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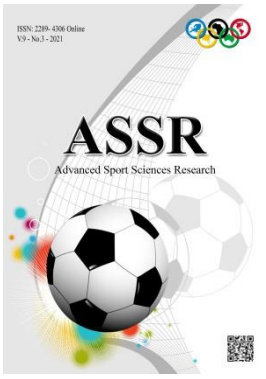

"Exercises using a suggested bluffing ball and its effect on the motor reaction and the skill of clapping by changing direction for basketball players"

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Abstract

One of the objectives of the research set by the researcher is to identify the exercises using a proposed deception ball and its effect on the motor reaction and the skill of the drum by changing the direction of the basketball players, using the experimental method as it fits the problem posed by the researcher, and the research experiment was applied to a sample consisting of 20 players aged 13 - 15 years for the Specialized School of the Sports Talent Center for Basketball in Anbar Governorate - Hit City, they were divided into two groups of equal numbers and equal with 10 players for each group, as the experimental group used the exercises with the proposed deception ball, while the control group used the same exercises and withheld them Using the proposed deception ball, the application of the main experiment took 4 weeks, with 3 training units per week with the goal of developing learning, and each application unit included 3-4 exercises with a time of 20 to 25 minutes, and after the end of the experiment, the results were statistically processed, and the most important results were Is that the exercises using the proposed deception ball had a positive effect on the motor reaction and the skill of clapping by changing direction, but the superiority of the experimental group over the control group that developed also had the effect of using the same exercises without the deception ball. As for the most important recommendations, the most important recommendations were to take advantage of the exercises and the deception ball proposed by the basketball coaches for the specialized schools because of their effective impact in the time of the motor reaction and the skill of the drum by changing the direction, and the Ministry of Youth and Federations Sports Providing equipment and tools for specialized schools to develop the level of players.

Keywords : Exercises, motor and basketball.

Introduction

Basketball is one of the sports that brings excitement to many viewers and practitioners, and this game has formed a cultural identity for some countries that are famous for this game, so many sports institutions in it seek to raise the level of teams, and from an early age rely on experts and specialists who did not They spare no effort to provide and use the best educational and training means to target the capabilities and skills required to be developed, especially in the field of motor learning and learning development.

The process of skill learning at the present time is not limited to traditional methods, but rather the introduction of creative ideas, even if simple and inexpensive, has become a qualitative leap towards the advancement of the level by learners and players. To include a lot of diverse basketball skills such as deception, cutting, manipulation, dribbling and scoring, and these skills require performance in the least time, a high possibility of controlling and showing quick reactions, and sometimes it is important for the basketball player to be able to hide the main goal of the movement if he wants to increase his offensive potential ", [2] so it is necessary to raise the skill level, the trainers must put some innovative obstacles, whether human or industrial, when performing the exercises.

From here emerged the importance of the research in the use of proposed deception ball exercises and their impact on the motor reaction and the skill of the drum by changing the direction of basketball players.

Research Problem

Through the continuous follow-up of many sports teams and methods of developing skills, whether at the level of specialized schools or sports clubs in basketball, he noticed that the process of developing learning for skills is still going at the same pace, and the researcher does not find any ideas used by those in charge of the educational or training process to provide some difficulties when exercising For the purpose of developing the level, after mastering through the stages of motor learning, it is necessary to go to the development of learning for the skills that the learner or player has mastered using methods and means to achieve the goal, so the researcher raises the following question:

Is there an effect of using the proposed deception ball exercises in the motor reaction and the skill of clapping by changing the direction of basketball players.

Research objectives

1 Preparing exercises using a proposed deception ball in line with the level of the research sample.
2 Identifying the differences between the two groups of research, the control and the experimental, in the motor reaction and the skill of the tapping by changing the direction of the basketball players.

Research hypotheses

1 There are statistically significant differences between the results of the Pretest and posterior measurements for the control and experimental research groups in the motor reaction and the skill of the drum by changing the direction and in favor of the Posttest measurements.

