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Director: Fernando Emilio Valladares Fuente

Email: fernando.valladares@upr.edu.cu

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Original article

## Exercises to improve the effectiveness of Tokui-Waza in Tachi Waza

### Ejercicios para mejorar la efectividad del Tokui-Waza en el Tachi Waza

### Exercícios para melhorar a eficácia do Tokui-Waza em Tachi Waza

Teobaldo Martínez Perdomo<sup>1\*</sup>  <https://orcid.org/0000-0002-0541-8591>

Lázaro Alberto Pastor Chirino<sup>2</sup>  <https://orcid.org/0000-0001-9435-865X>

Osviel Hernández Sotolongo<sup>3</sup>  <https://orcid.org/0000-0002-3954-4107>

Rosa María Tabares Arevalo<sup>3</sup>  <https://orcid.org/0000-0003-2721-6402>

Esteban Eddy Méndes Lazo<sup>3</sup>  <https://orcid.org/0000-0003-3775-1425>

<sup>1</sup>Eide "Ormani Arenado". Pinar del Río, Cuba.

<sup>2</sup>Provincial Directorate of Sports (Inder). Pinar del Río, Cuba.

<sup>3</sup>University of Pinar del Río "Hermanos Saíz Montes de Oca", Faculty of Physical Culture "Nancy Uranga Ramagoza". Pinar del Río, Cuba.

\*Corresponding author: teobaldomartinezperdomo@gmail.com

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## ABSTRACT

In the current sport of Judo, the mastery of the Tokui-Waza or favorite technique is essential to defeat the opponent and win the victory, however this requires an adequate technical-tactical preparation and its systematization in the training process. From the existence of a series of inadequacies related to the didactic procedure of the coaches for the teaching-learning of the technical-tactical actions of Tokui Waza, in order to enable the athletes an adequate training in the process of technical preparation, based on new and better ways to address and improve this process, the objective of this research is to implement a set of exercises to improve the effectiveness of Tokui Waza in the Tachi Waza of the women's Judo team, category 15-16 years old, of the Integral Sports School in Pinar del Río, in correspondence with the different manifestations within the combat. For this purpose, a sample of 12 athletes, members of this team, was used. Scientific research methods and techniques were used, such as: observation, standardized and individual interview, as well as document analysis. As a result, a set of structured exercises is provided, which include simplified and complex situations, which act didactically on the components of the technical-tactical preparation, constituting a useful tool for coaches in the improvement of their work in the sports preparation of athletes.

**Keywords:** Judo; technical-tactical preparation; Tokui Waza.

## RESUMEN

En el judo actual, el dominio del Tokui-Waza o técnica favorita es imprescindible para vencer al contrario y alzarse con la victoria; no obstante, ello requiere de una adecuada preparación técnico táctica y su sistematización en el proceso de entrenamiento. A partir de la existencia de una serie de insuficiencias relacionadas con el proceder didáctico de los entrenadores para la enseñanza-aprendizaje de las acciones técnico tácticas del Tokui Waza y en aras de posibilitarle a las atletas, una adecuada formación en el proceso de preparación técnica, fundamentado en nuevas y mejores formas de afrontar y perfeccionar este proceso, la presente investigación tuvo como objetivo implementar un conjunto de ejercicios para el mejoramiento de la efectividad del Tokui Waza en el Tachi Waza del equipo femenino de judo, categoría 15-16 años de la Escuela Integral Deportiva de Pinar del Río, en correspondencia con las diferentes manifestaciones dentro del combate. Para ello, se trabajó con una muestra de 12 atletas integrantes de este equipo. Se emplearon los métodos y técnicas de investigación científica como: la observación, entrevista estandarizada e individual y el análisis de documentos. Como resultado se aporta un conjunto de ejercicios estructurados, que incluyen situaciones simplificadas y complejas que actúan didácticamente sobre los componentes de la preparación técnico-táctica además que constituyen una herramienta de utilidad para los entrenadores en el perfeccionamiento de su labor en la preparación deportiva de los atletas.

**Palabras clave:** Judo; Preparación técnico táctica; Tokui Waza.

## INTRODUCTION

Judo is an individual sport, of variable character and contextualized among the group of combat sports. In the process of technical-tactical preparation of judo, it is necessary to highlight the importance of creating an accurate representation of the technique under study (Sterkowicz, Sacripanti, & Sterkowicz, 2013; Franchini et al., 2014; Ghetti, 2016). The coach must offer clearer and more concise explanations by means of a correct demonstration, this being as accurate as possible to the modeled reality to allow proper



learning and assimilation by the practitioner, in addition, teaching media such as films, filmstrips, photos, sequences should be used (Mikicin, & Kowalczyk, 2015).

