a training program with a good sleep regimen on improving the physical abilities of female futsal players.

1 4 Research Hypotheses:

141 There is a statistically significant positive effect of the proposed training program in improving the physical abilities of female futsal players.

142 A good sleep regime contributes to enhancing the results of the training program by improving the physical abilities of female futsal players.

143 There are statistically significant differences in the level of physical abilities of female futsal players before and after the application of the training program accompanying a good sleep regimen in favor of dimensional measurements.

1 5 Research Areas

151 Human field: Players of the Erbil Sports Institute team.

152 Time Range: From 11/11/2023 to 18/4/2024

153 Spatial Area: Erbil Sports Institute, Erbil Governorate.

1 6 Search term

A good sleep regimen is the regulation of daily behaviors and activities to support adequate and quality sleep, and includes adhering to a regular sleep schedule, creating an appropriate sleeping environment, and avoiding practices that hinder sleep, which enhances mental and physical performance and overall health.

2- Research Procedures

2.1 Research Methodology

The researchers used the experimental method to suit the nature and objectives of the research, by adopting a program design for one group.

2 2 Research community

The research community was represented by the players of the Erbil Sports Institute team 2023/2024, the sample included only the players participating in the Sports Institutes Championship in the Kurdistan Region of Iraq.

2 3 Research sample

A sample of the research was selected from the players of the Erbil Sports Institute / (2023-2024), whose number is (13) players, and they were randomly selected, and they were distributed to one training group by (10) players, while their number reached the members of the exploratory study sample (3) players.

2 4 Data collection tools

1 Questionnaire for the validity of the selected physical aptitude tests, Appendix (1)
2 Registration form for the results of the tests of physical abilities before and after.
3 Assistant team to work.

2 5 Devices and tools used

Stopwatch

Tape measure

Signs

Box

Whistle

Signs (10)

2.6 Exploratory experiment

The researchers conducted the exploratory experiment on 11/12/2023 with the help of the assistant work team before directly implementing the basic experiment, and the researcher conducted this experiment on the sample of the exploratory experiment and the number of its members reached (3) players, and the aim of this experiment is to identify the following things:

1 Know the time required to carry out the proposed exercises.

2 Take an idea of the players' knowledge of the exercises.

3 Overcoming errors and obstacles that appear when performing tests.

4 Ensure that the tests are easy to perform and execute.

5 Make sure that the tools used during the basic experiment are valid.

2 7 Pre-tests of the research sample

The researcher conducted the pre-tests on the research group on 14/12/2023 using physical tests for female players in a game under research, tests were applied within one day, and the tests took place at ten o'clock in the morning in the football field inside the Erbil Sports Institute.

2 8 Post-tests of the research sample

The post-tests were conducted on the research group on 12/2/2024 at exactly ten o'clock in the morning in the football stadium inside the Erbil Sports Institute, and the researcher committed to the implementation of the post-tests the same method of conducting the pre-tests, while ensuring the unification of their conditions and requirements in terms of time and place and organizing what can be organized from the variables surrounding the research.

2 9 Application of the training program

The training program was applied three days a week to the research group, and the time of the training unit was from 45 to 60 minutes, to be distributed to the research group of physical exercises physical skills in order to improve physical abilities, which the researcher extracted from (Hassan Abu Abdo 2016), (Khairia diabetes 2015).

2 10 module templates

Table 1

Models of training units within the training program

description	Unit time	Number of weeks	Paragraph
15 minutes warm-up 25 minutes physical exercises 5 minutes recovery.	45 min	First and second week	1
10 minutes warm-up 20 minutes physical exercises 15 mins skill	50 min	Third and fourth week	2

description	Unit time	Number of weeks	Paragraph
physical exercises 5 minutes recovery.			
10 minutes warm-up 20 minutes physical exercises 15 minutes physical skill exercises 5 minutes recovery.	60 min	Fifth and sixth week	3
15 minutes warm-up 25 minutes recreational physical exercises 10 minutes recovery.	50 min	Seventh and eighth week	4

2 11Statistical means

The researchers used the statistical bag SPSS through the following statistical methods:

Arithmetic mean

Standard deviation

Test T for one sample with pre- and post-test.

