

Set of anticipation technique exercises in tae-kwon-do sports for students 11-12 years old

Conjunto de ejercicio de técnica de anticipación en el deporte tae-kwon-do para alumnos 11-12 años

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ABSTRACT

This research was carried out in the Municipality of Puerto Padre with the objective of establishing a set of anticipation technique exercises that manage to maintain advantages in the scoring of the combats, to establish the results a set of anticipation exercises were used for the category 11-12 years, there is little tactical discipline for the use of the anticipation technique to maintain the advantage in the combats in conditions of victory, with the application of the exercises conditions will be propitiated to maintain superiority in the combats.

RESUMEN

La presente investigación se realizó en el Municipio de Puerto Padre con el objetivo de establecer un conjunto de ejercicio de técnica de anticipación que logren mantener ventajas en la puntuación de los combates, para establecer los resultados se emplearon un conjunto de ejercicios de anticipación para la categoría 11-12 años, existe poca disciplina táctica para la utilización de la técnica de anticipación para mantener la ventaja en los combates en condiciones de victoria, con la aplicación de los ejercicios se propiciará condiciones para mantener superioridad en los combates.

Keywords

Anticipation; Sports area; Provincial event; Puerto Padre.

Palabras clave

Anticipación; Área deportiva; Evento provincial; Puerto Padre.

INTRODUCTION

Taekwondo is a combat sport, where athletes have a great deal of direct interaction with each other, in a shared space and with opposite objectives. In combats, an exchange of blows takes place, where techniques (especially leg techniques) are executed with great fluidity, speed and explosiveness. Its complexity lies in the fact that several factors must be harmoniously combined to achieve sporting success: physical (Madrigal, A. L. 2020), mechanical (Estevan, Álvarez, Falco, Molina-García, & Castillo, 2011; Estevan, Molina-García, Falcó, & Álvarez, 2010), technical, tactical, strategic (González, Iglesias, Mirallas, & Esparza, 2011) and psychological (Pelegrín & Jara, 2009).

When referring to the concept of anticipation speed, González Calleja and Cerro Rodríguez (1986, p. 5) point out that its purpose is to evaluate a subject's ability to perceive speeds and trajectories, and their ability to self-control, through a dynamic anticipation exercise.

Therefore, three major elements are present in anticipation speed: first, perceptual anticipation; second, response time; and finally, self-control.

Tactical preparation, the fundamental basis for achieving high sporting achievements, cannot be separated from its application in the most diverse combat situations that have made their dreams of being the replacement of great champions come true. Even so, with the most varied methods and procedures in the teaching of tactics, due to its most diverse forms of application and the characteristics of each athlete, tae kwon do is rich in its global action, Madrigal, A., Córdova, B., Heredia, W., & Bugallo, G. (2017).

Despite all these proven potentialities in the application of tactics, these are not fully exploited by the athlete, and it can be seen that most athletes at these early ages are not able to define and do not have an adequate tactical discipline in their application; therefore, a correct integration that enables the effective fulfillment of the same is not achieved, so we are faced with the problem: How does the use of the anticipation technique influence students in the 11-12 year old category, in their aspirations to maintain advantages in the scores of the fights?

The general objective of the work is defined as: Establish set of anticipation technique exercises that manage to maintain advantages in the scores of the fights and thus aspire to victory.

Speed, precision and coordination are more important than power itself. This is because speed is achieved with power, precision and coordination. Through scientific studies, each technique is designed to obtain the maximum effect and speed.

Punches to the face are not allowed, but kicks are, which ensures a technical and exciting fight. The scoring system is being analyzed and may change. At the moment, any legitimate technique will

score one point to the trunk area and two to the head, if any of these blows carry a protection count, an additional point will be given. If a fighter is hit in the head with a powerful blow, the referee can start the count up to eight. Three of these counts and the fighter is eliminated. In addition to the judges, there is one referee per fight and a main table with three more officials. The participant has his/her trainer near the ring. There is also medical assistance at ringside. The fighters are highly trained and gifted in the art, which means they offer a spectacle even for people who do not wish to compete.

The fights are a means where the competitors will demonstrate all their talent from the knowledge and skills acquired during the training period. Tactics in Tae Kwon Do, as in other sports, play a vital and important role in your aspirations for victory, being a fundamental basis for our work. As tactics, we can say that it is the ability to create the conditions for the use of the competitive arsenal in a given situation. We can also say that it is the art of arranging, moving and using all your technical arsenal in combat in pursuit of victory. We can mention some basic elements to take into account when using tactics, such as: Using the time of the action, using the time of the combat, acting as an initiative, acting without initiative, preparing an action and waiting for the moment to execute it, having a preparation for a certain action, having a preparation for different actions, deceiving the adversary, acting with double intention, choosing the distance, taking advantage of the distance, transferring one action to another.

