THE EFFECT OF THE USE OF EXPLORATORY EXERCISES IN IMPROVING CONCENTRATION OF ATTENTION AND SKILLS OF CHEST HANDLING AND CORRECTION OF BASKETBALL STABILITY FOR PEOPLE WITH SPECIAL NEEDS

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Abstract

The process of teaching and methods of teaching depends on the means of transferring information from teacher to learner. This method whenever appropriate, the process of learning was better, faster and less effort. There have been many ways or means of transferring information and have made great progress because of the development of modern concepts of the educational process. Concentration of attention and its relation to the skills of chest handling and correction of the free throw basketball at the Center for Rehabilitation of Disabled Persons, and the search there are significant differences between the results of tribal and remote tests of the experimental group and for the tests dimension (14) players aged (10-14) years, and through the results were reached the conclusions and the most important: 1 - that the exercises have a special impact Good in the development of concentration of attention Fastness of performance of chest handling and accuracy of free throw of stability in the experimental group Recommendations 1 - attention to focus development attention Speed of handling chest handling and accuracy of free kick correction and other characteristics of the disabled

Keywords: Exploratory exercises, Chest handling, Teaching methods, Educational process

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INTRODUCCIÓN

The educational process and teaching methods depend on the means of transferring information from the teacher to the learner. Whenever this method is appropriate, the learning process will be better, faster, and with less effort. There have been many means or methods of transmitting information and great progress has been made as a result of the development of modern concepts of the educational process. As well as its connection with the mental and cognitive abilities of the learner with disabilities, what is characterized by kinetic learning. And teaching methods, which is one of the most important mathematical sciences, in terms of comprehensiveness and diversity, require the use of several types of educational aids and exploratory games that have an effective and direct impact on the learning process. Then to reach the learner to achieve the best skill performance according to organizational methods or means that depend on the extent of communication between the teacher and the learner for the disabled. As this means of communication plays an important and major role in mastering the motor duty to be learned (Hariprasad et al, 2013).

Exploratory games and focusing attention to people with special needs played an important role in the skill performance in many sporting events and activities. Including basketball for the disabled, and focusing attention is one of these important operations. Which works on the success of the application of different skills and helps to develop quick solutions for individual and collective skills. Many cases require quick solutions and high concentration of attention in order to develop appropriate solutions for the situations that occur in the match. Before performing the movements, we must focus on the performance and its accuracy in order to obtain a good position that helps in performing the skills distinctly. Handling and scoring are all basic skills that require focused attention for people with special needs. Also, observing the competitor's movements and following up requires the ability to focus attention (Myers et al, (2014)

The importance of the research lies in the fact that focus attention and basic skills in basketball have an important role in the process of skill performance and its accuracy during the implementation of motor duties during the game (Myers et al, 2018 ; Braun et al, 2016).

Therefore, work should be done to develop it and teach it well and correctly, using the focus of attention in order to increase the correct technical performance. Also, educational curricula and their scientific preparation are important in developing what should be developed in terms of handling and shooting skills for basketball for people with special needs. Which, in turn, develops the skill level (Mardon et al,. 2016 : Gilbert et al, 2004)

Hence, the importance of research lies in finding modern methods and techniques by giving exploratory exercises. These exercises are intended to focus attention for the purpose of developing the performance of some of the skills of chest handling and shooting from the free throw basketball for people with special needs. These exercises would contribute to raising the level of players for the better Wilke, (2020) : Hesslinger et al, (2002).

Research problem

The distinction in the game of basketball for the disabled is the rapid pace of performance, whether with or without the ball. The requirements of this game imposed on the players on the field a number of things that are closely related to speed (Byo et al,. 2008; Hjeltnes et al,.2015).

Through the researcher's experience in training, practicing the game, and following up on sports activities in committees and rehabilitation centers for the disabled. Note that many players lack attention and accuracy in performing some offensive skills in basketball for people with special needs (Mosewich et al, 2013).

He also noticed a weakness in speed and accuracy of performance, which depends on many variables and their impact on improving handling and accuracy of shooting in basketball. This thing is slow and inaccurate, because the exercises used are traditional and do not provoke enthusiasm, rush and effort to master them. Accordingly, the researcher tried to improve chest handling, free throw shooting and attention by applying special exploratory exercises. In order to focus attention, it was carefully selected for the purpose of raising and improving the skill level of people with special needs

Research objectives

1- Develop exercises for exploratory games to improve concentration of attention and its relationship to the skills of chest handling and shooting from the free throw basketball at Al-Rajaa Center for Rehabilitation of the Disabled

2- Recognizing the effect of exercises for exploratory games to improve concentration of attention and its relationship to the skills of chest handling and shooting from the free throw basketball at Al-Rajaa Center for the Rehabilitation of the Disabled

Research hypotheses

1- There are statistically significant differences between the results of the pre and post tests for the experimental group and in favor of the post tests.

