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The effect of using different training methods on developing some of the physical and skill abilities of Ghaz Al-Shamal Club basketball players

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Abstract:
The study aimed to identify the effect of using different training methods on developing some of the physical and skill abilities of the Ghaz Al-Shamal basketball players. The study hypothesized that there are statistically significant differences between the pre-and post-tests of the two experimental groups in some of the physical and skill abilities of the Ghaz Al-Shamal Basketball Club players. The researchers used the experimental method given the suitability of this method to the nature of the research and the research problem. The research sample consisted of (24) players purposely selected and divided randomly into two experimental groups. Each group consisted of (12) players after (6) players were excluded from having conducted the pilot experiment. The first group used the circuit training method and the second used the station method. The experiment lasted (12) weeks with (3) sessions per week.
The researchers reached the following conclusions: The drills used had a significant effect on the development of physical abilities in the first group that used the circuit training method. The drills used were instrumental in developing some of the skills adopted by the research that used the method of stations. Through the conclusions, the researchers recommend the following: the need to pay attention to the use of different training methods because of their impact on the development of the physical and skill perspective more than the training methods. The study also emphasizes the use of the method of high-intensity and circuit interval training to develop the physical of the players.

Keyword: The effect, training methods, skill abilities, Ghaz Al-Shamal, basketball

1- Introducing the research

1-1 Introduction and importance of research:

Basketball is one of the widely popular sports and occupies a good position as it is an interesting game and contains defensive and offensive skills that players should learn and master in matches. Training young people at this age is no different from any other game by preparing training programmes and following modern scientific methods on developing what should help to achieve the best results for them. As a result of the close link between physical preparation and skills in basketball, it has become necessary to pay attention to the elements of physical fitness, especially strength distinguished by speed, which is one of the special physical attributes affecting the success of performing skills basic in basketball.

The game of basketball in the world has witnessed remarkable development in recent years in the physical, skill, planning and psychological aspects, which characterized the modern character of the game with speed, strength and longevity in the exact technical preparation. This has affected the development of skills through the trainers following the scientific foundations in training programmes and various training methods to raise teams to a high level. Physical abilities are an essential element and a major factor influencing skill performance in training and competitions, with different degrees of dependence on them in sports, including basketball. Specialists in the field of training science agree on the importance of physical abilities for sports games and events “as strength and speed play an important role as one of the basic abilities of the components of physical preparation that characterize sports activities such as sprinting, jumping, long jump and skill such as shooting” (Abdel Baseer, 1999, p. 99).

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The importance of the research is highlighted in the fact that the best training methods should help achieve functional adaptation and raise the level of physical fitness, especially the comprehensive development of endurance of strength and flexibility, as well as periodic and respiratory endurance, speed, ability and speed endurance. These elements require determination and strong determination with performance at the skill level (Abdullah, 2000).

1-2 Research Problem:

The problem of the research lies through the experience of researchers being a basketball player who noticed a lack of interest by most coaches in using various scientific training methods in developing the explosive power of the muscles of the legs. This has negatively affected their levels of play, especially in attack, which is an effective weapon in modern basketball in order to raise the capabilities of players and their abilities to achieve optimal performance. Therefore, we decided to use two training methods to determine their effect on the development of some physical abilities and skills in basketball. The research aims to identify the effect of methods on the development of some physical abilities.

1-3 Research Objectives:

- To identify the effect of using different training methods on developing some of the physical and skill abilities of Ghaz Al-Shamal basketball players.
- Identifying the differences between the arithmetic means in the physical and skill tests between the two experimental groups in some of the physical and skill abilities of Ghaz Al-Shamal basketball players.

1-4 Research Hypotheses:

- There are statistically significant differences between the pre and post-tests of the two experimental groups in some of the physical and skill abilities of the Ghaz Al-Shamal Club basketball players.
- There are also statistically significant differences between the post-tests of the two experimental groups in some of the physical and skill abilities of Ghaz Al-Shamal Club basketball players.

