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Research Article

Effect of exercises similar to playing on developing some motor abilities and improving the accuracy of far shooting for handball female Players of Al-Fatat Sports Club

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Abstract

The importance of the research lies in the number of exercises similar to playing to develop some of the movement capabilities of the players at a level that supports good performance, as well as improving the performance of remote shooting for handball players through the use of effective educational and training methods ((exercises similar to playing)) with a high level of compatibility and mastery, which is commensurate with the development of the game, the research problem included the presence of weakness in some motor abilities and the lack of methods used, including exercises similar to playing by the trainer, in addition to the lack of sufficient accuracy, especially in remote corrections. Therefore, the researchers decided to study this problem and stand on it, and the aim of the study was to prepare exercises similar to playing to develop some Mobility abilities and knowledge of the effect of these exercises in improving the accuracy of the distance shooting skill with hand reel for the female athletes of the Al-Fatah Sports Club.

The research problem was identified by the lack of interest in training and developing the mobility abilities and the lack of training methods used by coaches commensurate with their importance in learning the offensive skills of handball players. The aim of the research is to:

- Preparing exercises similar to playing in the desire for some motor abilities for the female athletes of the Al-Fatat Sports Club of handball.
- Knowing the effect of exercises similar to playing on the development of some motor abilities of the female athletes of the Al-Fatat Sports Club of handball.
- Knowing the effect of similar exercises to play in improving the skill of long shot among the female players of the Al-Fatah Sports Club.

The researchers used the experimental method to suit its suitability to the nature of the problem. As for the research community, the female athletes of Al-Fatat Sports Club in Kirkuk, who numbered (16) players, were handball players. (6) female players were excluded, as the experimental research sample became (10 women).

The researchers prepared tests of motor abilities and a test of remote aiming skill and conducted reconnaissance experiments to verify their scientific parameters, then conducted the pre-tests followed by an experimental treatment for the experimental group that included the implementation of special exercises for a period of (8) weeks at a rate of (3) units per week, after which the post tests were performed and treated The data statistically using statistical transactions, and through the results, the researcher reached several conclusions, the most important of which are:

1- The training program by the coach has a positive effect on improving the motor abilities and the performance of long shot for the girl's handball club players.
2- Exercises similar to playing have a better effect on developing motor abilities and improving the accuracy of long range shooting for the girls of the Girl Sports Club handball.

The researcher recommended several recommendations, the most important of which are:

1- Interest in developing the motor abilities of handball players through a group of exercises similar to playing.
2- Using play-like exercises helps improve long-range shooting accuracy skills for handball players.

Introduction:

The level of performance of any player or player is the product of learning through discovering their sporting talents, and this is evidenced by training and field observations. Among the sporting events that have received a share of development and attention is the handball game, which is one of the

differential games that requires players to be at a high level of performance, in order to achieve achievements, especially when the players possess good mobility abilities.

As a result of the progress made in the field of this game, which women players also had ample luck from this progress and attention to the great development of the handball game for women. Skills performance. Exercises similar to playing are considered as one of the training methods that work on the direct construction of the athletic level of the players. In addition to the development of physical attributes, they integrate skillful performance.

The importance of the research lies in the number of exercises similar to playing to develop some of the movement capabilities of the players at a level that supports good performance, as well as improving the performance of remote shooting for handball players through the use of effective educational and training methods ((exercises similar to playing)) with a high level of compatibility and mastery, which is commensurate with the development of the game, the research problem included the presence of weakness in some motor abilities and the lack of methods used, including exercises similar to playing by the trainer, as well as the lack of sufficient accuracy, especially in remote corrections. Therefore, the researchers decided to study this problem and stand on it, and the aim of the study was to prepare exercises similar to playing to develop some motor abilities and knowing the effect of these exercises in improving the accuracy of the distance shooting skill with hand reel for the female athletes of the Al-Fatat Sports Club.

