

Impact of light exercises in selective cognitive response and handball shooting accuracy performance in Mesopotamia handball players

Ahuda Naji Zaidan

Diyala University, Faculty of Physical Education and Sports Sciences

Qusay Mohammed Hamdan

Diyala University Faculty of Basic Education

Mohammed Kadhim Saleh

Diyala University Faculty of Physical Education and Sports Sciences

Samer Saadoun Abd El , Rida

Diyala University Faculty of Physical Education and Sports Sciences

Search Summary

The study aimed to use exercises specific to light effects and know the extent of its impact in the selective cognitive response and accuracy of the performance of handball shooting skill in the players of the Club of Mesopotamia handball, the researcher used the experimental method and the design of the two equivalent groups with pre- and post-tests, but the research community is made up of handball players in Diyala province (30) players divided into clubs (Diyala, Mesopotamia, Meqdad) The two groups underwent pre- tests and then introduced the independent variable to the experimental group for 12 weeks, while the group left the officer to apply its method of training staff, after which the post- tests were conducted in the same circumstances as the pre- tests and the previous variables themselves. After collecting and tabulating the data, the researcher concluded that the exercises used contributed to the development of the accuracy of the handball shooting skill of the research sample.

Keywords: cognitive response, selective response shooting accuracy, handball.

1-Introduction.

Volleyball is today one of the most widespread games in the world as this game, like the rest of the games, is witnessing a continuous development in the level of performance of its players and the results of its games in attack and defense, which adds educational and training requirements that must be observed in the design of educational and training curricula, that the progress coupled with skilled requirements imposes on us the need for new requirements of detecting motor programs for any dynamic event Or skilled so we had to know how to deal with different types of skills and apply the principles of motor learning in order to reach the learning of skill and benefit from it in various types of life. Also the mental processes associated with physical performance in offensive skills are one of the most important requirements for the performance of a successful attack, rapid sensory perceptions enable the player to take the best place to perform the attack (crushing beating) as soon as possible Mental abilities are improved through the development of their elements, including cognition, which is of great importance in the process of selecting the right response appropriate to motor performance requirements. The problem of research lies in the poor performance accuracy of offensive skills, including the overwhelming high-level beating of volleyball, as a result of the low level of perception, which reflects negatively on the level of response. The objectives of the research included:

1. Know the effect of special exercises used in selective cognitive response and accuracy of the performance of the high-level crushing of the volleyball of the search sample.
2. Know the preference of the special exercises used or the exercises used in the development of dependent search variables.

The research hypothesis indicated statistically significant differences between the two groups. Control and experimentation in post- tests of the search sample.

2- The research approach and its field procedures.

2.1 Research approach.

The researchers used the experimental approach to suit the nature of the research and the design of the two equal groups with pre- and post- tests.

2.2 The research community and its sample.

The research community consists of the 30 players of diyala handball clubs, who represent three clubs: Diyala, Mesopotamia, Meqdadiya. As for the research sample, the club (Mesopotamia) was represented in the application and conduct of the main research experiment, where the percentage of participants (12) players representing (35%) From the research community.

Table (1)
Homogeneity of sample members

Variables	unit scaling	arithmeti c medium	Broker	Deviation Normative	Sprain factor
Visual acuity of the left eye	degree	11. 7	10	4. 64	0.72
Time age	year	22.4	22	2. 11	0.23
Training age	year	5.8	5	1.01	-0. 34

2-3 search tools.

2.3.1 Means of gathering information.

The information was collected from the International Information Network (INTERNATIONAL), Arab and foreign sources, questionnaires, testing and vias.

2-3-2 tools and devices used.

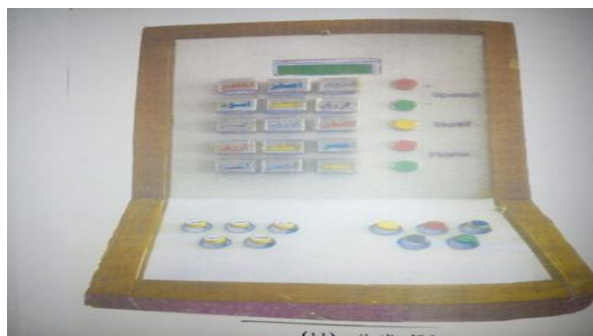
The researcher used the following tools and devices (legal handballs of different colors number (10), colored ribbons, colored dyes, handball court, adhesive tape, Haidar device to measure cognitive response speed, timer timer scanners number (2), electronic calculator (laptop) type (Dell), video camera (Nikone) number (2), selective cognitive response meter.

