

# THE EFFECT OF USING SOME PHYSICAL EXERCISES WITH HEAVY ROPES TO DEVELOP THE DEVELOPMENT OF THE EXPLOSIVE ABILITY OF THE ARMS AND LEGS AND THE ACCURACY OF THE OVERWHELMING PERFORMANCE OF VOLLEYBALL

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## **ABSTRACT:**

*The sports movement at all levels witnessed a continuous and comprehensive development in all its joints, whether in terms of skills, training methods, or devices and tools used, which in turn leads to the achievement that we are witnessing today.*

*One of the modern training methods aimed at breaking the state of boredom, and increasing strength and shocks in relation to the muscle, is exercises with heavy ropes.*

*There are in the game of volleyball a number of basic skills that in turn need a high level of physical and skill abilities and these skills (overwhelming transmission), as we find the transmission skill is the first skill of volleyball that the team starts the game in order to be able to earn points directly as that The sending player, if he manages to reveal the defensive weaknesses in the reception of the opposing team, then he achieves the direct points of his team and given the importance of the explosive ability that the researcher tried to study because it is the best way by which to achieve the goal, and accordingly, the importance of the research lies in the effect of the exercise T heavy ropes in the development of explosive power and precision transmitter overwhelming plane ball.*

*There are many Arab literature and research papers that contain exercises with the use of devices or tools or the use of different environments in training or plumber and hypoxic exercises, but they are devoid of studies on the importance of heavy ropes and this motivated the researcher to study the effect of exercises with heavy ropes on the development of the explosive ability and accuracy The crushing transmitter skill in volleyball game.*

*research aims:*

- Preparing heavy rope exercises to develop explosive power and volleyball skill.*
- Knowing the effect of heavy rope training in developing the explosive power and the accurate performance of the volleyball transmission skill of the experimental group.*

- Knowing the effect of training in the method used to develop the explosive power and the accurate performance of the volleyball transmission skill of the control group.

- Knowing the differences between the experimental and controlling groups in the explosive power and accuracy of performance in volleyball and dimensional tests.

Research hypotheses:

- There are no statistically significant differences for the pre and post tests for the experimental and control groups.

- There are no statistically significant differences for the dimensional tests for the experimental and control groups and for the benefit of the experimental group.

Research fields

The Human Domain: Players of the Volleyball School -

- Time Range: From 1/7/2019 to 9/29/2019

- Spatial domain: The hall of the specialized school for the care of sports talent in Baghdad.

Chapter Three

Research methodology and field work:

:Research Methodology

The researcher used the experimental method in designing (two sets of pre-test and pre-test) to suit the nature of the research and its problem.

:Research community and its sample

The researcher identified the research community for the players of the National Center for Sports Talent for Youth in Volleyball for the season (2018-2019) and the number is (16) players, while the research sample (14) players have become a percentage (100%) for the category of juniors aged (15-17) years And they were randomly divided into two groups (experimental and controlling), as each group consisted of (7) players, the experimental group performed exercises with heavy ropes, and the control group performed the trainer exercises.

The research procedures were represented in the pre-test and experimental method used on the research group, as well as the post-test tests for the research sample.

Research findings:

- Exercises used with heavy ropes have an effective role in developing the explosive ability of the legs and arms and the skill transmitted to the members of the experimental group.

- The experimental group advanced on the control group in the distance tests from the tribal tests in the explosive power and the transmission skill.

Research recommendations:

- Focusing on exercises with heavy ropes in training curricula because they have an effective impact on developing physical capabilities and basic skills in volleyball.

- Using heavy rope exercises in all sports activities because it sends pleasure and breaks the state of boredom and routine in training.

## INTRODUCTION

Sports training was affected in recent years by the modernity of science and technology, and this is in the various well-known sports. If the training process takes the form, structure and organization in line with the new development of the methods and means used in the training process, the scientific and technical development has added many new and modern methods including

It is compatible with the nature of the sporting activity practiced and the age group of the trainees through the

selection of trainers for the best and latest methods and methods that are appropriate for the specialized sports activity in order to reach to achieve the best results and invest the specificity of training related to the type of activity in order to reach a direct impact to improve the level of skill, physical and functional and my plans and psychological and mental of the player.

Where the sports movement at all levels witnessed a continuous and comprehensive development in all its joints, whether in terms of skills, training methods or

devices and tools used, which in turn leads to the achievement that we are witnessing today.