3 Presentation and discussion of results

3 1 Display the results of arithmetic means and standard deviations of search variables

Table 2

Levels of the paragraphs of the sleep system scale followed by the players and their arithmetic and hypothesis

Level	Significance level	Value (v)	Standard deviation	Arithmetic mean	Paragraph	Content	Paragraph
High	0.010	3.280	0.675	2.70	3	I sleep for an average time at night	1
medium	1.000	0.000	0.816	2.00		I wake up suddenly in the middle of the night	2
low	0.001	4.583	0.483	1.30		I feel refreshed and rested when I	3

						wake up in the morning	
medium	0.678	0.429	0.738	2.10		I feel anxious and restless before bed	4
low	0.024	2.714	0.699	1.40		I use relaxation and meditation exercises to improve my sleep at night	5
low	0.015	3.000	1.054	9	15	Overall score of the scale	

Table (1) shows that the levels of the paragraphs of the sleep system scale followed by the players approached between (high, medium, and high), as the first paragraph obtained a high level with an arithmetic mean of (2.70), which is higher than the value of the hypothetical mean of the paragraph of (2) and a significant significance level of (0.010), while paragraphs (2, 4) obtained an average level of two arithmetic averages of (2.00, 2.10), which are values close to the value of the hypothetical mean of the paragraphs and at non-significant significance levels of (1.00, 0.678).As for paragraphs (3 and 5), they obtained two low levels because they obtained two arithmetic mean amounting to (1.30, 1.40), which are values lower than the value of the hypothetical mean of the paragraphs and at levels of significant significance of (0.001, 0.024), and the scale in its total form obtained a low level with an arithmetic mean of (9), which is lower than the value of the total hypothetical mean of (10) at a significant significance level of (0.015).

Table 3

Arithmetic means, standard deviations and values (T) of the research sample on the pre- and post-tests

Significance level	Value (v)	Post-Test	Pre-test	audition

		Standard deviation	Arithmetic mean	Standard deviation	Arithmetic mean	
0.170	1.431	3.026	23.60	3.806	21.40	Flexibility(cm)
0.001	4.084	4.954	167.10	11.441	151.00	Jumping force of stability (cm)
0.000	7.126	0.075	3.14	0.316	3.87	Speed (20) (m/s)
0.000	8.064	0.674	15.87	0.976	18.90	Elongated (w)

Table (2) shows the arithmetic means, standard deviations and values (T) for the pre- and post-tests of the experimental group in the four tests, as the flexibility test in the pre- and post-tests obtained two arithmetic mean of (21.40, 23.60) with standard deviations of (3.806, 3.026) respectively, and the value of the (T) test between the pre- and post-tests was (1.431) at a non-significant significance level of (0.170), and this indicates that there are no statistically significant differences between the scores of the pre- and post-tests in the flexibility test, while Jump strength test of stability in the pre- and post-tests on two arithmetic means amounted to (151.00, 167.10) with two standard deviations of (1.441, 4.954) respectively, and the value of the test (T) between the pre- and post-tests (4.084) at a significant significance level of (0.001) and this indicates that there are statistically significant differences between the scores of the pre- and post-tests in the jump strength test from stability and in favor of the post-test, while the speed test in the pre- and post-tests obtained two arithmetic means of (3.87, 3.14) with two deviations The value of the (T) test between the pre- and post-tests was (7.126) at a significant significance level of (0.000), and this indicates that there are statistically significant differences between the scores of the pre- and post-tests in the speed test and in favor of the post-test, while the prolongation test in the pre- and post-tests obtained two arithmetic means of (18.90, 15.87) with two standard deviations of (0.976, 0.674) respectively, and the value of the (T) test between the pre- and post-tests was (8.064) at the level of significance of significant It reached (0.000) and this indicates that there are statistically significant differences between the scores of the pre- and post-tests in the prolongation test and in favor of the post-test.