The tactical field of Tachi Waza and its content in judo is given in two fundamental groups: offensive tactical actions; which contemplate direct attacks, counterattack and combined attacks and defensive tactical actions that contemplate actions that behave as a counterpart of direct attacks, i.e., dodges and coping (Copello, 2003). This structuring of the content condenses not only the whole universe of technical elements of judo, but also systematizes it and allows a novel form of orientation of the didactic work. In addition, it expresses the levels of organization of the subject and constitutes an objective way of being in correspondence with the purpose of the sport: the effectiveness of tactical actions (Copello, 2003).

The author himself (Copello, 2003), refers that the control of tactical performance is of great value for the data it provides for the knowledge of the effectiveness and efficiency of the judoka's technical and tactical training process. This has become the fundamental axis of sport preparation and mastery, manifesting itself in the prioritization of preparation content designs, with technical-tactical approaches. This, as one of the main directions of sports training, fulfills essential functions in the formation of the sport's own habits and skills Copello (2013); Morales (2014); Guillén (2015); (Calero (2015).

When working on a sport such as judo, care must be taken in the way of working on the contents with the students (García, 2006, p.187). In this sense, when speaking of judo methodology, Tamayo (2003), shows the guidelines to follow when working on fighting skills, and more specifically judo in schoolchildren.

When reference is made to the Tokui Waza, allusion is made to the specific technique of each judo athlete, so that, in the tactical field of Judo, it is defined as a direct attack that by its various forms of realization constitute a system of individual tactical action. This enriches the technical possibilities and the individual tactical evolution, where the interrelation of the technical-tactical action of Tokui Waza with the direct attacks, counterattacks and their combinations when training, allow the judo athlete to understand them and develop the motor potential by the experience and the ideas captured for a quick competitive participation. All this is subordinated to the intention of the formation of an intelligent, analytical, creative judo athletes, with a high efficient technical-tactical level, before the varied situations that are derived, according to the different manifestations in the combat.

Guillén, Ale and Coral (2017), emphasize that the basic formation process should be highly influenced by the directions of the preparation and the content attributed to them, express the pertinence of the use of a cognitivist model, of transference, which gives the possibility of articulating, in a logical way, technique and tactics, hence the idea that the technique cannot be seen on the margin of tactics is assumed.

Hernández (2011), considers that,

"in the technical preparation throughout the whole process of preparation of the athlete, the tasks dedicated to the teaching, mastery and improvement of the different technical elements, which will be used during the competitive exercise, are executed".



In combat sports, specifically in judo, from the tactical point of view, it coincides with the criteria of several authors such as, [Copello \(2013\)](#); [Morales-Cuellar, \(2014\)](#); [Guillén, Ale and Coral \(2017\)](#), which allude to the offensive tactical direction, the defensive tactical direction and the tactical direction of combined or continuous actions. Under this premise, the technical-tactical preparation requires the use of methodological tools that contribute to judo athletes' active participation in the understanding of tactical problems and improve, in the same way, competitive actions.

For his part, [Sastoque \(2012\)](#), states that;

"the tactical work consists of training movements and actions to perfect the skills of the techniques, for which an optimal physical fitness is required; establishing demands and degrees of difficulty in the realization of individual or combined techniques".

The basis of the technical improvement of athletes is aimed at maintaining the effectiveness and efficiency of any sporting gesture; for this, according to [Zatsiorski \(1990\)](#), it must have the following aspects: the individual particularities of the athlete, the planning of a sporting technique, the auxiliary exercises, training means and the special technical and physical preparation; that is why, in judo, the different biomechanical and training variables, mentioned above, must be taken into account to achieve the main objective, which is the victory through a good execution of the technical skill studied.

Based on the analysis of this bibliographic consultation, it is necessary to go to a specific search on the subject to know the treatment and all the specificities of the technical-tactical preparation in the planning documents of the technical collective of the team under study, as well as what existed in the Subsystem of High Performance Sport ([Chinea et al., 1984](#)) and the Integral Program of High Performance Sport ([Chinea et al., 1984](#)) and the Integral Athlete Preparation Program (PIPD) of Judo, in its 1991, 2007, 2014 and 2017 editions ([Jiménez, 1991](#); [Leyva et al., 2007](#); [Mesa et al., 2014](#); [Mesa et al., 2017](#)).

Taking into account all of the above, the objective of this research is to implement a set of exercises to improve the effectiveness of Tokui Waza in 15-16 judo female athletes from Pinar del Río, which will contribute to the increase of competitive performance.

