International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 02, 2020
ISSN: 1475-7192

The effect of combined exercises on the development of some physiological and physical indicators of the Eduard

[1]Ass. Prof. Dr. Ishraq Ghaleb Oudah

Abstract

The effect of compound exercises in developing some physiological and physical indicators of young players in fencing with fencing. The study aimed to prepare combined exercises that fit the capabilities of the research sample, and to identify their effect on developing some physiological and physical indicators of young players in fencing with fencing. The researcher used the one-group experimental method. Included research sample on (8) players representing the central Iraqi national youth team in the fencing weapon blinds, were selected purposively, and proceeded researcher to conduct test data carrying power of arms, legs Wa for agility in addition to the tests of physiological indicators (pulse, high blood pressure, and the pressure of the low blood) For fencing players , Then deliberately T. researcher of the preparation exercises vehicle (physical -mharri) which implementation took eight weeks by (24) and a training unit. The researcher concluded that the combined exercises led to the development of physical variables in a significant degree of statistical significance and for the benefit of telemetry , and the researcher also recommended relying on complex exercises when developing curricula for training fencing with fencing, as well as applying them to the junior category, especially the Specialized Center for Sports Talent for Duelists because of their Of a positive effect in raising the level of physical fitness of young fencer players.

Keywords*: compound exercise, physiological, physical indications, with a foil*

Introduction

Most have seen games sports at all levels globally are clearly superior to the achievement of the objectives and results set by trained planners in the long term , and is the fencing of sports changing short of anaerobic nature as these require sports real - time response in the movement and possession of offensive and defensive means , Therefore, the science of sports training is the basis for the development of the training process, if the physical preparation contributes to the development

[1] University of Baghdad - College of Physical Education and Sports Sciences for Women
Ishraq@copew.uobaghdad.edu.iq

of physical characteristics and the improvement of sports technique and achievement, (**Pulevsky, 2010**) that the importance of complex exercises helps to develop the capabilities of the athlete and mastery of movement performance and raise the effectiveness of training processes and the rapid progress of players in a sport Fencing through these multifaceted exercises that deal with multiple qualities and capabilities that enable the player to adapt to the nature of the activity of the sport of fencing , this sport needs to be developed skillfully, strategically and psychologically and the kinetic performance of the sport of fencing is characterized by strength, speed and agility, as well as the bearing of strength, which we notice in the movements of the players during competitions For points by touching while directing an opponent's fencing weapon His role in the defense and keep the arms from the touch area of the specific legal goal on the body of the opponent and thus needs a player fencing to withstand the force of the two men and arms as an important factor in the performance of the motor attack and defense, as well as in the development of the rest of the physical qualities of the other and which have a prominent role in changing the speed of direction or change the conditions of the body (**Naji, 2010**) , and this ability is a decisive factor in many sporting activities in general and in fencing sports in particular, because it gives the swordsman the opportunity to maintain the level of force production for the longest possible time , including carrying strength in the arms, especially the armed arm that carries and holds the weapon from the basic components Which should not be overlooked when sports exercises in fencing, as well as the bearing of strength for the two men that contribute to the performance of leg movements and stabbing with all agility and economy in effort for the player during competitions, and the importance of research comes to preparing complex and appropriate exercises in the sport of fencing that carries with it the possibility of development and overcoming weakness Outcome in the development of some physiological and physical indicators of youth players in fencing with foil. Therefore, the researcher decided to delve into this topic and benefit from the results of the study and employ its results in a way that serves coaches in the training process and develops the level of achievement in the sport of fencing as a scientific addition in this field. (**Fatima, 2015**)

Research problem *:* The research problem was identified that the sport of fencing is a fast-paced game that requires its practitioners to master all its abilities, whether physical or skill, and as a result of the development in all sporting events and activities, we, as workers in the field of fencing sports, should search for ways to develop and improve performance that there is Weakness in the level of endurance of the strength of the arms and legs during the course of the match and the agility that a fencing player needs when performing offensive skills, and creativity in accomplishing them so that he can reach the opponent's goal and achieve a touch as well as other situations in the game. And most fencing moves require pushing the ground And starting with changing body positions and directions, and the importance of these variables appears in the sport of fencing while trying to succeed in integrating several motor skills into one system, performing

different movements under different, changing and different circumstances, and the fact that the researcher is interested in the course of the game and the level of development in all its aspects. It was noted that there is a lack of the use of compound exercises (skill - physical) and that the reason for this is the lack of training on them from the trainers, noting that they contain a group of important abilities that must be avoided. Training them , hence the research problem is a lack of giving exercises that help develop the carrying power of the legs, arms and fitness in the sport of fencing weapon blinds so felt the researcher of the study of this problem and address numbers exercises vehicle and their impact on the development of bearing strength of the two men, arms and fitness and some indicators of physiological (Pulse - pressure) in order to identify the progress of this sport and its development and try to bring it to the advanced levels .