1-5 Research Domains:

- **Human**: Young players under the age of (18 years) for the Ghas Al-Shamal Basketball Club.
- **Temporal**: 11/1/2022-13/4/2022.
- **Spatial**: the indoors hall of the Ghaz Al-Shamal Club.

2- Research methodology and field procedures:

2-1 Research Methodology:-

The researchers used the experimental method given the suitability of this method for the nature and problem of the research.

2-2 Community and Research Sample

The selection of the research sample is closely related to the goals that researchers set for the research. Therefore, “the goals that researchers set for this research and the procedures used will determine the nature of the sample chosen (Mahjoub, 1988, p. 85).

The research community included the players of the Ghaz Al-Shamal Club in basketball totalling (24) players, who represent a percentage of (100%) of the original community. the selection of this group was based on the following reasons:

1. The sample members adequately represent the research community.
2. Ensuring the availability of the sample to perform the tests.
3. Ensuring that the sample implements the proposed and prepared parts of the training programme.

After the research community was selected, the sample was equally divided into two groups (the first used the circuit training method and the second used the station method) with (12) players for each group. Six players were excluded to apply the pilot experiment. Table (1) outlines the research sample.

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Table (1): the size of the samples used in the research

Group	Methods	Number of players
First experiment	Training using circuit method	12
Second experiment	Training using station method	12
Pilot group	Taking tests	6
Total	Total sample members	30

2.2.1 Homogeneity and Equivalence:

Table (2) shows the measurements, tests, arithmetic means, standard deviations, and the calculated, tabular and significant T-values of the pre-tests for the research sample.

	Significant	skew modulus	Tabular t-value	calculated t-value	stations		Circuit		Measurements and tests
					p	s	p	s	
1	height	0.925	2.07	1.593	4.616	160.61	5.159	163.551	insignificant
2	weight	0.987		0.134	5.742	55.312	5.662	55,755	insignificant
3	Age	1.005		0.187	3.91	15.16	3.70	15.55	insignificant
				physical tests					
4	Bench jump	1.92		0.74	3.51	57	6.75	59	insignificant
5	push iron bar	1.02		1.29	1.71	26	1.74	26.4	insignificant
6	Sit-up	1.22		1.13	2.11	14.5	2.55	15	insignificant
				skill tests					
7	Passing and receiving	1.08		0.175	4.13	25.90	3.84	26.21	insignificant
8	Dribbling	1.10		0.363	2.17	14	2.43	14.33	insignificant
9	Shooting accuracy	1.18		0.20	3.9	10.2	3.3	9.5	insignificant

2-3 Means of data collection and tools used in the research:

2.3.1 Means of data collection:

- Arab and foreign references and sources.
- Observation.
- Personal interviews.
- Expert Survey Form.

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2.3.2 Devices and Tools:

- Weighing device + iron tablets + iron bar.
- Measuring tape to measure the length and record the distances length of 50 m.
- Three Japanese-made electronic Stopwatches.
- Ten Basketballs.
- Electronic Calculator Brand: Casio (Japanese-made).

2-4. The tests used in the research

2-4-1 Choosing the tests used in the research

A questionnaire form was distributed to a group of experts to elicit their views on choosing the appropriate tests for the research. Table (3) shows the percentage of experts' agreement on the physical and skill qualities, which took a percentage of (70%) and above.

Table (3): the percentage of agreement for the tests according to the agreement of the experts.

	Expert agreement ratio	**Physical qualities and basic skills**
1	**95%**	**The speed quality of the legs**
2	**95%**	**The speed quality of the arms**
3	**87%**	**The velocity quality of the torso**
4	**100%**	**Passing and receiving the ball**
5	**100%**	**Shooting accuracy**
6	**90%**	**Dribbling the ball**

2-4-2. Steps for selecting research tests

Table (4): Percentage of agreement for selecting the candidate physical and skill tests