One of the modern training methods aimed at breaking the state of boredom, and increasing strength and shocks in relation to the muscle, is exercises with heavy ropes.

There are in the game of volleyball a number of basic skills that in turn need a high level of physical and skill abilities and these skills (overwhelming transmission), as we find the transmission skill is the first skill of volleyball that the team starts the game in order to be able to earn points directly as that The sending player, if he manages to reveal the defensive weaknesses in the reception of the opposing team, then he achieves the direct points of his team and given the importance of the explosive ability that the researcher tried to study because it is the best way by which to achieve the goal, and accordingly, the importance of the research lies in the effect of the exercise T heavy ropes in the development of explosive power and precision transmitter overwhelming plane ball.

:Research problem

By examining the researcher on the sources and research to develop physical and skill capabilities, I found that there are many Arab literature and research that contain exercises using devices or tools or the use of different environments in training or exercises plumber and hypoxic, but it is devoid of studies on the importance of heavy ropes and this is what motivated Researcher to study the effect of heavy rope exercises on developing explosive ability and accuracy of the overwhelming transmitting skill in volleyball.

:Research objectives

.Prepare heavy rope exercises to develop explosive power and volleyball skill -

.- Knowing the effect of heavy rope training on developing the explosive power and the accurate performance of the volleyball transmission skill of the experimental group.

Table (1)

Sample homogeneity shows research

Coefficient of torsion	Mediator	standard deviation	Arithmetic mean	Variables
<b>0.641</b>	<b>1.75</b>	<b>0.421</b>	<b>1.82</b>	Length
<b>0.645</b>	<b>15</b>	<b>1.342</b>	<b>16</b>	Age
<b>0.342</b>	<b>72.41</b>	<b>1.645</b>	<b>64.26</b>	the weight

.- Knowing the effect of training in the method used to develop the explosive power and the accurate performance of the volleyball transmission skill of the control group.

- Identify the differences between the experimental and controlling groups in the explosive power and accuracy of performance in volleyball and dimensional tests.

:Research hypothesis

- There are no statistically significant differences for the pre and post tests for the experimental and control groups.

- There are no statistically significant differences for the dimensional tests for the experimental and control groups and for the benefit of the experimental group.

:Research Areas

The Human Domain: Players of the Volleyball School -

- Timeframe: 1/7/2019 to 4/9/2019

- Spatial domain: The hall of the specialized school for the care of sports talent in Baghdad.

## MATERIALS AND METHODS:

### Research Methodology:

The researcher used the experimental method in designing (two sets of pre-test and pre-test) to suit the nature of the research and its problem.

### Search community and sample:

Research community and its sample

The researcher identified the research community for the players of the National Center for Sports Talent for Youth in Volleyball for the season (2018-2019) and the number is (16) players, while the research sample (14) players have become a percentage (100%) for the category of juniors aged (15-17) years And they were randomly divided into two groups (experimental and controlling), as each group consisted of (7) players, the experimental group performed exercises with heavy ropes, and the control group performed the trainer exercises.

Means of gathering information, tools and devices used in research:

:Means of information gathering  
 .Arab and foreign references and sources -  
 .Observation and experimentation -  
 .Tests and measurements -  
 .International Internet network -  
 .Information collection forms -  
 .Experts Opinion Survey Form for Physical Tests Supplement (1) -  
 Experts Opinion Survey Form for Skill Test (2) -  
 :Research devices and tools  
 .A medical scale to measure total weight and height -  
 .cm wide adhesive tape and office tools -  
 .A tape measure in centimeters -  
 ) .10 (flying balls -  
 Heavy Ropes (4).-  
 .Electronic stopwatch -  
 -Volleyball court and volleyball network with legal specifications.

#### Field research procedures:

:Determination of tests for explosive power

A group of tests were nominated in a questionnaire questionnaire, to seek expert opinions about determining the explosive power tests, as shown in Appendix (1). After collecting the forms and emptying the data, the tests that achieved an agreement rate (75%) or more were approved as a percentage of the tests, as shown in Table (2)

nomination		Relative importance	Candidate tests	Explosive power
Refusal	Acceptance			
	✓	80%	- Vaulting test for stability.	The explosive power of the two men The explosive power of the two men
×		70%	- Vaulting test of movement	
×		65%	- Wide jump test of stability	
	✓	85	Throw the medical ball (2 kg) of long sitting	The explosive strength of the arms
×		55 40	Throwing the medical ball weighing (2 kg) with two hands from above the head in a sitting position on the chair.	
×			Throw the medical ball (1 kg) from the stand	

Explosive power tests

)Test: Vertical Stability Test (Sargent

Test purpose: To measure the explosive strength of the two legs

- Tools: Flat wall, with marking directly on the wall according to the performance terms so that the start of the gradient is raised from the ground (150 cm), and after that the gradient starts from (151-400 cm), pieces of chalk.