2- There are statistically significant differences between the results of the post-tests for the experimental and control groups and in favor of the experimental group

Research Methodology

The researcher adopted the experimental research method as it is compatible with the solution of the problem to be investigated. Because it is one of the important means to gain reliable knowledge. The researcher used the design of two equal experimental and control groups. The experimental method is considered one of the “most sufficient means to reach reliable knowledge (1).

Research sample

It is the part that represents the original research community on which the researcher conducts the entirety of his work. A number of the research sample was chosen in a deliberate way, and they are a group of Al-Rajaa Center for Rehabilitation of the Disabled, which numbered (14) players, aged (10-14 years). They were divided into two groups (control) and (experimental) and by lottery by (7) players for each group (and in order to return the differences to the experimental factor, the experimental and control groups must be completely equal in all conditions except for the experimental variable that affects the experimental group) . The researcher conducted equivalence on the members of the two groups in Table 1 showing the equivalence.

Data and collection methods

(Arab and foreign sources, the international information network (the Internet, the exploratory experiment, tests and measurements, the statistical means of the SPSS system, personal interviews)

I. A Dell Pentium (4) laptop computer.

II. Canon 2900 laser printer.

III. Stopwatch (6) of a type (Sony)

IV. Plastic cones (20)

V. Balls and basketball number 10 / whistle.

Field Research Procedures

Determination of Tests

The most important thing the researcher needs is to choose or develop multiple tests to measure some variables that are related to the phenomenon to be measured. Accordingly, the researcher prepared a form to choose the appropriate tests for the skills under study. The questionnaire was presented to a group of basketball specialists, numbering (5), Supplement (1) and (2). After the forms were collected and unloaded, the tests that achieved an agreement percentage (70%) and above were selected, and Table 2 illustrates this.

Research Tests

Attention network test (1)

This test called the Grid concentration test is used to measure a player's ability to focus their attention.

The duration of this test is only one minute and the player is asked to put a dash (/) on the largest number of numbers that follow the specific number specified by the test taker. For example, when specifying the starting number with the number (17), for example, the test person should put a dash (/) on the number (18) and then the number (19) and so on and not try to put a dash (/) on the number (19) first and then) 18) sec.

This test can be used several times, changing the starting number specified for each subsequent time. It is also possible to change the numbers of the focus network and make multiple copies of them with changing the location of their numbers so that the tester does not get used to memorizing and remembering the location of the numbers. It should be taken into account that all numbers consist of two numbers, such as (01), (02), (23) and so on.. . The test can also be conducted in many experimental situations such as performance in front of colleagues or by adding some distracting variables.

Correction: Correction is done by counting the numbers that the athlete crossed out correctly within the minute period specified for taking the test. One score is given to each crossed out number correctly, and the higher the score of the athlete, this indicates his high ability to focus attention as in Figure 1.

Test name: Thoracic Handling Measurement (15 Handling)

• Purpose of the test: To measure thoracic handling speed

• Tools needed: mini basketball court, smooth wall, mini basketball, stopwatch, whistle. Draw a line on the ground 5 feet (1.5 m) away.

• Performance specifications: The laboratory stands behind the drawing line at a distance of (1.5 m) from the wall. . When the start signal is heard, the tester handles the ball on the wall. Provided that this handling is at the level of the laboratory chest and as soon as possible. Then he receives the ball after it bounces from the wall to repeat the work until It performs (15) proper handling

Table 1. The statistical parameters (the arithmetic mean, standard deviation, the calculated t-value and the significance of the differences). between the experimental and control groups in the tribal tests.

