

Physical Condition in the Performance Aspect of Seoi Nage Throwing Technique

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Abstract: In a judo match, a perfectly executed throwing result by a judo student against his opponent will get ippon score if the throwing result against the opponent is executed perfectly, in which the opponent's balance is lost, both feet are up in the air, and the opponent is thrown by using one of the techniques perfectly. Therefore, it takes strength, flexibility and speed reaction of throwing. This study used survey method and the used data analysis technique was path analysis. The population in this study was judo athletes of JIB judo association participating in PORDA XII West Java 2014 and used seoi nage throwing technique as their main weapon, as many as 20 people. Based on the results of data processing and analysis, the conclusion of this study is that strength, flexibility, and speed reaction directly affect the seoi nage throwing technique. Therefore, all those variables directly affect positively toward the seoi nage throwing technique.

1 INTRODUCTION

Judo is one of competitive sports that provides an opportunity for athletes to show their abilities and achievements to the fullest. The success of a pejudo in having high achievements cannot be achieved easily, but through a process called training, as explained that the main objective and target of training are helping athletes improving their skills and achievements as much as possible.

To improve the skills and achieve the maximum achievements, there needs to be support from various factors, such as the ability to master the techniques, tactics, excellent physical condition, good mental, quality trainers, support facilities and infrastructure. Of all the elements above, a judo athlete must have the ability both in terms of technique, tactics, physical, and mental, so that a judo athlete can achieve perfect performance skills. This is caused by the fact that physical, technical, tactical and mental skills affect each other's performance during a competition.

In judo sport, there are known various basic techniques such as slamming, lifting, pulling, pushing, choking or locking the opponent's joints. In addition, there must also be a mastery of the techniques of falling (ukemi) and techniques to eliminate the balance of the opponent (kuzushi). Based on the above explanation, it can be stated that

the exercise of techniques in judo is important without ignoring other aspects of the exercise.

In relation to technical training explains: Technical training is an exercise that is specifically intended to shape and develop motor habits or neuromuscular development. The perfection of basic techniques of each movement is important because it will determine the overall movement. Therefore, basic movements of every necessary form in every sport must be fully trained and mastered.

Every judo athlete must have at least one slamming technique as the ultimate weapon to defeat the opponent. To better master the flagship technique, a judo athlete is recommended to do uchikomi or drill exercise, which is a form of repetitive exercise. Furthermore, achievement of a perfect technique must be based on the three elements that support each other, namely kuzushi (technique to eliminate the balance of the opponent), tsukuri (technique of when losing balance) and kake (the right technique to slam). If the three elements are done correctly by a judo athlete, automatically, a pejudo can perform techniques with good and perfect dings.

In a judo match, a perfectly executed slamming by a judo athlete against his opponent will earn ippon. The value of ippon is obtained when the result of kicking against the opponent is achieved perfectly, i.e. the balance of the opponent is lost, the legs are lifted into the air, the opponent is slammed

using one of the cutting techniques perfectly. Therefore, it takes strength, formation and speed of the slamming motion.

The basic slam technique in judo is a procedure from series of Kuzushi, tsukuri and kake motions. After eliminating the opponent's equilibrium (kuzushi), move the body to the attitude / position. That is the technique when the uke loses its balance (tsukuri). Then, proceed to the kick technique. The pejudo must concentrate in mastery of tsukuri and must refine the kake, repeat the uchical exercises to accelerate and refine elements of kuzushi, Tsukuri, and Kake.

Such basic techniques must be mastered by every pejudo. In a game, slamming is very dominant for gaining scores because slamming can break the opponent's defense and accelerate the victory. So, the technique must be trained and well controlled so that the slamming is correct and accurate.

Previous research has been done by Walgito in 2000 who examined about the relation among team's cohesion, self-efficacy and the achievement of water polo team of participants at PON XV in Surabaya. Further research was conducted by Yudi Kahfiyudi in 2005 who examined the relation among strength and elasticity and kickback techniques seoi nage in judo, and the research conducted by Rahmawati in 2013 that examines the effect of explosive power, the elasticity and reaction speed to the skills for starting on swimming athletes at Ragunan Sports School Jakarta.

In a judo match, a perfect slamming executed by a tori (who slams) against his opponent (uke who slams in practice), will win an ippon. In a judo match, the author often see the judoka performing one of many nage waza techniques, namely seoi nage. In fact, this technique is often used as a flagship technique. This is possibly caused by the beauty of this technique.

To be able to have such slamming technique, there must be a physical training first, before the training for other aspects. Only with good physical condition, pejudo will be ready in doing the exercises. From several components of existing physical conditions, it can be classified that the components of physical conditions that need to be given in the slamming practice are strength, formation and reaction speed because slamming requires the basic components of physical strength, velocity and reaction speed.

The strength, velocity and reaction speed are the three body/physical components that are very important in Judo, especially when for the movements of pulling, lifting and slamming with flexible body movements in joint space (without having muscle tension, so there will be no disturbance to the movement).

2 METHODS

This study uses survey method by looking at causality between variables. Data analysis technique used streaming model analysis path. This path analysis technique can be used to test the direct effect of strength, velocity and speed reaction on seoi nage slamming technique.

