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The Effect of Chagi Training on Improving the Balance of Taekwondo Athletes

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ABSTRACT: This study aims to determine the effect of chagi training on improving the balance of taekwondo athletes. The benefits of this research; 1) theoretically this research opens a paradigm in the field of coaching in general and especially in the taekwondo martial arts to always use a variety of exercises; 2) this research is expected to increase knowledge to trainers so that they choose training methods that are simple but can improve the physical condition of taekwondo athletes; 3) as a reference value for the quality of further research. This study used an experimental method with a one group pretest-postest research design. This research was held at Gedung Serbaguma, Wirokerten Village, Banguntapan, Bantul, Yogyakarta Special Region. This research was conducted for 4 weeks or 1 month, the research began on 03 October 2022 to 04 November 2022. The population in this study were 15 Bantul taekwondo athletes. The sample in this study were 15 Bantul taekwondo athletes, with total sampling. Data collection techniques are carried out measuring balance with a strok stand measuring instrument. The data analysis technique used is using SPSS 23 software to test the Paired sample Test. The results showed that there was an increase in chagi training on improving the balance of taekwondo athletes with a value of 0.00 < 0.05.

KEYWORDS: Chagi training, balance, taekwondo

I. INTRODUCTION

Sport is a physical activity that can be done by all groups of people to get physical fitness (Manihuruk et al., 2023). Sport is a form of physical activity contained in games, competitions and intensive activities in order to obtain the relevance of victory and optimal achievement (Maliki et al., 2017). In the Law of the Republic of Indonesia No. 3 of 2005 concerning the National Sports System Article 4 reads: National sports aim to maintain and improve health and fitness, achievement, human quality, instill moral values and noble character, sportsmanship, discipline, strengthen and foster national unity, strengthen national resilience, and elevate the dignity and honor of the nation. Sports are also a factor in physical increase, spiritual growth, social and skill development (Gunarsa, 2023). In Indonesia itself, there are many sports that have developed and one of them is taekwondo.

Taekwondo is a military game that has a basic foundation in traditional Korean fighting techniques (Rahmat & Anggara, 2022). Taekwondo implies craftsmanship or methods of self-control or aggressive techniques that utilize the feet and hands (Hanum & Fajar, 2022). Taekwondo is a martial arts sport that has been widely recognized in various levels of society, this can be seen from the many people from various social statuses who practice taekwondo (Irwansyah, 2019).

When taekwondo athletes do training and matches, athletes also need good physical condition (Wahyuni & Donie, 2020). Physical condition is a factor that greatly affects a person's achievement, without good physical condition the technique cannot run perfectly in training or during matches and good physical condition is a requirement that must be possessed by an athlete (Agung et al., 2023). Taekwondo sport requires excellent physical condition, this is due to the high intensity of movement in carrying out each movement technique and one of the physical conditions that must be possessed is balance (Darmanto, 2017). In an effort to improve the balance of taekwondo athletes, it is necessary to have a structured and programmed training program (Amdan & Sepdanius, 2019). Good balance is very important for effective defense and defense positions for taekwondo athletes with good balance can better avoid opponent attacks and quickly adapt to counter effective attacks on opponents (Saputra & Irianto, 2019). From some literature found that balance is needed by taekwondo athletes in carrying out attacks against opponents, such as research conducted by Ariansyah et al who said that there was a relationship between balance in kicking (Ariansyah et al., 2017).

From the findings in the field so far the balance of taekwondo athletes is still not good so it is necessary to do varied exercises. Varied exercises can be done with chagi training. Chagi training in taekwondo is an exercise related to kicking techniques. "Chagi" in Korean means "kick" (Rozikin & Hidayah, 2015). Chagi training involves various types of kicks used in taekwondo, both for attack and defense (Wanto & Fikri, 2020). Chagi training involves good body balance and coordination. In taekwondo, good physical balance is essential to maintain stability when performing powerful kicks. Chagi training involves various foot movements, weight shifts, and body rotations, which require balance to maintain optimal control.

To improve the physical quality of athletes in order to be able to defeat their opponents, the coach must be able to make his athletes great at improving the quality of both psychological and physical techniques (Hermawan et al., 2021; Jariono et al., 2020). Therefore, to support success in improving the physical condition of athletes, it is necessary to prepare an exercise program that supports athlete achievement to its peak, in the sense that through the study of science in the analysis of athlete motion, so that the coach can make training programs according to the individual abilities of athletes using a variety of training programs. Sports science which includes physiology, biomechanics, psychology, tests and measurements, sports health, learning to move, nutrition, history and sociology are sub-disciplines to support the theory and methodology of training (Fachrezzy et al., 2021). Without being guided by the correct theory and principles of training, training often leads to unsystematic and methodical training and training practices so that increased achievement is difficult to achieve, therefore training will improve performance and the increase is influenced by the provision of load or energy, setting the rhythm or frequency, rest period and length of training (Wahyuri et al., 2019)

The purpose of this study was to determine the effect of chagi training on improving the balance of taekwondo athletes. The benefits of this research; 1) theoretically this research opens a paradigm in the field of coaching in general and especially in the taekwondo martial arts to always use a variety of exercises, 2) this research is expected to add knowledge to the coaches so that they choose a simple training method but can improve the physical condition of taekwondo athletes, 3) as a reference value for the quality of further research.