## **MATERIALS AND METHODS**

### **Methods and research techniques**

For this research, it was worked with a population of 12 female judo athletes of the 15-16 school category in Pinar del Río. Of them, seven are in their first year in the category, with 15 years of age and four years of experience in the discipline and five are in their second year in the category, with 16 years of age and five years of experience, representing 100 % of the athletes of the provincial team of this sport.

As a function of the research, scientific methods of the theoretical order were used, such as: analysis-synthesis; historical-logical; induction-deduction.



Among the empirical methods used are:

Document review: after consulting the documents through the study of planning of the team's technical collective, background information related to the improvement of the effectiveness of Tokui Waza and the technical-tactical preparation of the judo female athletes was revealed. In this analysis, the following were taken into account: the contents for the development of the technical-tactical preparation of the judo athletes; the dosage and distribution of the volumes of the technical-tactical preparation of the Tokui Waza of the judo female athletes in the macrocycle of preparation; the methods for the development of the technical-tactical preparation of the Tokui Waza of the judo female athletes, as well as the organizational procedures used for the development of the technical-tactical preparation of the Tokui Waza of the judo female athletes.

Standardized interview: it was applied to four judo coaches of the Sport Initiation School (Eide in Spanish) "Ormani Arenado Llonch" of Pinar del Río, who average more than ten years of experience in this work, with the purpose of knowing their criteria on the development of the methodological treatment in the process of technical-tactical preparation of the Tokui Waza in the judo female athletes.

Non-participant observation: it was carried out in six training sessions in the preparatory period (at the beginning and another at the end of each of the last three mesocycles of the stage).

In addition, a total of the athletes under study were observed in six tops carried out in the province, three internal control and three preparatory tops in the month of November 2018 with the provinces of Havana, Artemisa and Matanzas. Among the elements assessed were: direct attacks; combinations as a linking element; combinations as a projecting element; counterattacks.

## **RESULTS AND DISCUSSION**

In order to fulfill the proposed objective and structure the exercises to be proposed, an exploration of the current state of the technical-tactical action and effectiveness of Tokui Waza in the judo female athletes, category 15-16 years old, of the Eide of Pinar del Río was carried out, based on the methods and instruments provided, whose main results are described as follows:

### **Results of the interview with the coaches**

The overall analysis of coaches' responses yielded the following elements:

- All the interviewees (100 %) confirm giving great importance to the Tokui Waza technique (favorite technique). It is the technique most used by the athlete, the most effective, the most trusted when attacking, i.e. the one that provides the most victories.
- The 100 % of the trainers stated the frequent use of different exercises oriented to the execution of the Tokui Waza.
- Seventy-five percent of those questioned answered that the exercises were performed in the same way for everyone in the team, while the other 25 % stated



that they performed them taking into account the technical and competitive level of the athletes in their team, assigning them different tasks, according to their own characteristics.

- When analyzing the answers to this question, it was found that in the Integral Program of Preparation of the current Judo athlete and in none of the previous ones, there are exercises to improve the execution and effectiveness of Tokui Waza, a specific technique. In this document, there are only methodological indications to be followed by the coaches. This reinforces the need for the proposal of exercises.
- The 100 % consider necessary the elaboration of a methodological alternative to improve the effectiveness of Tokui Waza in the judo female athletes of the 15-16 category of the Eide of Pinar del Río. This would make it possible to improve the technical-tactical actions related to Tokui Waza and thus the effectiveness and efficiency of the judo female athletes, as well as the improvement of individual and team sports results.

### **Results of observations of training sessions in the preparatory period**

When evaluating the results obtained from the six observations made to the training sessions, in the preparatory period of the judo female athletes, of the 15-16 years old category of the Eide "Ormani Arenado", of Pinar del Río, the following insufficiencies were found:

- Inadequacy when selecting the appropriate technique (Tokui Waza) with respect to the somato type of the athlete.
- Mismatch in the coordination of movements when executing the Tokui Waza.
- Insufficient imbalance to perform the tokui waza at the moment of attack.
- Incorrect placement of the support foot and insufficient imbalance in the leg techniques (Ashi Waza).
- Insufficient leg and hip work and insufficient imbalance in shoulder techniques (Kata Waza) and hip techniques (Koshi Waza).
- Little technical mastery of Te Waza and Sutemi Waza techniques.
- Predominance of the repetitive method from exercises of schematic and mechanistic character, unable to produce positive transfers that achieve the appropriate effect in the thinking of the judo female athletes.
- Insufficient construction of technical-tactical actions of the Tokui Waza, unexpected to activate the operative thought of the judo female athletes in order to awaken the autonomy and decision making of those involved.
- Lack of didactic aids that contribute to the strengthening of the theoretical component of the technical-tactical preparation of the Tokui Waza of the athlete.
- The technical-tactical preparation of Tokui Waza is not detailed according to the different manifestations in combat.