Field search procedures.

2.4.1 Identify the selected tests in question.

2.4-1-1 Test (Haidar) selective cognitive response speed measurement. (Haidar: 35:2015)

- The device is placed on a table and 20 cm from the edge on which the laboratory sits and assigns its hands on the edge of the table sitting in front of it, where the researcher begins to explain the method of testing in all its details.
- The team determines the speed of operation of the device, which is (2) tha by pressing the speed button and is fixed for all testers, as well as determines the type of plan that the laboratory will test by changing the device's work map (determining the random action sequence of the device) which is constantly changing.
- The laboratory is asked to read the colors of the entire panel, which number (15) and on the laboratory AN approves the name of the color without the dyed color uttering the word, the response is on the color dyed by the word and not on the meaning or name of the word.
- The response is through calls on the right side through the color of the club. On the left side there are one-color appeals, but the color of the appeal is written on the thrill board.
- When the laboratory is ready for testing, the test begins through the start button, where the programmed device gives random instructions to the club by igniting a light for each peer in the test panel. For the word readable color, the electronic screen records the correct responses with the determination of speed and the type of course of performance plan through numbers appearing on the electronic screen, note that the device is programmed to work for a long minute and then gives the final signal, and after the completion of the specified working time gives the device the final result of the laboratory. Each laboratory is given (2) a try and records the best one of them.



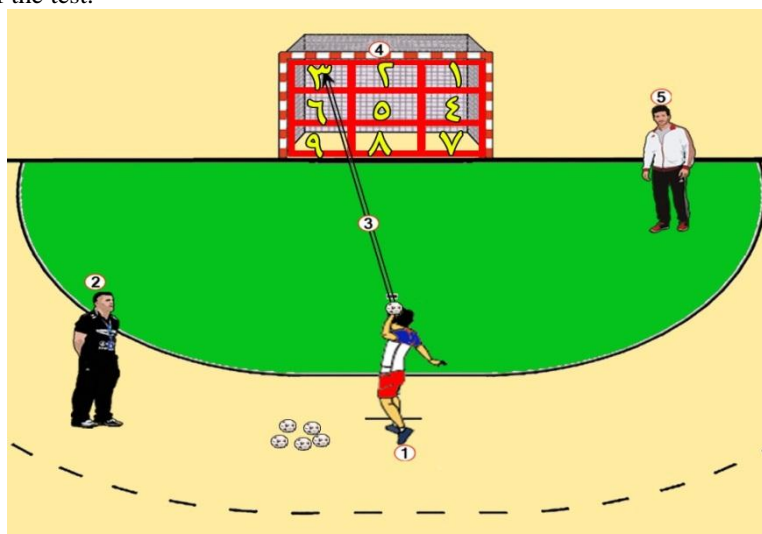
Shape (1)

Haidar Cognitive Response Service

2.4.1.2 Handball shooting accuracy test (Tailor:2001: 485)

The goal of the test: measure the accuracy of the shot with the handball.

- Performance method:
- Draw a handball goal on a front wall and in the form of two lists and a crossbar (2x 3 m) so that the shape that represents the two workers is in touch with the ground (the line of convergence of the wall and the floor of the pitch), and then divides the goal to measure the accuracy of the shot with a handball to (9) rectangles as in form (3) and draws a line on the ground 9 meters away from this form.
- The player shoots from behind the line with a step based on the fact that the one who hits his ball rectangles (1, 3, 7, 9) which represents the four corners of the goal which is 60×100 cm) gets the final score which is four degrees. If the ball hits the rectangles (2 and 8) which represent the area above the head of the goalkeeper and between his feet, which is 60×100 cm) also gets three degrees. If the ball hits the rectangles (4 and 6) which represents the area of the goalkeeper's arms and which is 80×100 cm gets two degrees×. If the ball comes out of that, the player gets zero.
- Each player performs after completing the necessary warm-up ten attempts and therefore the great end of the test.



Shape(2)

(Shooting accuracy skill test performance)

2.4.2 Exploratory experience.

The researcher and N conducted the reconnaissance experiment on 2/10/2020, on players (sample) from the research community who were randomly selected and then excluded from the research community. The main objective of this experiment was to identify:

1. The extent to which the sample understands the tests and their response to the application of exercises and suits their level.
2. Determine how long the tests take.
3. Ensure the validity and efficiency of the devices and tools used in the research.