2 There are statistically significant differences between the results of the Posttest measurements between the control and experimental research groups in the motor reaction and the skill of clapping by changing direction and in favor of the experimental group.

Research fields

- Human field: Twenty basketball players - Specialized School of the Sports Talent Center - Heat City, ages 13-15 years.
- Time range: for the period from 5/1/2021 to 1/2/2021.
- Spatial field: Anbar Governorate - Hit Youth Forum.

Research Methodology

The experimental method was used by the researcher to achieve the objectives and hypotheses of the research, which is characterized by tight precision.

Society and research sample

The research sample was chosen in a deliberate way represented by the players of the specialized school affiliated to the Sports Talent Center in Basketball in Anbar Governorate - the city of Hit, and the research community reached 27 players, 7 players were excluded for non-compliance with the training units, thus the research sample became 20 players aged 13-15 years , and after conducting homogeneity among the sample members in Table (1), they were divided into two control and experimental groups in a random manner with 10 players for each group, then conducting parity between the two groups in the research variables under study in Table (2).

Table (1). The homogeneity of the research sample n = 20

Variables	Units	Mean	SD	Median	Skewness
Height	Cm	166.75	5.78	169	-1.16
Weight	Kg	70.15	6.39	71	-0.39
Chronological age	Month	164.85	5.59	163.5	0.72
Training age	Month	13.75	4.06	13.5	0.18
Motor reaction	Sec.	0.56	0.11	0.57	-0.27
Dribble change direction	Sec.	18.7	1.67	19.5	-1.43

Table (1) shows that the skewness coefficient of all the variables ranged between ±3 and thus the sample is homogeneous.

Table (2). Equivalence between the control and experimental groups

Tests	Units	Control group		Experimental group		(t) value	Indication type
		Mean	SD	Mean	SD		
Motor reaction	Sec.	0.54	0.14	0.59	0.15	1	No sig.
dribbling change direction	Sec.	18.6	1.35	18.8	1.93	0.27	No sig.

Tabular (t) (1.73) . Significance level (0.05). degree of freedom (18).

It is evident from Table (2) that the control and experimental groups are equivalent in the research tests, as the tabular T value (1,1.27) respectively for the kinetic reaction and the patency by changing direction is greater than the tabular (t) value (1.73) below the significance level. (0.05), and the degree of freedom (18).

Means, devices and tools for research

- Arab and foreign scientific sources.
- Observation and experimentation.
- Tests and measurement.
- The International Network (Internet).
- Electronic calculator.
- A device for measuring the reaction time.
- Legal basketball court, legal basketball (20).
- Chair number (7), a table.
- Stopwatch .
- Colored chalk.

Suggested cheat ball

It is a legal basketball that the researcher has placed rubber leather bulges on the surface of the ball using an adhesive. And repeat the patina. The researcher took into account the degree of deflection of the ball in an appropriate way to achieve the goal of the research by placing the leather bulges at an appropriate height and that the ball does not deviate outside the range of the player's arms when they are extended to the side according to the principle of the player's vertical cylinder. The researcher has prepared (5) balls to be used by the experimental group. The researcher presented the proposed deception ball to (experts and specialists in basketball) to ensure the validity of its use (Fig. 1,2).

Figure 1. shows the deflection of the ball

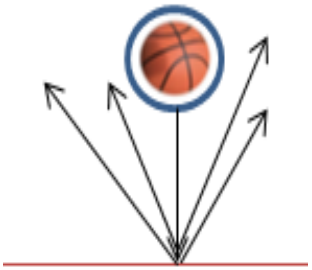

Figure 2. Shows the proposed trick ball

Exploratory experience

For the researcher, the exploratory experiment is "a practical training in order for him to stand on the negatives and positives that he may face when taking the test so that he can avoid them in the future" [(1)], and it took place on (Saturday) corresponding to 1/2/2021, at three o'clock. In the afternoon on the members of the research sample (the experimental group), the purpose of which was to ensure that the players understood the method of using the proposed deception ball and its purpose. The control and experimental research sample for testing procedures and preparation for the application of the research experience.