The factors that the tactic depends on are: the opponent, the athlete's abilities, the referee, the scoreboard and the behavior of the effect of the action as such. The tactic has two fundamental forms of execution, one offensive (attack) and another defensive (counterattack). Of the latter in combat sports there are 3 forms (riposta, encounter or simultaneous and anticipation) of which anticipation was taken for the work.

METHODS

The population of this research is made up of 42 student athletes from the Camilo Cienfuegos sports area of the Puerto Padre municipality in the 11-12 year old category, of the same 25 athletes with three years of experience in the sport, the rest new entrants in the category in question, working on a sample of 16 athletes that represents 38% of the universe, homogeneous from the point of view of their preparation.

In the development of this research the following methods were used for the best development of the study, among them we have the theoretical level:

Historical-logical, Analysis-Synthesis, Inductive-deductive, within the empirical level we have the survey, diagnosis, observation, within the statistical techniques we have the percentage calculation. These allowed the ease of taking measurements and parameters that enhanced the development of this research.

RESULTS

The 39 fights carried out by the sample in the Provincial Championship of the Municipality of Puerto Padre were diagnosed, obtaining 30 victories and only 9 defeats. The objective of the diagnosis was: To know the usefulness of the anticipation techniques by the student-athletes, their effectiveness and at the same time how they behaved in conditions of victory.

A notoriety of the anticipation in the fights by the athletes was confirmed, even surpassed by the riposte. For a better interpretation in its assessment it is necessary to define some basic conditions for which it can be determined that an action is positive when it meets the parameters of a point in the correct execution of the technique (Precision. Power)

Without Result, When it does not meet the parameters of a point, even complying with the parameters of the tactic. In addition, negative, when it does not meet the tactical requirements and other necessary components for the correct execution of the anticipation such as: reaction speed. Adequate strength (power). Distance. Adequate foot (more advanced or backward). Correct hitting zone. Technique with which it anticipates.

When conducting the survey, it was found that 62.5% of the athletes (10 of them) preferred the riposte as a tactical action for the counterattack, that 25% (4 of them) preferred anticipation and only 12.5% (2 of them) opted for encounter techniques.

Of the favorite techniques to perform for anticipation, the Bandal stands out with 80% (13 athletes) and 20% (3 athletes) the Dolio, not having the Nerio Chagui as a favorite. And the most used form by the students, 100% selected the direct from behind.

These results showed that the use of anticipation techniques is a tactic used by athletes despite the complexity of its execution.

The use of direct techniques provides the selection of the easiest and strongest form when executing the technical element, marginalizing a number of variants of the most advanced foot. And the non-use of Nerio Chagui due to its level of complexity and lack of practice in training

Table 1. Quantitative Assessment

Activity	Quantity of Actions	%	Positives	% de Effectiveness	Negatives	without Results
Advance	141	37,4	36	25,5	54	51
Riposta	221	58,6	75	33,9	68	78
Game	15	4	3	20	8	4
Total	377	100	114	30,24	130	133

Where the evaluations behaved with the following parameter:

75%-100% B: 50,1%-75% R: 25,1%-50% M: -25%

Table 2. Assessment of the use of anticipation under conditions of victory.

Quantity of Actions	En condiciones de victoria						
	Total	Positives	%	Negatives	%	Without Results	%
141	51	16	31,4	21	41,2	14	27,4

When we go into a detailed analysis of anticipation actions, we can see that in victory conditions the percentage of positive actions is low. The graph also shows that the highest percentage (41.2) belongs to negative anticipation actions due to different causes such as: not presenting adequate reaction speed to apply anticipation among their tactical arsenal, not presenting adequate power in the technical element selected to anticipate and the same being the point, not being at the adequate distance for the real possibility of tactical effectiveness, not performing the anticipation with the adequate foot (more advanced or backward).

DISCUSSION

The research carried out provides valuable results regarding the work of anticipation in the 11-12 year-old category, not being a topic of the same, but with increasingly more systematic work and its specialization at early ages. It was possible to verify that there is no methodological guide in the athlete preparation programs for teaching this technique (anticipation). Nor how it is applied in combat conditions, this being our starting point for the research, according to Granda, J., Barbero, J. C., Mingorance, A., Reyes, M. T., Hinojo, D. and Manan, N. M. (2006).