- Performance description: The player grabs a piece of chalk, then stands so that his holding arm is to the chalk next to the wall, then the laboratory raises his arm along its entire stretch to make a mark of chalk on the wall noting that the heels are not raised from the ground, and records the number that the mark was placed in front of, then from Standing position: the player swings the arms up front, then front down behind, with the knees bent half, then weighted up front with the knees straightened to the vertical jump to the maximum distance he can reach to make another mark and the arm along its entire stretch, records the number that the second mark is placed in front of.

Recording: The distance between the first and second signals is recorded and the player is given two attempts that count the best.

Second: throwing a medical ball from the long sitting  
The purpose of the test: To measure the explosive strength of the arm muscles.

Instruments used: a 2-kilogram ball, a tape measure.

Performance specifications: The laboratory sits long sitting on the end of its seat on the starting line, holding the ball with his hands over his head, then swings his arms to throw the ball to the farthest distance, without moving his torso.

Recording: the distance is measured from the starting line, to the ball fall area and to the nearest 10 cm, and two attempts are given to the laboratory and the largest of them is taken.

The third test: - Transmission skill performance

Test purpose: To measure the accuracy of transmission skill

Tools: volleyball court and net with legal height, 8 legal volleyball balls, tape of different colors, metric

Performance description: The volleyball court is divided as follows

- The player is holding the ball in any part of the half-field end line

.Facing the halfway planned 9 meters from the network

.The player determines the region before the start of the transmission -

- The transmission is carried out in any way to cross the grid ball into the planned halfway.

- Each player has 8 attempts, the first two attempts are directed to Region No. 1, the second to Region No. 2 and the third to Region No. 3, and the fourth to Region No. 4.

the conditions:

.The player is allowed to move freely in the transmission area -

- The correct attempt is counted when the net ball is touched and reaches the halfway pitch.

- If the ball falls on the line separating the two regions, the point is calculated in favor of the larger area if it is required.

Commitment to the time allocated for transmission -

Registration:

The laboratory is awarded 4 points in the event of injury to Region 1 -

3points if area (2) is hit

Two points in case of injury No. (3)

point in case of injury No. (4)

- Zero in case the ball falls off the field or any point not specified for the attempt. . Zero in case of breaching the terms of performance or failed transmission

The highest score recorded by the laboratory is (20) points-

### Exploration Experience:

The researcher conducted the exploratory experiment on 1-7-2019 on a sample that did not participate in the main experiment, and they are (3)

#### :Main experience

:field research procedures

The research procedures were represented in the pre-test and experimental method used on the research group, as well as the post-test tests for the research sample.

:Pre-test

Tribal tests and measurements of the research sample were carried out at the National Center for Sports Talent Care and the tests were conducted according to the following sequence:

The first day 2/7/2019 was measured variables weight, height, age and physical tests.

The second day 3/7/2019 the dispatch test was performed.

**:Training curriculum**

The researcher prepared a training curriculum using heavy rope exercises to develop some physical capabilities and send to the experimental group. The program was designed using exercises based on the foundations of sports training.

-The proposed training curriculum was started on Saturday, 5/7/2019, at 5 pm, and at the National Center Hall for the end of sports talent, and ended on Saturday, 9/26/2019.

The proposed training curriculum lasted for two months at the rate of (8) eight weeks and included (24) training units and three training units per week on days (Saturday - Monday – Thursday)

-The proposed training curriculum will be applied in the main section after the trainer's general and specific physical exercises.

-The researcher used the ripple load heavily (70% - 90%) from the maximum, as the training load was gradually increased after adopting the principle of raising the load by (2: 1) i.e. a training unit down and two training units up to the eighth training week where the intensity of the exercises for the purpose was reduced Conducting dimensional tests.

-The researcher relied to extract the maximum intensity of the research sample using the Carvonen () equation for the maximum pulse and equal to 220- age = the maximum heart rate in the case of effort and the

maximum pulse rate of the research sample was (202) z / d.

