The Effect of Circular Training According to the Style of Stations (Physical - Skill) in Developing Some Physical Capabilities and Aiming by Jumping in Basketball for Youth

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Abstract

The aim of the research is to identify the effect of circular training according to the stations' method (physical - skill) In developing some physical abilities and shooting skills from basketball jumping, the research community included (28) players representing Al-Nasiriyah youth club basketball players (16-18 years old) for the season (2018-2019). (20) players were chosen from them representing a sample The research was divided into two groups randomly into two groups one What a pilot and another officer and by 10 players for each group. . The researchers applied the circular training in a method (high intensity fatality) as it celebrates special exercises to develop the distinctive strength of speed for the arms, legs, back and abdomen, and the explosive ability of the arms and legs, as well as the development of correction skill from jumping by (18) training units at a rate of (3) training units per week, concluded The two researchers in the experimental group that applied circular training according to the style of stations (physical - skill) a marked superiority over the control group in some physical abilities and the correction of jumping skill.

Keywords: *Physical – skill, developing, physical capabilities, jumping.*

Introduction

Training science is an important science that contributes to developing the physical, motor and skill capabilities of the players and it is classified into several different types or methods, including circular training [1], which is one of the most important types of training that works to refine and develop physical and skill capabilities for different age groups, including young people, as this type of Training with suspense, excitement, and diversity in performing exercises, and he is able to control the existing equipment and tools and put them in the service of the goals that he seeks to achieve, as nothing can stand in the way [2] of applying the vocabulary of this type of training, while the basketball arena is a good place to apply Training, it can be replaced by a large or small square. One of the appropriate qualities of circular training is that several devices and tools can be used during its various training stations such as regular and medical balls, characters, barriers, regular targets [3], mobile and small goals, ropes, wall, etc. that tools and devices are carefully selected and then distributed objectively in order to achieve Its purposes. Physical capabilities form the cornerstone of the basketball game and is an important and essential factor to raise the level of skill and career performance as it plays a prominent role in the player's [4] mastery of basic skills, and basketball as one of the group sports activities is a skill sport that contains a large number of motor skills that need a large number of the physical capabilities and capabilities to be done in a good manner and proper performance, so it has become necessary to prepare the players physically and skillfully in order to be able to perform the motor skills with a high degree of accuracy, especially the aiming [5] skill of jumping, which requires the player to enjoy high-level physical and skill capabilities in order to be able to master the correction from all regions It is different, and in order to play real basketball, we have to train on all the capabilities this game needs (physical and skill).

Methodology

The two researchers used the experimental approach to design the two equivalent control and experimental groups, as it is the most appropriate method to solve the research problem.

Research community and sample:

The research community included (28) players representing Al-Nassiriya club youth basketball players (16-18 years old) for the season (2018-2019), (20) were chosen from them representing the research sample and by (71.42%), they were divided into two groups by the way Simple randomization (drawing) into two groups, one is experimental and one is control, with (10) players for each group. In order to achieve homogeneity among the members of the research sample and to avoid the influence of the factors that may have affected the results of the experiment in terms of individual differences in the sample within the group, the researchers conducted the homogeneity of the sample in some of the variables that may have an effect on the experimental variable (length, mass, age, Training age) and using the coefficient of difference law.

Table (1) shows this shows the mean, the standard deviation, and the coefficient of variation for the research variables for the sample individuals

Coefficient of variation	standard deviation	Arithmetic mean	measuring unit	Specifications	Siq
1. 69%	0. 03	178	Cm	Length	1
3, 61%	2, 58	71, 45	Kg	Bloc	2
3, 78%	7, 74	204, 6	Month	Age	3
11. 75%	4. 21	35, 80	Month	Training age	4

Then, the researchers conducted the equivalence between the two groups in the research variables (physical abilities, and correction of jumping skill) through the use of the law (t) for independent samples. Table (2) shows that.

Table (2) shows the value of the arithmetic mean, the standard deviations, and the calculated and tabulated value (t) in the search variables for the sample members.

Statistical significance	Values(t)		Experimental group		Control group		measuring unit	Statistical treatments variables	siq
	Tabular	Calculated	P	s	P	s			
Not significant	2,26	1,384	0.31	4,48	0,30	4,47	M	Bursting capacity of the arms	1
Not significant		0.645	3,4	40.7	4,52	39,6	Cm	Explosive power of the two men	2
Not significant		0,19	1,229	11,2	1,159	11,3	S	Distinguished strength as fast as the arms	3
Not significant		0,534	0.680	9,85	0.611	9,97	S	Distinguished strength at the speed of the two men	4
Not significant		1,168	0,875	9,1	0.966	8.6	S	Distinctive strength in the abdomen	5
Not significant		0.612	0.948	12.7	1,26	12,25	S	Distinguished strength at the speed of the back	6
Not significant		1,137	1,398	15,2	1,354	14,5	Degree	Aiming to jump	7

• Table (T) value (2,10) at the significance level (0.05), and freely (18).