Research methodology and field procedures:

Research Methodology:

The researchers used the experimental method for its suitability and the nature of the research problem through the use of experimental design pre and post-test for one experimental group.

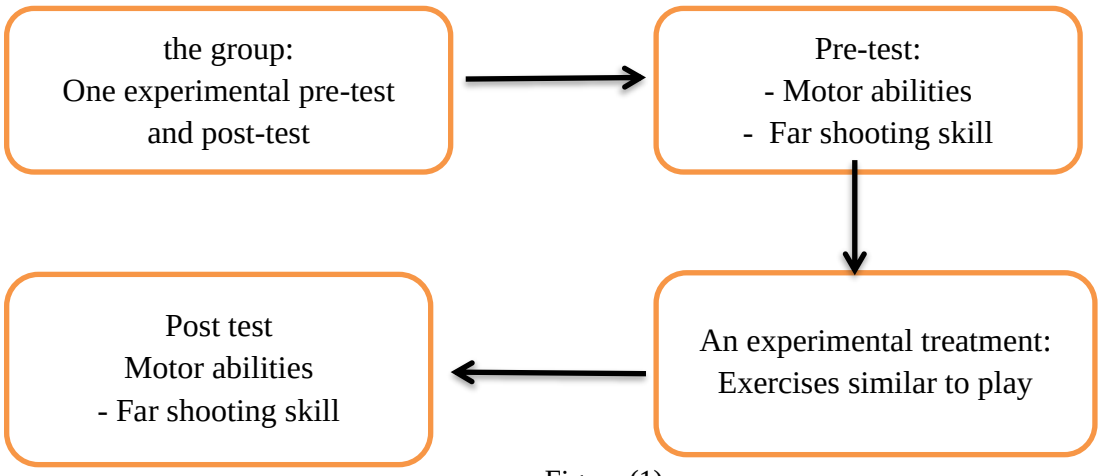

Figure (1)
Shows the experimental design of the research sample.

Research sample:

That the selection of the sample is closely related to the nature of the community as it is "the part that represents the community of origin or model in which the researcher conducts the whole and the focus of his work (Mahjoub; 2000) [(1)] , accordingly, the researcher's choice of his research sample came from Al-Fatat Sports Club, where the community of origin reached (16) players. The goalkeepers, totaling 4, were excluded. And excluding (2) of the players due to injury, as the experimental group amounted to (10) players, with a percentage of (62.5%).

Devices and tools used in the research:

- A legal handball court.
- Legal hand balls, size (2), count (10).

- Dell electronic computer
- Plastic barriers (10).
- Sapco stopwatch of Japanese origin, count (2)
- Adhesive tape and tape measure.
- Fox whistle, count (2)
- Pens and pencils.

Field search procedures:

Tests used in the research:

The researchers used a set of standardized tests from sources related to the research variables, and they were in two sections, tests of movement capabilities and tests of handling and correction skills, as follows:

First - tests of motor abilities:

1- The Zakzak run test in the Barrow method: (Al-Hakim, 2004). (2)

Purpose of the test: to measure agility

Tools: a rectangular jogging field to be built on solid ground 4.75 m long and 3 m wide, a stopwatch, five legs no less than 30 cm long.

Performance: The laboratory takes the standby position from the high start behind the starting line and when given the signal at the start, it runs zigzagging between the five legs and back to the start.

Score calculation: It records the time taken for the lab to travel the distance from start to finish.

The Numbered Circuits Test: (Hasnain,1995). (3)

The purpose of the test: to measure coordination (legs and eyes).

Tools: a stopwatch. On the ground, (8) circles are numbered, with a diameter of (60) cm and numbered from (1-8).

Performance: The laboratory stands inside Circle No. (1), and at the start signal, it jumps to Circle (2) and Circle (3), respectively, to Circle (8).

Scoring: records the time taken for the lab to travel over the eight circles.

Balance Test: (Abdul Hamid and Hassanain,1980). (4)

The purpose of the test: to measure static balance.