	Candidate Tests	agreement ratio	
		percentage	experts
1	Bench jump (30) seconds	77.7%	7
2	Sit-up (30) sec	77.7%	7
3	Laying on the back and making a star	33.3%	3
4	Front support for 30 sec.	22.2%	2
5	Pushing an iron bar up from a sitting position (30) seconds	66.6%	6
6	Passing and receiving on the wall	88.8%	8
7	Dribbling the ball for a distance of (30) m	88.8%	8
8	Shooting on hanging boxes	77.7%	7
9	Throwing a Medical ball to the farthest distance	55.5%	5

2-6. Physical tests

Test 1: Bench jump for 30 seconds
The second test: - Pushing a bar of iron 20 kg for 30 seconds
The third test: Sit-up for 30 seconds

2-7. Skill tests

First test: Continuous dribbling test in a zigzag direction for a distance of 30 m
The second test: - Measurement of coordination and speed of wall pass for 30 seconds.
The third test: measuring the accuracy of shooting.

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2-8. Pilot experiment

The researchers conducted a pilot experiment on Tuesday 11/1/2022 at 3 pm in the Ghaz Al-Shamal Club Hall / Kirkuk, on a group of (6) players from the research community of (30) players who were excluded from the main experiment of the research. Thus, they were ruled out of the research sample and the proposed tests were applied to them after making the measurements to reach the following:

- Determining the time taken for each test.
- Ensuring the safety of tools and devices used for research.
- Determining the validity of the tests for the sample members.
- Overcoming errors in the tests, if any.

2-9 Field research procedures

9-2-1 Pre-tests

Pre-tests were conducted on the research sample of (24) players representing the first and second experimental groups, at a rate of (12) players for each group in the hall of the Ghaz Al-Shamal Club in Kirkuk. The pre-tests of the second experimental group that used the method of stations training method were conducted on Wednesday 26/1/ 2022 at 10 am in Ghaz Al-Shamal Club hall in Kirkuk. Prior to conducting the tests, the researchers explained and clarified the tests to the research sample.

2-9-2. The main experiment:

The two experimental groups were subjected to the modules of the training programme, which was prepared by the researchers to develop the distinctive strength with speed and some basic basketball skills for the club players. The application period was set as (12) weeks, starting from Tuesday, 2/2/ 2022 and continued until Tuesday, 13/4 / 2022 with a rate of (3) training sessions per week. The sessions were conducted on Sundays, Tuesdays, and Thursdays, and for the first and second groups. Training begins with the training session at exactly 2 pm.

The researchers decided to develop two different methods, the first of which is the circuit training method, and the second is the method of training in stations, distributed over 36 training sessions for each method, at a rate of 3 sessions per week. The workout of the group that uses the circuit training method is that each pair of players perform the training according to the training session. When it is finished, the player takes a break and then starts the next exercise and so on until the end of the first group. The second group used the stations training method where all players start their session performing a specific drill and then take a specific period of rest and then start the second drill. Thus, the method of stations training uses weights and medical balls and the workout lasts 10-15 seconds and a period of rest of (45) seconds.

As for the modules and contents of the training programme, it included drills that contributed to the development of the player's physical and skill ability. The researchers considered all the variables shown by the pilot experiment, taking advantage of the specialists' views on the field of sports training, each according to his specialization in terms of writing and organizing the modules of the programme.

Therefore, the total time of the training programme for both groups for the period in which it was implemented was (6480) minutes, each group had (3240) minutes, and the duration of one training session was 90 minutes.

Table (5): the training session in minutes and for the first three weeks

Sections of the training session	Time during the week (minutes)	Time during the training session (minutes)	Total time (minute)
Preparatory section	45	15	135
general warm-up	15	5	45
special warm-up	30	10	90
2. The main	210	70	630

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section			
physical drills	105	35	315
skill drills	105	35	315
3. Final Section calming drills	15	5	45
Total	270	90	810

Table (6): the number of minutes per session in weeks (4,5,6,7,8)

Sections of the training session	Time during the week (minutes)	Time during the training session (minutes)	total time (minute)
Preparatory section	45	15	225
A general warm-up	15	5	75
special warm-up	30	10	150
A2. For the chief's department	210	70	1050
physical drills	105	35	525
skill drills	105	35	225
3. Final Section calming drills	15	5	75
Total	270	90	1350