Research objectives:

1- Preparing complex exercises in the development of some physiological and physical indicators for young fencing players.

2- Identify the effect of exercises vehicle to develop some of the physiological and physical indicators of young players with weapon epee fencing**.**

Search procedures:

Research Methodology **:**Use the T researcher of the experimental approach to design with pre and posttest one group of its suitability to the nature of the research problem.

Search community: The T researcher of the selection of search in a manner intentional community of players young weapon epee fencing season 201 9 - 20 20, totaling (1 1) player as selected T. researcher of (3) player yen random way to experience the reconnaissance and (8) between the sample search key , for the purpose of the homogeneity of the sample in the variables (height, body mass, age training) extracted T. a researcher of the mean, median , standard deviation and coefficient of torsion to it and found that the coefficient of torsion is trapped between (+ 1) , which is indicated by the homogeneity of the group, and table (1) It shows

Table (1) shows the characteristics of the individuals of the research sample

Statistical parameters **Variables**	**measuring unit**	**Arithmetic mean**	**Mediator**	**standard deviation**	**Coefficient of torsion**
Length	Cm	170.66	160.5	2.16	0.463
Body mass	Kgm	66.16	56.5	3.43	-0.479
Training years	year	4.5	4.5	1.04	0

Field research procedures:

Specifications of the tests used in the research:

1- Physiological tests:

- Pulse test.
- Pressure test (low and high).

2- Lactic acid measurement in the blood: used researcher of device to measure the concentration of lactic acid mobile manually type (Lactate Pro 2The second generation: The method of measurement consisted of selecting one of the fingers of the hand to be pricked and the appearance of the first drop of blood, then wiped it, and after the appearance of the blood drop for a second time, the measuring tape connected to the device is placed on it to draw the blood towards the tape, then the result of measuring the percentage of lactic acid appears within 15 seconds.

3- Physical exams:

First: The strength test of the performance of the armed arm (Nagy, 2010)

- *Objective of the test*: to measure the force tolerance of the arm's performance
- *Tools used*: a weight of 500 grams to be attached to the armed arm with a fencing weapon
- *Test description*: From the readiness position, extend the armed arm towards the person to touch and then return the arm backwards so that the elbow of the hand touches a tool placed between the torso and upper arm of the player, and it must be ensured that the armed arm returns to the correct position within (60) seconds.
- *Recording*: The correct repetitions are recorded within (60) seconds.

Second: the progress test and stabbing, then retreating back and stabbing for 60 seconds (**Muhammad, 2014**)

- *The purpose of the test*: to measure the strength of the two men in fencing.
- *The tools*: a legal fencing stadium, complete dueling player equipment, a stopwatch, a scoring form for each player.
- *Performance specification*: put the player stands ready on the pitch wearing legal fencing equipment. At the signal, the player performs the stabbing movement, advances forward, then stabs and returns within 60 seconds without stopping.
- *Registration method*: The number of times to be challenged is calculated within 60 seconds**.**

Third: Test progress and retreat for a distance of 42 meters with a hookah

- - *Objective of the test*: Measuring agility in fencing (**Marawan, 1999**).
- *Conditions for applying the test*: The test requires the presence of three people, one of whom is the temporary director (and the other) and the last is a registrar.

- *Hardware and tools*. Fencing stadium of international sizes , A legal sheikh weapon, . Electronic stopwatch**.**
- *Description of the test*: The tester stands on line (A) in standby mode. When the tester hears the start signal from the test director, which is the beeper sound, it makes the usual advance toward line (C). When it touches this line, it again performs its normal retreat toward line (B) and when it touches this line it makes Again by performing the normal advance towards line (5), then returning by normal retreating to line (C), and upon touching this line, he then performs the normal advance towards line (G) and then returning in normal regression to the starting point (a)
- *Test conditions:*

- That the player has to hit any line the attempt is considered unsuccessful.
- The proctor should alert the tester when he or she touches the line while moving forward or retracting with a word go and when not touching the line with the word (stop means the attempt failed and must be repeated.

