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Original article

Effect of bulgarian bag exercises on anticipation and certain physical variables for kuwaiti sabre fencers

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Abstract

Aim. Fencing is one of the individual sports that depends on various of physical, skill, psychological and mental abilities, and to develop these abilities the player must be prepared in a manner commensurate with the nature of performance, as it differs in performance requirements from other types of sports. The purpose of this study was to investigate the effects of Bulgarian bag exercises on anticipation and certain physical variables for Kuwaiti Sabre fencers.

Methods. Ten Sabre fencers under (20) years old from Qadisiya Club were randomly allocated to receive eight-week intervention of the of Bulgarian bag exercises, the data collected before and after the program for the experimental group.

Results. Statistical analyses showed that:

- Significant difference between the pre and posttests for experimental group in all physical variables and Anticipation test for posttest to the experimental group.

Conclusions. Under the conditions of our study, Bulgarian Bag Exercises to eight weeks resulted increases in anticipation and certain physical variables. These results must be considered by coaches to better understand and implicated of these concepts for technical effects of training.

Key words: Bulgarian Bag Exercises, Anticipation, Sabre fencers.

Introduction

Fencing is one of the individual sports that depends on various of physical, skill, psychological and mental abilities, and to develop these abilities the player must be prepared in a manner commensurate with the nature of performance, as it differs in performance requirements from other types of sports.

With the progress and rapid development in that sport, approaching high levels has become difficult unless the player has many physical, skill, psychological and mental aspects, and the discovery and development of capabilities that help in the growth and development of these aspects, where motor expectation is one of the abilities that may help in improving the potential of Physical and skillful player:

Ibrahim (1999) believes that the philosophy of fencing is crystallized in how to plan to achieve a correct touch on the opponent and at the same time impede him from achieving a touch, and accordingly the player should be prepared well planned as competition conditions cannot be accurately predicted, and thus the programs must include the ability to anticipate what might happen in different and common gaming situations.

Amr et al. (2017) indicate that anticipation is a skill that can be learned and developed through training practice, and the creation of training environments similar to competitive environments through which the player can implement the stages of the decision-making process and anticipate accurately and effectively to

reach sports achievement. And add that most coaches and players believe that anticipation is a potentially risky strategy. But we must differentiate between anticipation and guessing, and not confuse them.

Anticipation is based on the habits and movements a player observes in his opponent. Or guesswork, it is based on intuition and feelings, and it is not scientific, as it may happen to happen or not.

Abernethy & Zawi (2007) illustrate the skill of anticipation as the ability to predict the opponent's movements and thus gain the player advantage of being one step ahead of his opponent.

In controversies, the player strives to reconcile dealing with the behavior of one competitor only, but there is direct and continuous contact with this competitor, and as a result, his reaction must be taken into account when performing each offensive movement, and the goal of dealing can only be achieved when a reaction is introduced the competitor as well as the timing of this reaction in the context of the expected movement correctly.

Amr et al. (2017) point out that it is necessary to take into account that some players may give deceptive signals, so be careful before executing any movement, for example in the sport of fencing, the player may make a false attack to explore the defenses of the swordsman, then build on them the actual attack, and the player has experience He may give false signals because he realizes that this is a false attack, so the role of the coach lies in identifying and analyzing the opposing player,

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identifying strengths and weaknesses, and studying his behavior in various situations, so that he can build a strategy that the player can implement.

Glasser (1995) pointed out that many fencers have limited sentences and limited reactions. Competitor poll is important to them because most players react faster but do not have many sentences. As for the fencer who uses plans, it is easier for him to choose which of Solutions depending on the situation.

Where the sense of distance and time of the movement performed and its correlation with the perceived movement expectation works to stabilize the movement and reach to achieve good motor performance and raise the level.

Anticipation can be understood as a motion perception that includes the direct performance of movement.

The anticipation-based reaction is considered one of the important factors in the speed of performance, especially in activities that require a rapid reaction without waiting for the stimulus, and expectation is divided into two types: anticipating the place, anticipating the moment in time.

The motor anticipation is developed through the development of cognitive aspects and the development of mental processes. As for the development of the cognitive aspects, it is (the study of possibilities - the increase in the number of interactions) and the development of higher mental processes such as (thinking - observation - attention - conclusion - perception – perception).

Mahmoud (1995) states that the motor anticipation represents the time it takes to predict the emergence of the stimulus and the target, whether it is visual or auditory.