II. METHOD

This type of research is experimental research, so it can be interpreted that experimental research has a treatment given to the sample in the study (Colombo et al., 2023). The experimental method is used to be able to see whether or not there is an effect of the treatment given to taekwondo athletes through chagi training (Chang et al., 2023). The design in this study used a one-group pretest-posttest design. This research was held at Gedung Serbaguma, Wirokerten Village, Banguntapan, Bantul, Yogyakarta Special Region. This research was conducted for 4 weeks or 1 month, the research began on 03 October 2022 to 04 November 2022. The frequency of training was 3 times a week. The number of training sessions was 12 times. Training schedule on Monday, Wednesday and Friday. Training starts at 16-18 WIB. Population is a subject that exists in a study (Li et al., 2023). The population in this study were 15 Bantul taekwondo athletes. The sample is part of the population that will be examined in a study which will later be given treatment and measured with a measuring instrument (Rose et al., 2017; Zalla & Yates, 2021). The sample in this study were 15 Bantul taekwondo athletes, the sampling technique was total sampling, total sampling is all the population in the population sampled to obtain research data (Joni et al., 2023). The instrument used in measuring balance is the stork stand with a validity value of 0.9330 and a reliability of 0.8680. The data analysis technique uses the help of SPSS 23 software to test normality using the Shapiro-wilk test, homogeneity using the One Way Annova test and t test (influence) using the Paired Sample T Test.

III. DISCUSSION

Based on the research results, then analyzed using SPSS 23 can be seen in the table below:

Table 1. Normality Test

Tests of Normality

	Shapiro-Wilk				
	Statistic	df	Sig.		
Pretest	.890	15	.067		
Postest	.908	15	.127		

^{*.} This is a lower bound of the true significance.

a. Lilliefors Significance Correction

From the results of data analysis, the pretest value of 0.067 and posttest value of 0.127 is greater than > 0.05, so it is concluded that the data is normally distributed.

Table 2. Homogeneity Test

Test of Homogeneity of Variances

Pretest Posttest

Levene Statistic	df1	df2	Sig.
.967	1	28	.334

From the results of data analysis, the pretest and posttest values are greater than > 0.05, so it is concluded that the data is Homogeneity distributed.

Table 3. T-test (Effect)

Paired Samples Test

		Paired Differences								
			Std.		95% Confidence Interval of the Difference				Sig.	(2-
		Mean	Deviation	Mean	Lower	Upper	t	df	tailed)	
Pair 1	Pretest - Postest	1519.622	509.406	93.004	1329.407	1709.837	16.339	29	.000	

Based on the statistical analysis test using SPSS 23, the results of the T Test (Effect) with the Paired Samples Test test obtained a Sig (2-tailed) value of 0.000 < than 0.05 so it is concluded that there is a significant effect of chagi training on improving the balance of taekwondo athletes.

Good physical condition is an important factor for taekwondo athletes to achieve optimal performance and good performance (Utomo, 2018). Many factors determine the success of an athlete in appearance during training and matches, including good physical components and the physical components needed are strength, speed, leg muscle power, flexibility, agility, balance and coordination (Munzir, 2022). Good physical condition has several advantages, including athletes being able and easy to learn relatively difficult skills, not getting tired easily when participating in training or matches, training programs can be completed without many obstacles and can complete heavy training (Azwar & Rahmad, 2021).

Continuous training can improve physical conditions, one of which is balance (Arwandi & Ardianda, 2018). The training process that is carried out regularly, planned, methodically and continuously from simple to difficult and repetitive can be interpreted as each training movement is carried out gradually and repeatedly so that movements that were previously difficult to do become easy to do to achieve the goals you want to achieve (Nugroho et al., 2021). In improving balance, there needs to be a good training method that can effectively and efficiently improve balance (Setiyawan, 2018). In addition, the coach must also pay attention to the intensity of the training given to athletes, so that the training is right on target and meets the desired target (Gusnelia et al., 2022), so that the implementation of the research was designed by researchers in accordance with the training periodization to improve the balance of taekwondo athletes with chagi training.

Body balance is important in maintaining stability during complex movements and techniques when taekowndo athletes perform defense or attack (Ardiyansyah et al., 2013). When the athlete attacks using a kick, the athlete's foot position must have balance so that when the athlete is counterattacked by the opponent, the athlete does not fall (Hanief et al., 2016). From the results of the research obtained that cahgi training can improve the balance of taekwondo athletes. Based on the results of the research obtained, it is in line with the opinion of Andrieana & Sugiharto who say that the better the balance ability of an athlete, the better the ability to issue techniques and tactics during training and matches (Andrieana & Sugiharto, 2022).

A good attacking balance ability in taekwondo cannot be possessed if it is not done repeatedly. Chagi training in taekwondo has an important role in improving athletes balance. By practicing chagi regularly, athletes can develop sensitivity and control over their body position during attack and defense, and in chagi training, taekwondo athletes can expand the variety of techniques to improve balance. High-intensity chagi training helps improve balance and strengthens the muscles involved in leg movements.

IV. CONCLUSIONS

Chagi training is the right alternative choice to improve physical condition abilities, and which includes physical conditions, namely balance. Based on the results of this study, it can be concluded that there is a significant increase in chagi training on improving the balance of taekwondo athletes.

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