Tests	Level	T value	Control group		Experimental group		Units	Function
			± A	S	± A	S		
Focus network	0.744	0.335	1.155	6.919	1.345	7.143	Degree	Not Functioned
Chest handling	0.676	0.429	1.011	12.336	1.176	12.084	Second	Not Functioned
Free throw shooting	0.454	0.775	0.981	4.857	0.690	5.143	Degree	Not Functioned

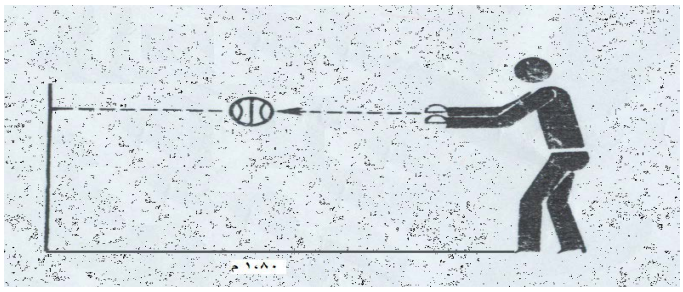
Table 2. Percentages of experts choosing the tests under study.

Ratio	Reptation	Test	Mission
80	4	Focus network	Attention
20	1	Landon Rings Test	
100	5	Chest handling speed measurement 15 throws	Chest handling
20	1	Chest handling speed measurement 10 throws	
80	4	Measuring the accuracy of the shooting skill from the free throw (10throws)	Accuracy of free throw shoots
20	1	Free throw shooting skill (20 shots)	

84	27	51	78	59	52	13	85	61	55
28	60	92	04	97	90	31	57	29	33
32	96	95	39	80	77	49	86	18	70
76	87	71	95	98	81	01	46	88	00
48	82	89	47	35	17	10	42	62	34
44	67	93	11	07	43	72	94	69	56
53	79	05	22	54	74	58	14	91	02
06	68	99	75	26	15	41	66	20	40
50	09	64	08	38	30	36	45	83	24
03	73	21	23	16	37	25	19	12	63

Figure 1: Focus network test.

Recording: Calculates the time taken by the laboratory from hearing the start signal until the ball touches the wall in the fifteenth (last) handling, in seconds.



Test name: Shooting from behind the free-throw line (10 throws) (2)

• Purpose of the test: To measure the accuracy of shooting the free throw.

• Necessary tools: legal basketball court, legal basketball goal, legal (10) basketballs

Specifications:

The player takes a standing position with the ball behind the center of the free-throw line.

Each player performs two sets, each set consisting of (5) consecutive throws.

The player has the right to shoot at the basket in any appropriate way.

Each player has only one attempt.

Test management:

A recorder who calls the names first to record the results of the throws.

Arbitrator - stands next to the player to give the ball and note the correctness of the performance and counting.

Calculation of grades:

It is calculated and scored one score for each successful throw (the ball enters the basket).

No score is awarded to the player when the ball does not enter the basket (failed).

The player's score is the sum of points he gets in (10) throws.

The exploratory experience

The exploratory experiment is (a practical training for the researcher to find out the negatives and positives that he encounters during the test to avoid them) (1). The researcher conducted an exploratory experiment on 12/5/2018 on a sample of Maysan basketball players. The number of (4) players before doing his research in order to choose research methods and tools.

Tribal Tests

The researcher conducted tribal tests before starting the educational curriculum. It included the tests (focusing of attention test, speed test for chest handling skill 15 tackles, and test measuring accuracy of shooting skill from free throw basketball) on Wednesday at ten o'clock in the morning on 15/1/2019 in their halls.

Educational Curriculum

The special exercises were applied during the educational units of the experimental group only and in the main section on Wednesday 17/1/2019 at 4:00 pm in the hall of Al-Rajaa Center for Rehabilitation of the Disabled.

Then the researcher applied these exercises to his research sample, which is the experimental group, whose members are (7) players. This group applied the exercises for a period of (8) weeks, with three educational units per week. This sample was subjected to two measurements, before and after in the tests under study. As for the second group, whose number is (7), they did not apply their exercises, but rather worked according to the method prepared by the team coach. She was also subjected to two measurements before and after in the same tests that the experimental group underwent.

The researcher took into account the following observations when applying his special exercises: The special exercises were applied at the beginning of the main section of the educational unit. The number of educational units reached (24) educational units.

Post-tests:

The researcher conducted the post tests for his research sample (experimental and control groups) on 20/3/2019. He may follow the same method that he followed in the pre-tests, after completing the prescribed period of the experiment, which lasted 8 weeks. The researcher was keen to find all the conditions and requirements for the pre-tests when conducting the post-tests in terms of time, place and means of testing.

Statistical Means: (2)

In order to achieve the goal of the study, the researcher used the statistical package for social sciences (spss):

(Percentage law, arithmetic mean, standard deviation, median, t-test for correlated samples, t-test for uncorrelated samples, skew coefficient, t-test for two related means).