The previous table shows that the tests (jumping strength of stability, speed, and stretching) have been improved through the training program with a good sleep system, while the improvement and development in the flexibility test was not significant, and the researcher attributes these results to .

4.2 **Discussion of results**

In light of the previous presentation of the results of the first hypothesis reached by the researchers and within the framework of the objectives and hypothesis of the research and guided by the results of reference studies and what is mentioned in the scientific references, the researcher begins to discuss the results of the tests of special physical abilities under research.

The researchers attribute this advance in the level of physical abilities of the research group to the observance of a good sleep regimen while improving the physical abilities necessary for the players in question.

This is what **Essam El-Din Abdel-Khaleq (2009) pointed out** that effective training must include the development of all the physical abilities necessary for the player, such as endurance, strength, speed, flexibility, agility. 16:166)

The researchers attribute the reason for this improvement among the physical tests of the research sample to the nature of the program developed by the researcher, which included exercises a good sleep system suitable for the sample, which was represented in exercises using simplified cones tools and a medical ball light weight.

Khairia Al-Sukkari and Mohamed Buraiq (2009) **confirm** that studies and scientific research have shown that a sleep regimen with a training program can increase muscular capacity, improve strength, endurance speed, speed with flexibility. (17:48)

The study of Yasser Osman (2009) **confirms** that the proposed training program was positive and effective for the research group. (18)

The researchers attribute this improvement to containing a good sleep regimen with the training program and physical exercises that serve endurance, muscular strength, speed, flexibility and this is consistent with what **Khairia Al-Sukkari and Mohamed Bariq (2009) pointed out**, that the design of the training program, easy to implement, the forces of influence, sophisticated, but we have modified something to suit the physiological, physical and psychological characteristics of the players regardless of their athletic abilities, and not only works to enhance athletic performance, but also works to develop capabilities. Basic physical such as endurance, strength, speed, flexibility, ability, agility, poise, compatibility. (17)

Conclusions and recommendations

4 1 Conclusions

In light of the results of the study and its discussion, the researcher concludes the following:

1 A good sleep regimen has an impact on improving the physical abilities of female futsal players.

2 That the training program has an impact on some good physical abilities and moral.

4 2 Recommendations

The researcher recommends several recommendations, the most important of which are:

1 Ensure a good sleep regimen that has a direct impact on improving some physical abilities.

2 Ensure that the training program is designed with a good sleep system to improve and develop the physical abilities of futsal players.

References:

1	**Mohammad Reda Al , Waqqad**	:	**(2003)**	Modern Planning in Football, Cairo: Dar Al-Saada Printing.
2	**Mufti Ibrahim**	:	**(2009)**	Fitness for Health and Sports, Dar Al-Kutub Al-Hadith, Cairo.
3	**Risan Khreibit and Abu Alaa Abdel Fattah**	:	**(2016)**	Sports Training, Book Center for Publishing, Cairo.
4	**Muhammad Hassan Allawi and Muhammad Nasreddin Radwan**	:	**(2001)**	Tests for motor performance, Dar Al-Fikr Al-Arabi, Cairo.
5	**Hassan Alsayed Abu Abda**	:	**(2016)**	Physical preparation for football players, Al-Fath for printing and publishing, Alexandria.
6	**Imad Aldin Abbas Abu Zaid**	:	**(2007)**	Planning and scientific foundations for team building and preparation in team games, application theories, knowledge facility, Alexandria.
7	**Khairia Ibrahim Al-Sukkari and**	:	**(2005)**	Plyometric Training, Part I, Knowledge Foundation, Alexandria.

