



## THE EFFECT OF SPECIAL EXERCISES IN DEVELOPING SOME ASPECTS OF MUSCULAR STRENGTH AND WHIP SHOOTING IN HANDBALL FOR PLAYERS OF BASRA EDUCATION TEAM

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### Abstract

The effectiveness of Handball is one of the activities that need an accurate studies in order to achieve the digital achievement of this event, as the great development in mathematical achievements and good link between the different sciences has been discussed in the training of beginners and the emerging, and here the importance of the research came to add something new. Therefore, the researcher used special exercises, investing them in training, developing some aspects of muscle strength, and completing a handball whip shooting to be at the level of ambition, either the research problem, it is that there is a weakness in some aspects of muscle strength and digital achievement in the effectiveness of handball which led the researcher to give great importance to special exercises that are related to Using it by achieving development towards teaching this event and training on it to know its impact on the digital achievement, and the research aims to:

- 1- Prepare of special exercises to develop some muscular strengths and accomplish the effectiveness of handball to begin with beginners.
- 2- Identify the impact of the number of special exercises to develop some muscular strengths and accomplish the effectiveness of handball of the beginner.

The researcher adopted the experimental approach to the appropriateness of the nature of the research, and the research sample included (14) his players who represent 100% of the entire research community, they were selected intentionally and then they were divided into an experimental group and a control group. The training curriculum of the sample, and after conducting the dimensional tests, treating them statistically, and discussing them. The researcher reached a group of conclusions, the most important of which are:

- 1- The physical tests used by the researcher are one of the important training foundations in revealing the physical requirements of the effectiveness and is an indication of the player and the coach in developing handball.

In light of the research conclusions, the researcher recommends the following:



1- Emphasizing the development of some aspects of muscle strength and the use of special means according to the motor performance to correct the handball when training the beginners and then developing the achievement.

**Keywords:** special exercises; whip shooting; Handball.

### **1-Introduction Research and importance:**

Access to high sporting levels requires a hard effort from coaches and players and all workers in the context of preparing players in its scientific concept, as it is a series of educational processes, in what the attributes and physical and motor capabilities can rise, as the great development in achievements can be promoted to the achievements. Sports in most countries of the world for various games indicate progress in a good link between different sciences when educating beginners and young people and training them, for the purpose of the economy in time and enhancing the technical foundations of sports skill according to the physical requirements and the need to them. One of the sporting activities that needs a precise study to learn the stages of the technical performance of this event, as this event requires some high physical abilities and motor and compatible capabilities for its practice, as well as physical specifications, the performance in it depends on the application of all technical training aspects in an integrated manner And developing them correctly using tools and auxiliary devices, as achieving the distinguished achievements in them indicates the development of the level of technical, skill and physical performance of the players this event, as it must be focused on developing aspects of physical and motor capabilities to reach better levels, reflected on the skill and physical performance, and that the frequent exercises are from During the tools and auxiliary devices related to technical performance, there is an effect on the process of learning the technical stages of this event and its integration with the integration of physical abilities at the same time and in the optimal way, and this is what must be focused on to shorten the time and effort to achieve development and improvement in the level of learning and the development of physical capabilities of these ages in the effectiveness of correction Handball. From here comes the importance of research to pay attention to physical and motor capabilities and adopted modern scientific methods and methods in teaching and developing technical, physical and motor performance in the whipping of the handball for beginners through the numbers



of a group of exercises with tools and auxiliary devices according to the correct scientific foundations because of its great role in mastering the sequence stages Full performance and flow.

### **1-2 Research problem:**

By following the field researcher for the training of the Basra Governorate Education team in the sporting hall of the Basra Education Directorate and informing it, they noticed that there is weak technical performance and some physical abilities, including muscular strength for the effectiveness of handling of the handball, and I diagnosed this through the tests they conducted on the students, and attributed this to the lack of The students' commitment to training, as this event requires special physical and motor capabilities, which requires giving great importance to the tools and auxiliary devices whose use is related to achieving development towards teaching this event and training on it by preparing a training curriculum and using modern methods and training methods that help to develop performance and reduce time, which leads To raise the level of achievement to contribute with a simple step to advance the wheel of development forward in this event, as well as it will be a scientific reference that sings sports libraries with a new applied field research in the game at the level of our dear country, the Arab world and the world.