The researcher used the method of training the high and low intensity

- The training curriculum was applied under the direct supervision of the researcher.

**:Dimensional tests**

After completing the vocabulary of the proposed training curriculum, the days in which the dimensional tests were conducted for the control and experimental groups were determined as follows:

- The experimental group dimensional tests were conducted on the day of the 27/9/2019 hour per hour for explosive power tests.

- The dimensional tests of the experimental group were carried out on the day of Sunday 28/9/2019 at 5 p.m. for the transmission accuracy skill test.

**:Statistical means**

The researcher used the ready statistical program (SPSS) to process the results statistically

**RESULT AND DISCUSSION:**

Presentation, analysis and discussion of results

Present the results of the pre and post tests of the explosive strength of the legs and arms and the crushing transmission accuracy of the control group, analyzing and discussing them.

Table (4): The significance indicates the differences between the pre and post tests of the control group

Statistical significance	Error level	Calculated v	PF	F.	Post-test		Pre-test		the test
					standard deviation	Arithmetic mean	standard deviation	Arithmetic mean	
moral	<b>0.001</b>	<b>5.225</b>	<b>0.5336</b>	<b>1.11429</b>	<b>0.83409</b>	<b>5.8286</b>	<b>0.47409</b>	<b>4.7143</b>	The explosive strength of the arms
moral	<b>0.000</b>	<b>11.250</b>	<b>3.2117</b>	<b>12.8571</b>	<b>8.9069</b>	<b>55.000</b>	<b>9.6855</b>	<b>42.1429</b>	The explosive power of the two men
moral	<b>0.001</b>	<b>6.110</b>	<b>1.7320</b>	<b>4.0000</b>	<b>1.3972</b>	<b>13.5714</b>	<b>1.8126</b>	<b>95714.</b>	Transmitter skill

A function below the significance level > 0.05 and below freedom 6

Table (5)

The significance indicates the differences between the pre and post tests of the experimental group

Statistical significance	Error level	Calculated v	PF	F.	Post-test		Pre-test		the test
					standard deviation	Arithmetic mean	standard deviation	Arithmetic mean	
moral	<b>0.001</b>	<b>6.911</b>	<b>0.2652</b>	<b>0.692</b>	<b>1.</b>	<b>6.2143</b>	<b>1.2328</b>	<b>5.554</b>	The explosive strength of the arms
moral	<b>0.000</b>	<b>7.689</b>	<b>5.4072</b>	<b>15.7142</b>	<b>11.0367</b>	<b>61.857</b>	<b>9.157</b>	<b>46.142</b>	The explosive power of the two men
moral	<b>0.001</b>	<b>12.394</b>	<b>0.9759</b>	<b>4.5714</b>	<b>1.6761</b>	<b>14.857</b>	<b>2.3603</b>	<b>10.2857</b>	Transmitter skill

A function below the significance level > 0.05 and below freedom 6

Table (6)

The significance indicates the differences for the post-tests of the variables in the control and experimental groups

Statistical significance	Error level	Calculated	Control group		Experimental group		the test
			standard deviation	Arithmetic mean	standard deviation	Arithmetic mean	
moral	<b>0.002</b>	<b>0.772</b>	<b>0.8349</b>	<b>5.8286</b>	<b>1.0253</b>	<b>6.2143</b>	The explosive strength of the arms
moral	<b>0.001</b>	<b>1.279</b>	<b>8.9069</b>	<b>55.000</b>	<b>11.0367</b>	<b>61.857</b>	The explosive power of the two men
Not moral	<b>0.135</b>	<b>1.559</b>	<b>1.3972</b>	<b>13.5714</b>	<b>1.6761</b>	<b>14.857</b>	Transmitter skill

A function below the significance level > 0.05 and below 12 degrees of freedom

Table (4) showed that there are differences between the values of the arithmetic mean and the values of the standard deviations of the pre and post tests of the

control group, as the value of the arithmetic mean of the test (the explosive strength of the arms) in the pre-test (4.7143), and the value of the standard deviation



was (0.47409), while The value of the mean of the mean in the post test was (5.8286), and the value of the standard deviation was (0.83409). For the purpose of identifying the significance of the differences between the arithmetic circles, as it appeared that the value of the mean of the differences between the two tribal and dimensional arithmetic modes has reached (1.11429), and the value of the standard deviation has It reached (0.5336), and the calculated value of (T) was (5.525), when compared to the level of error of (0.001) shows that less or smaller than the value of the significance level of \$ (0.05) which shows significant differences between the pre and post tests in favor of the post test.

