



The effect of special exercises according to the practice method in the development of the strength characterized by speed and speed of motor response in table tennis players

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Abstract

The educational process and its methods continue to occupy the minds of many researchers and those interested in teaching methods and kinetic learning, so several opinions have emerged in this area aimed at finding the best formulas for learning in general and motor learning in particular.

"Many scientists have agreed that students do not respond to the learning process in one way and that new and different educational methods must be used to build and develop the abilities and knowledge of students" ⁽¹⁾, which means that the teacher has the ability to renew and be informed of several teaching methods to address the different situations he faces during the educational process and prepare the curriculum for the development of physical and motor qualities during the lesson. The researchers considered the use of special exercises that work to develop the speed of punching as well as the speed of the motor response to them according to the method of practice by the orientation of the teacher, which is one of the direct methods of teaching and intensive training taking into account the times of rest, and the researchers assumed that there are statistically significant differences between tribal-remote tests of the experimental research game in the characteristic force of speed and speed of motor response.

The researchers used the method of one experimental method to solve the problem, and the sample consisted of the students of the Faculty of Physical Education and Sports Sciences and Bag number of 15 students, and the reconnaissance experiment was conducted and applied the tests related to research, and then the researchers carried out special exercises to develop the distinctive strength of the speed of the arms and the speed of motor response and for a period of (4) Weeks and actually (1) one lesson per week, and after obtaining the results the researchers addressed them through the use of the non-metallic statistics and after analyzing the results the researchers reached conclusions the most important, that the exercises used in the practice method have a positive effect in the development of the characteristic force at speed as well as the speed of motor response.

1- Introducing search: -

1-1 Introduction and importance of research: -

One of the main objectives of the study of sports education in the field of motor, is to learn and develop the basic skills of the scheduled games, and to achieve this must be used the best means, methods and methods accompanied by sufficient knowledge of the characteristics, needs and inclinations of learners to reach better results, and the education and training of students at this age is no different from any other game by preparing modern scientific methods to develop what should be developed and achieve the best results. So you can be

The importance of research as a scientific attempt to benefit from the method of practice) as a teaching method in the field of sports education and how to take into account individual differences in learning the skill of punching, especially left-wing, and compared to other methods and developing its speed as well as identifying the advantages and objectives and impact of the use of the method in the process of learning and working to develop some qualities that must be developed among students of sports education, especially in the boxing lesson, which needs the factor of strength and speed in the performance of punching skills

2.1 Search problem

When building the educational or training curriculum for boxing whether it is in the lesson or in the club and the nature of the game, which is one of the games that needs speed and strength must prepare the preparations working to rehabilitate students or players to be physically ready as well as correspond to the physical and motor abilities and take into account the level of difficulty of exercise where everyone must be able to perform it correctly without increasing mistakes and in a pattern that fits the nature of the method used in The curriculum where the researcher used the method of practice, which is considered one of the direct methods of guiding the teacher as well as developing the speed of motor response through the skill exercises followed by the method "which works to develop neuromuscular compatibilities in order to infect the target as quickly as possible, which the researcher sees the cause of weakness in muscle strength as well as the speed of their motor response, so it is necessary to overcome this type of performance constraints through a prepared educational approach. "¹

3.1 Search goals

- 1- The numbers of a proposed curriculum for students of the Faculty of Sports Education for the research sample
 - 2- Learn about the impact of the curriculum on the distinctive strength of speed and speed of motor response.
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1.4 Search assignments

1- _ There are statistically significant differences between tribal-remote tests of experimental research game in the characteristic strength of the speed of the arms and the speed of the motor response of players.

2- 1- 5 areas of research:-

1-5-1 Human Field:Students of the Faculty of Physical Education and Sports Sciences

1.5.2 Temporal domain:

Monday, December 2, 2020 to Monday, 6/1 /2020

1.5.3 Spatial area:

1- Faculty of Physical Education and Sports Sciences

2- Field search procedures:

1-2 Research approach: -

The researchers used the experimental method in a single group style to suit it in achieving research objectives.