### **1-3 Research objectives:**

- 1- Prepare of special exercises to develop some aspects of muscle strength and achievement in the effectiveness of handball of the beginners.
- 2- Identify the impact of the number of special exercises to develop some aspects of muscle strength and achievement in the effectiveness of handball of the beginners.

### **1-4 Research hypotheses:**

- 1- The presence of statistically significant differences between tribal and post-testing tests in the experimental and controlled research groups in some aspects of muscle strength and achievement in the effectiveness of handling of the beginner.
- 2- The presence of statistically significant differences between the two experimental research groups and the control in the results of the dimensional



tests in some aspects of muscle strength and achievement in the effectiveness of the handball correction of the beginners.

### **1-5 Research fields:**

**1-5-1 Human field:** A sample of the Basra education team players with a handball

**1-5-2 spatial field:** Sports Activity Hall in the Basra Education Directorate

**1-5-3 Time field:** from 25/1/2022 to 25/4/2022.

## **2 -Research approach and field procedures:**

### **2-1 Research curriculum:**

The nature of the problem obliges the researcher to choose the appropriate approach to it to achieve the objectives of the research and verify the validity of his hypothesis, as the researcher used the experimental approach of the experimental groups and the control with the tribal and post -I tests in order to pray and attribute it to the nature of the problem related to the research, since the experimental approach "represents the most sincere approach to solving many One of the scientific and theoretical problems (Haider Abdul Razzaq: 2015).

### **2-2 Sample of Research:**

The researcher identified the research community in the intentional way of the Basra education team players for girls, who numbered (14), for the season 2022, and thus represents a percentage of (100%) of the entire community of origin, and they divided the manner of individual and marital numbers according to the sequence of their achievements into two experimental and controlled groups, and the distribution was (7) His player for each group. In order for the researcher to be able to attribute the differences between the two research groups to the experimental factor, the two research groups must be completely equal in all their circumstances except for the experimental variable that affects the experimental group, and to know the homogeneity of the sample members in the variables (length, old age, mass), the coefficient of sprain showed Homing the sample according to what is shown in Table (1).



**Table (1) Special measurements homogeneity for the research sample**

| No | variables | Measurements unite | Mean arithmetic | Standard deviation | Mediator | kurtosis |
|----|-----------|--------------------|-----------------|--------------------|----------|----------|
| 1  | Old age   | year               | 17.35           | 1.92               | 17       | 0.456    |
| 2  | Length    | Cm                 | 165.47          | 5.2                | 164      | 0.894    |
| 3  | Mass      | Kg                 | 43,31           | 4.79               | 42       | 0.892    |

From Table (1) that the coefficient of twisting for all values is less than  $\pm 1$ , which indicates their distribution naturally, and this means that all members of the research sample are homogeneous. After the research sample is divided into two groups, and for the researcher to be able to attribute the differences between the two research groups to the experimental factor, two research groups must be completely equal in all their circumstances, except for the experimental variable that affects the experimental group. Before starting to conduct the training program in terms of muscular strengths, digital achievement and table (2), the parity between the control and experimental groups.

**Table (2) Equity between the two groups of research in the muscular strengths and digital achievement of the effectiveness**

| Verbal                                  | M/U        | Experimental Group |      | Control group |      | T collected | Sig   | indication |
|---|------------|--------------------|------|---------------|------|-------------|-------|------------|
|   |            | M                  | S    | M             | S    |             |       |            |
| Explosive strength for arms             | Sec        | 7.95               | 0.30 | 7.84          | 0.27 | 0.695       | 0.500 | Non -moral |
| Explosive strength for legs             | Sec        | 1.78               | 0.04 | 1.77          | 0.04 | 0.304       | 0.767 | Non -moral |
| Distinguished strength for the two legs | repetition | 8.13               | 0.19 | 8.12          | 0.21 | 0.051       | 0.960 | Non -moral |
| Distinctive force for the arms          | repetition | 12.42              | 1.27 | 12.14         | 0.89 | 0.485       | 0.636 | Non -moral |
| whip shooting                           | repetition | 14.87              | 0.76 | 14.85         | 0.79 | 0.030       | 0.955 | Non -moral |

