# KECEPATAN TENDANGAN PESILAT PUSAT PENDIDIKAN DAN LATIHAN OLAHRAGA PELAJAR GORONTALO 2023

GORONTALO STUDENT SPORTS EDUCATION AND TRAINING CENTER 2023 SPEED KICK SILAT

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## ABSTRAK

Olahraga pencak silat mempunyai beragam jenis tendangan yang dapat dipakai dalam pertandingan maupun kesenian. Pelatih yang baik tentunya akan memperhatikan perkembangan secara detail dari kemampuan atletnya. Tujuan dari penelitian ini yaitu untuk melakukan survei kecepatan tendangan Pesilat Pusat Pendidikan dan Latihan Pelajar (PPLP) Provinsi Gorontalo. Desain penelitian yang digunakan dalam penelitian ini adalah penelitian deskriptif kuantitatif menggunakan survei dan teknik tes. Populasi penelitian ini yaitu atlet pencak silat yang berlatih di Pusat Pendidikan Latihan Pelajar (PPLP) Provinsi Gorontalo tahun 2023 yang berjumlah 22 atlet. Sedangkan sampel diambil dengan teknik *Accidental Sampling* dikarenakan kebetulan atlet pencak silat yang ditemui berjumlah 14 yang terdiri dari 9 atlet putra dan 5 atlet putri. Teknik pengumpulan data menggunakan instrumen pengukuran kecepatan tendangan yang diadaptasi dari buku Johansyah Lubis. Hasilnya, untuk tendangan depan sebagian besar memperoleh kategori cukup. Tendangan sabit sebagian besar memperoleh kategori baik. Sedangan tendangan samping sebagian besar memperoleh kategori kurang. Pelatih hendaknya menggunakan metode latihan yang tepat guna. Pelatih hendaknya mengikuti program periodisasi latihan yang telah dibuat mulai dari tahapan latihan umum sampai dengan pra kompetisi agar mempunyai hasil yang diinginkan.

Kata Kunci: kecepatan; tendangan; pesilat

#### **ABSTRACT**

The sport of pencak silat has various types of kicks that can be used in competitions and arts. A good coach will certainly pay attention to the detailed development of the athlete's abilities. The purpose of this study was to survey the kick speed of Pesilat Center for Student Education and Training (PPLP) of Gorontalo Province. The research design used in this research is descriptive quantitative research using surveys and test techniques. The population of this study were pencak silat athletes who practiced at the Student Training Education Center (PPLP) Gorontalo Province in 2023, totaling 22 athletes. While the samples were taken using the Accidental Sampling technique due to the coincidence that the number of pencak silat athletes encountered was 14 consisting of 9 male athletes and 5 female athletes. The data collection technique uses a kick speed measurement instrument adapted from Johansyah Lubis's book. As a result, for the front kick, most of them get enough category. Crescent kicks mostly get good categories. While the side kicks mostly get less categories. Trainers should use appropriate training methods. The trainer should follow the training periodization program that has been made starting from the general training stage to the pre-competition in order to have the desired results.

Keywords: speed; kick; fighter

## Introduction

Today, in Indonesia there are many places for fostering the development of talented students in a sport. One such training platform is Pusat Pendidikan dan Latihan Pelajar (PPLP) (Kadir & Haryanto, 2021). The coaching system in PPLP is that athletes are coached to excel in the sports they are engaged in and educated in the academic field so they can guarantee a future. Development in the academic field of PPLP students is carried out in public schools according to their level of education and sports achievement development is carried out under the guidance of PPLP trainers according to their branch. So that these talented students will be able to hone their skills per sport without leaving school.

Gorontalo province itself has Pusat Pendidikan dan Latihan Pelajar (PPLP) which was founded in 2005 ago (HARGO, 2017) and under the auspices of the Gorontalo Province Youth and Sports Education Office, in which one of the sports branches fostered is the sport of Pencak Silat. Pencak silat is a martial sport that has characteristics that can be distinguished from other types of martial arts such as Silat, Judo, Kung Fu, Kempo and other martial arts. (Hidayat & Haryanto, 2022). This difference can be seen both in philosophy, movement techniques and attributes used during the training and match processes. Pencak silat is also an achievement sport that is contested both in the national and international arena. Pencak silat is a sport that has its own characteristics of motion and technique, for that it must be studied and trained properly and intensively.

In carrying out achievement development, the Pencak Silat sports branch conducts coaching from a young age to adulthood by cultivating character, attitudes, ethics and training. Pencak silat coaching at a young age is one of them on PPLP. PPLP is a place for coaching athletes at a young age which is directly shaded by the Ministry of Youth and Sports as well PPLP is a production barn for national athletes which is prepared for the next regeneration of athletes.

In pencak silat matches, there are many techniques that are used in accordance with the applicable provisions and categories that are contested, in that category there are several techniques that must be mastered, one of which is the kick technique. In the competition category, kick techniques are techniques that are often used and are very troublesome for opponents. There are several types of kicks, one of which is the front kick. The front kick is an attack that uses one foot or leg, the trajectory is directed forward by touching the base of the inner toes, and targeting the solar plexus and chin.