Research tests

Complex kinetic reaction time test

Tools

- A device that measures the reaction time to (0.001) of a minute.
- A table on which the examinee sits and three white lamps are installed on it. Each lamp is connected to a switch to close and at the same time is linked to a clock to measure the time.
- Measurement: the examinee sits on a chair in front of the table and places the palm of the hand on the table and the fingers are above the three closing buttons without touching them.
- The test supervisor turns on one of the three lamps and the examinee presses the button that turns off the lamp and in turn stops the measuring clock.
- The measurement is recorded and three attempts are repeated for each subject, so that the interval between one attempt and the other is from (25 to 30) seconds.
- The mean is calculated for three attempts, and the result of each player is recorded."[(3)]

Dribbling test (plump)

- Objective: To measure the speed of the dribbling between a group of poles.
- Equipment and tools: 6 bars, a stopwatch, basketball, the starting line is 1.5 m away from the first post, and the distance between the remaining pillars is 2.40 m.
- Method of performance: The tester stands with the ball behind the starting line, and when he hears the start signal, he runs between the pillars with the continuous pat the ball, provided that the laboratory performs this work back and forth to the finish line until it crosses the starting line.
- Recording: Calculates the time taken for this attempt, i.e. the distance from the beginning - the end - the beginning.
- Conditions :

The tester is allowed to practice the test before starting.

- The laboratory must perform the tamping process with either hand (right - left).
- The laboratory is allowed only two attempts to be counted as the best attempt" [(5)].

Field research procedures

Pretest measurement

The Pretest measurement was carried out to test the motor reaction and skill of the drum by changing the direction on the research sample, the control and experimental group, on (Sunday) corresponding to 3/1/2020 at 3 pm in the Hit Youth Forum, and the researcher and the sample members adhered to the terms of the research procedures.

Suggested exercises

Through the researcher's field experience, a number of exercises were prepared that fit the sample level. As the experimental group implements the proposed exercises with the trick ball, while the control group performs the same exercises without using the proposed trick ball. The exercises are applied in the main section of the training unit, as they take a capacity of 20-25 minutes (3-4) exercises in each unit, and the program took (4) weeks with (3) units per week from (Sunday, Tuesday, Thursday).) under the supervision of the specialized school coaches.

Posttest measurement.

The post-measurement was carried out to test the motor reaction and the skill of the drum by changing the direction on the research sample, the control and experimental group, on (Tuesday) corresponding to 2/2/ 2021 at 3 pm in the Hit Youth Forum.

Results and discussions

Table (3). Presentation and analysis of the results of the pre and post research tests for the control group

Tests	Units	Pretest		Posttest		Mean diff.	SD diff.	(t) value*	Type of indication
		Mean	SD	Mean	SD				
Motor reaction	Sec.	0.54	0.14	0.43	0.22	0.065	0.045	6.5	Sig.
Dribbling change direction	Sec.	18.6	1.35	16.2	1.24	2.4	1.11	6.85	Sig.

Tabular (t) (1.83). Significance level (0.05). degree of freedom (9).

Table (3) for the control group sample shows the results of the Pretest and Posttest measurements in the research variables that the differences are significant in favor of the Posttest measurements, as the calculated (t) value for the motor reaction test was 6.5, and the calculated (t) value was 6.85, and both values are greater than the tabular (t) value of 1.83 at a level of significance 0.05 and a degree of freedom of 9.

Table (4). Presentation and analysis of the results of the pre and post research tests for the experimental group

Tests	Units	Pretest		Posttest		Mean diff.	SD diff.	(t) value *	Type of indication
		Mean	SD	Mean	SD				
Motor reaction	Sec.	0.59	0.15	0.30	0.03	0.3	0.09	15	Sig.
Dribbling change direction	Sec.	18.8	1.93	13.1	1.81	5.7	2.00	9.04	Sig.