Results and Discussion

Presentation and analysis of the results of the tests, concentration, attention, chest handling, and scoring for the free throw basketball: The researcher applied the tests to the main research sample for the two groups (experimental and control) consisting of (7) players for each group.

Presentation and analysis of the results of the pre and post tests for the experimental group

After unloading the data for the pre and post tests of the experimental group from the researcher, and processing them statistically, it was shown in Table (3).

By looking at Table (3), which shows the results of the pre and post test for the experimental group in the concentration of attention. It is clear to us that the arithmetic mean of the pre-test reached (7.143) degrees. And with a standard deviation of (1.345). While the arithmetic mean in the post-test was (10,857), with a standard deviation of (0.899). When using the (T-Test) law for correlated samples, the calculated (T) value appeared (5,461) below the significance level (0.00). Which indicates its significance at the level of significance (0.05) and the degree of freedom (6). Thus, the difference is statistically significant in favor of the post-test. As for the chest handling test, the arithmetic mean of the pretest results reached (12.084) degrees, with a standard deviation of (1.176). While the arithmetic mean in the post-test was (9,461) degrees, with a standard deviation of (1,154).

When using the (T-Test) law for correlated samples, the calculated (T) value (5,969) appeared under the significance level (0.00). Which indicates its significance at the level of significance (0.05) and the degree of freedom (6). Thus, the difference is statistically significant and in favor of the post-test. In the free-throw shooting test, the arithmetic mean of the pre-test results reached (5.143) degrees, with a standard deviation of (0.690). While the arithmetic mean in the post-test was (8,286) degrees, with a standard deviation of (0.488).

When using code. (T-Test) for the interconnected samples, the calculated (T) value appeared (12,050) below the significance level (0.00). Which indicates its significance at the level of significance (0.05) and the degree of freedom (6), and thus the difference is statistically significant and in favor of the post test.

Presentation and analysis of the results of the pre and post tests for the control group

After unloading the data for the pre and post tests of the control group from the researcher. and processed statistically, as shown in Table (4).

By looking at Table (4), which shows the results of the pre and post test for the control group in the focus of attention. It is clear to us that the arithmetic mean of the pre-test reached (6.919) degrees, with a standard deviation of

Table 3. The results of the pre and post tests for the experimental group.

Tests	Level	T value	Control group		Experimental group		Units	Function
			±A	S	±A	S		
Focus network	0.00	5,461	0,899	10,857	1.345	7.143	Degree	Functioned
Chest handling	0.00	5,969	1,154	9,461	1.176	12.084	Second	Functioned
Free throwshooting	0.00	12,050	0,488	8,286	0.690	5.143	Degree	Functioned

Table 4. Pre-tests of the experimental and control groups.

Tests	Level	T value	Control group		Experimental group		Units	Function
			±A	S	±A	S		
Focus network	0.01	3,785	0,791	6,067	1.155	6.919	Degree	Functioned
Chest handling	0.07	2,202	0,363	11,557	1.011	12.336	Second	Not Functioned
Free throwshooting	0.00	6,000	0,756	5,714	0.690	4.857	Degree	Functioned

Table 5. The post-tests of the experimental and control groups.

Tests	Level	T value	Control group		Experimental group		Units	Function
			±A	S	±A	S		
Focus network	0.00	4,159	0,791	6,067	0,899	10,857	Degree	Functioned
Chest handling	0.00	1,059	0,363	11,557	0,154	9.461	Second	Functioned
Free throw shooting	0.00	7,562	0,756	5,714	0.488	8.286	Degree	Functioned

(1.155). While the arithmetic mean in the post-test was (6,067), with a standard deviation of (0.791). When using (T-Test) law for correlated samples, the calculated (T) value appeared (3,785) below the significance level (0.01). Which indicates its significance at the level of significance (0.05) and the degree of freedom (6). Thus, the difference is statistically significant in favor of the post-test. As for the thoracic handling test, the arithmetic mean of the pretest results was (12.336) degrees, with a standard deviation of (1.011). While the arithmetic mean in the post-test was (11,557), with a standard deviation of (0.363).

When using the T-Test law for correlated samples, the calculated T value (2,202) appeared below the significance level (0.07). Which indicates its significance at the level of significance (0.05) and the degree of freedom (6). Thus, the difference is statistically significant and in favor of the post-test only thoracic handling is not significant. In the free-throw shooting test, the arithmetic mean of the pre-test results reached (4.857) degrees, with a standard deviation of (0.690). While the arithmetic mean in the post-test was (5,714), with a standard deviation of (0.756).

