

The effect of cognitive strategy on the performance of some offensive skills in basketball for students

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ABSTRACT

Perception and learning strategies have become an urgent necessity to master the learning process and the industry of the academic sports teacher, in light of the emerging conditions of the educational process, especially in recent times between e-learning and blended education, which negatively affected students' mastery of many skills of the basketball game, so the cognitive learning strategy, which It works to activate the mental processes of the learner, which represent the essence of learning in the mind. It is one of the effective strategies that service learning and development, including learning and developing basketball skills and upgrading them because they represent cognitive means that urge the learner (students) to employ mental processes during learning in the direction of optimal learning. Among the foregoing, the importance of the research lies in the contribution of the perception strategy to the development of the educational process of basketball subject in light of the negative reflection of the Corona pandemic on students' learning of the skills of its performance and its law and the industry of the academic sports teacher at the best level of achievement.



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1. Introduction

Perception and learning strategies have become an urgent necessity to master the learning process and the industry of the academic sports teacher, in light of the emerging conditions of the educational process, especially in recent times between e-learning and blended education, which negatively affected students' mastery of many skills of the basketball game, so the cognitive learning strategy, which It works to activate the mental processes of the learner, which represent the essence of learning in the mind. It is one of the effective strategies that service learning and development, including learning and developing basketball skills and upgrading them because they represent cognitive means that urge the learner (students) to employ mental processes during learning in the direction of optimal learning. Among the foregoing, the importance of the research lies in the contribution of the perception strategy to the development of the educational process of basketball subject in light of the negative reflection of the Corona pandemic on students' learning of the skills of its performance and its law and the industry of the academic sports teacher at the best level of achievement. The educational process for all disciplines, including the academic sports field in the subject C Basketball for students, and through the researcher's follow-up with the students of the fourth

stage in the College of Physical Education and Sports Sciences / the University of Kufa, she noticed that there is a weakness in their skilful performance of the requirements of the basketball game, whether in basic skills or offensive technical performance skills, in addition to the weakness of the articles of the game law in the arbitration process. The researcher attributes this to the failure of students (the sample in question) to achieve an educational volume that meets the requirements of basketball during the study stages. In the first stage, the learning system was present in the basics of the game only for skills and law.

The objectives of the research: to prepare an applied educational curriculum for the perception strategy of legal and some offensive knowledge in basketball for students of the fourth stage / College of Physical Education and Sports Sciences / the University of Kufa, to identify the effect of the applied educational curriculum for the perception strategy in legal and some offensive knowledge of basketball for students of the fourth stage / College of Physical Education and Sciences Sports / University of Kufa.

practical part

The experimental design with two experimental and control groups was used, with a pre-and post-test, on students of the fourth stage / College of Physical Education and Sports Sciences / University of Kufa, for the academic year (2021-2022), and their number is (67) students representing the two divisions (B, C) of males only. Where the researcher chose all the students in the research experiments (exploratory, main), and by dividing them randomly into two groups (control, experimental) by drawing lots, where division (b) represented the control group, and division (c) the experimental group

2. Methodology

After reviewing many scientific sources and references in the field of basketball, as well as conducting some personal interviews with experts and specialists, about identifying the research variables that represented the problem of the current research (the academic achievement of basketball for students), represented by legal knowledge as a theoretical subject, and the performance of skills Offensive as a practical subject, and through the opinions of experts and specialists who were consulted, the research variables and their tests were determined by conducting a reference survey of the sources and references of the basketball game.

First: test the legal knowledge of basketball:

The achievement test of legal knowledge of basketball was adopted for students of physical education and sports sciences, which was built and codified by [3].

Second: follow-up test:

The purpose of the test: measuring the speed of follow-up performance with basketball.

Tools used: adhesive tape, leather measuring tape (20m), indicator number (1), electronic stopwatch, whistle, one basketball, papers and pens for recording.

Performance description: The defending player stands with the marker between his feet and his back on the board while holding the ball over the head with the arms, and upon hearing the start signal through the whistle, the player performs a forward half-turn movement for the right man and then throws the ball on the board to jump, follow-up and return with the ball at the first mark To perform the follow-up from the other side, by performing a forward half-turn movement for the left leg and returning to the first mark, as shown in Figure (1) with the six steps.

Test conditions:

Execute test steps quickly.