Table (7): the number of minutes in the training sessions for the weeks (9,10,11,12)

Sections of the training session	Time during the week (minutes)	Time during the training session (minutes)	total time (minute)
Preparatory section	45	15	180
A general warm-up	15	5	60
A special warm-up	30	10	120
A2. For the chief's department	210	70	840
physical drills	105	35	420
skill drills	105	35	420
3. Final Section calming drills	15	5	60
Total	270	90	1080

2-9-4. post-tests

Post tests were conducted for the research sample on Tuesday 13/4/2022. The tests were conducted in the same style as the pre-tests in terms of time and place.

2-10. Statistical means:

The researchers used the statistical package of SPSS to obtain the results.

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3. Presentation and discussion of the results

3-1. The physical tests of the group that trained using the circuit training method

3-1-1. Bench jump test:

Table (8): the group of circuit training method, the differences of the arithmetic means between the pre- and post-test, the sum of the squared deviations of the differences, and the calculated and tabular T-value of the bench jump test for 30 seconds

Method	T-table value	Calculated t value	Mg hf2	Q-q	Significant differences
circuit training	2.20	3.26	32.97	1.58	significant

3-1-2. Iron bar push test

Table (9): the circuit training method group, the differences of the arithmetic means between the pre- and post-test, the sum of square deviations of the differences, and the calculated and tabulated T-value of the iron bar push test 30 seconds

method	T-Table Value	Calculated t value	mg hf2	Q-q	significant differences
circuit training	2.20	7.73	2.98	1.16	significant

3-1-3. Sit-up test

Table (10): The group of circuit training method, the differences of the arithmetic mean between pre and post, the sum of square deviations of the differences and the calculated and tabular T-value of the sit-up test for 30 seconds.

method	T-Table Value	Calculated t value	mg hf2	Q-q	significant differences
circuit training	2.20	8.3	4.92	1.58	significant

3-1-3-4 Discussion of the circuit training method

According to the results we had, the significant differences can be ascribed to using the circuit training method, which is “a form of important and even main training that works directly to raise the efficiency of the internal vital organs in the human body (heart, lungs, circulatory system) and is considered one of the best methods used on developing Elements of physical fitness and their derivatives”.

3-2. The results of the skill tests using the circuit training method

3-1-3-4 Discussion of the circuit training method

According to the results we had, these significant differences came as a result of using the circuit training method, which is “a form of important and even main training that works directly to raise the efficiency of the internal vital organs in the human body (heart, lungs, circulatory system) and is considered one of the best methods used in developing Elements of physical fitness and its derivative (Hussein, 1998, p. 86).

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3-2. The results of the skill tests using the circuit training method

3-2-1. Passing and receiving test

Table (11): **the group of circuit training method, the differences of the arithmetic means between the pre- and post-test, the sum of the squared deviations of the differences, and the calculated and tabular t-value of the passing and receiving test for 30 seconds.**

method	T-Table Value	Calculated t value	mg hf2	Q-q	significant differences
circuit training	2.20	12.67	2.92	1.9	significant

3-2-2. Dribbling test

Table (12): the group of circuit training method, the differences of the arithmetic means between the pre- and post-test, the sum of the squared deviations of the differences, and the calculated and tabular t-value of the dribbling test.

method	T-Table Value	Calculated t value	mg hf2	Q-q	Significance
circuit	2.20	1.79	164.08	1.8	random

3-2-3. Shooting accuracy test

Table (13): the circuit training method group, the differences of the arithmetic means between the pre- and post-test, the sum of the squared deviations of the differences, and the calculated and tabular t-value to test the accuracy of the shooting

method	T-Table Value	Calculated t value	mg hf2	Q-q	Significance
circuit training	2.20	4.67	108.19	4.25	significant

3-4-3 Discussion of the results:

The researchers believe that these significant differences in the skill tests (passing, receiving, shooting) can be ascribed to applying the circuit training method because of its impact on development, as well as (the distinction of circuit training in addition to containing factors of suspense and excitement, provided that it is directly exposed to the effective and positive contribution to improving efficiency Sports for practitioners (physical + technical + tactical + psychological). This was confirmed by Ali "that circuit training has an effective effect in developing the elements of special physical fitness because of its impact on the circulatory and respiratory system and the intensity of the distinctive in performance." (Ali, 2004, p. 127).