**\*Moral under the degree of freedom 12 and the level of error  $\leq 0.05$**

It appears that the value of (T) was below the level of an error greater than (0,05) and the degree of freedom (12), and this indicates that there are no differences between the results of the experimental and control groups in the physical and motor variables and achievement after dividing them.

## 2-3 Means of Collecting information, Devices and Tools used in Research

### 2-3-1 means of collecting information

- 1- Arab and foreign sources
- 2- Questionnaire forms



- 3- Personal interviews
- 4- Tests and measurements

### **2-3-2 Devices and Tools used in research:**

- 1- Video camera /1 at 120 p /s type (LG)
- 2- LG timing hours, measuring tape).
- 3- Korean laptop (HP) computer, handcrafted calculator (CASIO)
- 4- A metal metric measuring tape (1) and adhesive tape to determine the test areas
- 5- Training rope (7)
- 6- Plastic cones of various sizes
- 7- Flags of (4) white whistles.
- 8- Legal categories (7) No. 2
- 9- A multi-height wooden box
- 10- Large plastic rings in diameter of 50 cm
- 11- Colorful colors of Qatar (1) meters (14)
- 12- Dumbbells (with different weights) number (14)
- 13- (20) barriers with different altitudes

### **2-4 Tests used in Research:**

Physical tests were identified after the researcher informed specialized sources about the validity of these tests to measure the research capabilities of the research.

#### **2-4-1 first test: Throwing a medical ball 1 kg of standing.** (Muhammad Hassan & Abu Al-Fattah: 2000)

The purpose of the test: - Measure the explosive force of the throwing arm.  
Tools: - Measurement tape, medical ball weighing 1 kg.

Performance specifications: - The throwing line is drawn on the ground and two parallel lines representing the throwing sector are set on the ground.

Registration: - The horizontal distance between the throwing lines is measured to the fall line on the ground.

#### **2-4-2 second test: Long jump test from stability.** (Muhannad Hussein & Ahmed Ibrahim: 2010)





The purpose of the test: measuring the explosive strength of the two men's muscles.

The necessary tools: flat land, tape measure, the starting line is drawn on the ground.

Performance method: The laboratory stands behind the starting line and the feet slightly separated, the arms high, and the arms passed in front and bottom behind with the knees bent half and the tendency of the trunk in front, and from this situation the two arms pass through a strong front and pushing the land with the feet in an attempt to jump as an imam for the distance possible.

Conditions:

- 1- The feet should be the eminence of the land until the moment of upgrading.
- 2- The laboratory has two attempts to record the best of them.

Registration: The distance from the inner edge of the upgrade line is measured to the closest trace left by the laboratory in the landing area near the upgrade plate.

**2-4-3 third test: Test of the arms bending from the modified inclined (girls) for a period of 10 seconds.** (Muhammad Hassan & Abu Al -Fattah: 2000)

The purpose of the test: measuring the strength of the speed of the arms muscles.

The necessary tools: flat area (space), timing watch, whistle for the start signal.

Performance method: From the putting of the inclined to bend the elbows until the ground touches the chest and then returns again to the inclined extinguishing position (10) seconds.

Conditions:

- 1- The laboratory takes the correct position (oblique being)
- 2- The laboratory chest must be touched every time he bends the arms and then extends it completely.
- 3- Speed performance.
- 4- Continue and not to stop during the performance when giving the signal until the end of the end is given.
- 5- For each laboratory only one attempt.
- 6- The number recorded by each laboratory announces the next laboratory to ensure competition.



Registration: The laboratory is counted for the number of times the performance and extending the arms for a period of (10) Sec.