2-2 sample search:-

The research community was chosen in the deliberate manner, represented by students of the Faculty of Sports Education University of Diyala, for the academic year 2019-2020, either sample was selected division (a) and numbered (40 students and 10 students who are not always scheduled, 7 students failed, 3 deferred students and 5 sick students, as students who were responsible and practitioners of the game and students who did not wish to conduct tribal tests were excluded from division A The number of students applying the curriculum to the experimental group in a practice manner.

2.3 Sample homogeneity:

In the process of homogeneity, the researchers used the sample of variables (height, weight,) by using the law of the twisting factor as shown in table (1).

Distribution type	coefficient Convolution	Error Normative	Broker	Deviation Normative	Middle Arithmetic	Variables
natural	0,47-	3,02	65	7,39	63,83	Weight
natural	0,28	3,69	171	9,04	171,83	Length

Table1 notes that all twisting factor values are lower than (± 3) and that all measurements achieve the natural curve.

2-4 Devices, tools used and information collection methods:

2-4-1 devices and tools used:-

- Light-designed pillow.
- A medical balance to measure weight. Number (1)
- Medical ball weighing (3) kg. No. 1
- Bar to measure length and distance.
- Tennis ball collar hanging in the head. Number (1)
- Core i5. Dell type
- Tennis balls. Wildon Number (6)
- Dumbbells (4) Weight (1000) g
- Whistle. Fox Type Number(1)

2-4-2 And the means of gathering information:-

- Arab and foreign sources and references.
- Testing and measurement.
- Expert opinion survey form to determine the most important physical abilities.
- Skill performance evaluation form.
- Registration forms for boxer tests.
- Interviews.
- Auxiliary staff.
- Internet information.
- Note.

2-5 field search procedures:

2-5-1 _ tests used in research: -

The researchers used a codified test to measure the characteristic strength of the speed of the arms as well as a codified test to test the speed of motor response.

❖ First test: Test the distinctive strength of the speed of the arms (front ¹ base (bending and stretching arms) continuously for(10)seconds

Purpose of the test: Measure the strength of the muscles of the arms at speed.

Tools: playground, electronic stopwatch, whistle to give the start and end signal.

Unit of measurement: repetition

Registration route: The biggest repetition is calculated during(10)tha.

Test specifications: From front base mode, bend arms and extend them as much as possible in(10)seconds.

❖ **The second test is about responsiveness speed.**

The dance ball ^{test.2}

The purpose of the test: to measure the speed of the motor response and the correct timing of the boxers.

Measurement method: Test the number of correct punches that are paid to the ball within ten seconds

2.5.2 Reconnaissance experiment

The reconnaissance experiment is one of the most important necessary measures that researchers have to do before conducting its main experiment, in order to know the initial picture of the main experiment and identify the validity of the devices and tools used and indicate the requirements of accurate and correct work free of difficulties and ensure the availability of safety and safety conditions when carrying out tests, and on this basis the experiment was conducted Reconnaissance on a sample from outside the research sample, a group of 3 students of the Faculty of Physical Education and Sports Sciences, on Sunday, 24 December 2019 at 10:00 a.m. in the boxing hall of the Faculty of Physical Education and Sports Sciences.

2-5-3 Pre-Test :

The researchers conducted tribal tests before starting to give prepared exercises on Tuesday, 31 December 2019, as the sample applied the test of the characteristic strength of speed of the arms and after giving a break the speed of motor response was conducted on the members of the research sample in the hall of the Faculty of Sports Education

2-5-4 Main procedures:

The researchers prepared exercises to complement the distinctive strength of the speed of motor response by relying on a set of sources and references in the field of education and after consulting a group of experts supplement No. 3. It is the preparatory part for learning a new skill as well as the use of resistances and exercises prepared in the curriculum to develop the speed and motor response of the 15 research sample members for (4) weeks and for the period from 6/1/2020 to 27 January 2020.

