

## The effect of training in playlmturk to improve the performance of the stock movement with a sword young player fencing

Alaa M Dhahir<sup>1</sup>, Hussein Makki Mahmoud<sup>2</sup>

<sup>1</sup> Al-Furat Al-Awsat Technical University, Technical Institute of Karbala, Iraq

<sup>2</sup> University of Kerbala, Iraq

### Abstract

During the course of his work, the trainer has difficulty in choosing the training method in which he seeks to achieve the desired goal, the variety of training methods work on the excitement of the players. Including the skill of the movement of the arrow, and to achieve this has been prepared a training curriculum that includes training Alblaymturk to see its impact on the development of explosive power. The aim of this research is to prepare a training curriculum with the training of Blaymturk to develop the explosive ability of the two men to perform the skill of the movement of the arrow for the young fencers with the weapon of sword fencing.

The researcher reached the following conclusions:

1. The effectiveness of the training curriculum in the playllium exercises in the development of the level of physical capabilities.
2. There is a preference for the training curriculum in the exercises Alblaiom left over the traditional training curriculum followed by the trainer in the development of the level of physical abilities.

By reviewing the results, the researcher concluded on the importance of plyometric training on the development of skill performance and the improvement of physical characteristics of fencing players. The movement of the arrow is more focused on the active muscles of the players and on the special physical qualities that are proven by the results.

**Keywords:** playmaker, arrow movement, fencing

### Introduction

The sports training includes many aspects that aim to reach the athlete to achieve, and those aspects choose the training methods and methods to achieve the desired goals. One of the modern methods in the field of sports training is the method of playlmturk, and differed views on whether it is a training method or a training method that can be used in training methods, Gambetta Gambetta (1989) that the playlmturk "training method to take advantage of energy stored in the body" <sup>[1]</sup>, Bastawisy Ahmad (1999) argues that "a method or system of a group of exercises based primarily on muscle elasticity" <sup>[2]</sup> can be used in training methods as one of the methods to improve the explosive force necessary to perform many mathematical skills that rely on strength and speed to achieve By developing Motor performance, including fencing, which requires physical preparation and skill while doing both attack and defense skills retreat. An important attack skill in the game of sword fencing is the movement of the arrow, so it became necessary to train with the playlmturk to achieve the best technical performance of the movement.

After reviewing several studies such as (Herrero 2010) <sup>[3]</sup> and (Lockie2011) <sup>[4]</sup>, which confirmed that the training is one of the most important intensity exercises, which is used to develop some of the physical qualities and skills and philosophical and distinguishes this type of training speed in performance and its effective effect. These qualities and improve the rates of muscle contractions and also increase the efficiency of the muscles of the legs mainly and that training Alblaiom leave a directed method with the aim of developing the explosive capacity of the two men, the main

purpose of this method of training is to increase the ability of the muscle to diastole and during diastole is stored a large amount of energy Wattage in the muscle and this energy is reused during the next constriction and make it Systole stronger. The development of explosive power to perform the movement of the arrow is important in reaching the goal of the competitor in the shortest time to get the touch and achieve the desired achievement and objectives of the training process, and this is where the importance of research.

### Research Problem

The performance of sports skills and movements requires the linking of many physical attributes, and each skill or movement characteristic or more distinguish it from others, and therefore the coach must choose the best method or training method to develop the appropriate qualities and abilities.

The attack with the sword of the fencing sword needs speed and strength at the same time during the performance, and therefore coaches must pay attention to these qualities to raise the level of muscle strength through some exercises Blaymturk for the men in order to develop the explosive ability to develop the work of muscle groups and make them produce maximum strength in the shortest time during the performance.

The researcher noted through the follow-up to local tournaments field observation and documentary films, noticed slow during the performance of the attack movement arrow sword game, as it must be after the armed arm in the direction of the goal of the opponent and the

body's tilt forward, must be pushed forward foot force and speed forward like Without the force and speed (explosive power), the player who performs the attack skill in the arrow movement cannot reach the opponent's goal and get a touch.