Research means and devices :

Field research procedures:

Determination of the physical abilities under consideration: The researcher has selected some physical abilities in the basketball, and included them in the appendix questionnaire (1), and it was presented to the experienced and specialized in the field of sports training and the basketball game appendix (2). To identify some of the physical abilities and after collecting the forms and discharged the researcher to take a behind the experts and adoption.

Table (3) opinions of experts and specialists in the nomination shows the physical capacity and the percentage of approval and disapproval

Percentage Percentage	write off	Percentage Percentage	Serve	Physical abilities	Siq
Zero	zero	100%	11	The explosive power of the muscles of the arms	1
9%	1	90%	10	The explosive ability of the muscles of the legs	2
27%	3	72%	8	Distinguished strength at the speed of the arms of the arms	3
9%	1	90%	10	The strength marked by the speed of the muscles of the legs	4
54%	6	45%	5	Exercise the arm muscles	5
18%	2	81%	9	Distinguished strength at the speed of the abdominal muscles	6
36%	4	63%	7	Distinguished strength at the speed of the back muscles	7
45%	5	54%	6	Transition speed	8
72%	8	27%	3	maximum speed	9
54%	6	45%	5	Speed up	10

Defining physical tests: The researchers prepared an appendix questionnaire (3) in order to choose the appropriate physical tests after they were presented to those with expertise and specialization in the field of sports training and basketball, and after collecting and unloading the forms, the researchers worked on sorting The tests that got the highest marking ratio as in Table (4).

Table (4) shows the opinions of experts and specialists in nominating physical tests and the percentage of approval and rejection.

Percentage	Does not fit	percentage	Repair	the exams	Body parts	Physical abilities	Siq
63%	7	36%	4	Throw a 3 kg medical ball to stand	For arms	Explosive power	1
18%	2	81%	9	Throw a 3 kg medical ball from a sitting position on a chair			
9%	1	90%	10	Vertical jump up from steadiness	For the two men		
72%	8	27%	3	Forward horizontal jump			
54%	6	45%	5	Pull up on the block continuously for 10 seconds	For arms	Force marked with speed	2
Zero	zero	100%	11	Oblique flatness then bend and stretch the arms 10s			
27%	3	72%	8	Partridge on one leg 30 m left and right	For the two men		
63%	7	36%	4	Partridge has a maximum distance of 10 seconds for each individual man			
18%	2	81%	9	Lying with hands attached behind the head raising and lowering the torso with pressing the knees with elbows for 10 seconds	For the abdomen		
72%	8	27%	3	Lying with hands attached behind the head and feet fixed With the help of a colleague, raise the torso with pressing the knees with the elbows for 10 seconds			
54%	6	45%	5	From laying flat on the abdomen and clasping hands behind the head with feet fixed with the help of a colleague, raise the trunk up and up to a certain level for 10 seconds	For the back		
36%	4	63%	7	From laying flat on the abdomen, holding hands behind the head, fixing the feet with the help of a colleague, raising and lowering the torso from the ground for 10 seconds			

Description of physical tests and correction skill used in the research:

First: The explosive power test for the two arms: throwing the medical ball a weight of (3) kg with two hands from the position of sitting on the chair. (5: 289)

The purpose of the test: To measure the explosive strength of the arms of the arms and shoulders.

Tools used: medical ball (3) kg, tape measure, and chair with secured torso strap

Method of performance: The laboratory sits on the chair and the medical ball is hand held so that the ball is higher and behind the head. The belt is placed around the chest of the laboratory and held from the back in a tight manner for the purpose of preventing the laboratory from moving forward while throwing the ball with two hands, because movement is limited to pushing the ball with two hands only.

Conditions: The laboratory is granted three consecutive attempts, and the laboratory must be allowed to perform a number of throws for the purpose of warming up before the performance. When the laboratory moves during the performance of one of the attempts on the chair, the result is not calculated and another [6] attempt is given in its place.

Recording: the distance between the front edge of the chair and the nearest point the ball places on the ground is calculated. The best attempt is calculated from the three attempts.