The position of the defending player before starting the performance, in which the knees are bent.

1. Before catching the ball from above, the player takes a step towards the board, as the right-hand man advances from the right and the left-hand foot advances from the left.
2. Touch the ball on the board from both sides, with eight repetitions, and return to the first mark.

Test administration:

- Timer: Giving the start and end signal through the whistle with the timing.
- Recorder: Calls names and notes performance with recording the test time.

Score calculation: The player records the time it takes to perform the test for the eight attempts by adopting the start and end whistle.

Third: Testing the accuracy of the modified peaceful aiming:

- The purpose of the test: measuring the accuracy of the peaceful shooting in three directions.
- Tools used: basketball court, sign number (9), whistle, one basketball, papers and pens for recording.
- Procedures: The player stands at a distance of (14m) from the basket (the point where the column descending from the centre of the ring falls to the ground) on the right or left side (according to the preferred hand for the start), and when he indicates the start, he taps between the three figures and in the form of a zigzag to reach the basket as in the figure (3).
- Test procedures: Three signs are placed as follows: The first person is (6m) away from the basket, the second person is (4m) away from the second person, and the third person is (4m) away from the second person.
- Performance method: The tester starts from the preferred side, and when he hears the start signal, he makes a pat between the signs and at full speed to put the ball in the basket from the side (right, front, left) and for one time only, as in Figure (3).

Registration: Grades are distributed as follows:

- If the ball touches the board and the hoop and enters the basket, the tester will be given a (1) mark.
- If the ball touches the board and does not touch the ring and enters the basket, (2) marks are given.
- If the ball does not touch the board and touches the ring and enters the basket, a score of (3) is given.
- If the ball did not touch the board or the ring and entered the basket, the tester would be given (4) marks.
- If the ball does not enter the basketball, the tester will be given (0).

The total score for the test is calculated by dividing the correction result by the performance time.

Fourth: Compound skill performance test (deception from stability, receiving the ball, shooting peacefully):

- The purpose of the test: to measure the performance of the composite skill (deception from stability, receiving the ball and shooting peacefully).
- Equipment and tools: basketball court, (5) basketball, adhesive tape, (5) indicators, whistle stopwatch.

Performance description: The player stands at point (a) upon hearing the starting whistle, deceiving the defender standing at point (c) by leaning to a specific direction, then receiving the ball from his teammate standing at point (b), and shooting peacefully towards the goal, as shown. Figure (4), and repeat the performance for 40 seconds.

Registration: Grades are distributed as follows:

Three points are calculated for each successful attempt (ending with a successful shot).

Two points are calculated for each failed attempt (ending in a failed shooting).

- If the time expires before completing the attempt, one point is calculated for the skill that was performed.

Exploratory experience:

For the researcher to obtain objective results, she conducted the exploratory experiment of skill tests, and

some perceptive strategy exercises, on Monday 10/25/2021, on a sample of (6) students from the research community, and the aim of the exploratory experiment was the following:

- 1- Checking the safety and accuracy of the tools used in the tests.
- 2- The suitability and clarity of skill tests for the sample, and knowledge of the difficulties facing the sample and the researcher during application.
- 3- Calculating the time taken for the different tests when applied to take advantage of that when conducting the main research experiment.
- 4- Training assistants on how to apply tests and how to record grades.
- 5 - Taking into account the safety of students when performing tests.
- 6- The extent of the student's response to the cognitive strategy exercises.

The main experience:

Pre-tests:

The researcher conducted tribal tests on the research community, which numbered (67) students, who represented the control and experimental groups, on Monday and Tuesday corresponding to 1-2/11/2021 in the closed sports hall of the College of Physical Education and Sports Sciences / University of Kufa, so she registered on the first day of the tests. Tribal measurements (height, weight, age, educational age), and test results for (), and on the second day, the test results for (legal knowledge, offensive skills) were recorded, and the researcher gave a brief explanation of how to perform the tests and their sequence, as proven The researcher collects all the conditions related to the tests (time, place), to be able to create similar or close conditions when conducting the post-tests.

