14 (1) (2025) 225 - 233
Journal of Physical Education, Sport, Health and Recreations
https://journal.unnes.ac.id/journals/peshr

The Effect of Leg Muscle Weight Training and Shuttle Drill Kick on The Speed of Pencak Silat Sickle Kick

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Article History

Received February 2025
Accepted February 2025
Published Vol.14 No.(1) 2025

Keywords:
Weight Training leg muscles; Shuttle Drill Kick; sickle kick speed.

Abstract

This study was conducted to determine the effect of Weight Training leg muscle exercises and Shuttle Drill Kick on the speed of the sickle kick of extracurricular Pencak Silat Tapak Suci athletes at Junior High School Muhammadiyah Majalaya, the sample used a Saturated sampling technique and the sample taken was 20 people. This study used quantitative with an experimental method with a two group Pretest-Posttest design. The instrument used in this study was a sickle test. The results of data management were calculated to see the effect of Weight Training leg muscle exercises and Shuttle Drill Kick on the speed of the sickle kick of extracurricular Pencak Silat Tapak Suci athletes at Junior High School Muhammadiyah Majalaya. With the results of Weight Training for the right leg having an effect of 68.7%, for the left leg 64.0%. while the results of the Shuttle Drill Kick for the right leg had an effect of 86.0%, for the left leg 66.9%. This means that weight training leg muscles and shuttle drill kick can increase the speed of the sickle kick.

How to Cite

Maulana, S. J., Safari, I., & Alif, M. N. (2025). The Effect of Leg Muscle Weight Training and Shuttle Drill Kick on The Speed of Pencak Silat Sickle Kick. Journal of Physical Education, Sport, Health and Recreation, 14 (1), 225-233.

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p-ISSN 2460-724X
e-ISSN 2252-6773

INTRODUCTION

Sports can be simply defined as physical activities carried out in everyday life, not only as a means of recreation but also as a place to learn and achieve achievements from high-level skill performances (Husdarta, 2021).In competitive sports, there are several things that need to be prepared in order to achieve a planned goal. These things include human resources, stakeholders such as referees, coaches, management, facilities and infrastructure, and other sports personnel lainnya (Safari et al., 2025.). Learning basic self-defense skills is something important that must be mastered by children (Alif, Muhtar, et al., 2024). One of the sports that is often competed and taught in schools is Pencak Silat, a traditional martial art from Indonesia. In Pencak Silat, physical condition components such as strength, endurance, speed, agility, flexibility, power, punches, reactions, and balance play an important role in improving athlete performance. Athlete performance can be supported by supportive training forms that will contribute to athletes in improving performance (Safari & Saptani, 2019).

Pencak Silat is a traditional martial art originating from Indonesia. According to Widodo & Eka Saputra, (2018) Pencak Silat or silat is a traditional martial art originating from Indonesia. In Indonesia, the parent organization of Pencak Silat is known as the Indonesian Pencak Silat Association (IPSI), while internationally it is known as PERSILAT (Persekutuan Pencak Silat Antara Bangsa, or The International Pencak Silat Federation) (Ruswinarsih et al., 2023). Pencak Silat is part of Indonesia's cultural heritage that has developed over the centuries. Influenced by various geographical, ethnographic conditions, and the dynamics of the times, Pencak Silat is not only a martial art but also a form of local wisdom that reflects the cultural identity of its supporting community (Ediyono & Widodo, 2019). In Indonesia, there are various Pencak Silat schools, one of which is the Tadjimalela School which originates from West Java. In addition, there is also the Tapak Suci School which originates from Central Java, which is widely spread in Islamic schools and Islamic boarding schools. The purpose of following Pencak Silat is not only to defend oneself, but also to achieve achievements (Pratama, Rendra & Trilaksana, 2018).

In Pencak Silat matches, there are rules that distinguish it from other martial arts. by Dongoran et al.(2019) stated that Pencak Silat is divided into several sports that have different movements, rules, cultures, and types. This difference is clearly seen in the match arena, rules, movements, clothing, and how to get points, especially when compared to sports such as boxing. Match rules are regulations that apply in a competition or match according to a particular sport that aims to ensure that the match runs fairly and fairly (Nopitasari & Wahyudi, 2022). Thus, Pencak Silat is not only a traditional Indonesian martial art, but also has a well-organized organizational structure, various schools spread throughout Indonesia, and unique competition rules that distinguish it from other martial arts (Ediyono & Widodo, 2019).