Tabular (t) (1.83). Significance level (0.05). degree of freedom (9).

Table (4) for the sample of the experimental group showed the results of the Pretest and Posttest measurements in the research variables that the differences are significant in favor of the Posttest measurements, as the calculated (t) value for the motor reaction test was 15, and the calculated (t) value was 9.04, and both values are greater than the tabular (t) value of 1.83 at a level of significance 0.05 and a degree of freedom of 9.

Table (5). Presentation and analysis of the results of the post-tests between the control and experimental groups

Tests	Units	Pretest		Posttest		(t) value	Indication type
		Mean	SD	Mean	SD		
Motor reaction	Sec.	0.43	0.22	0.30	0.03	2.06	Sig.
Dribbling change direction	Sec.	16.2	1.24	13.1	1.81	4.49	Sig.

Tabular (t) (1.73) . Significance level (0.05). degree of freedom (18).

Table (5) of the Posttest measurements of the control and experimental groups shows that the results were in favor of the experimental group, as the calculated (t) value was 2.06 for the motor reaction test, and the (t) value for the tamping test by changing direction was 4.49, and both values were greater than the tabular (t) value of 1.73 at a level A significance of 0.05 and a degree of freedom of 18.

It is clear from the presentation and analysis of the results in Table (3,4) of the pre and post research tests for the control and experimental groups in the motor reaction and the skill of the drum by changing the direction that the development was the share of the two groups. And the skills to be improved, the process of repetition of the exercise for the skill side is "in order to improve the motor paths of the skill"[(4)].

And that the planned experimentation process is able to reach the players to adapt when performing the exercises and for both groups, despite the different level of difficulty. Adaptation means stability in the skill performance even if the performance positions change.

It is clear from table (5) that the exercises applied by the experimental group that used the proposed deception ball had a clear effect on the temporal results of the motor reaction and the skill of clapping between the characters more than the control group, and the researcher attributes this development to the fact that these exercises have been developed Players in the conditions of performing the actual matches in terms of using the skill of clapping in the way of deception with the ball, which is followed by the performance of other skills such as cutting, handling or shooting, and this means that the exercises using the deception ball have provided a group of movements that perform a level of difficulty when training has contributed to increasing the speed of performance ,[(6)] as a result of the player's repetition while he is under the pressure of the visual tracking provided by the tool (the deception ball), and the performance coincided with adjusting the cognitive abilities with the tool and the place. The deceiver with the ball can use different types of deceptions in accordance with the motor performance of these movement basics so that he can mislead the defender and spoil his defensive timing or balance, and then not To have a better field for passing, dribbling or shooting at the basket"[(2)].

The basketball player who is skilled is the one who works to change his speed by changing the speed in the drum and using the various tricks of the defender, thus he cannot anticipate the movement of the attacker, and this is what characterized the proposed exercises using the trick ball, which led to the superiority of the experimental group over the control group that The same exercises were applied, but without using the deception ball, and thus the researcher achieved the objectives and research hypotheses.

Conclusions

1 The exercises using the proposed deception ball had a positive effect on the motor reaction and the skill of clapping by changing the direction, but the superiority of the experimental group over the control group was also obtained by the effect of using the same exercises without the deception ball.
2 The proposed deception ball achieved the principle of gradation in performing the exercises from easy to difficult for individual experimental group.
3 The proposed deception ball increased the excitement and suspense to apply the exercises.

Recommendations

1 Benefiting from the exercises and the deception ball suggested by basketball coaches for specialized schools because of their effective impact in the time of the motor reaction and the skill of the drum by changing the direction.
2 Suggesting and designing other means to develop basic basketball skills.
3 The Ministry of Youth and Sports Federations should provide equipment and tools for specialized schools to develop the players' level.

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