Yau et al. (2018) believe that every sports movement has a goal and has a specific purpose, and the movement may be part of a large movement formation, as is the case in compound movements, and the goal of the movement is expected for the player because he identifies it before performing the movement and realizes it whether Large or small, and this means the anticipation of the movement's progress at specific moments.

To determine the sources of information through which to obtain a successful expectation, the researcher used the temporal occlusion method, which is a video footage in which he uses different points for the opponent's repeated movements, or by using spatial occlusion. They are video clips in which he uses spatial clips that may be hidden. In addition to the visual research techniques in their studies.

Studies such Williams, et al. (2002) Jackson & Mogan (2007), Ward et al. (2008), that experienced players have a reading of the opponent's movements and from the least available information, gestures and preliminary conclusions issued by the opposing player, player can anticipate the opponent's moves and act on

them accurately and quickly compared to the junior players.

Bulgarian Training Bag is a training equipment used in strength training, Plyometrics, Weight training, aerobic exercise, and fitness in general. Bags are made of leather or synthetic leather and filled with sand; Weigh between 3 to 38 kg and have flexible handles to allow training of the upper and lower body, and to improve the prehensile strength.

Ivan Ivanov invented it in 2005. He was looking for a training tool that would allow fighters to improve explosive actions. and the dynamic movements related to pushing, twisting, balancing, pulling, twisting, rotating, crouching, ramming, and throwing. (Sava Sport, 2015)

Ivanov was inspired by the tradition of the shepherds' performing demonstrations of strength with sheep and goats at the fairs in their native Bulgaria. Shepherds were often forced to carry sheep and lambs around their shoulders when they moved with their flock, and they showed their strength at festivals. Ivanov based the design of his tool on the body of a sheep and saw its use as an interpretation of the tradition.

According to the experience of the researchers, many players lose some touches during defense as a result of sudden and rapid movements that the opponent may perform without the player being prepared to perform the appropriate counter defense as a result of a wrong expectation of the opponent's movement, and also he may not be able to score a touch during the attack or during the counter-attack Inability of the player to perform the appropriate deception to record the touch due to a lack of information that the player receives from a competition, and he cannot correctly anticipate the opponent's movement, The purpose of this study was to investigate the effects of Bulgarian bag exercises on anticipation and certain physical variables for Kuwaiti Sabre fencers.

Material and Methods

Experimental Approach to the Problem

One group (experimental) performed a pre and post - measurements in which physical variables and anticipation test (Bassin Timer Lafayette Indiana Model 50575). The experimental group (EG) (10 Sabre fencers) trained 80 minutes 3 times per day a week on Bulgarian bag exercises for eight weeks. The experimental group completed Bulgarian bag exercises to see whether this type of training modality would have a positive or negative or no effect on physical variables and anticipation test.

Samples

Ten Sabre fencers under (20) years old from Qadisiya Club were randomly allocated to receive eight-week intervention of the of Bulgarian bag exercises, the data collected before and after the program for the experimental group.

Statistical analysis

All statistical analyses calculated by the SPSS statistical package. The results reported as means and

standard deviations (SD). Differences between two groups reported as mean difference. Confidence intervals (meandiff \pm 95% CI). paired samples t-test

used to determine the differences in fitness parameters between the pre and post – measurements.

Results

Table 1. sample Characteristics (Mean \pm SD)

Group	N	Age [years]	Weight [kg]	Height [cm]
Experimental	10	19.17 \pm 0.3	69 \pm 3.9	177 \pm 5.38

Table 1 shows the age and anthropometric characteristics of the subjects .There were no significant differences observed in the anthropometric characteristics and age for the subject.

Table 2. Mean \pm SD and "T" Test between the pre and posttests for experimental group in physical variables and Anticipation test

Variables	Experimental group		Sign.
	Before	After	
Standing Long Jump Test	2.30 \pm 0.42	2.37 \pm 0.50	S
Medicine ball throw test	6.19 \pm 1.04	6.65 \pm 1.46	S
Shuttle run test	41.00 \pm 1.45	39.05 \pm 1.58	S
Coordination test	5.80 \pm 0.16	5.21 \pm 0.17	S
Anticipation test	0.064 \pm 0.015	0.048 \pm 0.016	S

Table 2 shows that:

- Significant difference between the pre and posttests for experimental group in all physical variables and Anticipation test for posttest to the experimental group.