The main goal of Pencak Silat is to protect oneself, improve health, and achieve achieve ments. Self-defense training teaches to be more aware and actively pursue character development (Alif, Komarudin, et al., 2024). In competition, Pencak Silat fights involve two fighters from different camps facing each other with elements of defense and attack. According to Maulana (2023) a fight in the Pencak Silat category is a fight in which two fighters from different camps face each other with elements of protection and attack. Pencak Silat has gone global and is not only known in Indonesia . Nabila et al. (2021) stated that Pencak Silat matches began to be competed in championships at regional, national, and international levels. To achieve achievements in Pencak Silat, it is necessary to master basic techniques such as hitting, kicking, and blocking. The kicking technique in Pencak Silat has various variations, including A, T, and sickle kicks (Guntur Sutopo & Misno, 2021). One of the important kicking techniques to master is the sickle kick. Thus, Pencak Silat not only functions as a means of self-maintenance and health, but also as a means to achieve achievements at local and international levels (Mihmidati & Wahyudi, 2021).

Kicking is one of the techniques in Pencak Silat, which is included in various other techniques such as punches, comparisons, sweeps, and others. Kicking techniques are considered difficult to get points, because kicks in Pencak Silat matches produce 2 points according to (Hausal et al., 2018). The attack value in Pencak Silat gets +2 points for each hit on the opponent's body armor and +3 points if it successfully knocks down the opponent. Various kicking techniques, such as A, T, and Crescent kicks, are often used in matches. The crescent kick, one of them, is a technique that is often used, especially by beginner athletes. This crescent kick is known as a half-moon kick. the ideal way to do a crescent kick is to lift the leg as high as the target position. Turn the waist towards the road while cutting the middle of the

knee at a position of about ±64° (Riyan et al., 2019). Kick angle and foot position The crescent kick is one of the important kicking techniques. This kick requires a combination of strength, speed, and punches to have maximum impact on the opponent Since the crescent kick attack comes from the side, this move is easily caught by the opponent. To prevent this, immediately pull back. lower leg after the kick is done. Start from a stance, lift your knee until it is parallel to the target. Rotate your waist in the direction of the kick, then follow it with a whip of the lower leg that is supported by the knee movement (Amrullah, 2015). The speed of the sickle kick is a key factor in Pencak Silat because it can determine the effectiveness of an athlete's attack and safety. A fast kick can surprise an opponent, give points, and even avoid counterattacks. Thus, this sickle kick requires training that includes leg muscle strength. (Nurul Ihsan, 2018).

Based on the results of observations in the field, many novice athletes perform crescent kicks that are lacking in speed so that when competing, the kick is easily caught by the opponent. This is Speed is very much needed in Pencak Silat matches because the faster the movements made by the athlete, the more difficult it will be for the opponent to avoid and the easier it will be to get points (Guntur Sutopo & Misno, 2021). Therefore, by conducting this study, the researcher wanted to know whether the trainingweight trainingleg muscles can increase the speed of the sickle kick in Pencak Silat athletes and whether-Shuttle Drill Kickcan increase the speed of the sickle kick in Pencak Silat athletes and how the combination affects Weight Training And Shuttle Drill Kick on the speed of the sickle kick in Pencak Silat athletes.

It is estimated that one way to train kicking speed is by Weight Training And Shuttle Drill Kick.Weight training is a weight training included in basic physical fitness training that aims to increase muscle strength and speed, so that the athlete can kick more lightly and have better explosive power (Farhiah et al., 2019). Weight training is an exercise that is carried out systematically using weights as a tool to increase muscle function strength in order to achieve goals such as improving physical condition, preventing injury, or for health purposes. In the context of leg muscle training, exercises such as leg press and leg extension are often used. Leg press is, leg extension, squat and lunges an exercise for the lower leg muscles, where the athlete pushes the weight with the legs, while leg extensio is an exercise for the thigh leg muscles (Waskito & Yusradinafi, 2021). This second exercise aims to strengthen the leg muscles, which are important for increasing kicking speed. Shuttle Drill Kickis a common drill used in various sports. It is designed to improve speed, agility, and coordination. Essentially, shuttle drills involve moving back and forth between two or more specific points in a short distance, while kick Refers to the kicking movement (Tofikin & Sinurat, 2020) In this exercise, athletes will sprint to a certain point, then kick towards, and return to the starting point. This exercise can help improve an athlete's technical skills, endurance, and quick response in real game situations. The most important decision a teacher or coach must make is about how to distribute certain skills during training.

