

The effect of exercises according to the increase in the height of the ring tendency in the accuracy of the direct shooting skill in basketball among middle school students

Lect.Dr.AdilAwad Karhoot¹,Lect.Dr.NawfalQahtan Mohammed²

^{1,2} Ministry of Education / Directorate of Education, Al-Anbar Governorate / Iraq.

Corresponding Author:nufalq@gmail.com

Abstract

The objective of the study was to identify the exercises prepared by the researcher according to the increase in the height of the ring tendency in the accuracy of direct shooting of basketball for middle school students. The research was applied experimentally to a sample of (40) students representing a percentage of intermediate students at Al Mughira bin Shuba in the city of Ramadi, the center of Anbar province, they were divided into two control and experimental groups, exercises were applied for a period of three months and two units per week depending on the method of fixed and changing exercise For both groups, the difference was that the control group used exercises on the ring with a legal height of 3.5 m, while the experimental group applied exercises according to the increase in the height of the ring tendency, and the researcher achieved the assumptions that he put forward, and the researcher concluded that the development was for both groups that applied the exercises in a fixed and variable manner But the preference was for the experimental group to apply the exercises according to the increase in the height of the ring tendency, and the recommendations of the research were to use the increase in the height of the tendency of the ring when teaching direct shooting in basketball.

Keywords: Exercises, ring tendency and direct shooting.

provided its services to the learning process of sports motor skills .

Scientists' opinions differed from the literature they presented in the various theories of kinetic learning and learning, in which some went to express opinions towards focusing on the technical performance of skill in the beginnings of kinetic learning without focusing on performance results and the achievement

Introduction

In the field of kinetic learning, we find today the occurrence of rapid leaps in the developed world to learn various mathematical skills in a way that is appropriate for the learner as a human being in terms of performance or kinetic, verbal or emotional behavior, and these facts came through the results of experimental scientific research, which

From this standpoint, the importance of research appeared in the direction of the two researchers to use the method of basketball leaning, then gradually increasing it when performing direct scoring exercises in the basketball to reach scientific facts in the accuracy of direct shooting as a result of technical performance and achieving the most important condition of kinetic learning, which is the transition from Ease to difficulty when learning skill (Ali, Athab and Hamzah, 2020).

Through the follow-up of the researchers as specialists in the field of physical education, they noticed that many students feel the difficulty in hitting a basketball goal that is (3.5) meters high when participating in practical lessons and internal school competitions, or when representing school teams in external school tournaments held by the sports activity for the stage Medium, which caused the aesthetic of the basketball game that lies in the goal injury to go, and to achieve the incentive to repeat the successful performance by learners when learning to correct the skill, the researcher raises the following question (Athab and Hassan, 2010):

Is there any effect of exercises according to the increase in the height of the ring tendency in the accuracy of the skill of direct shooting of basketball among middle school students?

Research objectives

1. Prepare direct shooting exercises for basketball according to the increase in height of the tendency

of accuracy of achievement, which some considered a second stage after the formation of the kinetic program of the kinetic path of skill Educated. Some mathematical skills require walking in their education to achieve two goals: accuracy of performance and accuracy of achievement in order to shorten time and effort through following methods or using methods that can achieve valuable results for the skill learning process, for example in the skill of shooting in basketball, which is one of the basic skills that You must go to the process of teaching it after the learners have mastered other skills such as the movements of the men and the plump and handling and provide a measure of the ball. Mastering this skill requires several technical aspects such as the opening of the legs and the movement of the movement between the parts of the body and the extension of the joints of the body and compatibility and pushing the ball with the right hand and the ball flying arc as well On controlling vision through compatibility between the eye and the arm and the awareness of distance and strength, and the availability of these aspects will be reflected in the accuracy of the performance results to succeed in hitting the target (Ahmed Abdulmohsen, 2018).

The effective dynamic learning of mathematical skill, which is what enables the learner a degree of success in the beginning of learning to provoke his motivation towards repetition of performance to achieve success and face early learning difficulties, "the individual tends to repeat the successful behavior that accompanies him with a pleasant result" (Al-Hali, Al-Saffah and Athab, 2019).

the city of Ramadi boys- district teachers.

Research methodology and field procedures

Research Methodology

The experimental method was used by the two researchers to suit the research procedures.

Society and research sample

The research community included second-grade students whose number is (100) students distributed over four people by (25) students for each division of Al-Mughira Bin Shuba branch in the Ramadi city center - Anbar Governorate(ATHAB, 1818), the research sample was randomly selected and (10) students from each division were chosen to be The research sample (40) students, they were divided into two equal control, experimental and lots groups, and (20) students per group. Thus, the percentage of representation of the research sample from the original community reached 40%.