- *Registration*: -The work of the recorder is to record the time it takes for the laboratory from the moment the beeper is heard until the moment its front feet cross the starting line, recording the time (s).

Exploratory experience: After selecting tests for research fee T. The researcher of the exploratory experiment 23/2/201 9 on a sample of (3) player yen from non - sample tests of physiological and physical

Main experience:

Tribal tests: were conducted tribal tests of physiological and physical tests on members of a sample search on 26/2/201 9 in the fencing hall.

Implementation of the training curriculum: The preparation of exercises training curriculum proposed after reviewing a range of sources and references on the subject of research , was the start of the application of the training curriculum with effect from the date 28/2/201 9 for a period of eight weeks and included 24 training module by three training per week (Sunday - Monday - Thursday) was the use of the training method of iterative and adopt the principle of increasing the resistance for exercises bearing force and the principle of gradual increase which they are applied these movements to develop the carrying power of arms, legs and fitness for members of the research sample, with all the exercises with a specificity of performance motor movements , legs and appeal and movements the special included in the training program and the emphasis on achieving the right performance , which was one of the main tasks confirmed by the researcher for him to evolution j t assume power and agility execution time exercise took within the main section of the unit training one (20 minutes) , ended with the application of the curriculum on 23/4 / 201 9 As in Appendix (1) .

2-6-3 posttests: was conducted posteriori tests on 27/4/201 9 and in the same circumstances, the spatial and temporal sequencing of the test tribal, 30/4/201 9.

Presentation, analysis and discussion of results:

- **Presentation and discussion of the results of physiological tests of the research sample:**

Table (2) Shows showing the statistical parameters to find the differences between the pre-posttests of the research sample in the physiological tests

Variables	Alone Measurement	Tribal		after me		P	T	indication
		s-	P	s-	P			
pulse	Degree	103,0	1,1	102,5	0,5	0,5	1.7	moral
high pressure	Degree	123,0	24,0	121,0	10,3	2,0	0,2	moral
Low pressure	Degree	73,5	1.7	75,5	1.7	00	00	Immoral
Lactic acid	**L/NMO**	**1,02**	**2,30**	**0,54**	**0.61**	**58,7-**	**2,72**	**moral**

Significant at the level of significance ≤ (0.05)

- **Presentation and discussion of the results of the strength and agility tests of the research sample:**

Table (3) Shows the statistical parameters to find the differences between the pre-dimensional tests of the research sample in the physical tests

Variables	Alone Measurement	Tribal		after me		P	T	indication
		s-	P	s-	P			
Bear arms	time	5,59	1,2	36,5	3,1	23,0	11,5	moral
Bear two men	time	56,5	5,0	40,0	7,2	16,5	2,9	moral
Fit	time	16,99	1,006	15,31	0,4	1,68	3,32	moral

Significant at the level of significance ≤ (0.05)

Discussing the results:

Through the results of Table (2,3) that show the existence of significant differences between the posttest and the pretest and in favor of the posttest, the researcher attributes the causes of physiological changes to the functional body systems (pulse and low and high blood pressure). Her study is consistent with the study of (**Abeer, 2020**) the role of exercise to Accurate adaptation to performance according to the specificity of the fencing game, which requires great effort and special tactics and precise control of the amount and how the energy is spent from the start of the match until the end, as the player necessarily needs to compensate for the acute shortage of oxygen, especially in the last minutes of the match because the lack of oxygen The necessary energy production will negatively affect his performance, because "the player as an integrated unit is affected by different sports situations. Sports movements lead to physiological changes within the athlete's body."

With the increase in physical effort during the first half, as it becomes an increase in the rate of energy demand, and the body resorts to the use of the anaerobic energy system, which is represented in the anaerobic decomposition of both muscle glycogen and blood glucose and thus begins the production of lactic acid, where it works to reorganize the reverse reaction to get rid of lactic acid. By converting it to pyruvic, in the metabolism of lactic acid, therefore any increase in the activity of this enzyme is accompanied by an increase in the elimination of lactic (**Bahaa El-Din, 1999**)

This is consistent with the findings of a study that these exercises prepared by the researcher to develop this ability in the players are appropriate for the movement and skill of the players, because it is close to or similar to the movement path and represented by the type of activity and its specificity. In addition to the continuity and regularity of the players in training, which had a clear role in the development of this movement ability , as well as the interval training method that was used was one of the most important ways to develop agility because it provides adequate comfort to the players (**Measurement, 1997**).As well as the study (**Al-Khaqani, 2011**) that "the use of combined exercises has proven effective in developing the special physical abilities of the members of the experimental research sample ." As well as the study (**Mustafa, 2014**) that "the suggested exercises affected the development of physical abilities effectively (strength characterized by speed, endurance of strength and endurance of speed) among the members of the experimental group.