**2-4-4 Fourth Test: Five Steps Test** from pivot (Muhannad Hussein & Ahmed Ibrahim: 2000).

The purpose of the test: measuring the strength of the speed of the muscles of the legs.

The necessary tools: measuring tape - upgrading plate - a suitable place for the triglyceride.

Performance method: The player stands behind the starting line with a certain distance, then the player begins to jump forward by pushing the man's reference and landing on the plaintiffs forward, i.e. from the right to the left and by exchanging (ran by jumping) with the repetition of these proofs as he lands with the fifth garment on his feet together.

Conditions: The feet are upgraded from the stability position towards the front and then the landing of the nascent man and so on.

Registration: The distance from the inner edge of the upgrade plate is measured to the closest effect that the laboratory leaves from the upgrade plate, and two attempts are given to each laboratory and the best is calculated.

**2-4-5 Fifth test: - The accuracy of the correction of stability.**

Tools used: (10) hand balls, handball goal, five collars diameter each collar (60) cm.

Performance method: The player stands behind the penalty throwing and aims on the goal, trying to enter the ball from inside the hoops installed in the corners of the goal and under the crossbar without the presence of the goalkeeper.

Registration: The player is given one point if he enters the ball from inside the collar that bears No. (1) And two points if he enters it from inside the cordon (2) and three points if he enters it from inside the cordon no. (3).

Conditions: It is not permissible to pass or touch the penalty line until after the ball comes down the player's hand.

**2-5 Exploratory Experience:**

The exploratory experience was conducted on Thursday 4/2/2022 at (11) in the morning on the sports hall of sports activity on (5) player's practices for the





effectiveness of handball. (7) Days, on Thursday, 11/2/2022, in order to know the obstacles that the researcher faces when applying the tests, including

- 1- Ensuring the clarity of test instructions by the sample members
- 2- Determine the difficulties and obstacles that will appear during the implementation and functioning of the tests
- 3- Learn about the appropriate time to perform the tests and how much it takes
- 4- Learn about the ability of the sample members to implement the tests and their suitability for them
- 5- Ensure the validity of the tools and devices used in the research

### **2-6 Tribal Tests:**

The researcher assisted the assistant team with tribal tests on the research sample in the sports hall for sports activity in the Directorate of Education in Basra Governorate from Friday on 5/2/2022 at (11) in the morning, as the tests had muscular strengths for research and achievement, researcher photographing the tests with a videos camera.

### **2- 7 Main Experience:**

After applying tribal tests to the research sample, the main vocabulary of the research experience, which includes exercises for the effectiveness of handball, based on modern scientific sources and references in sports training science and the opinions of specialization in the handball game. These exercises were applied in the main part of the training unit at the stage The numbers were the number of these training units (24) training units distributed over (8) weeks by (3) training units per week, appendixes (1) , as the curriculum was applied to the research From the training unit with a time ranging from (45 - 47) minutes, the two highly selected training methods and the method of repetitive training were used as they are in the private numbers stage and these two methods are appropriate for this stage, as the researcher began exercises strongly pregnancy (80%), as the sample represents Players under (19) years, as this intensity is appropriate, and this was confirmed by (Muhannad Bashtawi,& Ahmed Ibrahim: 2010) when training players in the period of period in some types of physical performance associated with the skillful kinetic performance in Competition - like conditions

It is a percentage training between (75-90%) from the maximum that the player can bear, while the repetitive method is (90-100%) of the player's



maximum ability (Mohamed Sobhi: 1997), and under consideration that suits the intensity with the repetitions, The rest between the repetitions and the groups was calculated by calculating the time of the return of the heartbeat to the warm -up pulse (120 n/d) and then giving the following exercise to all the exercises used in the training units, and this was confirmed by (Mohamed Mahmoud: 2014) that the new training pregnancy that is given In the method of highly selected training and the repetitive method was implemented when the pulse rate reaches (120 h/r) (Muhannad Hussein & Ahmed Ibrahim: 2010), as the use of the heart rate method as a way to assess the amenities and restore recovery between exercises and training units can be One of the most helpful ways to assess the effort and raise the act of the body's functional organs and organs for this effort (Muhammad Subhi Hassanein: 1997).