**Objectives**

1. Reveal the significance of the differences between the tests before and after the experimental and control groups in the development of explosive power among the players of the Karbala Youth Club fencing.
2. To reveal the significance of the differences between the post-test of the experimental and control groups in the development of the explosive force of the research sample.

**Hypothesis**

1. There are significant differences between the pre and posttests of the experimental and control groups in the development of explosive power among the players of Karbala Youth Club fencing.
2. There are significant differences in the post test between the experimental and control groups in the development of the explosive power of the members of the research sample.

**Research Areas**

Human field: players of Karbala youth club fencing weapon

sword fencing.

Time domain: The period from 5/3/2019 to 4/6/2019

Spatial Field: Training Center for Fencing at Karbala Sports Club.

**Research Methodology and Field Procedures**

**Research Methodology**

The researcher used the experimental method in two experimental and control groups with pre and posttests.

**Table 1:** Demonstrates experimental design

Aggregates		Experimental variable	
Experimental	Pre - test	Curriculum + Play out exercises	Post - test
Control		Training curriculum	

**Research community and sample**

The researcher identified the research sample in the deliberate way represented by the players of Karbala Youth Club fencing with the weapon of sword fencing and the number of (10) players, and the players were divided into two experimental and control groups, and thus the control sample consisted of (5) players and the experimental research sample of (5) players, In order to know the homogeneity of the two control and experimental groups, the researcher conducted the equivalence of the research sample with the study variables, as shown in Table (2).

**Table 2:** Shows the arithmetic media, the standard deviations, the calculated value (t) and the significance of the differences in the variables under consideration between the experimental and control groups in the pretest.

Variables	Measuring Unit	Control Group		Experimental Group		Values T Calculated	Significance of Differences
		S	P	S	P		
Age	Year	24.000	1.247	35.500	1.716	0.745	random
Length	meter	1.717	0.034	1.730	0.036	0.835	random
the weight	Kg	64.700	13.881	62.800	12.882	0.317	random
Age of training	Year	4.130	1.072	4.030	1.028	0.213	random
Wide jump of stability	meter	64.400	427.4	46.500	5.523	0.290	random
High deep jump	meter	11.950	1.053	11.930	0.817	0.192	random

\* Values t Crosstab (1.860At the significance level (0.05) and in front of the degree of freedom (5 + 5 -2 = 8)

It is clear from the table above that the research sample is equivalent to the value of (T) calculated less than the tabular value, ie there are no significant differences between the variables.

**Search procedures**

**Choose physical abilities**

1. Wide jump test of stability <sup>[5]</sup>.
2. Deep jump height test <sup>[6]</sup>.

Tribal tests:

The tribal tests were conducted on Monday and Tuesday, 11-12 / 3/2019, in the hall of the fencing training center in the masses sports club.

**Training curriculum**

The researcher has prepared a proposed training curriculum that included the training of Blaymturk in the special preparation phase and extended (6) weeks taking into account the age of the players, as the study (Francesco 2018) <sup>[7]</sup> confirms that after eight weeks of training using Blaymturk exercises improved the speed of the lower limbs and explosive strength Of young athletes.

The training curriculum continued for the period from 17/3/2019 to 26/4/2019 with

(3) training units per week. The number of training units reached (18) training units. It took 15 to 30 minutes for the play out to be carried out, then 10 to 15 minutes of rest was given for the purpose of hospitalization, and severely ranged from 80 to 100%. With the coach and marital exercises with the colleague, recalling (Redondo 2014) <sup>[9]</sup> fencing instructors must combine strength exercises and technical training to transfer strength gains to skill performance. Divide the stress and volume of jumps in the following order <sup>[10]</sup>:

Depend on the type of exercise and distance traveled when performing partridge or jumping exercises and in the order of the following table:

**Table 3:** Shows the type of stress used in playlumturk exercises

Distress	Exercise type
High	Deep jump 80 120 - cm
Maximum limits	Jumping exercises
Average	Deep jump 20 50 - cm
Low	Low impact of jump/ throw

In terms of size, it was based on the number of jumps performed in one training unit according to the following table <sup>[11]</sup>:

**Table 4:** Level and number of hops for playlists left per unit

The Level	Number of Hops
Junior	100 - 80
Average	120 - 100
Advanced	140-120

The researcher has taken into account the principle of gradual increase in training size and as shown in the following figure

**Table 1:** Shows the number of jumps performed during the weeks of the playout

						140-120
						120 - 100
						100 - 80
6	5	4	3	2	1	Weeks

As for the rest between the training units should be limited

**Table 5:** Shows the arithmetic media, standard deviations, the value of Z and the significance of the differences between the pre- and post-tests in the physical tests of the experimental group.