Several previous relevant studies, including: 1) (Nabila et al., 2021) with the results of right-footed crescent kick skills influenced by other variables. From these results, it can be interpreted that kick training with rubber tires affects the results of Pencak Silat crescent kicks. 2) (Syampurma & Negeri, 2019) with the results There is a joint relationship between agility and explosive power of leg muscles on the speed of the crescent kick of Pencak Silat athletes Silaturahmi Kalumbuk, Kuranji District, Padang City. 3) (Sutopo & Misno, 2020) the results obtained based on the results of the study, it is known that the speed of the crescent kick of teenage athletes is in the good and sufficient category. The highest percentage of kick speed in male and female athletes is the crescent kick using the right foot. 4) (Kamarudin & Zulrafli, 2020) with the results that there is an influence of leg muscle power and flexibility on the speed of the sickle kick of PPLP Pencak Silat athletes - Meranti Regency by 74.65%.

Although some studies are references, in the research that the researcher will conduct there is an update, namely with the Weight Training and Shuttle Drill Kick training methods to increase the speed of the sickle kick in Pencak Silat in the form of basic techniques. Mastering techniques is an inseparable unity in Pencak Silat.

Based on the description above, the researcher can formulate this research "Is there an effect of Weight Training exercise on the speed of the sickle kick in Pencak Silat athletes, Is the effect of Shuttle Drill Kick exercise can increase the speed of the sickle kick in Pencak Silat athletes, and Is there an effect of the difference between Weight Training and Shuttle Drill Kick exercises on the speed of the sickle kick in Pencak Silat athletes? " Thus, this researcher aims to determine the effect of weight training leg muscles and shuttle drill kick exercises on speed before and after the

training treatment given to Tapak Suci extracurricular athletes at Junior High School Muhammadiyah Majalaya.

METHODS

This research was conducted at Junior High School Muhammadiyah Majalaya. This research was conducted for 1 month with 12 meetings in a week 3 meetings. This type of research uses the Experimental Method with Two Groups design Pretest-Postest Design. The population is all athletes of the Pencak Silat extracurricular Tapak Suci Junior High School Muhammadiyah Majalaya. The study wanted to conduct research in the Pencak Silat extracurricular Tapak Suci with a sample of 20 people. Therefore, the study used a saturated sampling technique, saturated sampling is a sampling technique in which all members of the population are used as samples. This technique is generally applied when the population is relatively small, which is less than 30 people (Ummah ,2019).

The instruments used in this study were tests and observations. The tests were conducted at the beginning (Pretest) in the form of a sickle kick to the reel before being given treatment, and the final (final) form of training Weight Training leg muscles and Shuttle Drill Kick after being given treatment. While observations are used to record the implementation of the training Weight Trainingleg muscles and Shuttle Drill Kick to ensure that the intervention is carried out according to plan. This tool is equipped with a crescent kick speed test program using the Pencak Silat Crescent Kick Speed Test by 2022 (Ode & Aziz, dalam jhonsyah lubis, 2016:199) performing a crescent kick on the target for 10 seconds as much as possible. to find out how to increase the athlete's speed against the speed of the kick by looking at the test results obtained.

The data collection technique used in this study was carried out by analyzing the results of the pre-test before treatment was given and ending with a post-test after treatment was given for 12 meetings, and the treatment was given in 10 meetings. Weight Trainingleg muscles (leg press and leg extension with 8 repetitions (3 sets) andShuttle Drill Kickwas done (3 sets) and ended with a post-test after being given treatment. 3 times, namely with the right foot and the left foot. This study is to determine whether a treatment is said to be very good, good, sufficient, lacking and very lacking.

In this data analysis, when the data is obtained and analyzed quantitatively, the data that will be used with the help of SPSS (Dewi et al., 2023). The data will be analyzed using the t- test to test the difference in the average speed of the sickle kick. Each test result data that has been carried out through Pretest And Posttest The data will be processed by means of.

RESULTS AND DISCUSSION

In this section, the results of the study will be discussed with the analysis of data obtained during the research, the difference in the results of the speed of the sickle kick after being given treatment and before being given treatment. Before being given treatment, the Tapak Suci extracurricular participants of Junior High School Muhammadiyah Majalaya conducted an initial test or Pretest to know how deep the speed is after doing Pretest data results Pretest. After there is data Pretest perform ranking aimed at being grouped using Matched Ordinal Pairing. Ranking the initial test results to group samples using the ordinal pairing method. for two groups, group 1 Weight Training leg muscles and group 2 Shuttle Drill Kick, and given treatment 3 times in 1 week, the treatment given was for group one, namely exercise Weight Training leg muscles. And for group 2 Shuttle Drill Kick. The treatment is to increase the speed of the Pencak Silat sickle kick.