Table (4) showed that there are differences between the values of the arithmetic mean and the values of the standard deviations of the pre and post tests of the control group, as the value of the arithmetic mean of the test (the explosive strength of the two men) in the pre-test (46.142), and the value of the standard deviation reached (9.6855), while The value of the mean of the mean in the post test was (55.000), and the value of the standard deviation was (8.9069). For the purpose of identifying the significance of the differences between the arithmetic circles, as it appeared that the value of the mean of the differences between the two tribal and dimensional arithmetic modes has reached (12.8571), and the value of the standard deviation has It reached (3.2117), and the calculated value of (T) was (1 1.250), when comparing the error level of (0.00) was found to be less or less than the value of the significance level of (0.05), which indicates the significance of the differences between the pre and post tests in favor of the post test.

Table (4) showed that there are differences between the values of the arithmetic mean and the values of the standard deviations of the pre and post tests of the control group, as the value of the arithmetic mean of the (transmission skill) test in the pre-test (9.5714), and the value of the standard deviation reached (1.8126), while it reached The value of the arithmetic mean in the post-test (13.5714), and the value of the standard deviation was (1.3972). For the purpose of identifying the significance of the differences between the arithmetic circles, as it appeared that the value of the arithmetic mean for the differences between the tribal and dimensional arithmetic modes has reached (4.0000), and the value of the standard deviation has reached (1.7320), and the calculated value of (T) was

(6.110), when measured NH level of error of (0.001) shows that less or smaller than the value of the significance level of \$ (0.05) which shows significant differences between the pre and post tests in favor of the post test.

Table (5) showed that there are differences between the values of the arithmetic mean and the values of the standard deviations of the pre and post tests of the experimental group, as the value of the arithmetic mean of the test (the explosive strength of the arms) in the pre-test (5.554), and the value of the standard deviation was (1.2328), while The value of the mean of the mean in the post-test was (6.2143), and the value of the standard deviation was (). For the purpose of identifying the significance of the differences between the arithmetic circles, as it appeared that the value of the mean of the differences between the tribal and dimensional arithmetic modes has reached (0.692), and the value of the standard deviation has reached (0.692) (0.2652), and the calculated value of (T) was (6.91) 1), when comparing the error level of (0.00) was found to be less or less than the value of the significance level of (0.05), which indicates the significance of the differences between the pre and post tests in favor of the post test.

Table (5) showed that there were differences between the values of the arithmetic mean and the values of the standard deviations of the pre and post tests of the experimental group, as the value of the arithmetic mean of the test (the explosive strength of the two men) in the pre-test (46.142), and the value of the standard deviation was (9.157), while The value of the mean of the mean in the post test was (61.857), and the value of the standard deviation was (11.0367). For the purpose of identifying the significance of the differences between the arithmetic circles, as it appeared that the value of the mean of the differences between the two tribal and dimensional arithmetic modes has reached (12.8571), and the value of the standard deviation has It reached (5.4072), and the calculated value of (T) was (7.689), when compared to the level of error of (0.001) shows that less or smaller than the value of the significance level of \$ (0.05) which shows significant differences between the pre and post tests in favor of the post test.

Table (5) showed that there are differences between the values of the arithmetic mean and the values of the standard deviations of the pre and post tests of the



experimental group, as the value of the arithmetic mean of the (transmission skill) test in the pre-test (10.2857), and the value of the standard deviation reached (2.3603), while it reached The value of the arithmetic mean in the post test (14.857), and the value of the standard deviation was (1.6761). For the purpose of identifying the significance of the differences between the arithmetic circles, as it was shown that the value of the arithmetic mean for the differences between the tribal and dimensional arithmetic means has reached (4.5714), and the value of the standard deviation has reached (0.9759), and the calculated value of (T) was (12.394), at M. A comparison of the error level of (0.00) was found to be less or less than the value of the significance level of (0.05), which indicates the significance of the differences between the pre and post tests in favor of the post test.