3-3. Station-style physical tests

3-3-1. Bench jump test

Table (14): the set of stations, the arithmetic mean differences between the pre- and post-test, the sum of the squared deviations of the differences, and the calculated and tabulated T-value for the bench jump test for 30 seconds

method	T-Table Value	Calculated t value	mg hf2	Q-q	Significance
station	2.20	5.11	101.625	4.5	significant

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training					

3-3-2. Iron bar push test

Table (15): the set of stations, the differences of the arithmetic means between the pre- and post-test, the sum of the squared deviations of the differences, and the calculated and tabulated t-value of an iron bar push test for 30 seconds

method	T-Table Value	Calculated t value	mg hf2	Q-q	Significance
station training	2.20	6.86	35	3.5	significant

3-3-3. Sit-up test

Table (16): the set of stations, the arithmetic mean differences between the pre- and post-test, the sum of the squared deviations of the differences, and the calculated and tabulated t-value of the sit-up test for 30 seconds.

method	**T-Table Value**	**Calculated t value**	**mg hf2**	**Q-q**	**Significance**
station training	**2.20**	**8.33**	**2.69**	**1.25**	**significant**

3-3-3-4 Discussion of Results:

From the foregoing, the researchers see that the approach that was used in training the group of station training has an effect on the development of the physical side. This can be attributed to the use of weight training directed to the working muscles of the arms, legs and trunk. That is, these muscles have evolved as a result of the development of muscle strength in its various forms. This is because the training directed by weights to certain muscle groups leads to the development of them where (the work of muscle repetition to reach the stage of fatigue made the muscle work with a weight that is more than its capacity, isolate the special muscle groups to be strengthened, repeat training groups and repeat training sessions. This came as a result of the use of the method of station training, which is of a profound effect on the development of the physical aspect, and this is what (Khouribet) stressed that “sports training increases muscle activity and that participates in more muscle groups, which leads to a development in the production of energy in the muscles." (Khouribet, 1997, p. 322).

3-4- Skill tests using the stations method

3-4-1. Passing and receiving test

Table (17): the set of stations method, the arithmetic mean differences between the pre- and post-test, the sum of the square deviations of the differences, and the calculated and tabulated T-value for the passing and receiving test for 30 seconds.

method	**T-Table Value**	**Calculated t value**	**2**	**Q-q**	**Significance**
station training	**2.20**	**17.14**	**24.92**	**30.75**	**significant**

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3-4-2. Dribbling test

Table (18): the set of stations method, the differences of the arithmetic means between the pre- and post-test, the sum of the squared deviations of the differences, and the calculated and tabulated t-value of the dribbling test.

method	T-Table Value	Calculated t value	mg hf2	Q-q	Significance
station training	2.20	7.5	4.06	6.23	significant

3-4-3. Shooting accuracy test

Table (19): the set of stations, the arithmetic mean differences between the pre- and post-test, the sum of the squared deviations of the differences, and the calculated and tabulated t-value to test the shooting accuracy

method	T-Table Value	Calculated t value	mg hf2	Q-q	Significance
station training	2.20	3.66	22.25	64.25	significant

3-4-3-4- Discussion of the results:

Through the foregoing and regarding skill tests, it was noticed that there are significant differences in favor of the post tests. The researchers attribute this to the fact that the skill of passing and receiving has developed as a result of the muscles gaining the appropriate strength, increasing their speed and reducing their performance time.

This means that the development of the speed of the players addressed in the training has worked to develop the speed of movement performance because speed plays an important role in skill performance and depends mainly on muscle strength.