It attributes the researcher of we cause these differences in the training of bearing force and focus on the development of endurance components and power leads to the development of muscle fibers in the muscles of the body parts when subject to the effects of gravity or resistance, and this response makes the muscle more efficient and capable of development, and this is consistent with what referred to (**Sergey, 2010**) "Strength training with external resistance affects the development of working muscle groups and increases strength endurance, which varies according to the resistance to be overcome."

Conclusions and recommendations

Conclusions:

1- The emergence of significant differences between the results of the pre and posttest for the tests of physiological indicators and in favor of the post test for the research sample.

2- Significant differences emerged between the results of the pretest and the post test for strength endurance tests for arms and legs and agility and for the post test for the research sample**.**

Recommendations:

1- The necessity to emphasize the development and endurance of all kinds of muscular strength among the players and players of fencing.

3- The necessity of emphasizing the coaches using complex exercises in developing the strength endurance of the fencing players as one of the modern training methods.

References

1- Amir, Kazem Jaber; Physiological tests and measurements in the sports field, 1st Edition, Kuwait, That Al-Salasil Publications, 1999.
2- Pulevsky and Sergey; Physical exercises, (translation) Alaa El Din Mohamed Elaiwa, 1st floor, Alexandria, What for Publishing and Distribution, 2010.
3- Bahaa El-Din Ibrahim Salama: The vital representation of energy in the sports field , Arab Thought House, Cairo, 1999, p. 187.
4- Al-Khaqani, Bayan Ali Abd Ali, and (others); Foundations of Fencing, 1st Edition: Oman, Arab Society Library for Publishing and Distribution, 2011.
5- Abdel Zahra, Mustafa Jaseb; Using the Rubber Ropes Method in Some Physical and Kinetic Abilities and Physiological Variables of Young Shapewear Players, Unpublished Master Thesis, College of Physical Education, University of Al-Qadisiyah, 2014.
6- Abdel Fattah, Abu Al-Ela Ahmed; Mathematical physiology and morphology, methods of measurement and evaluation, Cairo, Arab Thought House, 1997.
7- Fatima Abd Malih, and Khalaf, Zafer Namous; Basics of Fencing Training, 1st Edition: Oman, Arab Society Library for Publishing and Distribution, 2015.
8- Majeed, Raysan Khuraibet; Applications in Physiology and Sports Training: Al-Shorouk Publishing and Distribution House, Arabic Edition, First Edition, 1997.
9- Nagy, Aseel; The effect of aerobic endurance exercises at different times in developing endurance (speed and strength of performance) among the girls of the girl club in fencing. Unpublished MA Thesis, University of Baghdad, College of Physical Education for Women, 2010.
10- Abeer Dakhill Hatem Al-Selmi ;. Mostafa. S. Hosen :The Effect of Motor Sense Exercises for Developing Motor and Physiological Abilities of Backstroke and Forward Stroke Service Skill in Badminton, International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 01, 2020 ISSN: 1475-7192, p5619.
11- Measurement & Evaluation in Physical, Health & Recraetion Education. p. 161.

Appendix (1) Compound exercises

1- From the unkred position, the players are facing each other, and one of them is determined by the leader and the second player in the reversal, and the leader moves with rapid side movements on both sides and randomly, as well as using stabbing movements, and the reversal player tries to follow the leader's movements for 30 seconds, then rest 15 seconds, then change the leader and make him the reflection, and the reflection makes him a leader and so on and repetition.
2- From a standing position for rapid annexation of Imam jogging distance of 22:00 and when you hear the signal or Instruct take the standby mode (Alounkrd).

3- From the standing position included jumping high in the place and when you heard the start signal, take the standby position (oncard) 8 times .
4- From the standing position, jump high and when you hear the start signal, perform three successive stabs of stability 8 times.
5- From the standby mode (oncard) half of Dubai was made 8 times in a row, then stabbed once with the right leg and once with the left man .
6- From standby mode, do a 3-step reverse advance, do 10 times and return to standby mode again.
7- From the standby position (oncard), jump to the imam 3 steps, then turn around once and return to the standby position with repeating the exercise on the length of the field 10 times.