The target population in this study was all female athletes of lower and middle class who participated in PORDA XII West Java Year 2014 in Bekasi Regency. However, the accessible population was judo ato of JIB judo association participating in PORDA XII West Java Year 2014 in Bekasi Regency, who used seitar nage technique as their main weapon, as many as 20 people. The used sampling technique was total sampling.

Strength variable was measured by hand grip (Savva, 2014) and leg dynamometer test (Alvares, 2015) and abdominal strength test (Learman, 2015), measured by sit and reach test (Ayala, 2012). Variable of reaction velocity was measured with whole body reaction test (Shibata, 2015) and the variable of seoi nage technique was measured with performance test of seoi nage skills. The used data analysis techniques were SPSS 17.00 and Lisrel 8.80 program.

3 RESULTS AND DISCUSSION

From the data analysis result, there was obtained the result of structural model along with coefficient of path which was the research design. The constellations are as follows:

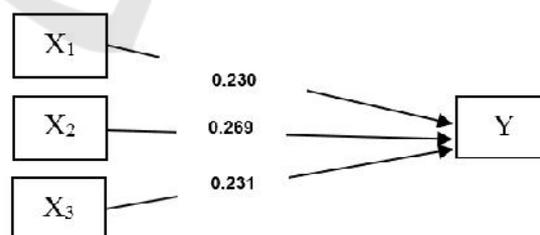


Figure 1: Constellations of Relation among Variables X1, X2, X3, and Y.

From the picture above, the path coefficient can be summarized as follows:

Table 1: Direct Influence among Variables.

No.	Direct Effect	Path Coefficient	dk	t _{count}	t _{table}	
					0.05	0.01
1	X ₁ against Y	0.230	18	1.86	1.73	2.55
2	X ₂ to Y	0.269	18	1.85	1.73	2.55
3	X ₃ against Y	0.231	18	1.88	1.73	2.55

From the table 1, it can be seen that there is positive direct effect of path X₁ to Y, X₂ to Y, line X₃ to Y.

From the calculation of path analysis, the coefficient value of strength path to seoi nage technique is 0.230. The coefficient value of the flexibility pathway to the technique of kick seoi nage is 0.269. The coefficient value of the speed reaction velocity on the seage nage technique is 0.231. From the result of t test, the value of t_{count} = 1.86, 1.85 and 1.88, which are bigger than t_{table} = 1.73. Since the value of t_{count} is greater than t_{table}, the proposed hypothesis is rejected, thus all of those variables have direct positive effect on seoi nage slamming technique.

4 CONCLUSIONS

Based on the results of processing and data analysis, it can be concluded that the variables of strength, flexibility, and speed of reaction affect the technique seoi nage dings. Thus all these variables have a direct positive effect on seoi nage ding techniques.

REFERENCES

- Alvares J. B. A. R., R. Rodrigues, R. de Azevedo Franke, B. G. C. da Silva, R. S. Pinto, M. A. Vaz, and B. M. Baroni, 2015. Inter-machine reliability of the Biodex and Cybex isokinetic dynamometers for knee flexor/extensor isometric, concentric and eccentric tests, *Phys. Ther. Sport*, vol. 16, no. 1, pp. 59–65, Feb. 2015.
- Ayala, F., de Baranda, P. S., Croix, M. D. S., Santonja, F. 2012. Reproducibility and criterion-related validity of the sit and reach test and toe touch test for estimating hamstring flexibility in recreationally active young adults. *Physical Therapy in Sport*, 13(4), 219-226.
- Kahfiyudi, Y. 2005. *Hubungan Antara Kekuatan dan Kelentukan Dengan Bantingan Teknik Seoi Nage Dalam Olahraga Judo*. (Tesis). Universitas Negeri Jakarta, Jakarta.
- Learman, K., Pintar, J., Ellis, A. 2015. The effect of abdominal strength or endurance exercises on

abdominal peak torque and endurance field tests of healthy participants: A randomized controlled trial. *Physical Therapy in Sport*, 16(2), 140-147.

- Rahmawati, E. 2013. *Pengaruh Daya Ledak, Kelentukan dan Kecepatan Reaksi Terhadap Keterampilan Start Renang Pada Atlet Renang Sekolah Ragunan Jakarta*. (Tesis). Universitas Negeri Jakarta, Jakarta.
- Savva, C., Giakas, G., Efstathiou, M., Karagiannis, C. 2014. Test-retest reliability of handgrip strength measurement using a hydraulic hand dynamometer in patients with cervical radiculopathy. *Journal of Manipulative & Physiological Therapeutics*, 37(3), 206-210.
- Shibata N. 2015. Subjective response of standing persons exposed to fore-aft, lateral and vertical whole-body vibration, *Int. J. Ind. Ergon.*, vol. 49, pp. 116–123.
- Walgito, B. 2000. *Analisis hubungan antara kohesivitas tim, efikasi diri dengan prestasi tim polo air peserta PON XV di Surabaya* (Doctoral dissertation, Universitas Gadjah Mada).