Tools: stopwatch

Performance: The laboratory takes a standing position on one of the feet, preferably the foot of the elevating man, then puts the free foot of the leg on the inner side of the knee of the man on which he is standing and takes the posture of the waist during the application.

Score calculation: It records the time that starts from the moment the man is raised from the ground until he commits a mistake or loses balance.

Second - test the accuracy of far shooting skill: -

Shooting accuracy test. (Nasr Khaled,2017). (5)

The purpose of the test: To measure the accuracy of far shooting.

Tools: a handball, a handball goal drawn on a wall (3 + 2 m), then divide the goal into nine, rectangles to measure the accuracy of the correction and draw a line on the ground 9 m away from the goal.

Performance The player shoots from behind the line with the pivot step.

Registration:

- Hitting rectangles (9,7,3,1) that represent the corners of the goal and whose dimensions are (100 + 60 cm) gets 4 degrees.
- A rectangular (2,8) hitting that represents the area above the goalkeeper's head and between his feet and whose dimensions are (100 + 60 cm) gets 3 degrees.
- The rectangle hitting (6,4) representing the goalkeeper's arm range, whose dimensions are (100 + 80 cm), gets two points.

- The rectangle goal (5) representing the chest and torso area of the goalkeeper and whose dimensions are (100 + 80 cm) receives one score.
- If the ball falls outside that gets a zero, each player takes ten throws and only one attempt.

Exploratory experience,

The exploratory experiment is one of the most important necessary procedures that the researcher performs before carrying out his final experiment with the aim of testing research methods and tools and indicating the requirements of accurate and correct work without difficulties, as the exploratory experience is "a practical training for the researcher to find himself on the negatives and positives that he encounters during the conduct of tests in order to avoid them in the future" (Al-Mandalawi and others; 1989) [(6)] , as the reconnaissance experiment was carried out on a sample consisting of (4) players other than the research sample of the Sulaf Sports Club handball players, and tests of movement abilities and a test of remote aiming skill were conducted at exactly (4) in the afternoon on Saturday corresponding to (7/12 /) 2019) and it was aimed at:

1. Ensure the efficiency of devices and tools.
2. Know the time spent for each test as well as the time for the total exams.
3. Adequacy of the assisting work team
4. The level of difficulty of the tests for the research sample.
5. Knowing the difficulties facing the researcher in order to avoid them in the future.

The researchers re-conducted the reconnaissance experiment after the passage of (8 days) at exactly (4) in the afternoon on Sunday (15/12/2019). The experiment was conducted on the same individuals and under the same conditions, through which the tests were re-applied for movement capabilities and the accuracy of far shooting skill. The aim was to extract the scientific parameters of the tests represented by (stability factor and objectivity coefficient). The researchers also conducted the exploratory experiment with exercises similar to playing at 3 pm on Thursday (19/12/2019) on the exploratory experiment sample and the purpose of this experiment is:

1- Knowing the time allocated for exercises similar to playing.
2- Knowing the difficulties that the researcher faces in order to avoid them in the future.
3- Knowing the number of repetitions of each exercise.
4- Know the rest periods between repetitions, totals, and cycles.

Pre-tests:

The researchers conducted the pre-tests at four o'clock in the afternoon in the Sports and Scouting Activity Hall of the General Directorate of Education in Kirkuk Governorate on Sunday and Monday (22-23 / 12/2019) on the members of the research sample of (10) players representing the experimental group.

Main Experience:

The researchers prepared special exercises similar to playing after analyzing the sources with (30) exercises for each of the movement capabilities exercises (agility, alignment, balance) and exercises to improve the accuracy of the distant shooting skill with handball (Appendix 2) where the exercises began on Sunday, corresponding to (5/1/2020) at the rate of (3) educational units per week and continued until Thursday (27/2/2020) and at the Sports and Scouting Activity Hall in Kirkuk, by (24) educational units (Appendix 1)) And included the educational unit time (90) minutes.