No	Statistical Standards	Measuring Unit	Pre - Test		Post - Test		The Values of Z	Significance Level	Significance of Differences
	The Exams		s-	P	s-	P			
1	Wide jump test of stability	cm	168.60	11.950	201.20	8.526	-2.023	0.043	moral
2	Deep jump height test	cm	25.40	3.209	33.40	4.037	-2.041	0.041	moral

\* Significance level (0.05)

**As shown in Table (5)**

In the wide jump test variable of stability: the arithmetic mean in the pretest test was (168.60) with a standard deviation of (11.950), the arithmetic mean in the post-test (201.20) with a standard deviation of (8.526), and the calculated value of Z (-2.023), at Significance level (0.043), which indicates the significant differences between the pre and posttests at the significance level (0.05) and in favor of the post test.

In the deep jump height test variable: the arithmetic mean in the pretest test (25.40) with a standard deviation of (3.209), the arithmetic mean in the post-test (33.40) with a standard deviation of (4.037), and the calculated value of Z (-2.041), at the level of Significance (0.041), this indicates significant differences between the pre and posttests at the significance level (0.05) and in favor of the post test.

Table (5) showed that there were significant differences in the tests of the wide jump of stability and the height of the deep jump and in favor of the post test, the researcher attributes this to the impact of the training program to contain the exercises Alblaymturk and direct those exercises directly and effectively to the active muscles of the two men and clearly shows improved productivity The difference between the arithmetic averages between the pre- and post-test and in favor of the post-test. Khaddam exercises related to effective experimental group as well as to the vocabulary

between (48 - 72) hours and depending on the amount of training load. Rest intervals between repetitions are limited at most between (5-10) seconds. Rest intervals between groups should have a ratio of work-to-rest ratio (3: 1 and 5: 1). Again, rest between groups is (90 - 150 seconds) [12]. The number of repetitions is often limited to (8-10) repetitions in one group, and during continuous training, the frequency of these exercises used in general increases with less effort, accordingly the number of groups also changes. (6 - 10) groups for most exercises. As for exercises that need high intensity, such as jumping exercises, the number of groups is limited between (3-6) groups [13]. After the tests were conducted on 28 - 29/4/2019 at ten in the morning, where it was taken into account the installation of all the conditions related to the tests in terms of tools, time, place and method of implementation.

**Presentation, analysis and discussion of results:**

of the training curriculum successful and has a effectiveness of effective and easy to implement, what contained in the exercise variety as well as the use of the difficulty of performing the training unit (intensity), according to the curriculum vocabulary for each athlete commensurate with its capabilities as well as the specific rest between repetitions and aggregates training Workload, as well as gradual and undulating training loads and the use of training This means that this method is far from the previous means of training, which includes devices and tools, it is a modern and enjoyable means for athletes when applying this type of training for the training of the Pleiomic to develop the performance of the athlete and the achievement (and the achievement of the achievement, the achievement and the achievement) (1999). Particularly high effort on the muscles, tendons and joints working leads to the adaptation of the body gradually to the use of special type of exercise S least intensity and then the most severe) [14], the use of high-intensity ranging from (80-100%) It is the intensity sufficient to develop the skills performance "reflected the training intensity the high such exercises force commends the rapid activities of internal embodiment most of the motor units of muscle fibers stimulated and increased the starting of the nerves rate of mobility, and this increases the internal activity in addition to improving power" [15].

**Table 6:** Shows circles arithmetic was no deviations Normative and valuables and the significance of differences between the tests before and after the physical tests of the control group.