2-5-5 Post -Test :

The distance tests were conducted on Tuesday, January 28, 2020, in the boxing hall of the Faculty of Sports Education, where the conditions for the implementation of these tests and their instructions were observed under the same conditions and possibilities available and used in tribal tests.

2.5 Statistical means

The researchers used the statistical bag (spss) to extract the results.

3. View, analyze and discuss results:

3.1 Presentation and analysis of the results of the speed-characterized strength test and the motor response speed test for the tribal and remote tests of the research sample:

Table(1) shows the computational circles and standard deviations of the test of strength characterized by the tribal and remote speed of the experimental research group.

Variables	Unit of measurement	Type of tests	Arithmetic medium	Sample	Standard deviation	Standard mistake
Speed power test		Tribal	27.66	6	1,36	.792
		Post	33.66	6	1.94	.557
Motor response test		Tribal	25.750	6	3.817	1.102
		A far away	29.083	6	3.450	.996

Table(2)

Differences in computational circles, standard deviations, calculated value (t), ratio of errors and indication of differences between the results of the tribal and remote tests of the experimental group in physical and motor tests

Variables	auditions				T	Error rate	Significance
		S-F	P	h			
Speed power test	The next one.	-4.417	2.906	.839	5.264	.000	Spiritual
Motor response test	The next one.	3.333	4.185	1.208	2.759	.019	Spiritual

Below 0.05 indication level and freedom score (5)

Table 2 shows that there are differences between the values of the computational circles and the values of the standard deviations of the tribal and remote tests of the experimental group in the test of the characteristic strength of the **arm** reached the computational average in the tribal test (27.66) with a standard deviation (1.36), but in the remote test reached the computational medium (33.66) and with a standard deviation (1.94) and to find the moral differences between the tribal and remote tests the researcher used the test (t) of the interconnected samples, and through table (4) it was found that the distinctive strength of the **arm** morally because the value of the error rate is (000).) smaller than the level of significance (0.05) and the degree of freedom (5), which indicates moral differences between the tribal and remote tests.

In the kinetic response test (ball ball), the computational medium was valued in the tribal test (25,750) and with a standard deviation of (3.817), while the computational average in the distance test was 29,083 and the standard deviation value (3,450) was for moral proficiency. The differences between the tribal and remote tests the researcher used a test(t)ofthe interconnected samples, and through table(1)it was found that the characteristic strength of the moral **arm** because the value of the error ratio is.**019**)smaller than the level of indication (0.05)and the degree of freedom(5)indicating moral differences between the tribal and remote tests.

3.2 Discussion of the results:

By presenting tribal and remote research results to test the characteristic strength of the speed of the arms and testing and analysing the speed of the motor response, it was found that there are moral differences between the tribal and remote measurements of the experimental research group and in favor of telemetry.

The researcher attributes this improvement to the members of the research sample in the results of the strength characterized by the speed of the upper parties the use of exercises that the researcher in its determination improved the speed of strength in the practicing students during the lesson as well as work to develop the response factor that comes as a result of neurological compatibilities, practice and exercises used intensively with the direction of the tide/anchor of that support unit, especially the main part of it

Teaching method experts consider that the training method is one of the best methods that take into account the increase in application time, providing information, clarifications and correcting errors and contributing to the learning process and in order to clarify the importance of this method it is appropriate to mention that my development skill needs a reasonable time to train on it as well as replay and repetition and correcting mistakes and therefore the number of training method is the best method to evaluate the maximum time for application. ¹This method provides sufficient time to practice and provide as much time as possible to apply educated skilled andallows for good relationships between the teacher and students, between students and the skill they learn, and between students. ²

Conclusions and recommendations:

The exercises used in the practice method have a positive impact on the development of the distinctive force at speed as well as the speed of motor response, as it has been shown that the interest in using methods and methods in learning skills and the use of tools and aids improve the required performance based on speed and accuracy.

Sources

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