Based on the observations of researchers in the field, when PPLP athletes from Gorontalo Province were practicing, the researchers found that in attacks several types of punches and kicks consisting of front kicks, sickle kicks and side kicks were often used in the training menu. When researchers ask athletes and coaches about which type of punch is the most effective and also the fastest in execution. Athletes and also coaches cannot explain because the speed of each kick made by PPLP athletes in Gorontalo Province is unknown. The same thing happened when researchers asked athletes and coaches which kicks were the most effective and also the fastest in execution. Athletes and coaches cannot explain because the speed of each kick made by PPLP athletes in Gorontalo Province is unknown.

Based on the results of observations of researchers in the field, the researchers took the initiative to focus on kicks, by taking a study on kick speed surveys of Gorontalo Province PPLP Pesilat fighters. This research is very important, because as an illustration of the trainer in improving the performance of the Pencak Silat athletes of PPLP Gorontalo Province so that after it is known which kick is the fastest in execution, the coach can focus on the kick while practicing and when instructing the athlete.

# Method

The research design used in this research is descriptive quantitative research using surveys and test techniques. The population of this study were pencak silat athletes who practiced at the Student Training Education Center (PPLP) Gorontalo Province in 2023, totaling 22 athletes. While the samples were taken using the Accidental Sampling technique due to the coincidence that the number of pencak silat athletes encountered was 14 consisting of 9 male athletes and 5 female athletes. The data collection technique uses a kick speed measurement instrument adapted from Johansyah Lubis's book.

This study used a survey and test technique of crescent kicks, straight kicks and side kicks, the strongest leg as fast as possible and as much as possible for 10 seconds. The implementation was carried out 3 times and the best time was taken with a bag height of 75 cm (women) and 100 cm (men). While the data was collected using the norms for assessing the speed of kicks in the sport of pencak silat. This study used survey methods and data collection techniques using kick speed measurement instruments (Lubis, 2004). The norm assessment is as follows:

Table 1. Kick Speed Assessment Norms				
Category	Female	Male		
Very well	>24	>25		
Good	19-23	20-24		
Enough	16-18	17-19		
Not enough	13-15	15-16		
Less Once	<12	<14		
Source (Lubia 2004)				

Source (Lubis, 2004)

Data analysis techniques in this study used quantitative descriptive to determine kick speed and the fastest kick technique performed by PPLP athletes from Gorontalo Province along with their averages.

# Results

This study aims to determine kick speed and to find out the fastest kick technique performed by Pencak Silat athletes from PPLP Gorontalo Province. Using research subjects Pencak silat athletes PPLP Gorontalo Province with a total of 14 athletes consisting of 9 male athletes and 5 female athletes. The research data is as follows:

				1	
No	Numbe	r of Kick At	tempts	Dest time	Catagory
INO -	1	2	3	Dest time	Category
1.	21	20	22	22	Good
2.	20	18	19	20	Good
3.	18	19	17	19	Enough
4.	15	18	18	18	Enough
5.	16	17	15	17	Enough
6.	25	21	23	25	Very well
7.	22	23	24	23	Good
8.	18	21	20	21	Very well
9.	15	18	18	18	Enough

Table 2. Male Front Kick Speed Test Results

Table 3. Female Front Kick Speed Test Results

Number		r of Kick At	tempts	Doct time	Catagory
INO -	1	2	3	Best time	Category
1.	19	18	18	18	Enough
2.	18	20	21	21	Good
3.	18	17	17	18	Enough
4.	25	24	22	25	Very well
5.	17	17	14	17	Enough

The results of calculating the data for the male front kick speed test for Pencak silat athletes from PPLP Gorontalo Province. Shows an average of 20.3. The smallest value is 17 and the largest is 25. The results of the calculation of the speed test data for the female front kick Pencak silat athlete PPLP Gorontalo Province. Shows an average of 19.8. The smallest value is 17 and the largest is 25. The results of the overall calculation of the speed test data for male and female front kick Pencak silat athletes from PPLP Gorontalo Province show an average of 20.1.

Table 4. Male Crescent Kick Speed Test Results					
No N	Numbe	er of Kick At	tempts	Post time	Cotocom
INO	1	2	3	Dest time	Calegory
1.	18	19	24	24	Good
2.	21	22	24	22	Good
3.	20	19	18	20	Good
4.	19	20	19	20	Good
5.	16	18	17	18	Good
6.	20	21	26	26	Very well
7.	24	25	27	27	Very well
8.	24	23	21	24	Good
9.	24	25	23	25	Very well

Table 4. Male	Crescent	Kick Speed	Test Results
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No –	Numbe	r of Kick At	tempts	Post time	Catagory
10	1	2	3	Dest time	Calegory
1.	18	20	22	22	Good
2.	20	22	24	24	Very well
3.	23	24	22	24	Very well
4.	24	23	22	24	Very well
5.	19	22	21	22	Good

Table 5. Female Cresce	nt Kick Speed Test Results

The results of the calculation of the men's crescent kick speed test data for Pencak Silat athletes from PPLP Gorontalo Province. Shows an average of 22.9. The smallest value is 18 and the largest is 27. The results of calculating the speed test data for women's crescent kicks for Pencak Silat athletes from PPLP Gorontalo Province. Shows an average of 23.2. The smallest value is 22 and the largest is 24. The results of the overall calculation of the sickle kick speed test data for male and female Pencak Silat athletes from PPLP Gorontalo Province show an average of 23.

