

Original Article

Exercises to Improve Tactical Performance of Boxers in the Pre-Selection of Camagüey, Cuba

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ABSTRACT

Introduction: The tactical performance of boxers is critical; it takes into consideration the particularities of each athlete in the sport, especially the three bout distances.

Aim: To design exercises to improve the tactical performance of boxers in the adult pre-selection of Camaguey.

Materials and methods: The objectives of the adult category were used to design the; the study included 24 boxers of the adult category from the local preselection, in the several divisions established in the Comprehensive Program of Athlete Preparation, and the characteristics of the boxers between 19 and 40.

Results: The assessment made by ten users revealed the acceptance and convenience of the system of exercises conforming to their opinions, as they consider it is a valuable methodological tool for coaches in this category.





Conclusions: The validation of the system of exercises was checked upon its implementation in educational practice and the application of the initial and final instruments utilized to measure the parameters set during the design stage. This procedure demonstrated the improvements observed in the athletes, in terms of technical-tactical level when the exercise system was applied.

Keywords: Boxing, system, technical-tactical performance.

INTRODUCTION

The tactical performance of boxers in the province of Camagüey has been characterized by the specificities of athletes in the sport, particularly the aggressive boxers, and the counter punchers in the mid and long distances. These characteristics and competitive results have taken them to the national teams, and be part of a provincial team that has been the national champion on nine occasions. However, strengthening tactical preparedness in boxing bouts must be a key element in adult preselections as in sports facilities.

Several researchers have dealt with this issue from different perspectives, such as Zamora, (1995), Albuquerque, M. B. (2013), Machuat, G. *et al.*, (2017) y García, J. M. y *et al.*, (2018). This study coincides in various aspects in terms of training, for instance, it is necessary to consider the classification of intermittent high-intensity actions, in which logical thinking is critical to respond to the many situations that emerge in the bout.

In that sense, boxing is recognized as a combat sport that constantly demands proper tactical performance. Authors like Vélez, Machuat, Moreno, and Boffil (2020) consider that the effectiveness of tactics depends mainly on the proper technical level. When a boxer lacks adequate mastery of the technical fundaments of boxing, proper tactical performance will fail.

In that sense, the Comprehensive Program for Athlete Training (Domínguez and Sagarra, 2017), states that one of its main goals for the junior categories is strengthening the technical-tactical training, adjusted to the new demands of contemporary boxing.

However, there is a contradiction to the good results of the latest years (2011-2017), between the technical level of the junior category in the province of Camagüey (technical assessment) and the shortcomings observed in terms of boxing tactics (tactical assessment) in the Vietnam Heroico Boxing Academy in the province, during the national competitions. The flaws observed include:

- A tendency to fight only in the mid and long-distance.
- Grater dedication to purely technical aspects during the training.





Insufficient exercise planning based on situations that enable tactical thinking.

Accordingly, this research aims to design exercises to improve the tactical performance of boxers in the adult pre-selection of Camaguey.

MATERIALS AND METHODS

The sample for this study included 24 boxers in the adult category that integrate the provincial preselection in these divisions; three in the 49 Kg; three in the 52 Kg; four in the 56 Kg; three in the 60 Kg; two in the 64 Kg; one in the 69 Kg; one in the 75 Kg; two in the 81 Kg; two in the 91 Kg; and two in the +91 Kg, that participate in the national championship. The municipal representation by athlete is below: (Vertientes: one; Carlos Manuel de Cespedes: one; Sibanicu: one; Camagüey: eight; Jimaguayu: three; Sierra de Cubitas: two; Najasa: three: Santa Cruz del Sur: two; and Nuevitas: two.

The information search about the tactical performance of the boxers in the adult category selection in Camagüey province included an interview with the technical chief of the Provincial Boxing Commission to know his opinion about the main difficulties that hinder the tactical performance of the boxers. The observations of training revealed a marked interest in the technical actions exclusively, putting aside their integration into the tactical aspect.