### **2-8 POST-TEST:**

The dimension test for the two groups of research on Friday, corresponding to the assistant team and under the supervision of the researcher according to the conditions and instructions for each test and in the same circumstances.

### **2-9 Statistical Means:**

The researcher used the statistical bag SPSS and the following statistical laws (Ali Salman: 2013)

Mass, mediator, standard deviation, sprain coefficient, T test for independent samples, T test for independent interconnected samples

### **3- View Analyze and Discuss Results:**

#### **3-1 View results and analysis:**

After the data was discharged for tribal and post tests for the two research groups and to verify the authenticity of the search assumptions, the data was analyzed statistically and as follows:

#### **3-1-1 Presentation of the results of the differences between the tests of muscle strengths (tribal and post-test) of the experimental group and their analysis:**

**Table (3)**

**Shows the calculations and standard deviations between the results of the tribal and post- tests in the physical tests of the experimental group**  
**\* Moral at the error level (0.05) ≥**

| Verbal                                  | M/U        | Experimental Group |      | Control group |      | Def. - | Def. + | T collected | Sig   | indication |
|---|------------|--------------------|------|---------------|------|--------|--------|-------------|-------|------------|
|   |            | M                  | S    | M             | S    |        |        |             |       |            |
| Explosive strength for arms             | distance   | 7.95               | 0.30 | 8.90          | 0.12 | 0.955  | 0.955  | 9.293       | 0.000 | MORAL      |
| Explosive strength for legs             | distance   | 1.78               | 0.04 | 1.88          | 0.01 | 0.105  | 0.105  | 5.970       | 0.001 | MORAL      |
| Distinguished strength for the two legs | repetition | 12.42              | 1.27 | 15.14         | 1.06 | 2.714  | 2.714  | 9.500       | 0.000 | MORAL      |
| Distinctive force for the arms          | distance   | 8.13               | 0.19 | 8.70          | 0.11 | 0.575  | 0.575  | 11.081      | 0.000 | MORAL      |
| whip shooting                           | repetition | 19.87              | 0.76 | 21.71         | 0.44 | 1.840  | 1.840  | 6.926       | 0.000 | MORAL      |

**3-1-2 Show the results of the differences between the tests of muscle strengths (tribal and dimensional) for the control group and their analysis:**

**Table (4) Shows the calculations and standard deviations between the results of the tribal and post -tests in the physical tests of the control group**

| Verbal                                  | M/U        | Tribal - Test |      | Post-test |      | Def. - | Def. + | T collected | Sig   | indication |
|---|------------|---------------|------|-----------|------|--------|--------|-------------|-------|------------|
|   |            | M             | S    | M         | S    |        |        |             |       |            |
| Explosive strength for arms             | distance   | 7.84          | 0.27 | 8.24      | 0.20 | 0.404  | 0.076  | 5.274       | 0.002 | MORAL      |
| Explosive strength for legs             | distance   | 1.77          | 0.04 | 1.81      | 0.01 | 0.040  | 0.015  | 2.542       | 0.044 | MORAL      |
| Distinguished strength for the two legs | repetition | 12.14         | 0.89 | 13.71     | 0.75 | 1.571  | 0.368  | 4.260       | 0.005 | MORAL      |
| Distinctive force for the arms          | distance   | 8.12          | 0.21 | 8.29      | 0.22 | 0.168  | 0.045  | 3.668       | 0.010 | MORAL      |
| whip shooting                           | repetition | 19.85         | 0.79 | 20.48     | 0.50 | 0.630  | 0.156  | 4.021       | 0.007 | MORAL      |

**\* Moral at the error level (0.05) ≥**



### 3-1-3 Show the results of the differences in the tests of muscle strengths (dimensional) between the experimental groups and the control and analyze:

Table (5) Shows the calculations and standard deviations of the physical tests of the experimental and control groups of research sample.