Second: The explosive power test for the two men:

Test name: Vertical Jump of Sargent (68:10)

The purpose of the test: to measure the explosive strength of the two men

Tools used: smooth wall of suitable height, tape measure, chalk.

Method of performance: The laboratory stands facing the wall, then the laboratory extends its arms up to its full extent for the purpose of knowing the first sign and then records the number, noting the sticks attached to the ground, the laboratory swings the arms down and back with the torso bent forward [7] and down and bends the knees to the position of the right angle only.

Registration: The registration is made by the number of centimeters the laboratory reached from the standing position, and the mark it reaches as a result of the jump-up, as the mark (the distance between the first mark and the second mark is the amount of the explosive power of the two men).

Third: Test the force marked by the speed of the arms: (8: 268)

Fourth: Lift the torso and put pressure on the knees (abdomen) in (10) w: (5: 348)

The purpose of the test: to measure the strength marked by the speed of the abdominal muscles.

Tools used: colleague or observer to calculate [8] the number of compression times - stopwatch.

How to perform the test: From lying on the back and hands tied behind the head with feet fixed with the help of a colleague, lift the torso and squeeze the knees by touching their elbows alternately.

Registration: The number of times the trunk is [9] lifted from the ground in (10) tha.

Fifth: Lift the trunk back (back) on the 10th w:

Measure the strength marked with the speed of the back muscles.

Tools used: colleague or observer to calculate the number of times lift - stopwatch.

How to perform the test: From laying flat on the floor, clasping hands behind the head, and fixing feet with the help of a colleague, lift the stem off the ground in (10) seconds.

Recording: The number of times the stem is raised in a time of (10) seconds.

Sixth: The force distinguished by the speed of the two men: (6: 149)

The test: Partridge on one leg for a distance of (30) meters left and right

Special exercises:

Objectives: The researchers have prepared special exercises aimed at developing the explosive ability and the distinctive force of speed and the aim of correction of jumping basketball for young people (16-18 years). These exercises are characterized by the following: -

a. To contribute to achieving the goals of the special preparation stage (physical and skill) for young players (Al-Nassiriya Club).

B. The contents of the exercises should be matched with the physical and skill characteristics of the players.

C. The exercises were applied by extracting the average stress of all the exercises used.

Dr . Take into account what means and capabilities affect implementation.

E. The diversity of exercises and flexibility in implementation, which makes it clear when implementing.

Dimensional Tests: After performing the special exercises, the two researchers conducted the dimensional tests of the research sample on Sunday and Monday, 11-12 / 3/2019. The researcher was keen to prepare the distance tests similarly in terms of spatial and temporal conditions for the tribal tests.

Statistical means:

The researchers used the following statistical methods: (percentage - arithmetic mean - standard deviation - coefficient of variation - test (t) for symmetric samples - test (t) for independent samples) [10, 11]

Presentation, analysis and discussion of the research results:

Present the results of the pre and post tests for some physical capabilities and correction skill for the control group and analyze them.

Table (5) shows the mean and standard deviations and the calculated and tabulated value (t) of the pre and post tests of the search variables.

Statistical significance	Value (t)		Post-test		Pre- test		measuring unit	Variables Statistical treatments	siq
	Tabular	Calculated	P	s	P	S			
Significant	2,26	4,978	0.05	4,54	0,306	4,47	M	Bursting capacity of the arms	1
Significant		4,03	7,07	46,9	4,52	39,6	Cm	Explosive power of the two men	2
Significant		8,08	0,994	12.9	1,159	11,3	Th	Distinguished strength at the speed of the arms	3
Significant		3,305	0.628	9,690	0.611	9,97	Th	Distinguished strength at the speed of the two men	4
Significant		13,416	0.966	10,6	0.966	8.6	Th	Distinctive strength in the abdomen	5
Significant		9	1,054	14	1,26	12,5	Th	Distinguished strength at the speed of the back	6
Significant		8,820	1,702	16.7	1,354	14,5	Degree	Aiming to jump	7

Table value (t) (2.26) at the significance level of 0.05 and freely (9)

Conclusion

Both the control exercises and the experimental groups have achieved a positive effect in developing some physical capabilities and shooting skills from jumping, but in varying proportions. The experimental group that applied circular training according to the stations' method (physical - skill) showed a remarkable superiority over the control group in some physical capabilities and the correction skill of jumping

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Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the Ministry of Higher Education and Scientific Research and all experiments were carried out in accordance with approved guidelines.

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