Table (6) showed that there are differences between the values of the arithmetic mean and the values of the standard deviations of the dimensional tests in the experimental and controlling groups, as the value of the arithmetic mean for the explosive strength of the two arms in the pre-test was (6.2143), and the value of the standard deviation was (1.0253) for the experimental group, while The value of the mean in the post test was (5.8286), and the value of the standard deviation was (0.8349) for the control group. The calculated value of (T) was (0.772), when comparing the error level of (0.455) it was found to be less or smaller than the value of the significance level (0.05), which indicates the significant differences between the two groups Duck and experimental and in favor of the experimental group.

Table (6) showed that there are differences between the values of the arithmetic mean and the values of the standard deviations of the dimensional tests in the experimental and control groups, as the value of the arithmetic mean for the explosive strength test for the two men in the pre-test was (46.142), and the value of the standard deviation was (11.0367) for the experimental group, while The value of the mean in the post test was (55,000), and the value of the standard deviation was (8.9069) for the control group. The calculated value of (T) was (1.279), when comparing the error level of (0.225) it was found to be less or smaller than the value of the level of significant indication (0.05), which indicates the significant

differences between the two groups Plan and pilot for the benefit of the experimental group.

Table (6) showed that there are differences between the values of the arithmetic mean and the values of the standard deviations of the dimensional tests in the experimental and control groups, as the value of the arithmetic mean for the explosive strength test for the two men in the pre-test was (14.857), and the value of the standard deviation was (1.6761) for the experimental group, while The value of the mean in the post test was (13.5714), and the value of the standard deviation was (1.3972) for the control group. The calculated value of (T) was (1.559), when comparing the error level of (0.135) it was found to be less or smaller than the value of the significance level (0.05), which indicates the significant differences between the two groups Plan and pilot for the benefit of the experimental group.

Discuss the test results Explosive strength of the legs and arms and the crushing transmission accuracy of the control group.

From table (4), there were significant differences in the research variables between the pre and post tests and in favor of the dimensional tests of the control group. Repeats in addition to the comfort that the coach used, according to the approach prepared by him, which helped to develop the explosive ability of the arms and legs, which is one of the capabilities of the task for volleyball players.

Therefore, the use of jumping exercises has a great importance in the development that occurred to the players, by identifying the height of the obstacles, boxes and terraces by the coach, which was documented, which helps in performing the duties required of these muscles. The player who has an explosive power can perform all the skills that require an explosive power Especially volleyball players, as Mohamed Tawfiq states, "One of the most important characteristics that volleyball players should be able to perform in their various skills is for the player to have an immediate and rapid reaction, speed in changing position, and muscle ability to perform high jump and strong jump.

The results of the research were low in the skill of overwhelming transmission accuracy in a way that does not rise to the required level, and the researcher attributes this to the lack of effectiveness of the exercises followed in the accuracy of the

overwhelming transmission skill and the lack of special exercises in accuracy as most of the exercises are carried out without determining the location of the ball directing where Mustafa points Flying ball players must realize that the serve is not just a ball crossing the net, but the team players must be able to perform the serve in a good and accurate manner and the team can score points through the serve)),.

Discussing the results, pre- and post-tests of the explosive power of the legs and arms and the overwhelming transmission accuracy of the experimental group.

The results presented by Table (5) related to the test (the explosive strength of the arms and legs) showed that there are significant differences in the pre and post tests and in the interest of the post test, as the researcher attributes to the effectiveness of the various physical exercises of the arms and legs with heavy ropes where the exercises represented by jumping with the rope with lengths Different, bounce forward, backward and side jump, in addition to exercises for the arms with heavy ropes represented by rippling, beating with whip and bouncing, which contributed to the development of the muscles of the legs and arms, where (Qasim Hassan) states that "the development of the explosive force is intensity." Exercises performance at each time stage approach to the maximum (80-90%) or under the maximum (90-95%) or maximum (100%) can change this is done by changing the speed of the performance of the exercises.

Therefore, the use of heavy rope exercises is extremely important in the development of the players because it was documented in a way that helps in performing the duties required of these muscles. The player who has an explosive power can perform all the skills that require an explosive force, especially the transmitting skill, which is the most important skill that the player can Obtaining a direct point without straining his team, and this was confirmed by (Muhammad Hassan Allawi). The researcher also agreed with him that "the explosive force is one of the most important physical capabilities that are positively related to skill performance, as it is the main factor in the ability to develop performance.

Also, diversification in the use of heavy rope exercises led to the elimination of boredom, suspense and effort by the players and pushing them seriously towards the best performance because the various

exercises make the player excited to train and stimulate different muscle groups according to the type of exercise.