Homogeneity and parity of the research sample

The researchers conducted homogeneity of the research sample in the variables of length, weight, age, and skillful research variables, Table (1). Then, after dividing the sample into two groups, they statistically processed the results of the pretests for the equivalence procedure, Table (2).

of the ring in basketball for middle school students

2. Knowing the effect of exercises according to the increase in the height of the ring tendency in the accuracy of the direct shooting skill in basketball among middle school students.
3. Identify the differences between the control and experimental research groups in the accuracy of direct shooting skill in basketball among middle school students.

Research hypotheses

1. There are significant differences between the results of the pre and posttests of the control and experimental groups in the accuracy of the direct shooting skill in the basketball and in favor of the post tests.
2. There are significant differences between the results of the posttests between the control and the experimental groups in the accuracy of the direct shooting skill in basketball and in favor of the experimental group.

Research fields

- The human field: (40) students representing the second grade stage of Al Mughira Bin Shuba School for Boys.
- Time : for the period from 11/18/2019 to 8/2/2020.
- Spatial field: basketball court for medium marauding bin Division of

Table 1. Shows the consistency of the research sample

Variables	Units	Mean	SD	Median	Skewness
Length	Cm	153.57	3.14	1.51	1.86
weight	Kg	56.38	2.14	56.5	0.16
Chronological age	Year	14.4	2.44	14.5	-0,12
Direct shooting accuracy from the front	Degree	4.95	1.01	5	-0.14
Direct shooting accuracy from the side	Degree	11.07	1.57	11	0.13

It is clear from Table (1) that the value of the torsional coefficient (L) for the variables ranges from ± 3 , and thus the sample is homogeneous (Athab, 2019).

Table 2. Shows the equivalence of the two research groups

Tests	Units	Control group		Experimental group		(t) value*	Type of significance
		Mean	SD	Mean	SD		
Direct shooting accuracy from the front	Degree	4.7	2.9	5.2	1.58	0.68	No sig.
Direct shooting accuracy from the side	Degree	10.95	1.09	11.2	1.93	0.51	No sig.

* Table (t) value (1.684) with a significance level of 0.05 and a degree of freedom (38).

10. The International Information Network (Internet).

11. The assistant work team (Mr. Abdul Qadir Hussain. Bachelor of Physical Education, Mr. Riyadh Aziz. Bachelor of Physical Education).

Research tests

Front shooting test

- Purpose: To measure the player's skill in shooting towards the basket from a specific location on the left side of the basketball goal.
- Tools: basketball, basketball goal.
- Performance specifications: The player is shooting the ball from the specified place directly outside the

Table (2) shows that the calculated value of (t) for both tests is smaller than the value of the (t) tabular, which indicates the equivalence of the control and experimental groups in skillful research tests (Athab, Hussein and Ali, 2019).

Devices, tools and means of collecting information

1. Weight and height measuring device.
2. KENKO electronic calculator.
3. HP type computer.
4. Legal basketball court.
5. 20 balls.
6. Metric tape measure.
7. Arab and foreign sources.
8. Test and measurement.
9. Information form.

towards the basket from a specific location on one side of the goal near the two corners of the field.

- Tools: basketball, basketball goal.
- Performance specifications: The laboratory is shooting from the specified place on both sides of the goal near the two corners of the stadium, and (6) meters from the center of the basket. The laboratory has the right to aim using one hand or two hands, to perform ten shootings from one side of the basket, and then move to the other side to perform ten other shootings. Before performance, the laboratory is permitted to perform some throws as a trial.
- Conditions(Hopkins, 1977): The shooting should take place from the specified location for that, and the laboratory shall perform ten shootings on each side, and the total number of shootings on the two sides shall be twenty shootings.
- Score: Two grades are counted for each successful shot in which the ball is entered into the basket.
 - One score is calculated for each cocking in which the ball touches the ring and does not enter the basket.
 - Do not count scores for shootings in which the ball touches the plate

free throw area, and that is from an area located at the intersection of the throw line with the circle, which is a specific point to the left of the basket, and this area must be specified with a mark drawn on the ground(Chen and Darst, 2001). The laboratory can perform shooting with one hand or two hands together in any way of shooting, noting that the shooting is made directly to the basket without the ball touching the target board.

- Conditions: Shooting must be made from the specified location.
 - The laboratory has the right to (15) throws that can be performed in three groups (each group has five throws).
- Before performing, the laboratory is allowed to make some throws as a test.
- Score: Two scores are counted for each successful shot in which the ball is entered into the basket.
 - One score is calculated for each cocking in which the ball touches the ring and does not enter the basket.
 - Grades are not counted when the ball touches the board and does not enter the basket.
 - The maximum score on the test is thirty(Ford and Puckett, 1980).