| Verbal                                  | M/U        | Control Group |      | Experimental group |      | T collected | Sig   | indication |
|---|------------|---------------|------|--------------------|------|-------------|-------|------------|
|   |            | M             | S    | M                  | S    |             |       |            |
| Explosive strength for arms             | distance   | 8.24          | 0.20 | 8.90               | 0.12 | 7.413       | 0.000 | MORAL      |
| Explosive strength for legs             | distance   | 1.81          | 0.01 | 1.88               | 0.01 | 11.404      | 0.000 | MORAL      |
| Distinguished strength for the two legs | repetition | 13.71         | 0.75 | 15.14              | 1.06 | 2.887       | 0.014 | MORAL      |
| Distinctive force for the arms          | distance   | 8.29          | 0.22 | 8.70               | 0.11 | 3.509       | 0.004 | MORAL      |
| whip shooting                           | repetition | 20.48         | 0.50 | 21.71              | 0.44 | 4.789       | 0.000 | MORAL      |

\* Moral at the error level (0.05) ≥

### 3-2 discuss the results:

It was found from the presentation and analysis of the results of the tables (3-4-5) of the explosive force variable. Physical, including the explosive force of the arms and the two men, so organized physical training according to a program prepared on scientific foundations leads to the development of various physical capabilities, and that the exercises carried out by members of the experimental group were related to the paths of running steps (strength training with resistors and training in rubber ropes) in the capacity variable The explosive of the two men, through the jumping exercises on the barriers with different altitudes (30 cm, 40 cm, 50 cm). We have shown us the improvement of the explosive strength of the two men in the post -test, and this is what the study (VALDAN) indicated that training with devices and auxiliary tools is a method that contributes to the process of improving muscle ability For the two men) (Muhammad Hassan Allawi,& Abu Al-Ela Ahmed Abdel-Fattah: 2000) and it was used well and suitable for the sample during the training units Several eight weeks, and this period was sufficient to improve the muscle strength of the two men, as it contributed very clearly and influential in improving the strength and the researcher believes that the commitment that the sample members showed to the training units implemented on them by the trainer as well For arms and



legs, and this is consistent with (Mohamed Reda: 2009) in order to increase the level of achievement, the coaches must urge athletes to raise the ceiling of adaptation cases regularly, and this means in practice that the trainers must plan high -intensity training in a successive manner in order to rotate high -intensity training days. With the days of training and distress, i.e. the rotation of difficult training days with easy training days, and this "can enhance the process of compensation for the energy consumed and lead athletes to the excessive compensation state, meaning that the adaptations are closely related to the correct scientific planning with the method of applying repetitions and strictness" (Muhammad Sobhi: 1997 The researcher also believes that the exercises that were used, which included various exercises vehicle of jumping and jumping movements, and rapid jumping exercises. The basic muscles are in the rhythm of the steps to aim and consensus between the arms and the two legs has achieved a development in muscle efficiency and a good level of achievement of the experimental group, which is the real indicator in the development of the skill of the whipping correction, which contributed to raising the physical level of the research sample, and this is consistent with what he referred to B.Gajer "The performance of the hand roller requires that it has a high capacity in its body systems to overcome the strength of gravity while the effort while the resistance remains on the group of muscles used, This means that he has a certain level of special strength according to the effort made, which requires a specific period of time and which he can do with the highest efficiency. For arms and legs, as the exercises are based on the components of the training pregnancy that were applied to the experimental and controlled research groups, led to adaptations that had the effective effect in developing and developing the distinctive strength of speed, and that these exercises that were used with devices and tools in the education and training process to develop the kinetic ability helped In the development of this ability in line with the physical and motor capabilities of the beginners players, and this is confirmed by Mekkelson, "The athletes should perform this ability to perform highly, as carrying them must reach (80 - 90 %) of the maximum heart rate" (Muhammad Reda: 2009) The researcher believes that the use of training loads is suitable for members of the research In terms of the physical, motor, skill and artistic aspect, in addition to that, the required and appropriate intensity has been taken into account in the use of exercises prepared in the training program and the rest periods between an exercise and another according to their capabilities, and the