No	Statistical Standards	Measuring Unit	Pre - Test		Post - Test		The Values of Z	Significance Level	Significance of Differences
	The Exams		s-	P	s-	P			
1	Wide jump test of stability	cm	172.00	9.460	174.40	12.700	-.944	0 .345	Non-moral
2	Deep jump height test	cm	26.00	3.742	27.00	3.536	-1.518	0 .129	Non-moral

\* Significance level (0.05)

**As shown in Table (6)**

In the wide jump test variable of stability: the arithmetic mean in the pretest test was (172.00) with a standard deviation of (9.460), the arithmetic mean in the post test (174.40) with a standard deviation of (12.700), the calculated value of Z (-.944), At the level of significance (0.345), this indicates that the differences between the pretest and post tests are not significant at the level of significance (0.05).

In the deep jump height test variable: the mean of the pre-test (26.00) with a standard deviation of (3.742), the mean of the post-test (27.00) with the standard deviation of (3.536), and the calculated value of Z (-1.518), at the level

of Significance (0.129), this indicates that the differences between the pre and post tests are not significant at the significance level (0.05).

Table (6) shows that there are no significant differences in the two tests of the wide jump of stability and the high jump of the deep before and after the tests. The researcher attributes this to the lack of training program prepared by the instructor on the plumburk exercises. A simple development for the benefit of the post-test due to the nature of the training program, which was applied to the control group and the training contained in it contribute to the development and improvement of the player.

**Table 7:** Shows the arithmetic media, standard deviations, the value of Z and the significance of differences in the physical tests of the experimental and control groups in the post-test.

No	Statistical standards	Measuring Unit	-S	P	The values of Z	Significance level	Significance of differences
	The Exams						
1	Wide jump test of stability	Cm	187.80	17.4 -Yes	-2.514	0.012	moral
2	Deep jump height test	cm	30.20	4.917	-2.193	0.028	moral

\* Significance level (0.05)

**Table 7 shows**

In the wide jump test variable of stability: In the post-test of the experimental and control groups, the mean was (187.80) with a standard deviation of (17.4), and the calculated Z value (-2.514), at the level of significance (0.012), this indicates the significance of the differences between Posttest at significance level (0.05) for the experimental group.

In the deep jump height variable: in the post-test of the experimental and control groups, the mean was (30.20) with a standard deviation of (4.917), and the calculated value of Z (-2.193), at the significance level (0.028), this indicates the significance of differences between the post-test at Significance level (0.05) for the experimental group.

Table (7) showed that there were significant differences in the tests of the wide jump of stability and the height of the deep jump for the post-test of the experimental and control groups and for the benefit of the experimental group. Selected in this development "as pleometric exercises are accompanied by activities in which muscles perform central and decentralized contraction for of several recipes, including kinetic action and explosive power" [16].

By reviewing the results, the researcher concluded on the importance of pliometric training on the development of skill performance and the improvement of physical characteristics of fencing players. The movement of the arrow is more focused on the active muscles of the players and on the specific physical qualities that have been demonstrated by the results. This is consistent with the results (Ameen Najlaa, 2000) [17] that pleometric training is one of the effective exercises in the development of explosive power and characteristic force B The speed and ability to produce the maximum power rate in the shortest time and the impact on achievement and digital investigation and improve the performance level through the nature of this type of biometric training, which showed a special skill in mobilizing force and speed and detonated instantaneously from the sudden release of energy, as demonstrated by the results (Redondo 2014) [18] By implementing a maximum strength training program for six weeks, maximum and explosive strength can be improved. This establishes more specific strength exercises.

**Conclusions**

1. Effectiveness of the training curriculum in the playllium exercise in developing the level of physical abilities.
2. There is a preference for the training curriculum in the exercises Alblaiom left over the traditional training curriculum followed by the trainer in the development of the level of physical abilities.