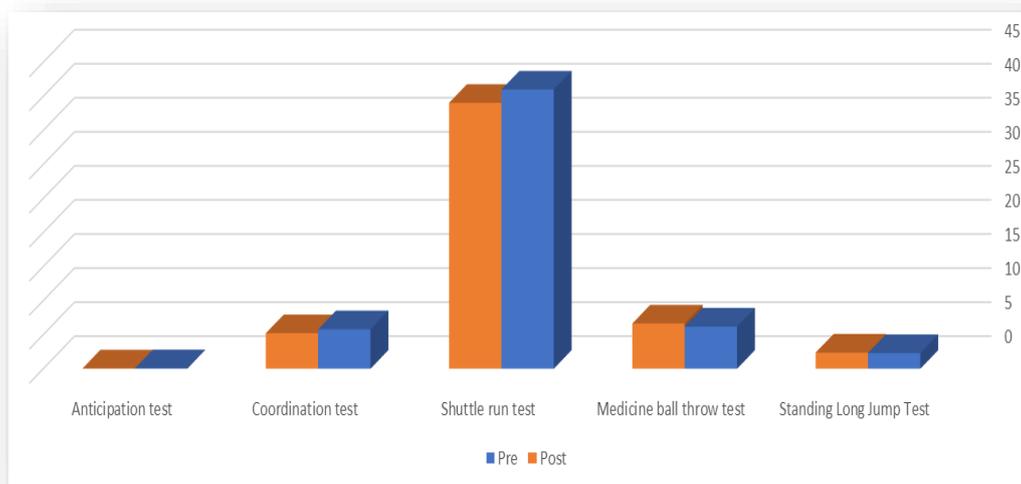


Fig1. Show difference between pre and posttests for experimental group in physical variables and Anticipation test

Discussion

This study assessed the effects of an eight weeks of Bulgarian bag program, on the physical variables and Anticipation test, Experimental results indicated that all variables significantly increased in the experimental group after the Bulgarian bag program.

The researchers attributes this to the use of the proposed training program for the development of motor anticipation and the exercises it included for the development of various physical abilities associated with motor anticipation and affecting the results of touching such as exercises to develop the muscle

capacity of the two legs and exercises for the speed of the movement response to different positions and control of movement and the movements of the feet in progress and retreat while performing Exercises or in competitions and the compatibility between different body parts during advancement and retreat with the movement of the armed arm straightener in order to anticipate the opponent's movement to record the touch so that he cannot do the defense to increase the score of touches.

The researchers also believes that the training of fencing players depends primarily on spousal training in



addition to training with the coach or individual training, as these exercises are similar to the nature of performance in the sport of fencing, and hence doubles training is one of the best forms of fencing training to reach the optimal competitive performance until the player becomes. While training in competitive situations similar to what he may be exposed to in competitions, he can expect the correct movement from the competitor, and the use of movement prediction exercises helped in reaching an advanced stage of good performance in dueling, and made it easy for the fencers to use defense and response skills, and attack skills. Good counterattack skills enable players to score successful touches.

This is confirmed by (Vairavasundaram & Palanisamy, 2015) that Bulgarian bag increases the physical strength of the hand, wrists, arms, shoulders, back, legs and rotational muscles. It also helps to improve core muscles, coordination, and mobility of shoulders and joints. Due to its shape, material and construction, the Bulgarian bag can be used to develop speed and agility in ways that are not possible with weights and machine circuits.

Where Ali (2005) mentions that the kinesthetic expectation is the early detection of the main target of movement before its arrival in order to reduce the kinetic response time to serve the motor duty of the required skill or movement.

This is consistent with the results of studies by Ali (2005) Abd al-Rahman (2005), Suleiman (2001) which indicate that training programs that improve the

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- level of Kinetic anticipation helps in developing the physical abilities of the players.
- Physical abilities are one of the pillars of training that depends on the player's development, as it is one of the most important performance requirements in the sport of fencing, which may be the decisive factor in winning matches, especially when the skill level of the competitors is equal or close, given that the level of the fencer's physical condition is one of the important reasons that contribute. In achieving many victories, the high level of fitness of the fencer enables him to perform a successful sports season.
- This is confirmed by Kamal (2001) that success in performing any skill requires the development of physical components that contribute to its perfect performance.
- The results of the study agree with those of Elsayy, (2010), Vairavasundaram & Palanisamy (2015), Bobu et al. (2015) that Bulgarian bag training contributes to improving muscular endurance and skill performance.
- ### Conclusions
- Under the conditions of our article, the researcher conclusion that
- The Bulgarian Bag is an extremely effective training tool for Sabre fencers
 - Safety is founded when with the Bulgarian Bag training.
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