Sultan (1990, p. 156) stresses that “muscle strength is one of the dynamic factors of motor performance and is also the reason for its progression. Moreover, the development of muscular strength leads to the development of a kinetic quality at the same time, and the development of the strength of the arm muscles especially (forearm, wrist, and fingers) increased ability to perform". This in turn works on the speed of the skillful performance of dribbling as a result of increasing control over the ball. For this reason, Ali (2000, p. 33) stresses the need to increase the player’s ability while he/she is in control of the ball during the dribbling, as it becomes an inseparable aide to the hand given its importance as an existing skill by itself and has its own privacy and active role that control it during the performance in the matches. The development of the muscular strength of the legs and the arms depend primarily on the exercises of different weights and the use of medical balls and performance that depends on strength and speed. Mahmoud (2019, p. 65) notes that "The player who jumps as high as possible for shooting is the winner, as he/she can score better.".

3-5. Presentation and discussion of the results of the physical post-tests for both groups

3-5-1. bench jump test

The researchers attribute the reason for this to the development of the muscle groups involved in motor performance as a result of training with weights. This is evidenced in the muscles of the legs and the use of medical balls. This led to the development of skill performance and further improving the motor compatibility of the players' performance. It also works on the full and proper interdependence and harmony between the nervous system and its role in the distribution of nervous arousal to the muscle groups concerned rather than others. This led to the superiority of the post-tests that used the method of station training. This is confirmed by (Hassan) that “speed depends entirely on force and if you return to the

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physical point of view, we know that speed is a movement resulting from force with its association with the factor of time" (Suleiman, 1993, p. 276).

Table (20): the calculated and tabulated t-value of for the 30-second bench jump test

method	T-Table Value	Calculated t value	Post-test p	Post-test s	significance
circuit training	2.07	3.92	6.16	53.08	Significant
station training			5.6	63.33	

3-5-2. Iron bar push test

The researchers attribute this development to the effectiveness of the stations training method and the result of the effect of weight training and medical balls directed on the working muscles of the arms. These muscles have developed as a result of the development of muscular strength in its various forms and the gradual increase in the weight of weights as well as the weight of the medical balls used in training. This made the muscle more capable of facing the new burden, which helped improve and develop muscle strength in performance. This was confirmed by Abdul-Khaleq (1999, p. 117) that "the process of upgrading the level of speed strength requires work using weights or using the weight of the body."

Table (21): the calculated and tabulated t-value of for a 30 sec iron bar push test

Method	T-Table Value	Calculated t value	Post-test p	Post-test s	significance
circuit training	2.07	4.32	3.32	33.67	Significant
station training			3.47	36.67	

3-5-3. Sit-up test

Researchers believe that the development in this skill is due to the exercises given in the training sessions that led to the clarity of this development. Some studies indicated that speed appears in most cases related to muscle strength or related to the speed of changing direction and speed is an indication of the muscle responses resulting from the rapid exchange of muscular contraction and relaxation.

Table (22): the calculated and tabulated T-value for the 30-second sit-up test

Method	T-Table Value	Calculated t value	Post-test p	Post-test s	significance
circuit training	2.07	3.15	1.66	14.75	Significant
station training			1.81	17.08	

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3-6. Presentation and discussion of the skill tests (post-test) for both groups

3-6-1. Passing and receiving test

The researchers attribute this to the use of the passing skill exercises that are used in the training sessions, whether they are towards the wall or between the players. They have also contributed to the progression of the skill level of performance, and this was confirmed by (Al-Ani) who notes that "It is an exercise test that develops the skill that uses high-intensity interval training that is one of the active periods in the development of upper limb muscles (Al-Ani, 2005, p. 96).

Table (23): The arithmetic means, standard deviations, and the calculated, tabular and significant t-value show the differences between the post-test tests of the circuit method and the stations for the 30-sec passing and receiving test.

method	T-Table Value	Calculated t value	Post-test p	Post-tests	significance
circuit training	2.07	5.41	1.83	28.08	Significant
station training			1.91	23.75	

3-6-2. Dribbling test

The researchers believe that these significant differences between the two methods and in favor of the station training method are due to the fact that the muscle groups were affected by the use of the stations method in developing this skill.