The result of the initial test and observation of bouts during the training revealed difficulties in the following aspects:

- Feints are not used effectively to strike effective blows.
- Boxers do not know the correct way of using the feints.
- Boxers do not know the correct way of fooling the opponent.
- Boxers do not know how to execute maneuvers.
- There are shortcomings in the pendulum-like movements when attacking with a single punch.
- Out of range positioning when attacking using two punches.
- Lack of confidence of being out of range when hitting the opponent if using two punches.
- Out of range in the simultaneous counter and cross counter-punching.
- Little effectiveness in cross counter-punching.
- Faulty displacements and punching in the long distance.
- Shortcomings in the quick movements of legs in the mid-distance leaving the boxer out of range.
- In the mid-distance, problems with trunk defense movements.





Exercise system

It was conceived for boxers in the social category.

Exercise No. 1:

Objective: to imitate tactical actions of the sport, in a row, through the Cuban Boxing School.

Execution:

The students will make a row facing the teacher; at his sign, in a combat stance, they will perform the tactical action in the place. The coach will move around the gym and correct the errors. This boxing school lasts 30 minutes daily. Assessment is made through the executions, the best actions will be weighed.

Exercise No.

Objective: to imitate tactical actions of the sport, taking plane steps in a row, through the Cuban Boxing School, improving the actions.

Execution:

The students will make a row facing the teacher; at his sign, in a combat stance, they will perform the tactical action taking plane steps for 30 minutes daily.

Exercise No. 5:

Objective: to imitate tactical actions of the sport, taking pendulum-like steps in a row, through the Cuban Boxing School, improving the actions.

Execution:

The students will make a row facing the teacher; at his sign, in a combat stance, they will perform the tactical action in the form of pendulum-like steps. The coach will move around the gym and correct the errors. This boxing school lasts 30 minutes daily.

Exercise No.6:

Objective: to imitate tactical actions of the sport in pairs, through the Cuban Boxing School.

Execution:

The students will make two rows facing each other. The teacher will stand at one of the ends of the rows; at his sign, in a combat stance, they will perform the tactical action of fighting for 30 minutes daily.

Exercise No. 7:

Objective: to imitate tactical actions of the sport, taking plane steps by pairs, through the Cuban Boxing School.

Execution:

The students will make two rows facing each other. The teacher will stand at one of the ends of the rows; at his sign, in a combat stance, they will perform the tactical action of fighting with plane steps for 30 minutes daily.





Exercise No.8:

Objective: to imitate tactical actions of the sport, taking pendulum-like steps by pairs, through the Cuban Boxing School.

Execution:

The students will make two rows facing each other. The teacher will stand at one of the ends of the rows; at his sign, in a combat stance, they will perform the tactical action in the form of pendulum-like steps. The teacher will move around the gym and correct the errors. This boxing school lasts 30 minutes daily.

Exercise No.9:

Objective: to imitate tactical actions of the sport moving in pairs, through the Cuban Boxing School.

Execution:

The students stand all over the gym. The teacher will stand in a position with a total or almost total vision of the work to be done, including moving around the gym and correcting the errors made by the athletes. At his sign, in a combat stance, they will perform the tactical action while moving around the gym and the teacher will correct the errors. This boxing school lasts 30 minutes daily.

Exercise No.10:

Objective: to imitate tactical actions of the sport moving around in pairs, through the Cuban Boxing School.

Execution:

The students will make pairs located all around the gym. The teacher will stand in a position that allows him or her to have a total or almost total vision of the work and will give the start sign. The teacher moves around the gym and corrects the errors made by the athletes. From a fighting stance, the number one boxer will perform the tactical action of combat, moving around, for 1 minute-long rounds. The execution will alternate in the second round, to the number two boxer. This fighting school will last 20 minutes daily and will have 4-5 rounds.

Exercise No.11:

Objective: to imitate tactical actions of the sport moving around in pairs, through the free task-based combat school.

Execution:

The students will stand in pairs all around the gym. The teacher will stand in a position that allows him or her to have a total or almost total vision of the work. The coach will give the start sign and will move around the gym to correct the errors made by the athletes. From a fighting stance, the two boxers will perform free combat emphasizing the tactical action of the bout, for 1 minute-long rounds. The teacher will use the resting minute between rounds to perform demonstrations





and correct the errors generally. These free task-based fights will include two-four rounds daily, totaling four minutes of work.