Side Shot Test

- Purpose: To measure shooting skill by making shootings

2. The self-validation coefficient for the shooting test from the front and the shooting test from the side (0.93- 0.92), respectively, so the tests have the truth.

The third pilot study:

It was conducted on (Tuesday) 11/11/2020 four o'clock in the afternoon, and its purpose was to check and choose the distance of the ring inclination in line with the research sample, and the inclination of the basketball ring was controlled so that the shooting exercises on the ring would be started so that the arch of the front ring, opposite the incline, provides a height of 2.95 m from the ground, from any direction when shooting.

Pre-test

The researchers and the assistant team conducted the pre tests to measure the shooting from the front and the shooting from the side, on (Wednesday) 11/13/2019 at four o'clock in the basketball court for the intermediate Al-Mughira bin Shuba the test .

The main experience

Before starting the implementation of the main experiment of the research, the researchers conducted three introductory units for the control and experimental research sample, whose goal was to teach the shooting skill by jumping in terms of technical performance of the skill, then a set of direct shooting exercises was prepared by jumping from different distances and directions to the goal of basketball was set in an educational curriculum , and the researcher adopted the

and does not enter the basket.

- The laboratory records the total number of degrees in twenty attempts made, and the maximum score is forty degrees(Huang *et al.*, 2017).

Field research procedures

Pilot study

The first and second pilot study: For the purpose of identifying the understanding of the members of the research sample, the appropriateness of the tests, and identifying the obstacles that may appear when applying the tests, as well as the time it takes for the test, the researchers conducted the first exploratory experiment on (15) students who did not participate in The main research experiment, on Sunday (Sunday) 11/13/2019, four o'clock in the afternoon, and the tests were repeated after seven days and on the same individuals in the same spatial and temporal conditions on (Sunday) on Sunday 10/11/2019 in order to verify the validity and reliability of the tests, When treating the statistical results with the Pearson (R) correlation coefficient law, it was clear that:

1. The value of (R) for the first and second tests for shooting from the front and shooting from the side (0.88-0.85), respectively, which is greater than the (R) tabular value of (0.44) is below the significance level (0.05), in front of the degree of freedom (13), so The tests have a coefficient of stability.

- The first month: the use of a stationary exercise, which means "one continuous performance sequence in the educational unit" (KIOUMOURTZOGLOU, 2004).
- The second and third month: Using the variable exercise, which means "the sequence of changing performances under different and changing circumstances in a single educational unit" (Paul and Garg, 2012).

fixed and variable exercise method, if both groups are subject to the same exercises and the same educational method, except that the experimental group performs the exercises according to the increase in the height of the ring tendency Table (3), while the control group applies the shooting exercises to the ring with its legal height of height (3.5) meters, and the curriculum took three months to implement, with two educational units each week for each day (Monday and Wednesday). Physical education teachers oversee the application of the main experiment and follow-up to the field researchers. The curriculum was divided into:

Table 3. Show the increase is indicated by the height of the ring inclination of the experimental group

Week	Unit	Tilt of the ring	The height of the arch of the ring from the front from the ground	Unit	Tilt of the ring	The height of the arch of the ring from the front from the ground
1	1	10 Cm	2.95M	2	5 Cm	3M
2	3	-	3.5M	4	5 Cm	3M
3	5	10 Cm	2.95M	6	5 Cm	3M
4	7	-	3.5M	8	5 Cm	3M
5	9	10 Cm	2.95M	10	5 Cm	3M
6	11	-	3.5M	12	5 Cm	3M
7	13	10 Cm	2.95M	14	5 Cm	3M
8	15	-	3.5M	16	5 Cm	3M
9	17	10 Cm	2.95M	18	5 Cm	3M
10	19	-	3.5M	20	5 Cm	3M
11	21	-	3.5M	22	-	3,5 M
12	23	-	3.5M	24	-	3.5 M

from the side on (Monday) 2/2/2020, and the researchers were committed to conduct the post-tests in the same circumstances in which the pre tests were conducted in terms of time, location and procedures.

Post-test

After completing the implementation of the main research experiment, the post-tests were conducted to measure the shooting from the front and the shooting

- Pearson correlation coefficient, torsional coefficient, mean, standard deviation, law (t) for symmetric samples, law (t) for asymmetric samples (Pojskić *et al.*, 2014).

Statistical means

The researchers used the following statistical methods

- Percentage Law.
- The Factor of Self-Honesty .