Cognitive strategy exercises for research:

To obtain the best results in developing the research variables (legal and offensive knowledge of basketball), among the students of the research community, a curriculum for special educational exercises was prepared, which was based on the evaluation of the opinions of some experts and specialists, referred to in so that the curriculum is of a scientific level commensurate with the capabilities of the sample Achieving a state of progress in the desired level of skill and achievement. Here are some details about the methodology used for the exercises:

- The educational curriculum prepared for basketball is for students in the fourth stage / College of Physical Education and the Sports Sciences / University of Kufa.
- The educational curriculum for the exercises was applied for a period of (12) weeks, for the period from Monday 11/8/2021 to Monday 1/24/2022.
- The educational curriculum for exercises included (12) educational units, with (4) educational units per month.
- The total lecture time is (120) minutes, which is allocated for cognitive strategy exercises (70 minutes) within the main section of the educational unit, as shown in the details of the educational units in Appendix (5).

Post exams:

Post-tests were conducted for the research sample, the two groups (control, experimental) on Monday and Tuesday corresponding to 31/1 - 1/2/2022, after completing the implementation of the educational curriculum, and the researcher worked to provide the same conditions in terms of place, time, tools, method of implementation, and the work team who did the pretests.

Statistical means:

The researcher used statistical methods in the ready-made program for the statistical package for social

sciences (SPSS).

3. RESULTS

This chapter includes presenting the results of the pre and post-tests for both the control and experimental groups, and these results have been analyzed and discussed to reach the research objectives and validate the hypothesis. The (t. test) was used for correlated and independent samples, to find out the significant differences in the arithmetic mean between the control and experimental groups, and to verify the effect of the perception strategy used in developing the legal and some offensive knowledge of basketball in the research sample. Presentation and analysis of the results of pre and post-tests (legal knowledge, offensive skills in basketball) for the control group:

Table (1): The arithmetic means standard deviation, the calculated (t) value, and the significance level of the tests show the pre and post-research variables of the control group.

Research variables	Unit of measurement	Pre-test		Post-test		Calculated t-value	sig
		mean	Std. deviation	mean	Std. deviation		
Legal knowledge	Degree	19.66	2.99	33.60	3.85	22.44	0.000
Follow-up	sec	33.94	1.34	30.79	2.59	5.40	0.000
Multi-directional shooting	Degree/sec	0.115	0.039	0.184	0.034	7.78	0.000
Combined offensive skills (deception, receiving, shooting)	Degree	3.73	1.43	5.60	1.35	9.72	0.000

Presentation and analysis of the results of pre and post (legal and offensive knowledge of basketball) tests for the experimental group:

Table (2): The arithmetic means standard deviation, the calculated (t) value, and the significance level of the tests show the pre and post-research variables of the experimental group.

Research variables	Unit of measurement	Pre-test		Post-test		Calculated t-value	sig
		mean	Std. deviation	mean	Std. deviation		
Legal knowledge	Degree	18.50	2.40	40.28	2.30	57.24	0.000
Follow-up	sec	34.50	1.02	28.75	2.28	10.18	0.000
Multi-directional shooting	Degree/sec	0.100	0.050	0.219	1.58	8.59	0.000
Combined offensive skills (deception, receiving, shooting)	Degree	3.28	1.63	7.85	1.56	20.08	0.000

Presentation and analysis of posttest results (legal knowledge, offensive skills in basketball) for the control and experimental groups:

Table (3): The arithmetic means, standard deviation, the calculated (t) value, and the level of significance of the tests show the dimensional research variables for the control and experimental groups.

Research variables	Unit of measurement	Pre-test		Post-test		Calculated t-value	sig
		mean	Std. deviation	mean	Std. deviation		
Legal knowledge	Degree	33.60	3.85	40.28	2.30	5.62	0.000
Follow-up	sec	30.79	2.59	28.75	2.28	2.23	0.034
Multi-directional shooting	Degree/sec	0.184	0.043	0.219	1.58	3.86	0.001
Combined offensive skills (deception, receiving, shooting)	Degree	5.60	1.35	7.85	1.56	4.16	0.000

