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# The Effect of Down Hill Training on Pencak Silat Extracurricular Scratch Speed

#### Ridwan Sudirman

(STKIP Setiabudhi Rangkasbitung, Indonesia)

\* Corresponding Author. E-mail: ridwansudirmanpendor@gmail.com

### **Abstrak**

Kegiatan ekstrakurikuler pencak silat pada dasarnya merupakan pengajaran gerak, dimana terjadi hubungan antara pembina/pelatih dan siswa di sekolah. Kecepatan tendangan sabit merupakan tolak ukur kemampuan pencak silat siswa dalam pembinaan watak, peningkatan keterampilan, ketangkasan dan keteladanan. Dengan demikian, tujuan penelitian ini adalah untuk melihat pengaruh Latihan down hill terhadap kecepatan tendangan sabit pencak silat. Penelitian ini menggunakan metode kuantitatif Eksperimen dan sampel yang digunakan sebagai unit analisis yaitu sebanyak 20 orang siswa putra yang mengikuti kegiatan ekstrakurikuler pencak silat. Instrumen yang digunakan Pretest, Threatment dan Postest. Teknik analisis data yang digunakan adalah uji t yang melihat perbedaan antara hasil data pretest dan postest. Hasil penelitian ini menunjukkan bahwa nilai rata-rata pretest siswa adalah 15.60 sementara nilai rata-rata postest siswa adalah 20.00. Nilai hasil t hitung sebesar 26.10 serta nilai signifikansi sebesar 0.00. berdasarkan nilai tersebut, dapat disimpulkan bahwa Latihan down hill berpengaruh terhadap kecepatan tendangan sabit ekstrakurikuler pencak silat.

Kata Kunci: Down Hill, Tendangan Sabit

## Abstract

Pencak silat extracurricular activities are movement teaching, where there is a relationship between the coach/trainer and students at school. The speed of sickle kicks is a measure of students' pencak silat abilities in building character, increasing skills, dexterity and exemplary. Thus, the purpose of this study was to see the effect of downhill training on the speed of pencak silat sickle kicks. This study used a quantitative experimental method and the sample used as the unit of analysis was 20 male students who took part in pencak silat extracurricular activities. The instruments used are Pretest, Treatment and Posttest. The data analysis technique used is the t test which looks at the difference between the results of the pretest and post-test data. The results of this study indicate that the average value of students' pretest is 15.60 while the average value of students' posttest is 20.00. The result value of t count is 26.10 and the significance value is 0.00. Based on these values, it can be concluded that down hill training has an effect on the speed of sickle kicks in the pencak silat extracurricular.

**Keywords:** Down Hill, Crescent Kick

### Introduction

Pencak silat is essentially a cultivation of the personality of the Indonesian nation in which apart

from containing elements of self-defense, there are also elements of art, sports and spirituality which form a unified and inseparable unit. Along with the times, pencak silat began to be developed both in formal and non-formal education units with the aim that this nation's heritage would continue to grow and not be lost in time. The number of pencak silat clubs or colleges today is increasingly encouraging the existence of pencak silat as one of the outstanding sports that is contested.

Defense technique is the main principle in pencak silat. The basis of the defense technique is avoidance, evasion and parry which must be trained to strengthen active defense and attack. reason. as well as other techniques. Several aspects need to be trained, namely physical training, technical training, tactical training, and mental training (Mukhtar Ridwan, Taufik Hidayat Suharto, 2021). Optimal achievement can be obtained when the athlete has a wealth of pencak silat techniques and is supported by proficiency in using them. by good physical condition.

Have good physical condition. The elements of physical fitness are speed, strength, flexibility, endurance, agility, balance, reaction, accuracy, coordination and power. Even though it already has achievements, it still seems there is a problem on the ability of athletes, especially in the ability to kick. When researchers do observation, during practice. It seems that the problems faced are mastery, techniques - techniques that have not been maximized in one of the techniques. which has not been maximally mastered, namely the crescent kick technique. A sickle kick is a kick that is executed using the other leg and the trajectory of the leg from the side with an impact on the instep.