researcher believes that the force that is characterized by speed is to integrate two strengths and speed is that it is a complex physical capacity of strength and speed. It is considered one of the most important physical abilities of all sports and important for the sports individual on the part of the competition's specialization that he is practicing, that the player needs the great strength of speed to continue and make fast strength and get expedite to reach the regular speed during the stages of his course in the competition and that the possibility of developing this ability on football players. The hand as a result of the development and development of their distinctive force with the speed (Muhammad Subhi Hassanein: 1997), and ((stamper that the development of the strength of the two men muscles leads to a speed of running the running, and the researcher believes that the development of the distinctive force of speed has several important foundations and plays a fundamental role in these capabilities. This means the implementation of movements with appropriate resistors according to the weight of the body and severely under the maximum in order to change this capacity, which is related to the amount of work done for a period A short time, and this is consistent with Yurgen" The exercises of the resistance to withdrawal," resistors, platform exercises, or rapid jumping exercises with a man or both men together weighing the body over the barriers at different heights are often used taking into account the time of performance and the specialized distance in a way that serves the technical performance of the correction stage (Muhannad Hussein and Ahmed Ibrahim: 2010).

#### **4- Conclusions and recommendations**

##### **4-1 conclusions:**

- 1- For the exercises used in the curriculum prepared, a positive effect in improving the achievement of the wind correction of the players of the experimental group.
- 2- The physical tests used by the researcher are one of the important training foundations in revealing the physical requirements of the effectiveness and is an indication of the player and the coach for achievement in the effectiveness of handling of the handball.
- 3- The development of the level of technical performance (technique) of the experimental group in the dimensional tests after the use of the exercises used in the prepared curriculum, which indicates the effectiveness of these exercises





in achieving a good level of motor bonding and learning to perform players in the effectiveness of handling handball.

4- The use of auxiliary devices has proven effective in correcting the path, which was reflected in the performance and achievement to correct the handball

5- The development of physical and motor capabilities in a balanced manner in the research sample

6- The development of physical capabilities reflected positively in the development of the digital level of achievement in the effectiveness of handball.

#### **4-2 Recommendations:-**

In light of the research conclusions, the researcher recommends the following:

1- Emphasizing the development of physical abilities to develop the skill tracks of handball players.

2- Conducting research and similar studies on other age groups and other sporting activities, to reveal the strengths and weaknesses of the motor implementation of the skill, in order to improve the level of digital achievement of other events.

3- Attention must be paid to how modern devices available in colleges, specialized institutes, specialized schools and benefit from them to give clear images, accurate information about time and spatial paths.

4- Attention to school sports and school students, because it is the basis for national teams.

5- Entering the element of suspense and excitement in the lessons of physical education and training by modern means that is the player from boredom and routine.

6- The age stage (15-16) is an appropriate stage for training and developing physical capabilities and reflects positively in the development of the handball game.

7- Dependence on physical tests and measurements to select the players for the effectiveness of handling of the handball

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### Appendix (1) Sample of Training units

| No | Type of exercise  | repetition and time | rest between repetition | groups | rest between groups | valium for one exercise |
|----|---|---------------------|-------------------------|--------|---------------------|-------------------------|
| 1  | (Standing -its back to the wall) connects the rubber rope with the left arm of the column installed on the wall and pulled the player the rope to the side by moving forward to the right and then left with the trunk of the two sides | 7×20 sec            | 40 sec                  | 2      | 90 sec              | 8 Min                   |
| 2  | The player stands next to the column is an appropriate pause and hold the installed football with the column in the middle, then you throw up to the top  | 7×20 sec            | 40 sec                  | 2      | 90 sec              | 8 Min                   |
| 3  | Throwing from three tennis steps  | 7×20 sec            | 40 sec                  | 2      | 90 sec              | 8 Min                   |
| 4  | stand a confrontation of the device and its status is slightly apart and the rubber rope with the arms is in the head and the player pulled the rope from the top to the chest  | 7×20 sec            | 40 sec                  | 2      | 90 sec              | 8 Min                   |