### Brief scientific article

# RETREATING FROM THE LINE OF ATTACK AS AN IMPORTANT FACTOR FOR A SUCCESSFUL DEFENSE IN REAL AIKIDO

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**Abstract:** Transversal research was carried out on a sample of real aikido practitioners made up of males aged from  $30 (\pm 5 \text{ years})$  who train three times a week. During the selection of the respondents, the criterion, along with the age structure and gender, was also the degree of knowledge of the technique of real aikido, and thus participating in the research were the respondents who have been training real aikido at least three, and at most four years. The aim of the research was to establish the significance of retreating from the line of attack as a relevant prerequisite for a successful defense. The aim of the research was the skill of real aikido which consists of a combination of individual techniques. The respondents in pairs via an arranged sparring carried out the technique of "downwards hand" blocks as a response to the "direct" foot strike and the "inner upper arm outwards" block as a response to the "fist straight ahead" strike along

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with a simultaneous retreating from the line of attack by a "side movement" technique. In the following variant, the respondents who defended themselves from an identical strike used the previously mentioned blocks which they did not carry out in combination with movement but rather, remained in the line of attack. The obtained results confirm the presumption that the number of successfully realized blocking techniques which precede the realization of the latter individual techniques in real aikido (most often, levers) will depend on the fact whether the defender has retreated from the line of attack using the movement technique.

**Kev words:** line of attack, strike, movement, block, real aikido.

## INTRODUCTION

Real aikido is a relatively new martial art founded by soke (founder) Ljubomir Vračarević. This is an authentic martial art which took elements from traditional aikido, jiu jitsu, judo, etc., in such a way that the master promotes learning techniques, removes all mystification and religiosity, considering them inappropriate for the Balkan spirit, and adopts and perfects the elements which increase efficiency and applicability in real life situations (Milosavljević, Matavulj and Trunić, 2013). The basic premise of real aikido is to defeat the attacker efficiently, and not to be physically injured. This is a defensive, extremely flexible system of defense techniques whose basic features are the following: counterparting the opponent's attack, a continuity of carrying out techniques and a total final dominating of the attacker (Milosavljević & Vračarević, 2011). In real aikido, the dominating of the attacker is most often carried out by a technique of levers with which the attacker is "controlled" by dosed pain. Pain is an unpleasant sensory or emotional experience which is caused by possible or existing tissue damage or which can be described to match the mentioned damage (Arlov, 2007).

*The topic of this research* of this paper is the skill of real aikido, which consists of a combination of individual techniques.

The aim of the research is establishing the significance of retreating from the line of attack as a relevant prerequisite for a successful defense

#### **METHOD**

In this research, the experimental factor were the techniques of movement realized with the aim of retreating from the line of attack which are within the framework of the "agreed sparring" realized directly after the attacker starts carrying out the technique of strikes, along with a simultaneous carrying out of the block technique. All the strikes with the hands as well as the feet within an agreed sparring are realized by using the maximum strength of the respondents carrying out the strikes and with the aim to realize contact with the defender's abdomen, during which the practitioners who were defending themselves wore the chest protectors used in taekwondo in order for the research to be carried out safely. In the system of real aikido training, as the word 'real' implies, there is much insistence on a real attack by the partner. The founder of real aikido aspired for this kind of training to master defense techniques which would be applicable in real life situations (Vračarević, 2007). Strikes are mobile structures which can be realized with the hands and feet with the participation of other body parts, and which have the aim to obliterate the opponent via a tactical design in whose realization various abilities participate (Milošević, Zulić and Božić, 1989). The efficiency of the strike techniques are directly connected with timeliness and speed realization (Blagojević, Vučković and Dopsaj, 2012). Those practitioners which had the task to defend themselves from strike techniques carried out the block along with a simultaneous movement, with the aim of retreating from the line of attack. Movement is realized when it is necessary to overcome a certain space and/ or maintain an adequate distance, as well as when it is necessary to retreat from the direction of an eventual attack (Blagojević, Vučković and Dopsaj, 2012).