2-4-3 pre- tests.

The pre- tests for handball accuracy were conducted on the research sample and the selective response speed test was conducted on 5/10/2020 at 3 p.m. and on the indoor hall playground closed at the University College of Mesopotamia.

2.4.4 The main research experience.

After conducting pre- tests, the search experiment was launched on 10/10/2020, as described in table(2)

The table (2) details the overall work of the research experience.

to	Details	Number	Time/minute	Total
1	Number of weeks to work with the experiment	12	150 D	1800 D
2	Total number of educational units	36	50 D	1800 D
3	Number of units per week	3	50 D	150 D
4	The actual performance of the curriculum in the main section	36	40 D	1440 D
5	The rest between the exercises the main section	36	5 D	180 D

2.4-5 Post- tests.

After the completion of the main research experiment on 28/12/2020, the post- tests of the search sample were conducted. On 3 January 2021, the researcher conducted the post- test of the speed of selective response and the following day on 4 January 2021, the tests were conducted and the researcher followed the same method of performing pre- tests under the same conditions and under the same spatial and temporal conditions and using the same tools as well as the presence of the auxiliary team in both tests while applying the sequence of tests.

2-4-5 statistical means.

The researcher used the spss statistical bag to process the data and extract the results.

3- Presenting, analyzing and discussing the results.

3.3 View the results of post- tests in the Selective Motor Response Test (Haidar) and the handball accuracy skill testing and analysis of the experimental and controlled groups.

Table (3)

It shows the values of computational circles, standard deviations, computational differences, calculated value (t) and the significance of the differences between the results of the post- tests in the selective kinetic response test (Haidar test and the handball accuracy skill test for the experimental and controlling group Tin).

Statistical features Variables	Unit of measurement	Control Group		Experimental Group		Error rate	Indication on 0.05
		A	STD	A	STD		
Haider's selective motor response test.	degree	23. 81	1.75	27. 46	1.64	0. 001	Slab
Shooting accuracy skill test	degree	22. 14	1.26	28. 39	1.75	0. 000	Slab

3.2 Discussion and analysis of the results of post- tests in selective cognitive response tests and handball accuracy skill for experimental and controlled groups.

Table 3 shows us the existence of moral differences in the cognitive selective response test and some post- handball shooting accuracy test for the controlled and experimental research groups and for the benefit of the experimental group and attributes this development to the contribution of exercises designed from Researcher Wen accepted to develop the skilled performance of the learners because it carries with it cognitive characteristics that had a great and obvious impact on performance. Where the researcher sought to make an internal change in the unconscious mind and reach him the experience of flow, in which the player has a great deal of awareness. This is what Hamed Suleiman points out (41:2012) that reaching a high degree of voluntary control can reach cases of alternative awareness. It is called the so-called flow experience, I have been able to deliver the player to the highest level of cognitive response selection associated with the type of exciter, which reflects positively on the speed

of performance and therefore more effective in achieving results, because the previous experiences he learned in the educational units have produced a reservoir of information on how to deal with the largest number of external excitings he is exposed to during the game, and these Accumulated experiences of how to select the response from several responses to achieve greater results. This is consistent with ray (Wajih Mahjoub and others:220:2013) ((The speed of sensory perception in a good learner indicates previous experience and wide knowledge as well as refers to the catalyst contributing to the perceived form appears simultaneously or by fractions of a second^{difference})). Researcher Wen also attributes this to the integrity of the curriculum applied by the use of some visual techniques, and in accordance with the variables adopted by researcher Wen in the study presented to her the experimental sample to the period of application of the vocabulary of the curriculum, and that the value of the curriculum designed using some technique Visual inputs have provided the opportunity for learners to develop the abilities of the cognitive sense of mobility, cognitive and transitional speed and to act safely and take the most possible opportunity to achieve the optimal goal, which is possessed by the students members of the experimental research sample, which reflected on the accuracy of learning some of the handball shooting skills under consideration.

4- Finale

The researchers concluded that the visual exercises designed and used in this study helped to develop the selective cognitive response and therefore contributed to the development of some mental skills in the research sample considering that perception is one of those skills, which reflected positively in the development of the accuracy of handball shooting skill for the research sample, emphasizing the use of visual exercises in training units and linking them with the basic skills of the handball game, and emphasizing the use of more complex visual exercises and new ideas than those used by researcher Wen in the training units.

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