Table (24): the arithmetic means, standard deviations, and the calculated, tabular, and significant t-value show the differences between the post-tests of the circuit method and the stations for the dribbling test.

method	T-Table Value	Calculated t value	Post-test p	Post-tests	significance
circuit training	2.07	2.79	0.9	8.08	Significant
station training			0.94	9.17	

3-6-3. Shooting accuracy test

Researchers attribute the reason for this development to the exercises, weights and assisting tools used in training, which led to this development, as well as to the use of the circuit training method, which is characterized in a direct way to contribute effectively and positively to the improvement of sports efficiency (physical fitness and technical)

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Table (25): the arithmetic means, standard deviations, and the calculated, tabular and significant t-value, the differences between the post-test tests of the circuit method and the stations to test the shooting accuracy

Method	T-Table Value	Calculated t value	Post-test p	Post-test s	significance
circuit training	2.07	3.78	1.24	9.5	Significant
station training			0.83	7.8	

The researchers reached the following conclusions:

- The exercises used had a significant effect on developing the physical abilities of the first group that used the circuit training method.
- The exercises used had an effective role in developing some of the skills approved by the research, which used the stations method.

Through the conclusions, the researchers recommend the following:

- The need to pay attention to the use of different training methods because of their effect on the development of the physical and skill aspect which exceeds that of the training methods.
- Emphasis on the use of high-intensity interval training and circuit training to develop the physical side of the players.

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Appendices

Appendix (1)

A model of the training programme using the method of circuit training (36) training sessions

weeks	training intensity	T	training style
First week	Average	1	Circuit training style The first stage
	below the maximum	2	
	Average	3	
Second week	below the maximum	4	
	Average	5	
	below the maximum	6	
Third week	Average	7	
	below the maximum	8	
	Average	9	
Fourth week	Average	10	Circuit training style The second phase
	maximum	11	
	below the maximum	12	
Fifth week	Average	13	
	below the maximum	14	
	maximum	15	
Sixth week	Average	16	
	below the maximum	17	
	maximum	18	
Seventh week	Average	19	
	below the maximum	20	
	maximum	21	
Eighth week	Average	22	
	below the maximum	23	
	maximum	24	
ninth week	below the maximum	25	Circuit training style third level
	Average	26	
	maximum	27	
tenth week	below the maximum	28	
	maximum	29	
	Average	30	
eleventh week	below the maximum	31	
	maximum	32	
	below the maximum	33	
Twelfth week	Average	34	
	maximum	35	
	below the maximum	36	

Intensity used:

- Low (low) 30-50%
- Below average 50-70%.
- Average is 70-80%.
- Below the maximum 80-90%.
- Maximum 90-100%.

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Appendix (2)

A model of the proposed training curriculum using the method of stations (36) training units

weeks	training intensity	T	training method
first week	Average	1	station method
	below the maximum	2	
	Average	3	
second week	below the maximum	4	
	Average	5	
	below the maximum	6	
the third week	Average	7	
	below the maximum	8	
	Average	9	
fourth week	Average	10	station method
	maximum	11	
	below the maximum	12	
Fifth week	Average	13	
	below the maximum	14	
	maximum	15	
the sixth week	Average	16	
	below the maximum	17	
	maximum	18	
Seventh week	Average	19	
	below the maximum	20	
	maximum	21	
The eighth week	Average	22	
	below the maximum	23	
	maximum	24	
ninth week	below the maximum	25	station method
	Average	26	

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	maximum	27	
tenth week	below the maximum	28	
	maximum	29	
	Average	30	
eleventh week	below the maximum	31	
	maximum	32	
	below the maximum	33	
Twelfth week	Average	34	
	maximum	35	
	below the maximum	36	

Intensity used

- Low (low) 30-50%
- Below average 50-70%.
- Average is 70-80%.
- Below the maximum 80-90%.
- Maximum 90-100%.