Table 6. Male Side Kick Speed Test Results					
No	Numbe	ber of Kick Attempts		Destines	Catagomy
INO -	1	2	3	Dest time	Category
1.	13	17	16	17	Enough
2.	14	15	17	17	Enough
3.	16	13	12	16	Not enough
4.	15	12	14	15	Not enough
5.	10	12	16	16	Not enough
6.	15	19	18	19	Not enough
7.	16	18	20	20	Good
8.	19	16	15	19	Good
9.	19	18	21	21	Good

 Table 7. Female Side Kick Speed Test Results

No	Number	r of Kick At	tempts	Dest time	Catagory
INO -	1	2	3	Best time	Category
1.	13	15	14	15	Not enough
2.	14	12	13	14	Not enough
3.	11	12	13	13	Not enough
4.	16	13	12	16	Enough
5.	17	15	14	17	Enough

Calculation results of the male side kick speed test data for Pencak Silat athletes from PPLP Gorontalo Province. Shows an average of 17.8. The smallest value is 15 and the largest is 21. The results of the calculation of the speed test data for the female side kick of the PPLP Pencak Silat athlete in Gorontalo Province. Shows an average of 15. The smallest value is 13 and the largest is

17. The results of the overall calculation of the side kick speed test data for male and female Pencak Silat athletes from PPLP Gorontalo Province show an average of 16.8.

#### Discussion

Kicks in pencak silat matches have several advantages, including kicks that have a fairly high value of 2, have a longer attack range and have higher power when compared to other attack techniques (Hidayat & Haryanto, 2021). A good kick, of course, requires high accuracy and speed to be counted. There are several types of kicks that are simple and easy to do, namely front kicks, sickle kicks and side kicks. Empirical results from research show a variety of varying results.

The results of the front kick speed test showed that most of the PPLP Gorontalo athletes had sufficient and good speed. Of course that's good, but it can still be improved to get optimal results. There are many popular types of exercises that trainers can apply, namely weight training (Lungit Wicaksono et al., 2020; Nasution & Heri, 2017). This exercise has been shown to increase the speed of front kicks with a frequency of 3 times a week for 5 weeks (Lungit Wicaksono et al., 2020). As for the training, you can combine strength, balance and power training (Hidayat & Kadir, 2020; Vai & Ramadi, 2018). Combinations in training are very important in increasing speed in the special training period of pencak silat kicks.

The results of the crescent kick speed test showed that most of the PPLP Gorontalo athletes had varying speeds between good, and some even lacking. This condition is not good, considering that there is still some work that the coach should complete. Several types of exercises that can be applied by trainers are by using internal weights and external weights. The internal load in question is the load that is within oneself for example plyometric exercises and maxex exercises which are proven to increase sickle kick speed in pencak silat (Hayati & Endriani, 2021; Sudirman, 2015). There is another exercise using weights that has been shown to increase the speed of sickle kicks, namely using a simple tool, namely a rubber tire which can increase kick results by 77.1% on the right foot and 71.8% on the left foot (Nabila et al., 2021). The physical components in pencak silat sickle kicks are also heavily influenced by power and flexibility (Kamarudin & Hanafi, 2020). Crescent kicks require intense practice so that the kick target is precise.

The results of the side kick speed test showed that most of the PPLP Gorontalo athletes had varying speeds between sufficient, insufficient, and some even very insufficient. This is a big job that is mandatory for coaches to follow up so it doesn't drag on. Resistance band exercises are proven to affect the speed of side kicks in pencak silat (Ali et al., 2022). The side kicks for pencak silat can be trained with exercises to support physical conditions such as balance and leg muscle explosive power, even up to 74% (Candra & Natas Pasaribu, 2020). This type of kick needs special attention by the coach compared to the other two types of kicks (front kick and sickle kick). Trainers in practice can also apply side-training physical conditions so they can do side kicks quickly and accurately.

# Conclusion

The conclusion of this study proves that side kicks are kicks with less speed. Then the crescent kick is a kick with many good categories. Trainers should use appropriate training methods. The trainer should follow the training periodization program that has been made starting from the general training stage to the pre-competition in order to have the desired results. Furthermore, for future research, researchers should start experimenting in several types of training methods by adjusting the head coach training program.

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