When using the (T-Test) law for interconnected samples, the calculated (T) value appeared (6000) below the significance level (0.00), which indicates its significance at the significance level (0.05) and the degree of freedom (6). Thus, the difference is statistically significant and in favor of the post-test

Presentation and analysis of the results of the post-tests for the experimental and control groups

By displaying in Table (5) the results of the post-tests for the experimental and control groups. It is clear to us that the arithmetic mean of the focus network test for the experimental group reached (10,857) degrees, with a standard deviation of (0.899). While the arithmetic mean of the control group was (6,067), with a standard deviation of (0.791). When using the (T-Test) law for uncorrelated samples, the calculated (T) value reached (4,159) below the significance level (0.00). Which indicates its significance at the level of significance (0.05) and the degree of freedom (12), and thus the difference is significant and in favor of the experimental group (Table 5).

In the chest handling test, the arithmetic mean was (9.461) for the experimental group, with a standard deviation of (0.154). While the arithmetic mean of the control group was (11,557) with a standard deviation of (0.363). When using the (T-Test) law for uncorrelated samples, the calculated (T) value reached (1,059) below the significance level (0.00). Which indicates its significance at the level of significance (0.05) and the degree of freedom (12), and thus the difference is significant and in favor of the experimental group . In the free-throw shooting test, the arithmetic mean was (8.286) for the experimental group, with a standard deviation of (0.488). While the arithmetic mean of the control group was (5,714), with a standard deviation of (0.756).

When using the (T-Test) law for uncorrelated samples, the calculated (T) value reached (7,562) below the significance level (0.00). Which indicates its significance at the level of significance (0.05) and the degree of freedom (12), and thus the difference is significant and in favor of the experimental group

Discussion

After reviewing the results shown in Table (3), which shows the results of the experimental group in the pre and post measurements of the tests under study. Table (4) shows the results of the control group in the pre and post measurements of the same tests. As well as Table (5), which shows the results of the post-tests for the experimental and control groups. It is clear to us that the experimental group had a better level of development than the control group, as evidenced by the results we found in the aforementioned tables.

The results of the experimental group whose members applied the special exercises in developing the speed of performing the pectoral handling with the ball and the accuracy of the performance of the shooting from the free throw. The development of their level was better than the control group that did not use special exercises. They also worked according to the method set by the team coach, and what reinforces this talk is the return to the results of tables (3) (4) (5).

The researcher, before preparing him for special exercises that aimed to improve focus, attention, speed of performance of chest handling with the ball, and accuracy of shooting from the free throw basketball, was fully convinced that the speed of skillful performance is one of the important characteristics of the basketball player. In order for the player to perform these skills at the ideal speed, the coach must carefully choose the exercises that are completely similar to what happens in the matches. The coach trains the players on it with gradual performance so that the players get used to performing it with the same strength and speed that it should perform during matches.

As (John, 1983) emphasized, "The athlete with deep focus is the one who has physical compatibility in controlling stimuli and emotions. That affect his being when concentrating and he will be in control of the motor duty." (1) This was confirmed by (Ghazi, 2000) Improving the player's mental and mental abilities increases his predictability, i.e. increases the player's ability to visualize future events during the match, and it also works to develop the player's ability to implement all skills and duties and control the course of play in a balanced manner during the match." (2) The researcher also confirmed that although the free throw game plays an important role in determining the results of many matches. It is often decided matches win or lose from above the free-throw line. The free throw is easy because "the variables of defense and distance are constant." (1) Handling is one of the main and important offensive skills in basketball, which is no less important than the shooting process. Through it, the opponent's goal can be reached, which has a positive impact on the number of goals scored. Handling moves the ball to the best places to shoot" (2).

Conclusions and recommendations

Conclusions

1- The exercises for exploratory games have a good effect for improving the concentration of attention and the speed of performance with the pectoral manipulation. As well as the accuracy of the free throw from the stability of the experimental group from Al-Rajaa Center for Rehabilitation of the Disabled

2- The preference of the experimental group in improving the concentration of attention and its relationship to the speed of performance with chest handling and the accuracy of free-throw scoring at Al-Rajaa Center for Rehabilitation of the Disabled.

Recommendations

1- Paying attention to exploratory games to improve focus, attention, speed of performance, chest handling, and accuracy of shooting for the free throw and other characteristics of basketball players, especially for the disabled.

2- Adopting special exercises for exploratory games to focus attention in developing speed and accuracy of performance. Coordination is prior to and simultaneous with improving the basic skills of basketball players, especially for the disabled, in the centers of the State of Iraq.

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