The fundamental contribution of this research consists of a proposal of exercises that serve as a methodological guide for coaches to teach the anticipation technique to young athletes and thus in its

tactical application that is considered as one more argument to maintain advantages and aspire to victory in combat, also proposed by Bosque-Jiménez, J. (2018), Lastres, A. (2017).

For the Methodological Proposal of Anticipation Exercises, a set of anticipation exercises based on the principles of sports training and the application of methods for working on tactics were selected. These exercises will be put into practice with all the selected techniques and with an order of priority by level of complexity in their execution. It is important to clarify that before reaching anticipation we must have overcome the practical knowledge of the encounter or simultaneous, a similar variant but not with the same purpose in tactical procedures, this being a basic exercise in the first steps of anticipation.

Córdova, Rodríguez, Madrigal, & Cazco, (2020) states that after creating motor skills and habits in the execution, coordination and application of the main capabilities in athletes who anticipate, different combat situations are created, which will be developed by assault in combat schools where each athlete will have an invariable tactical discipline (only varying in the foot that performs the anticipation) responding with elements of anticipation and taking into account the following: combat score, number of points that are taken as an advantage, time remaining in the combat, also rounds or minutes of the last, recommended distance for good effectiveness, given the characteristics of the opponent, select which action will be anticipated if the first or second action and technique that will be used.

Calero Morales, (2019), states that with the use of the proposal with its logical character and basis for the level of complexity in its acquisition, it would be obtained in the application of anticipation in the tactical arsenal of athletes; a vital weapon in the result of the combats.

Authors such as (Bacuilima and Ávila, 2024) implemented a pedagogical program of visual and auditory stimulation to improve and evaluate the reaction speed capacity of children, adolescents and adults among other capacities through the time intervals and number of actions performed by a taekwondo athlete, in their research they worked on a pedagogical program 3 times a week for a period of 8 weeks where the number of correct answers with taekwondo techniques was measured before and after the program, as fundamental results a 32% increase in effectiveness was observed in the correct answers with the reaction time of the program, this indicates a notable improvement in the reaction time of the athletes and significant improvements in performance. In a descriptive and qualitative research, collecting detailed information through surveys, the author Hernández, (2024) demonstrated how emotional intelligence influences the sports performance of taekwondokas by applying specific tests and analyzing their correlation with sports performance, which yields as

results in the scores obtained in the different dimensions of emotional intelligence, the identification of strengths and opportunities for the development of technical and emotional skills.

In his Diploma Thesis, the author Parris (2021), proposed a set of mobility exercises to apply to taekwondo for the 11-12 year-old category, considering the practical and scientific importance of their application in taekwondo, especially from an early age. However, coaches consider that they are essential for the physical, technical-tactical and combinative development of practitioners. In a socio-educational study with a qualitative approach to understanding and interpreting emotions as experienced by students in their daily school context, Huertas (2023) aims to identify the elements of taekwondo that could improve emotional regulation in eighth grade students of basic secondary education, where he identifies the presence of common elements between taekwondo and emotional regulation with various points of convergence, in addition, elements of taekwondo are recognized that favor emotional regulation, therefore, through the link between taekwondo and emotions, skills for self-control and modeling of behaviors are encouraged that contribute to improving the subject's training and at the same time to harmonious coexistence. In his program for improving flexibility in Taekwondo, Ros, (2022) responds to his general objective of improving flexibility levels among students through the practice of Taekwondo linked to Physical Education classes, so it can be carried out without any time or space problems, giving teachers the possibility of developing their classes to improve motivation and flexibility in an original and unconscious way.

Mediavilla (2020) theoretically validated a system of specific exercises to develop the speed of execution of offensive actions in kicking techniques in taekwondo players, which allowed to build an alternative solution by inductive means, which comes to solve the limitations found on the development of the speed of execution of the kick, in addition, the theoretical value was determined from the perspective of the experts, identifying high coincidences on the theoretical-methodological quality, usefulness, importance and relevance.

The author Pinto (2022), in his research work on recreational games for the physical preparation of taekwondo, allowed to know the relationship between recreational games in the physical preparation of Tae Kwon Do and the development of coordination capacities, which demonstrates the relationship between recreational games and physical preparation, in addition, with the design of the guide, the sports practice of taekwondo is improved and elevated in the children's category.

Toala (2023) in his research entitled systematization of experiences of plyometric exercises for taekwondo of the specialized training club Scorpius, raises as an objective the development of

plyometric exercises in a more scientific way to increase the efficiency of basic and advanced level kicks in senior and youth categories, the proposal fulfilled the purpose of reducing the reaction time to kick without losing strength in the act, in addition to developing them from a more scientific point of view.

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