Based on observation. researchers, the sickle kick is used as a weapon in the attack, because of the kick technique. The sickle has the advantage that the direction of the trajectory occurs from one side. outside towards the top in so that it has a maximum speed, and has a high degree of balance. The uneven ability and experience of novice fighters at school age makes extracurricular activities a place to hone students' pencak silat abilities according to their interests and talents. Pencak silat extracurricular activities are basically movement teaching, where there is a relationship between the coach/trainer and students at school. The speed of sickle kicks is a measure of students' pencak silat abilities in building character, increasing skills, dexterity and exemplary. Therefore.

Pencak Silat is one of the martial arts sports that requires several physical abilities that are dominantly used in pencak silat matches, some of which are in the form of strength, speed and agility. In martial arts, pencak silat also requires mastery of the physical, technical, tactical and mental athletes in trying to beat the opponent. Pencak silat martial arts also has the most important basic techniques used in self-defense even when facing an opponent during a match, these basic techniques are: punches, kicks, blocks, dodges, drops and sweeps (Maimun Nusufi, 2015). However, one of the techniques most often used during matches is the kick technique. One of the dominant kick techniques often used in Pencak Silat matches is the crescent kick. This sickle kick is an effective kick to get points and is very practical to use for counterattacks successfully after avoiding an opponent's attack. To get a maximum sickle kick, you need to master the correct technique, the right target, and the correct kick trajectory that does not contradict the body's anatomy, so that it will generate maximum kick speed and be more effective in collecting points in Pencak Silat matches. sickle kick, a kick that traverses a semicircle inward, targeting all parts of the body,

Speed is a person's ability to perform a movement or a series of movements after receiving a stimulus as quickly as possible (Ultimately, Dela Andika Tri, 2019). Speed is also the potential of the body which is used as capital in carrying out pencak silat movements such as kicks, punches, and other movements. Speed is very much needed in pencak silat matches because the faster a fighter's movements are made, the more difficult it is to be avoided by the opponent and the easier it is to get points.

The regular, systematic and continuous physical exercise included in an exercise program will significantly improve physical abilities. The exercise will run according to the goal if it is programmed properly according to the correct reference. The training program includes all matters regarding exercise dosage, exercise frequency, practice time, and other exercise principles. This training program is arranged in a systematic, measurable, and adjusted according to the training objectives needed. Physical exercise requires a relatively long time to get optimal results (Akbar et al., 2019).

In addition to running uphill, down hill is also beneficial for the physical condition component. Downhill running is a full-body training model used to investigate the physiological consequences of eccentric muscle action and/or muscle damage due to exercise (Ultimately, Dela Andika Tri, 2019). Due to its eccentric nature, downhill running causes lower leg muscle damage, which is manifested by changes in muscle structure, muscle function, and running performance that occur up to several days after training.

#### Method

The research method used is the Experimental quantitative methods. Denzin & Lincoln in (Setiawan, 2018) states that quantitative research methods use a lot of numbers. Starting from the data collection process to its interpretation.

Table 1. Pattern of One Group Pretest Posttest Design

Pretest	Treatment	Postest
O1	X	O2

The variables in this study consisted of two variables, one independent and one dependent variable. Data collection techniques are following the research design, so two pieces of data must be collected, namely data about kick speed ability before and after treatment. To obtain sickle kick speed ability data used in this study is a sickle kick ability measurement test and recorded in seconds. For instrument data collection, namely, the ability to kick the sickle speed using peching and to find out the ability to kick the results of downhill training in the form of scores (scores), a kick test was carried out 2 times with a time of 10 seconds, after students participated in the treatment for 16 meetings. subject This study included 20 students who took part in the pencak silat extracurricular.

This research was conducted at SMA Negeri Lebak Regency for 3 months, from October to December 2022. The frequency of practice is 3 times a week. Each practice meeting is 90 minutes long, with a practice schedule Wednesday: 15.30 to 16.30, Friday: 15.30 to 16.30, Sunday: 08.00 to 9.30. The research test result data obtained in the form of raw data (row score) were analyzed using the t-test formula with the assessment criteria (Johansyah Lubis, 2014) in Table 2.