Post- tests:

The post- tests were conducted after completing the training period for the research sample on Saturday and Sunday (1-2 / 3/2020), and these tests were conducted in the same circumstances in which the pre-tests were conducted.

Statistical means:

- Percentage.
- Correlation coefficient.
- Median.

- Quartile deviation.
- Variance coefficient.
- Wilcoxen test.

Presentation and discussion of results:

Presentation and discussion of the results of motor abilities:

Table (1) shows the values of the median, the quartile deviation, and the coefficient of variation for the pre and post- tests, and the calculated Lucoxin value and their statistical significance for the results of the agility tests

Tests	Measuring unit	Pre-test			Post-test			Sample	Wilcoxon value Calculated	Wilcoxon tabular value	Sig type
		Median	Quartile deviation	Variance coefficient	Median	Quartile deviation.	Variance coefficient				
Zakzak ran in Barrow fashion	second	11	1	9.09	7.5	0.5	6.67	10	0	8	Sig

Presentation of coordination results:

Table (2) shows the values of the median, the quartile deviation, and the coefficient of variation for the pre and post-tests, and the calculated Lucoxin value and their statistical significance for the results of the compatibility tests.

Tests	Measuring unit	Pre-test			Post-test			Sample	Wilcoxon value Calculated	Wilcoxon tabular value	Sig type
		Median	Quartile deviation	Variance coefficient	Median	Quartile deviation.	Variance coefficient				
Numbered circles	second	14.5	1.75	12.07	9	0.75	8.33	10	0	8	Sig

Presentation of Balance Results:

Table (3) shows the values of the median, the quartile deviation, and the coefficient of variation for the pre and post-tests, and the calculated Lucoxin value and their statistical implications for the results of the balance tests.

Tests	Measuring unit	Pre-test			Post-test			Sample	Wilcoxon value Calculated	Wilcoxon tabular value	Sig type
		Median	Quartile deviation	Variance coefficient	Median	Quartile deviation.	Variance coefficient				
Stand on the instep	second	10	1.5	25	17	0.5	5.26	10	1.5	8	Sig

Discussing the results of motor abilities:

Through what was presented to the tables above, it is evident that there is an improvement in the motor abilities of the experimental group, and the researchers attribute this improvement to the effect of

play-like exercises prepared by the researchers, as these exercises contributed to the development of the motor abilities of the handball players, and the performance of exercises in an orderly, orderly and effective manner, and adequate rest periods, which are characterized by diversification and excitement, close to the nature of motor abilities. (Hussain; 1998) [(7)], in addition, play-like exercises contribute greatly to the development of basic elements, the most important of which is the development of motor abilities and are appropriate for the skillful performance of the players, because they are similar to or close to the movement path, and this is what Hara pointed out, or tactical and relate it to building the quality of creation and psychological qualities of competition (Hara; 1990) [(8)], the abilities were considered qualities related to the physical aspect of the human being, and these capabilities proceed according to the dynamics of development and growth according to the age stages. Therefore, "the movement capabilities are abilities or characteristics acquired from the environment and the practitioner is the basis for their development according to the individual's physical, sensory and perceptual ability" (Mahjoub, 2002) [(9)] .

As it is one of the main pillars on which the skill numbers in different games depend, the relationship between motor abilities and the level of skill performance and its difference according to the type of activity or sporting activity practiced. Hence, the individual's possession of a high level of motor abilities indicates that the individual has a high degree of ability to successfully practice sports, as each age stage is characterized by a natural development of some of these abilities, and these abilities can also develop through training, training and practice.

Presenting and discussing the results of far shooting skill.

Presentation of the results of the far shooting skill:

Table (4) shows the values of the median, the quartile deviation, and the coefficient of variation for the pre and post-tests, and the calculated Lucoxin value and its statistical implications for the results of far shooting skill test.