			Muhammad Jaber Bariqi	
Theories of Force Training, Dar Al-Shorouk, for Publishing and Distribution, Baghdad, Iraq.	(2002)	:	Ali Turki Musleh	8
(Education, Training, Evaluation, Arbitration), Second Edition, Knowledge Foundation, Alexandria.	(2007)	:	Ellen Wadih Farag	9
Foundations and rules for football players, team games, Knowledge Facility, Alexandria.	(2006)	:	Ali Fahmi Albaik	10
Champion Industry Integrated Training Series 6 18 Years Old, Facility Maaref, Alexandria.	(2001)	:	Khairia Ibrahim Al-Sukkari and Muhammad Jaber Bariqi	11
Preparation, performance, training methods, Dar Al-Fikr Al-Arabi, Cairo.	(2005)	:	Omar Mohamed Labib and Ayman Mahmoud Sayed Karate	12
The effectiveness of using a proposed fitness training program for youth football under the age of 14 in the West Bank – Palestine	(2015)	:	Rami Muhammad Sweidan	13
The impact of a proposed educational program on some basic football skills among upper basic school students in Jerusalem governorate schools.	(2013)	:	Abdullah Shurbaji	14
The effect of a proposed training program on the curve of change for some physical abilities among junior football in Tubas Sports Club	(2011)	:	Muhammad Sameer Abdul razek	15
Sports Training (Theories and Applications), Dar Al-Maaref for Printing and Publishing, Alexandria.	(2009)	:	Essam Eddin Abdul khaliq Mustafa	16
Foundations and principles of sports training, Knowledge Foundation, Alexandria.	(2007)	:	Khairia Ibrahim Al-Sukkari	17
The effect of using the cross-training method on physical and skill variables for junior football, Master Thesis, unpublished, Faculty of Physical Education for Boys, Helwan University.	(2009)	:	Yasser Othman Mohammed	18
19 Walker, Matthew	:	(2017)	Why We Sleep: Unlocking the Power of Sleep and Dreams. Scribner	

Accessory (1)

Expert Opinion Form

Mr. Expert / ..... Esquire

Greetings, and after...

The researcher aims to build research procedures tagged ((The effect of a training program with a good sleep system in improving some of the physical abilities of futsal players))

In view of the extensive experience and know-how that you possess, the researcher was keen to use your expertise to indicate the validity of the tests developed to measure the physical abilities of female futsal players to choose the most appropriate ones to be applied to the research sample, hoping to add any amendments you deem appropriate.

Sincerely thanks and appreciation

Name:.....
Degree : .....
Position: .....

Researcher

Accessory (2)

auditions

1 Muscle strength test:

Wide jump test of stability:	:	**Test Name**
Measure the muscular ability of the legs in the forward jump.	:	**Purpose of the test**
A wide jump place with a width of 1.5 meters and a length of 3.5 meters, taking into account the security and safety of the players at the test site so that the place is level, free of obstacles and not smooth. tape measure and colored pieces of chalk.	:	**Devices and tools**
The tester stands behind the starting line (elevation) and the feet are slightly spaced apart and parallel, so that the metatarsal touches the starting line from the outside. The tested player starts by swinging the arms backwards with the knees bent and leaning forward slightly, then jumps forward as far as possible by stretching the knees and pushing the feet with the arms swinging forward.	:	**Method of performance**
The test is carried out on a rough surface that allows to give the required thrust. The elevation of the feet should be taken together, not with one foot. A good warm-up is allowed before taking the test. The player should avoid falling back after performing the attempt as much as possible. Each player has three consecutive attempts, the best of which is credited to him. The arms must be swung forward and up to help push the jump forward.	:	**Test Instructions**
The measurement is from the starting line (elevation) to the last part of the body touching the ground towards this line. The starting line is 5 cm wide and goes into the measurement of the attempt. Each attempt is measured to the nearest 5 cm. The test player is awarded the best of the three attempts.	:	**Sign up**