## Sample of respondents

The sample of respondents in this transversal research was taken from the practitioners of real aikido and is made up of males aged from 30 (± 5 years) who train three times a week. While selecting the respondents, the criterion, along with the age structure and gender, was also the degree of knowledge of the technique of real aikido, and thus respondents who train real aikido at least three, and at most four years took part in the research. Along with this, the respondents did not belong to one single club but were from different clubs, as well as from different cities. The mentioned training period secured a quality realization of individual techniques, as well as a combination of individual techniques which were realized within this research. Thus, the research involved a systematic sample. "We form systematic samples by using personal conviction from the units of the group as typical or representative for a given gathering" (Žižić and associates, 1993, p. 142). In total, at the beginning, some 40 male respondents were under observation (20 pairs) of which no less than 36 respondents (20 pairs) were planned at the final observing during the assessing of the efficiency of carrying out levers while the sample, due to fluctuation, cannot be any less than 36 respondents (18 pairs). All the respondents are in good health, without injuries which would cause difficulties for taking part in this research, regularly train and volunteered for assessing the success of the realization of the block techniques through agreed sparring.

#### Observable variables

An observable variable is the technique of blocks which can be realized in a combination with or without the technique of moving. The term block implies the technique which can be used as a defense from an attack carried out by hand or foot (Mudrić, 2005). Using this research, the authors tried to point out the significance of the technique of movement which would increase the number of successfully realized block techniques for which it is presumed would not be sufficient to successfully block the attacker's hands or feet, i.e. to stop a strike directed towards them in the chest area, unless the defender fails to retreat from the line of attack at least partly.

The process of establishing the success of realizing the block techniques which can be carried out independently or in combination with the movement technique

By means of agreed sparring, the respondents carried out all the planned attacks in pairs and on one occasion.

This research included the following variants of attack and defense:

- 1. One partner attempts to defend himself from the attacker by a strike with the foot "straight ahead", and while remaining in the line of attack he carries out the block "with the palm downwards" attempting to disable the attacker from making any foot contact with his chest (BKNAPNOG1).
- 2. One partner attempts to defend himself from the attacker by a strike with the foot "straight ahead", during which he retreats from the line of attack with the movement technique "moving to the side" along with a simultaneous carrying out of a block "with the palm downwards" attempting to disable the attacker from from making any foot contact with his chest (SKNAPNOG2).
- 3. One partner attempts to defend himself from the attacker by "punching," during which he remains in the line of attack and carries out the "inner side of the upper arm outwards" block, trying to disable the attacker from from making any hand contact with his chest (BKNAPRUK1).
- 4. One partner attempts to defend himself from the attacker by "punching," retreating from the line of attack with the movement technique of "sidestepping" with a simultaneous carrying out of the "inner upper arm outwards" block, trying to disable the attacker from making any hand contact with his chest (SKNAPRUK2).

## Statistical analysis

Considering that the variables were analyzed according to the principle task being carried out successfully-unsuccessfully (value 1 for successful – 2 for unsuccessful), the Wilcoxon test for the dependent samples for determining the statistically significant differences was used, during which compared were the variables BKNANOG1 and BKNAPNOG2 and BKNAPRUK1 and SKNAPRUK2, as well as the Friedman test for multiple samples. The observed level of statistical significance was  $p{=}0.05$ .

BKNAPNOG1 – without movement, the one defending himself carries out a block as a response to foot strike 1

SKNAPNOG2 – with movement, the one defending himself carries out a block as a response to foot strike 2

BKNAPRUK1 – without movement, the one defending himself carries out a block as a response to hand strike 1

SKNAPRUK2 - with movement, the one defending himself carries out a block as a response to hand strike 2

### RESULTS

The results of the statistical analysis are given in tables 1, 2 and 3.

 Tablea 1. of statistical analysis for variables BKNANOG1 and SKNAPNOG2

Wilcoxon Matched Pairs Test Marked tests are significant at p <.05000						
	Valid - N	T	Z	p-level		
BKNAPNOG1 & SKNAPNOG2	40	56.00000	3.195325	0.001397		

As can be seen from Table 1, the results for the variable BKNANOG1 were statistically significantly different (p=0.001) and on the level p=0.001 from variable SKNAPNOG2. Considering that in the case of SKNAPNOG2 the number of successfully realized techniques is far greater than BKNANOG1, we have concluded that the realized technique which follows the retreating from the line of attack is a far more efficient method of defense and as such, it is recommended in the training of the mentioned techniques.

Table 2. Results of the statistical analysis for the variables BKNAPRUK1 and SKNAPRUK2

Wilcoxon Matched Pairs Test Marked tests are significant at p <.05000						
	Valid - N	Т	Z	p-level		
BKNAPRUK1 & SKNAPRUK2	40	0.00	3.723555	0.000196		

As can be seen from Table 2, the results for the variable BKNAPRUK1 are statistically significantly different (p=0.0019) and on level p=0.001 from the variable. Considering that in the case of SKNAPNOG2 the number of successfully realized techniques is far greater than BKNAPRUK1, we have concluded that the realized technique which follows the retreating from the line of attack is far more efficient as a defense method and as such recommended in training of the mentioned techniques.