Tests	Measuring unit	Pre-test			Post-test			Sample	Wilcoxon value Calculated	Wilcoxon tabular value	Sig type
		Median	Quartile deviation	Variance coefficient	Median	Quartile deviation.	Variance coefficient				
Far shooting	Goals number	2	1.5	75	5	0.5	10	10	0	8	Sig

From Table (4), which shows the mean value and the quartile deviation for the test (distant aiming skill with a step of the focal point), where the pre-test reached the median (2) with a spring deviation (1.5), and after performing the post test for the same group, the median came (5) and with a quartile deviation (0.5), through observation, we see it different with regard to the pre and post-tests, and this indicates that there are differences between the two tests. To clarify these differences, the two researchers used the (Wilcoxen test), from which the value of Wilcoxin calculated for the results of this test came to (zero), while the table value of Wilcoxen is equal to (8) for a sample of (10) and at a level of significance (0.05), so there are differences between the two tests and in favor of post- test.

Discuss the precision results of the far shooting skill:

From the above presentation of the table, it becomes clear that the accuracy of the long shot skill has improved greatly, and the researchers attribute the reason for this improvement in the skill to the development and development of the movement capabilities of the girl's handball club players.(Zam; 2005)[(10)] . The importance of motor abilities, "The individual's possession of a high level of motor abilities helps to successfully practice many sports activities, the motor abilities to participate in the development and upgrading of motor skills" (Al-Saadoun; 2002)[(11)] , in order to reach a high level of

performance, it is imperative for the player to possess high mobility abilities in order to face the variables of play, especially in the game that takes a long time, as "high mobility abilities help to invest the player's skill and tactical abilities in the right direction" (Abbas; 2003)[12] , in addition, the development of female handball players in terms of skillful performance depends on basic principles that affect and affect athletic performance, these important principles are the motor abilities that had a basic role in the will factor of the player, and this is what came through one of the sources that shows the importance of motor abilities "As the motor abilities are one of the main pillars on which the physical numbers, skills and level of achievement within the various sports activities depend", Likewise, the increase in motor abilities has a positive effect on the player's psychological and moral state, as it increases and develops his willpower factor in a way that makes him able to move on the field "(Al Amir; 200). [13]

Conclusions and recommendations:

Conclusions:

Through the findings of the researchers, it was concluded that similar exercises to play have a better effect on the research sample in developing motor abilities through the significant differences in the results of the research among handball players, and thus a better effect on the performance of basic skills (offensive) with handball, especially the accuracy of the long shot skill.

Recommendations:

Accordingly, the two researchers recommended an interest in developing motor abilities by using special exercises similar to playing based on scientific foundations for those abilities. It precedes or accompanies exercises to develop basic skills in handball, especially in the initial stages of education and training its effect on other skills.

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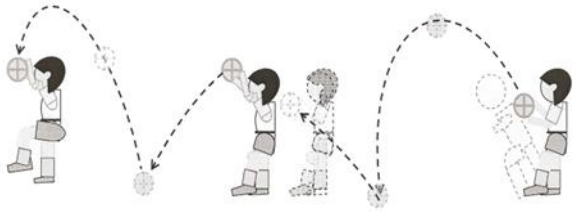
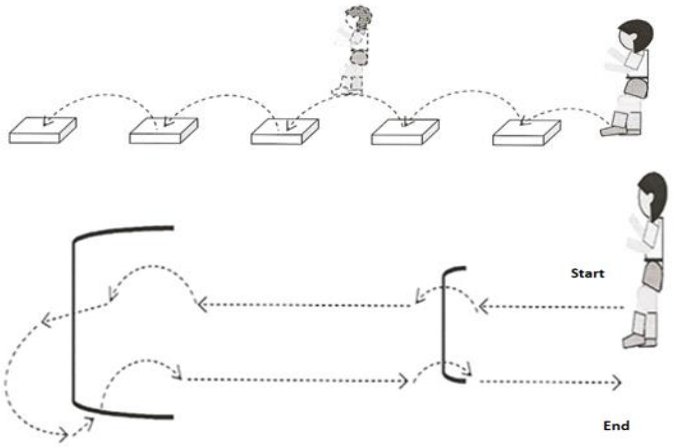
Appendix (1)
Sample of the educational unit