- Deficient operability of the general thinking of the judo female athletes.
- Deficiencies in the theoretical-tactical knowledge of the Tokui Waza of the judo female athletes according to the different manifestations in combat.

### **Results of the observations to preparation matches**

On the other hand, the control carried out at the six preparation matches, included in the general mesocycle showed the following:

- Insufficient imbalance to perform the Tokui Waza at the moment of attack.
- Inadequate displacement according to the technique to be performed.
- Weakness in the grips at the moment of execution.
- Weakness in the grips at the final moment of the technique (moment of projection). Reinforced with difficulties in decision making to perform the techniques at the right time.
- Insufficient coordination to execute the combinations with the Tokui Waza as a linking or projecting element.
- Limitation in detecting the moment of attack to interrelate one technique with the other, complex combination.
- Poor reaction speed and agility to perform counterattacks with the Tokui Waza, direct attacks, linking or projecting combinations.
- They do not attack with the Tokui Waza at the appropriate moment.
- They create very few defensive breaking actions to the opponent.
- They use a limited arsenal of effective Tokui Waza.
- They do not take into account the Tokui Waza in the profile of the opponent, stature, posture, right or left and level of the opponents.
- Slowness in the execution of a technical action that requires a quick determination.

### **General observation results**

The general analysis of the results of the indicators in the six observations made to the training sessions, and the six preparation matches, allowed to confront where the main deficiencies in terms of Tokui Waza were.

As shown in table 1, the indicator with the greatest difficulty and the lowest percentage and effectiveness index was the one related to direct attacks, with 30 %, showing a low level of effectiveness. The indicator with the highest percentage of effectiveness was that of combinations as a linking element, for 60 % of effectiveness, a fact that demonstrated the existence of deficiencies in the use of Tokui Waza in different technical-tactical actions, but at the same time, showed that this indicator allowed greater effectiveness in competitive results. All these results show deficiencies in the technical-tactical actions of Tokui Waza (Table 1).





**Table 1.** - Results of the observation of the preparatory matches

Indicators	Evaluation						
	Negative actions			Effective actions			
	Total of actions	Nulo	%	Ippón	Wazari	Total	%
Direct attacks	60	42	70	6	12	18	30
Combinations as linking	25	10	40	9	6	15	60
Combinations as projecting	37	20	54	5	12	17	46
Counter attacks	48	31	65	7	10	17	35

### Set of exercises to improve the effectiveness of the Tokui Waza technical-tactical action in judo female athletes

Based on the exposed insufficiencies, a set of exercises were designed and implemented to improve the effectiveness and the technical-tactical action of Tokui Waza, according to the different manifestations in combat, using the systemic-structural-functional method, which allowed establishing the structure, the elements, their interrelation and functioning. In the design of the exercises, the methodological steps guided by **De Armas, Lorences and Perdomo (2003)** are assumed.

The theoretical, methodological and scientific foundations of the proposed exercises respond to the need and social commitment that judo has in the Cuban sports system and the demands of the current sports universe, which lies in making possible the goals of the sports institution with the interests of Cuban society, which requires novel forms in the individual action of the technical-tactical preparation of Tokui Waza in judo, since the solution of the current problems in this discipline will only be possible with the intervention in the sports training process to gradually transform it.

These exercises also favor the integral development of technical and tactical skills in harmony with the theoretical knowledge and the physical and volitional possibilities that contribute to the systematic growth of the judo female athletes, considering the need for a methodological tool of flexible and integral character, which can be contextualized according to the level of the athletes and the objectives set by the coach in his training structure, enabling the systematization within the preparation process.

The structure of these exercises includes: description, dosage, methods, means and methodological indications.

Exercise 1. Combat for grips.

Description: in this exercise, the combat for the grips will be carried out freely, with the only exception that one athlete will try to get the grip first and at the sound of the whistle they will change roles.

Dosage: two to three repetitions will be performed.

Time: 30"-1' of work in each of the series.



Method: polemic and competitive situation.

Exercise 2: Tokui-Waza attack blindfolded on the spot.

Description: Tori will perform Tokui Waza attacks blindfolded when uke is standing in front of him on the spot.