With the aim of determining the difference on the level of technique, carried out was a Friedman test for all four observable SKNAPRUK2 variables.

Friedman ANOVA and Kendall Coeff. of Concordance ANOVA Chi Sqr. ( $N = 40$ , $df = 3$ ) = 41.13223 <b>p = .00000</b> Coeff. of Concordance = .34277 Aver. rank r = .32592						
	Average - Rank	Sum of - Ranks	Mean	Std.Dev.		
BKNAPNOG1	3.187500	127.5000	1.750000	0.438529		
BKNAPRUK1	2.737500	109.5000	1.525000	0.505736		
SKNAPNOG2	2.237500	89.5000	1.275000	0.452203		
SKNAPRUK2	1.837500	73.5000	1.075000	0.266747		

**Table 3.** Results of statistical analysis for all variables

The Friedman test pointed to a significant difference between the observable variables (techniques) during which the results were shown from worse to better (Table 3), so that the SKNAPRUK2 technique is the most successful one, and BKNANOG1 is the least successful. The percentage of success ranged from 25% of the successfully carried out technique BKNANOG1 to over 90% for SKNAPRUK2.

#### DISCUSSION

It is important to stress that hitherto this topic has not been researched in real aikido as a defensive martial art, and thus it is important to shed light on the significance of retreating from the line of defense. The obtained results point to the fact that the movement technique with the aim of retreating from the line of attack as an experimental factor contributes to a large number of successfully realized defenses. In the specific case of this research, the phrase "successful defense" implies preventing contact of the attacker's extremities with the chest of the defender, during which the one defending himself has the possibility to prevent the mentioned contact with a block technique or a combination of movement techniques and blocks. An unsuccessful block implies any kind of contact of the attacker's extremities with which he is attempting to strike the chest of the defender. Even though dominant

in real aikido, levers in the greatest number of cases are carried out after preventing the attacker's strike with a block and/or retreating from the line of attack, and thus it is important to stress the significance of the technique of movement used in this aim, which this research confirms. The obtained results point out that the the number of successful defenses were carried out by foot, during which the one defending himself remained in the line of attack trying to disable the block technique of the attacker achieving contact with the defender's chest. An explanation of the results obtained thus is in the fact that the attacker's foot is heavier, and the muscle groups which are used to carry out a concrete strike are much stronger than the hand of the attacker carrying out the block. Somewhat more successful was the defense from the hand strike, during which the defender remained in the line of attack trying to disable the attacker to realize a contact with the defender's chest with the blocking technique. The explanation is in the fact that the attacker carries out the strike with the hand, while the defender also carries out the block with the hand, and thus the ratio of the weight of the extremities and the strength of the muscle groups which move the mentioned extremities are more equivalent than in the previous case. Even more successful is the combination of the technique of movement and the block as a response to the foot strike, while the most successful was the combination of the technique of movement and the block technique as a response to the hand strike. The ensuing difference in the last two mentioned defenses can be explained again by a weaker hand strike which is easier to block than the foot strike which is much stronger. In any case, the results obtained point to the large significance of retreating from the line of attack, whether it involves defense from a hand or a foot strike.

### **CONCLUSION**

The aim objective of this research is the martial art of real aikido which consists of a combination of individual techniques. This research had the aim to determine the significance of retreating from the line of attack as a significant prerequisite of a successful defense. The results obtained speak in favor of the fact that retreating from the line of attack increases the percentage of successfully carried out defenses which have as the aim to prevent contact with the attacker's extremities and the defender's chest. As in every other martial art whose aim is to promote the efficiency of techniques applied, thus also in real aikido all the combination of techniques which are carried out can be combined in numerous ways in order to overcome the attacker efficiently, and thus this research points to the variants of defense whereupon the defender had the possibility to use only blocking techniques in one case, and in another a combination of movement and block techniques which gave

incomparably better results and confirmed the presumptions of the research. The future researches which would be aimed at this problem could analyze the efficiency of rectilinear and circular movements with the aim of retreating from the line of attack, which can determine whether and from which strokes an advantage during the retreating from the line of attack can be given to rectilinear or circular movements. Such researches would surely contribute to positive transformations of real aikido which is, as every other martial art, alive, i.e. submits to positive changes and is directed towards efficient solutions to certain problematic situations.

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