The results presented by Table (5) related to the test (crushing transmission accuracy) showed that there are significant differences in the pre and post tests and in the interest of the post test, as the researcher attributes to the development came through the development of special exercises for crushing transmission accuracy, which included transmission to the background areas From the stadium, as well as determining the centers to which the player sends, since this skill is well mastered, controlling the opposing team and giving confidence to his team by obtaining a direct point without stressing the team. Therefore ((The transmission is one of the most important direct attack strikes that players use during the He played which might put the opposing team in a weak defense position)).

- Discussing the results, pre- and post-tests of the explosive power of the legs and arms, and the overwhelming transmission accuracy of the experimental and control group.

We find that the training curriculum has positively affected the development of the two research groups, while we find that there are significant differences between the experimental and control groups in the post-test and in favor of the experimental group, where its development was greater than the control group.

The researcher attributes this to the use of the experimental group exercises with heavy ropes in the training curriculum and codification of pregnancy components Training and various exercises for the arms and legs that the researcher believes has a positive and important impact in developing the explosive strength of the legs and arms where he states ((that exercises that use large resistance are one of the important means And necessary and appropriate to develop the explosive power of the arms and legs)).

As for the transmission skill, there was no significant significance between the experimental group and the control group. This reason is due to the two groups using the transmission skill training in the training unit, which prompted the two groups to make a better effort, which led to the removal of boredom from the players and pushed them seriously towards the better performance of the fact that the various exercises make

The player is eager to train and stimulate different muscle groups, according to the type of exercise.

#### Conclusions:

- Exercises used with heavy ropes have an effective role in developing the explosive ability of the legs and arms and the skill transmitted to the members of the experimental group.
- The experimental group advanced on the control group in the distance tests from the tribal tests in the explosive power and the transmission skill.

#### Endorsement:

- Focusing on exercises with heavy ropes in training curricula because they have an effective impact on developing physical capabilities and basic skills in volleyball.
- Using heavy rope exercises in all sports activities because it sends pleasure and breaks the state of boredom and routine in training.

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#### Annex (1)

In the name of ofAllah the Merciful

A questionnaire

An expert and expert opinion survey to determine the most important tests for the explosive power that can be used in the study

Prof. Dr ..... Respected.

good greeting.

In the intention to carry out the tagged research (the effect of using some physical exercises with heavy ropes to develop in developing the explosive capacity of the arms and legs and the accuracy of the overwhelming performance of volleyball), within the requirements for obtaining a doctorate degree in the philosophy of physical education and in view of your scientific experience in this field we put This form is in your hands, and we kindly request you to nominate the most important physical capabilities to develop the accuracy of crushing transmission in volleyball for the category (15-17) and to add any test that you see appropriate for this research and was not mentioned in the form.

Thank you for your cooperation ... Thank you very much.

The researcher

Diana Hussein Abdul Karim

The name:

Signature:

The scientific title:

Jurisdiction:

Workplace:

Date:

**Annex (1)**

Notes	inappropriate	appropriate	the exams	Physical ability
			Throw a medical ball 2 kg to stand Throw a medical ball, 2 kg of long seas Throw a medical ball 1 kg to stand	The explosive power of the arms
			Vertical jump from firmness Vertical jump from movement Wide jumping from movement	The explosive power of the two men

**Annex (2)**

In the name of ofAllah the Merciful

A questionnaire

Expert and expert opinion questionnaire to determine the most important tests of overwhelming transmission accuracy that can be used in the study

Prof. Dr ..... Respected.

good greeting.

In the intention to carry out the tagged research (the effect of using some physical exercises with heavy ropes to develop in developing the explosive capacity of the arms and legs and the accuracy of the overwhelming performance of volleyball), within the requirements for obtaining a doctorate degree in the philosophy of physical education and in view of your scientific experience in this field we put This form is in your hands, and we kindly request you to nominate the most important physical capabilities to develop the accuracy of crushing transmission in volleyball for the category (15-17) and to add any test that you see appropriate for this research and was not mentioned in the form.

Thank you for your cooperation ... Thank you very much.

The researcher

Diana Hussein Abdul Karim

The name:

Signature:

The scientific title:

Jurisdiction:

Workplace:

Date:

**Annex (2)**

Notes	inappropriate	appropriate	the exams	Skill
			Send from the top and bottom Perform a skill to send Sending from a different speaker	The transmitter