Exercise 3: Tokui-Waza attack blindfolded on the spot.

Description: Tori will perform Tokui Waza attacks blindfolded when uke is moving freely on the tatami.

Exercise 4: Tokui Waza attack with grappling.

Description: Tori will perform Tokui Waza attacks immediately after achieving a two-handed control, making sure to perform a correct imbalance.

Exercise 5: Tokui Waza attack after performing a feint with the arms and feet.

Description: Tori will perform Tokui Waza attacks immediately after performing a feint with both arms and feet, always making sure to have a good control of the uke.

Dosage: two to three repetitions will be performed.

Time: 30"- 2' of work in each of the series.

Method: repetitions and competitive.

### **Combinations**

Objective: to improve the tactical actions of Tokui Waza combinations that occur during combat.

Exercise 1: Tokui Waza combinations with opposite hand techniques.

Description of the exercise: Tori will perform Tokui Waza combinations with techniques by the opposite hand to the side of the body where we always attack.

Exercise 2: Combinations of Tokui Waza with Ne Waza

Description: Tori will perform Tokui Waza attacks and immediately after projecting will perform an immobilization technique, the most appropriate according to the position adopted by the uke after falling.

Dosage: two to three repetitions will be performed.

Time: 1'-1:30' of work in each of the series.

Methods: repetitions and competitive.

### **Counterattacks**

Objective: to improve the tactical actions of counter-attacks with the Tokui Waza that occur during combat.

Exercise 1: counterattack with Tokui Waza to a leg technique.



Description of the exercise: Tori will perform the Tokui Waza, after performing a dodge to a leg technique.

Exercise 2: Counterattack with the Tokui Waza to a simple combination.

Description of the exercise: Tori will perform the Tokui Waza after having defended or dodged a simple combination of two uke's leg technique attacks.

### **Methods and means:**

- Direct visual method.
- Verbal and sensoperceptual method.
- Standard repetitions method.
- Variable standard repetitions method.
- Polemic and competitive situation.

### **Methodological indications**

- The technical and tactical level of each athlete will be taken into account when performing these exercises.
- The exercises will begin to be performed without the resistance of the uke and then the level of resistance of the uke will be increased until reaching the most similar to combat to encourage operational thinking.
- The exercises will be performed first to uke in right postures and then with left postures and at the end the ukes will change the postures at will during the exercises so that they will be facing the same thing that happens in a combat.
- The teacher must ensure that the athletes do not perform the exercises in the form of Randori from the beginning, so that the objectives can be met in each of them.
- The teacher must emphasize the quality of the execution of the exercises, providing them with evaluative levels. These are: polished (when the tactical action is executed without making mistakes, there is systematic fluency and high level of efficiency), semi-polished (when the tactical action is executed making some non-fundamental mistakes; the action does not always appear fluid, but in general it is efficient) and coarse (when the tactical action is executed in an uncoordinated way and does not produce any effectiveness). Based on **Vera (2007)**.
- The teacher should not move on to another exercise if the athletes do not execute the technical action correctly and have overcome the different evaluative levels.



## CONCLUSIONS

It is concluded that the set of exercises proposed to improve the effectiveness of Tokui Waza are a contribution to the continuous development of judo in the selected sample.

Its application has allowed the consolidation of the mastery of the technical-tactical action of Tokui Waza, adapting to the characteristics and different specific manifestations of judo combat today.

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The authors declare not to have any interest conflicts.

**Authors' contribution:**

**Teobaldo Martínez Perdomo:** Conception of the idea, literature search and review, instrument making, instrument application, compilation of information resulting from the instruments applied, statistic analysis, preparation of tables, graphs, and images, database preparation, general advice on the topic addressed, drafting of the original (first version), review and final version of the article, article correction, authorship coordinator, translation of terms or information obtained, review of the application of the applied bibliographic standard.

**Lázaro Alberto Pastor Chirino:** Conception of the idea, literature search and review, compilation of information resulting from the instruments applied, drafting of the original (first version), article correction.

**Osviel Hernández Sotolongo:** Compilation of information resulting from the instruments applied, statistic analysis, preparation of tables, graphs, and images, database preparation, database preparation, general advice on the topic addressed.

**Rosa María Tabares Arevalo:** Literature search and review, instrument making, statistic analysis, preparation of tables, graphs, and images, drafting of the original (first version).

**Esteban Eddy Méndes Lazo:** Literature search and review, instrument application, translation of terms or information obtained, review of the application of the applied bibliographic standard.



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Rosa María Tabares Arevalo, Esteban Eddy Méndes Lazo