**References**

1. Gambetta, Vam. NSA Round Table; Plyometrics, New studies in Athletics, 1989, 4(1).
2. Bastawisy Ahmed. Fundamentals and Theories of Sports Training, Cairo Dar Al-Fikr Al-Arabi, 1999, p. 295.
3. Herrero Azael J, Martín Juan, Martín Teresa, Abadía Olaia, Fernández Beatriz, *et al.* Short-Term Effect of Plyometric and Strength Training with and Without Superimposed Electrical Stimulation on Muscle Strength and Anaerobic Performance: A Randomized Controlled Trial. Part II. National Strength and Conditioning Association, 2010.
4. Lockie RG, Murphy A, Janse de Jonge X. Quantifying Training Load for Free Sprint, Resisted Sprint, Plyometric and Weights Training with Session-RPE in Field Sport Athletes. National Strength and Conditioning Association, 2011.
5. Mohammed Hassan Allawi, Mohammed Nasr al-Din Radwan: tests of motor performance, Cairo, Dar Arab thought, 2001, p. 78.
6. Mustafa Hassan Abdul-Karim: The Effect of Stylistic (Electrical Stimulation - Blumetrack) and (Blumetrack) on the Electrical Activity of the Muscle and Some Muscular and Skill Abilities of the Youth Team in Fencing Game, Ph.D. Dissertation, University of Baghdad, College of Physical Education, 2009, pp. 68-69.
7. Francesco Fischetti. At. Al., Effects of Plyometric Training Program on Speed and Explosive Strength of Lower Limbs in Young Athletes, (JPES). 2018; 18b(4):P2476.

8. Zaki Mohamed Mohamed Hassan. Cross-training is a recent trend in training. Alexandria: Egyptian Library for Printing and Publishing, 2004, p. 256.
9. Redondo, Juan C. At. Al., Eeffect a 12- week Strength training Program on Experimented Fencers, Movement Time. 2014; 28(12):P3379.
10. Chu D. Jumping into plyometrics, 2nd ed. Champaign, IL: Human Kinetics, 1998, P 4-5.
11. Chu D. Jumping into plyometrics, 2nd ed. Champaign, IL: Human Kinetics, 1998, P4.
12. National Strength and Conditioning Association. Position statement: Explosive/ plyometric exercise. NSCA. J. 1993; 15(3):P16.
13. James C. Radcliffe, BS & Robert C. Farentions. Op. Cit, pp23.
14. Omoso Juard Bo, Physical training for badminton, Edited by buoys tim dncloed Denmark, holling Book Publisher, Ais, 1999, p22.
15. Jamal Sabri Faraj: PLC Training for Maximum Power Development, Amman, Degla Publishing House, 1st Floor, 2010, p. 9.
16. Maffiuletti NA, Dugnani S, Folz M, Dipiemo E, Mauro F. Effect of Combined Electrostimulation and Plyometric Training on Vertical Jump Height, Medicine and Sports Exercise, Bourgeon. France, 2002.
17. Ameen Najlaa. the effect of plyometric exercises on developing the power of speed and its relation with the capability of kata performance of karate beginners. Master thesis, unpublished, Faculty of Physical Education for girls, Alzaqazeq University, 2000.
18. Redondo Juan Cm *et al*, Eeffect a 12- week Strength training Program on Experimented Fencers, Movement Time. 2014; 28(12):P3379.
19. Alsayigh HA, Athab NA, Firas M. Journal of Global Pharma Technology the Study of Electrical Activity of the Triceps Brachia Muscle according to the Chemical Changes of Water Loss during Spike in Volleyball, 2017, 57-62.
20. Alsayigh HA, Athab NA. The Study of Rectus Femoris Activity after Knee Joint Rehabilitation. 2016; 9(9):360-5.
21. Jumaah H, Ktaiman A, Abdul N, Athab K, Mohammed A. The Effect of Using Pain Management Techniques in the Rehabilitation of Chronic Lower Back Injury in Athletes and Non- Athletes, 108-12.
22. Athab NA, Hussein WR, Ali AA. A Comparative Study for Movement of Sword Fencing Stabbed According to the Technical Programming in the Game of Fencing Wheelchairs Class B. Indian Journal of Public Health Research & Development. 2019; 10(5):1344-7.
23. Athab NA. An Analytical Study of Cervical Spine Pain According to the Mechanical Indicators of the Administrative Work Staff. Indian Journal of Public Health Research & Development. 2019; 10(5):1348-54.