Exercise No. 12:

Objective: to imitate tactical actions of the sport moving around in pairs, through the Free Combat School (sparring).

Execution:

It goes similar to the three-round bouts (three minutes each, plus a minute to recover between rounds), preferably in a ring, using ten-ounce gloves, mouth protector, and groin protector, in pairs. It can be voted according to the teacher's criterion and the goal set. It is executed once a week, for 9-12 every sparring.

RESULTS AND DISCUSSION

The design of the exercise system embraced the previous research on this topic (Ibarra, M., Soto, C., Martín, Y., and Heredia, F., 2015), Pantoja, O., Pérez, R., and García, A., 2017). The studies suggest exercises to improve the effectiveness of defensive skills of junior boxers, and the tactical offensive actions of athletes in the top category, respectively. Vallejo (2020), suggested a methodology for technical-tactical intervention, focusing on counterpunching. In turn, Romero and Lanza (2021) recommended methodological guidelines to optimize the planning of offensive tactics training in 13-14-year-old boxers. One element that coincides with this is the search for solutions to tactical problems during the bout. A boxer's performance is taken into consideration, but the proposal of this study, in addition to the previously analyzed problems, is based on the particularities of the Camagueyan boxers, and their features as mid and long-distance fighters. The inclusion of these tactical aspects is fundamental, considering that at the very heart of a boxer's activity there may be different fighting styles, offering the possibility of adapting this style to each boxer's specificities.

Theoretical assessment of the exercise system through user criteria

The assessment made by ten users revealed the acceptance and convenience of the system of exercises conforming to their opinions, as they consider it is a valuable methodological tool for coaches in this category. Overall, 100% said that they agreed, while 80% responded totally in agreement with the practical usefulness of the system, expressed in the dimensions and indicators analyzed. Lastly, 100% of the users manifested their agreement with the methodological usefulness given by the coach that utilizes the exercise system.

Upon analyzing the opinions, it was concluded that the system of exercises is applicable in terms of improving the tactical performance of boxers in the adult category.





Validation of the exercise system suggested

The system's effectiveness to improve the tactical performance of boxers in the adult category in the province of Camagüey was determined through a preexperiment (pre-test and post-test) in one group, whose athletes were characterized.

The results of descriptive statistics (Table 1) show the central and most frequent values of each test's moment, evidencing an increase in the results of the athletes overnight.

One instance is seen in the general results, where the central value of the first moment was one, whereas it was three in the second moment. The most frequent value of the first moment was one, whereas it was five in the second moment, evidencing an overnight increase.

		Overall evaluation of the 1 st moment	Overall evaluation of the 2nd moment
Ν	Valid	24	24
	Lost	0	0
Median		1.00	3.00
Style		1	5

Table 1. Descriptive statistics

The above was part of the results at the Playa Giron National Tournament, with four gold medals, three silver medals, and four bronze medals, by the 19 Camagueyan athletes that participated in the competition. The provincial team also provided three athletes to the national boxing team of Cuba.

The athletes executed the actions planned in the exercise system, and improved their execution gradually during the fights, until they were able to use them in the national competition, namely: preparatory actions, attacks with one or two punches, counter punches, distances (long and mid). It also showed greater difficulty in terms of tricks, maneuvers, two-punch attacks, and cross counter punching. The athletes perceived tactics as necessary.

CONCLUSIONS

The exercise system was designed considering the aspects that make Cuban education distinctive, the theoretical rationale and the methodology for sports training, as well as the Cuban Boxing School, based on the needs collected in the diagnostic of the technical-tactical training process, and the characteristics of the Camagueyan boxers.

User opinions showed positive results and were considered very adequate.





The validation of the system of exercises was checked upon its implementation in educational practice and the application of the initial and final instruments utilized to measure the parameters set during the design stage. This procedure demonstrated the improvements observed in the athletes, in terms of technical-tactical level when the exercise system was applied.

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