2. Speed stress test:

Shuttle Running 2 ×20 meters:	:	**Test Name**
Speed endurance measurement.	:	**Purpose of the test**
4 Plastic funnel or football banners Gear stopwatch or plastic tape.	:	**Devices and tools**
The player takes the standby position in front of the first flag and behind the starting line, and let (a) be in the high start position, and when given the start signal, he runs towards the other flag to rotate around it, return to the start line and rotate around the first flag, and so the player continues to travel the distance back and forth between the two lines 2 times so that the last time ends at the finish line (b)	:	**Method of performance**
The time it takes for the player to travel the distance between the two lines back and forth is recorded 2 times in seconds to the nearest 1/10 second.	:	**Sign up**
Test the 25-meter enemy of the moving start:	:	3 Test name
Measurement of transition velocity.	:	Purpose of the test

An athletics track divided into lanes, a football field or a flat space area of land that is at least 65 meters long and at least 3 meters wide. Stopwatch.	:	Devices and tools
The place of taking the test is planned into an appropriate number of lanes (2 to 5) lanes, depending on the available capabilities, especially the number of arbitrators. After a distance of 30 meters from the starting line, the area is divided by intermittent transverse lines of goodness between each line and the other a distance of 2 meters, and these lines continue from 30 to 54 meters. More than one region can be planned to apply the test to more than one group at the same time.	:	Procedures
The player stands with both feet behind the starting line in the lane assigned to him from the high starting position. He calls the ear to start with the following sign (Take your place, get ready, run). When the player hears the command to run, he goes at full speed in a straight line and continues until the whistle goes off, announcing the end of the 6-second time. The player's goal is to cover the longest possible distance during the test time.	:	Method of performance
He calls the players, records the results, and is in his place on the side and in front of the timer. The results of the best attempt of the two attempts are calculated for the player.	:	Sign up

4 Flexibility test:

Bend the torso to touch as far as possible (after the toes).	**:**	**Test Name**
This test assumes measuring the distance by which the escape can reach the farthest distance by bending the torso forward and down without bending the knees.	**:**	**Purpose of the test**
Ruler box .	**:**	**Devices and tools**
The individual stands on top of a seat so that the front of the feet on the edge of the seat and then the individual bends the torso in front of the bottom to reach the farthest possible distance down with the fingers of the hands and knees - taking into account the joining of the feet - note the installation of a scale (ruler) so that allows measuring 20 inches (50.8 cm) above and below the edge of the place to stand.	**:**	**Method of performance**
The distance reached by the fingers of the hands while holding the final position for at least two seconds without allowing vibration.	**:**	**Sign up**

Appendix (3)

Players' sleep system scale phrases

At all	Once in a while	A lot	Content	Paragraph
			I sleep for an average amount of time during the night	**1**
			I wake up suddenly in the middle of the night	**2**
			I feel refreshed and rested when I wake up in the morning	**3**
			I feel anxious and restless before bed	**4**
			I use relaxation and meditation exercises to improve my sleep at night	**5**

Accessory (4)

Program to determine a good sleep schedule (4)

Content	Paragraph
Sleep at night from eleven o'clock at night until 7 am	1
Practice healthy sleep habits, such as creating a comfortable, dark sleeping environment with appropriate temperature adjustments	2
Practice relaxation techniques and meditation before bed to calm the mind and prepare for rest	3
Reduce the use of electronic devices before bed, and make sure mobile phones and large screens are locked	4
Establish a special bedtime routine, such as a warm shower or reading for a specific period of time.	5

Accessory (5)

Training program for some physical elements for 8 months, each week 3 training units Table (5)

description	Unit time	Number of weeks	Paragraph
15 minutes warm-up 25 minutes physical exercises 5 minutes recovery.	45 min	First and second week	1

10 minutes warm-up 20 minutes physical exercises 15 mins skill physical exercises 5 minutes recovery.	50 min	Third and fourth week	2
10 minutes warm-up 20 minutes physical exercises 15 minutes physical skill exercises 5 minutes recovery.	60 min	Fifth and sixth week	3
15 minutes warm-up 25 minutes recreational physical exercises 10 minutes recovery.	50 min	Seventh and eighth week	4