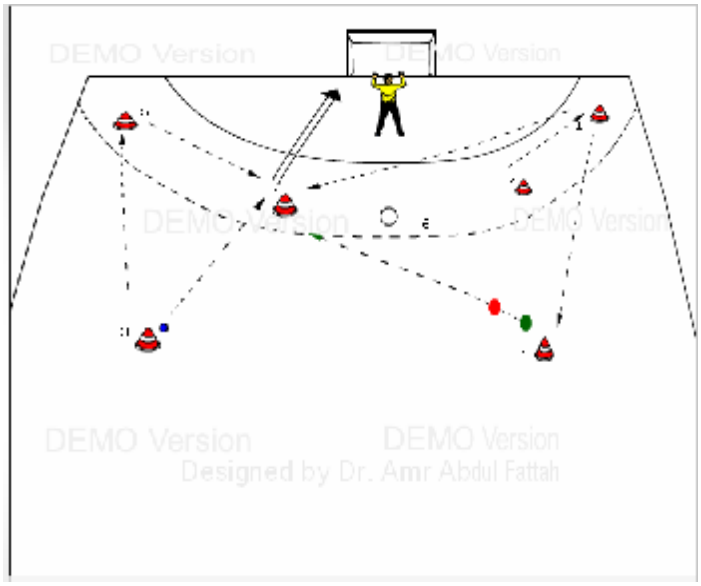
Teaching unit: the first unit.
Time: 90 minutes.
Educational objective: to develop the spirit of competition and suspense.
Day and date :
Learning objective: That the players perform motor abilities exercises (1-2-3) with similar exercises for long range shooting.
Number of players: 10 players.

Sections of the unit	Time	Activities or skills	Figures and notes
First: the preparatory department. 1- Attendance. 2- General and special preparatory exercises.	15 min 2 min 13 min	Welcoming female athletes and clarifying the importance of the program prepared by the researchers and the importance of commitment to attend and implement the program. Standing - light jogging - jogging with arms rotating forward / backward in succession - jogging with legs raised forward - jogging and bending while touching the ground from both sides left and right - and standing and warm-up exercises that serve the exercises applied in the main section and according to the activity sheet.	×××××××× ⟶ Emphasizing the correct performance of warm-up exercises
Second: the main section. 1- Educational activity. - The theoretical part. - The practical and applied part.	70 min 10 min 60 min	Explanation of the performance of movement capacity exercises (1-2-3) and how to apply them with an emphasis on performing them as quickly as possible. Explanation of performing ball throwing exercises from the 9-meter area on the target and from different places. Applying the performance of movement capacity exercises (1 - 2 - 3) and how to apply them with an emphasis on their correct performance Application of ball throwing exercises from a 9-meter area on the target and from different places	Give feedback to players by correcting mistakes during performance. Emphasizing the spirit of suspense and competition and performing exercises correctly.
Third: the final section.	5 min	Stand up, jog with cool-down and breathing exercises.	

Appendix(2)

Model of motor ability exercises similar to play

N	Exercises	Formation
1	Exercise for coordination (eye and leg) Throwing a handball up and receiving it forward after bouncing from the ground and then trying to hit it down and receive it	
2	Balance exercise, jumping over 5 boxes with a height of 30 cm fixed to the ground and the distance between one box and another 50 cm straight	
3	Agility exercise The player begins to run for a distance of 5 meters and tries to jump the barrier and its height is 35 cm, and after a distance of 2 meters, he tries to cross from the bottom of the crossbar, which is 1 m high, and backwards, noting that the player's body changes while crossing the crossbar (left - right)	



Appendix (3)