Table 2. Criteria for assessing the speed of Pencak Silat sickle kicks

Category	Success
Very well	>25
Well	19-23
Enough	16-18
Not enough	13-15
Less Once	<12

#### **Results and Discussion**

The results of the research data included the initial test data (pretest) and the final test (posttest) from the experiments carried out in the experimental group that did downhill training on the speed of the pencak silat crescent kick. The results are as follows:

Table 3. Male and female test results

Category	Daughter	Son
Very well	>24	>25
Well	19-23	20-24
Enough	16-18	17-19
Not enough	13-15	15-16
Less	<12	<14

The results of the pretest assessment stated that based on the criteria for assessing the speed of sickle kicks within 10 seconds by doing 3 occasions > 25 (Very Good) for 0 students, 20-24 (Good) for 0 students, 17-19 (Enough) for 6 students, and 15-16 (Less) as many as 8 students, and <14 (Not Once) as many as 6 students. The initial test score (Pretest) with a total sample of 20 people, the smallest (Minimum) value is 13, the largest (Maximum) is 16, the average (Mean) is 15.60, and the std value. Deviation (Std. Deviation) of 1,847.

The results of the post-test assessment stated that based on the criteria for assessing the results of crescent kick speed within 10 seconds by doing 3 occasions > 25 (Very Good) as many as 0 students, 20 - 24 (Good) as many as 13 students, 17-19 (Enough) as many as 6 students, and 15-16 (Less) as many as 1 student, <14 (Not once) As many as 0 people.

Based on the test results of the paired sample t test on the pretest and posttest data, it appears that the results obtained an average value (mean) of4,400, Std. Deviation (Std. Deviation)as big754 andt count as big26,100., with a df of 19 sig 0,000. Then consult the

t table at a significance level of 5% with a df of 19 which is 1,729. this shows that the calculated t score is greater than t table (th: 26,100> t: 1,729). From the table it is known that sig. (2-talled) of 0.000 <0.05. The percentage increase in the effect of down hill training on the kick speed of the pencak silat extracurricular sickle kick after being given treatment was 28%.

Based on the description of the data above, it can be explained that there is an effect of down hill training on the sickle kick of pencak silat extracurricular students of pencak silat. The more often the treatment is given according to the needs and characteristics of the students, the better the students' skills in pencak silat sickle kicks. This is following the results of the study (Kartini et al., 2018) who suggested that the training model used according to the needs and characteristics of athletes is more effectively used and can increase scores up to 80%. In this study, the down hill exercise used increased student scores by 28% based on the results of a comparison between pretest and posttest. Down hill training is also effective in improving students' skills in terms of character development, skills improvement, dexterity and exemplary (Yuwono & Rachman, 2021).

In line with (Amrullah, 2015)which states that the training method has a different effect on the ability to kick the sickle in pencak silat. The sickle kick ability is one of the basic movements in pencak silat. The sickle kick movement is a series of complex movements, thus to be able to perform a good sickle kick movement one must be supported by physical components directly related to the sickle kick movement such as speed, balance, accuracy, especially having high strength.

Variations in the form of exercises with various methods can also influence the objectives of the exercises so that they can improve students' abilities. As stated by (Pratiwi et al., 2018), the form of variations of exercises carried out with the training method the hope is that with this training the fighter will not feel bored during training and it is hoped that it will be more optimal.

In carrying out the sickle kick speed test, participants are required to do as many kicks as possible for 10 seconds, because the best score can be obtained by the number of kicks taken. (Widiastuti, 2015). The factor that influences success in a match is

the mastery of attack techniques, one of which is the sickle kick. Scythe kicks that are done quickly will produce maximum power so it is expected to gain value with these attacks. Speed is also affected by several factors (Guntur Sutopo & Misno, 2021).

In addition, there are internal and external factors that affect the ability of students' pencak silat sickle kicks including student body posture, motivation, and exercise intensity during the 3 months the research took place. This is in line with the results of research by Marlianto et al which explained that the factors that influence the ability to kick the sickle include factors of training intensity, practice time, student body posture, and the level of student knowledge about pencak silat (Marlianto et al., 2018).

#### Conclusion

Based on the results of testing the discussion hypothesis, it can be concluded that there is significant influence on the speed of extracurricular pencak silat sickle kicks. The magnitude of the influence/increase in sickle kick speed can be seen from the difference in the pretest and posttest average values of 15.60 and 20.00 greater after being given down hill running training treatment on the influence/increase of crescent kick speed ability in the extracurricular pencak silat by 28%.

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