Results and discussions

Table 4. Shows the results of the control group in the pre and posttests of the shooting variable from the front and the shooting from the side

Tests	Unit	Pretest		Posttest		Mean diff.	SD diff.	(t) Value*	Type of significance
		Mean	SD	Mean	SD				
Direct shooting accuracy from the front	Degree	4.7	2.9	8.7	1.67	3.6	1.62	10	Sig.
Direct shooting accuracy from the side	Degree	10.95	1.09	16.2	1.74	5.3	2.12	11.27	Sig.

* Table (t) value (1.729) at the significance level (0.05), in front of the degree of freedom (19).

Table (4) shows that there is a significant difference in the results of the pre and posttests of the control group in the direct shooting variable from the front and from the side and for the benefit of the posttests, as the calculated value of (t) and for both tests was greater than the value of (t-table).

Table 5. Shows the results of the experimental group in the pre and posttests of the shooting variable from the front and the shooting from the side

Tests	Unit	Pretest		Posttest		Mean diff.	SD diff.	(t) Value*	Type of significance
		Mean	SD	Mean	SD				
Direct shooting accuracy from the front	Degree	5.2	1.58	11.95	1.56	6.7	2.05	14.88	Sig.
Direct shooting accuracy from the side	Degree	11.2	1.93	18.6	2.69	7.2	2.37	13.58	Sig.

* Table (t) value (1.729) at the significance level (0.05), in front of the degree of freedom (19).

Table (5) shows that there is a significant difference in the results of the pre and posttests of the experimental group in the direct shooting variable from the front and from the side and in favor of the posttests, as the calculated value of (t) and for both tests was greater than the value of the (t) tabular.

Table 6. Shows the results of the post tests for the control and experimental groups in the shooting variable in the front and the shooting in the side

Tests	Unit	Control group		Experimental group		(t) Value*	Type of significance
		Mean	SD	Mean	SD		
Direct shooting accuracy from the front	Degree	8.7	1.67	11.95	1.56	6.37	No sig.
Direct shooting accuracy from the side	Degree	16.2	1.74	18.6	2.69	3.38	No sig.

* Table (t) value (1.684), the significance level is 0.05, and the degree of freedom is (38).

In Table (6), the statistical results showed that the preference was for the experimental group that applied the exercises according to the increase in the height of the ring tendency, and this case allowed the experimental group to achieve a measure of success in the beginnings of learning or during the stages of its development for the duration of the curriculum and raise the internal incentive for learners in repetition when performing the exercises. And dealing with different heights and directions, "the internal motivation is represented in a feeling of desire to achieve or excel or to perform the required work in an elaborate or excellent manner, and such incentive can be exploited by mastering the teacher to present the material and present it in an interesting way. And an attractive way so that the learner feels the importance of it" (Wang, Liu and Moffit, 2010).

On the other hand, the increase in the height of the ring's tendency provided the experimental group with the cognitive mental aspect of the learners to perceive distances, strength and directions as well as control and skill in the conditions of the field of vision for shooting by jumping. The players must they take note of the largest number of parts and events of play,

Table (6) shows that there is a significant difference in the results of the posttests between the control and experimental groups in the direct shooting variable from the front and from the side and for the benefit of the members of the experimental group, as the calculated value of (t) and for both tests was greater than the value of the (t) tabular.

Through what was presented and analysis in Table (5,4) of the results, it became clear that the differences were significant in favor of the post-test tests of the control and experimental groups in direct shooting from the front and the side, and this reflects the positive effect of the exercises that were applied by the two groups and the method of constant and variable exercise that provided the learners. In the first month, fixing and pruning the dynamic program of direct shooting skill by jumping through the stationary exercise, then the high level of technical performance and achievement in the next two months by performing repetitions of various exercises from different distances and directions through the changing exercise. Thorndike presented. On learning "Repetition reinforces learning, as it strengthens the link between stimulus and response" (Semidara, 2012).

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and realize quickly the sensory signals, not the emergence of the appropriate kinetic behavior of the position in terms of determining the speed of performance, distances and movement within the field required for performance, as well as what the player perceives from the amount of force exerted and what the brain sends of instructions to the muscles according to The intensity of the effort, for example a basketball player when shooting by jumping "(Athab, Hussein and Ali, 2019). This has strengthened the development in the accuracy of direct shooting from the front and the side of the members of the experimental group, which has been statistically proven, and thus the researchers have achieved the goals and hypotheses of this research study(Athab and Alsayigh, 2021).

Conclusions

1. There is a positive effect of the educational curriculum of both groups applied to exercises using the fixed and variable exercise method in the accuracy of direct shooting from front and side to middle school students.
2. The results showed the superiority of the experimental group that applied exercises according to the increase, with the height of the tendency of the ring over the control group in the accuracy of the shooting from the front and the side, and this is evidence of the positive effect.

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