4. DISCUSSION

Discussing the results of pre and post-tests (legal knowledge, offensive skills in basketball) for the control group: We show, for the results of the tests for measuring the research variables (legal knowledge, follow-up, the movement of the two men during defense and coverage, peaceful multi-directional shooting, compound offensive skills), for the tribal and remote control groups, and the emergence of significant differences between them and in favor of the post-tests, and the researcher attributes these significant differences between The pre and post tests of the control group are relatively simple to the results of the experimental group, to the quality of the skill exercises used by the subject teacher, which also included exercises to develop the defensive and offensive side of basketball coupled with knowledge of the law subjects through it, as the control group is also the students of the fourth stage, and the teacher seeks To develop it in all areas of preparation for learning and academic achievement of the subject through a specific educational curriculum, so the subject teacher and his exercises had the most prominent role in the development of his group, in addition to that the continuity and regularity of the students to attend, and their response to the exercises of the educational units during the lesson throughout the three-month learning period, which coincided With the research procedures of the researcher, and the accompanying multiple iterations This practice of skillful and offensive exercises under the supervision of their teacher and his experience in education and training, with the nature of the age group in that, led to the development of the skillful performance of the control group, where he sees (Yarub Khion, 2002) in the learning development stage, "The coaches and teachers emphasize the repetition of the performance of the basic and special skills for each game until Its implementation is automatic, and this is reflected in its development, and this was also indicated by (Amin Anwar Al-Khouli, Osama Kamel Ratib, 1999) "Repetition is a basis for learning, and determining the number of repetitions of performing a movement is an important matter, as it depends on the acumen of the coach and his experience to a large extent in Determine the optimal number of appropriate repetitions for each dental stage.

The correct perception of movement and attack through the explanation and the specialized exercises of the perception strategy, which the researcher did for her experimental group, has led to the gradual development of the performance of these skills, and this gradual development of the motor performance of the skills has helped in improving the motor perception of the skill during the stages of the educational curriculum, and then The development of motor performance worked on reducing errors, and increasing the motor perception of performance and its development, as a result of the lack of corrected errors with the researcher's exercise methodology, as indicated by (Mohamed Lotfi Al-Sayed, 2006) "The better the level of motor performance, the better the motor perception of the learner, and therefore the perception The total motor performance improves as a result of progress by increasing the educational level.

Finally, the researcher believes that the development of her experimental group in the research variables is the result of the good psychological factor, which reflected positively on the students in learning the requirements of basketball for the perception strategy, and its diverse and different philosophy to the method of the subject teacher, represented by the effective practice of exercises and their diversity and conditions similar to playing and increasing the specific repetitions and the gradual level and installation In skill performance, which led to an increase in students' motivation to skillful learning and the desire and commitment to perform exercises during the educational units of the lesson and reflected on the progress of their level in those variables, as (Osama Kamel Ratib, 2005) confirmed that "the self-motivation of the emerging player stems from within him so that He enjoys his presence in every training unit, and his absence is considered as losing something valuable, important, and beloved to him. The motive for continuing to practice stems from the nature of the activity that he loves and the performance that he enjoys, which represents a new experience for him. The performance was characterized by the spirit of competition

about the correct performance of the various exercises, as (Mufti Ibrahim Hammad, 1996) confirmed: Choosing some exercises that achieve comprehensive growth for practitioners plays an important role in making every young person find himself in them. Such exercises may lead to an upgrade in the level of skill, physical, or cognitive elements. etc. Therefore, various exercises would lead to awakening the spirit of enthusiasm among young people. increase their ability to learn.”

5. CONCLUSION

In the light of the results obtained by the researcher through the field experience and her use of appropriate statistical methods in describing and inferring about them, the researcher reached the following conclusions:

1. The perception strategy has a positive impact on the development of legal knowledge of basketball for fourth-stage students / College of Physical Education and Sports Sciences / University of Kufa.
2. The perception strategy has a positive effect on the development of basketball (follow-up, leg movement during defence and coverage), for students of the fourth stage / College of Physical Education and Sports Sciences / University of Kufa.
3. The perception strategy has a positive effect on the development of offensive skills in basketball (peaceful multi-directional shooting, compound offensive skills), for students of the fourth stage / College of Physical Education and Sports Sciences / University of Kufa.
4. The development in the experimental research variables, for the students of the fourth stage / College of Physical Education and Sports Sciences / University of Kufa, through the clear difference of the results of the post-tests of the experimental group confirms the effectiveness of the independent variable and the experimental control.
5. The duration of the independent variable represented by the number of educational units during the lesson for the perception strategy was appropriate in creating adaptations that reflect the extent of development in changing students' behaviour in the research variables.
6. There is a development in the research variables of the control group, but at a rate that may be small compared to the results of the experimental group.

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