Table 1. descriptive statistics

	N	Min	Max	Mean	Std. Deviation
Pretest Weight Training right leg muscles	10	15	23	19.80	2.201
Pretest Weight Training left leg muscles	10	12	19	16.20	2,440
Shuttle Drill Kick Pretest right foot	10	17	23	19.90	1,969
Shuttle Drill Kick Pretest left foot	10	14	19	16.90	1,912
Posttest Weight Training right leg muscles	10	20	27	23.00	2.309
Posttest Weight Training left leg muscles	10	14	22	19.20	2,440
Posttest Shuttle Drill Kick right foot	10	18	25	21.40	2.459

It can be seen in **Table 1** above that all samples that participated Pretest And Posttest. there is a minimum value Pretest Weight Training right leg muscles 15, while Pretest Weight Training left

leg muscles 12, while Shuttle Drill Kick Pretest1 7, while while Pretest left foot shuttle drill 14, Posttest Weight Training right leg muscles 20, while Posttest Weight Training left leg muscles 14, while Posttest Shuttle Drill Kick right 18, while Posttest shuttle drill left foot 15. For maximum value Pretest Weight Training right leg muscles 23, while Pretest Weight Training left leg muscles 19, while Shuttle Drill Kick Pretest 23, while while Pretest left foot shuttle drill 19,Posttest Weight Training right leg muscles 27, while Posttest Weight Training left leg muscles 22, while Posttest Shuttle Drill Kick right 25, while Posttest shuttle drill left foot 23. For the mean value Pretest Weight Training right leg muscle 19.80, while Pretest Weight Training left leg muscles 16.20, while Shuttle Drill Kick Pretest 19.90, while while Pretest left foot shuttle drill 16.90,Posttest Weight Training right leg muscle 23.00, while Posttest Weight Training left leg muscles 19.20, while Posttest Shuttle Drill Kickright 21.40, while Posttest left foot shuttle drill 18.70. For Deviantion value Pretest Weight Trainingright leg muscle 2201, whilePretest Weight Training left leg muscles 2,440, while Shuttle Drill Kick Pretest1,969, while while Pretest left foot shuttle drill 1912,Posttest Weight Training right leg muscles 2,309, while Posttest Weight Training left leg muscles 2,440, while Posttest Shuttle Drill Kickright 2,459, while Posttest left foot shuttle drill 2.111.

Table 2. Normality Test Results

	sig	sig.p	caption
Pretest weight training right foot	0,05	0,266	Normal
Pretest weight training left foot	0,05	0.257	Normal
Pretest Shuttle Drill Kick right foot	0,05	0,682	Normal
Pretest Shuttle Drill Kick left foot	0,05	0,157	Normal
Posttest Weight Training right foot	0,05	0,438	Normal
Posttest Weight Training left foot	0.05	0,182	Normal
Posttest Shuttle Drill Kick right foot	0,05	0,380	Normal
Posttest Shuttle Drill Kick left foot	0,05	0.654	Normal

It can be seen in **Table 2** above the normality test that has been carried out. then it can be concluded that the data that has been taken through the crescent kick test to the target shows that the results of the Pretest wheigt training of the right leg muscle have a sig value of 0.266> 0.05 then the data is normally distributed, while the results of the Pretest wheigt training of the left leg muscle have a sig value of 0.257 > 0.05 then the data is normally distributed, while the results of the Pretest Shuttle Drill Kick right leg have a sig value of 0.682 > 0.05 then the data is normally distributed, while the results of the Pretest Shuttle Drill Kick right leg muscle have a sig value of 0.157 > 0.05 then the data is normally distributed, while the results of the Posttest wheigt training right leg muscle have a sig value of 0.438 > 0.05 then the data is normally distributed, while the results of the posttest wheigt training left leg muscle have a sig value of 0.182 > 0.05 then the data is normally distributed, while the results of the Posttest Shuttle Drill Kick right leg muscle have a sig value of 0.380 > 0.05 then the data is normally distributed, and while the results of the Posttest Shuttle Drill Kick left leg muscle have a sig value of 0.654 > 0.05 then the data is normally distributed.

Table 3. Homogeneous Test Results

	sig	Sig. p	information
Weight training right leg muscles	0.05	0.635	Homogeneous
Weight training left leg muscles	0.05	0.711	Homogeneous
shuttle drill kick right	0.05	0.546	Homogeneous
Shuttle drill kick left	0.05	0.971	Homogeneous

It can be seen in **Table 3** above, it shows that the sig value of the right kick pretest is 0.635 > 0.05, so it is homogeneous, while the sig result of the left kick pretest is 0.711 > 0.05, so it is homogeneous. Meanwhile, the sig result of the right kick posttest is 0.546 > 0.05, so it is homogeneous, while the sig result of the left kick posttest is 0.971 > 0.05, so it is homogeneous.

The test in this study was carried out using the paired sample t-test and the Independent Sample Test, for the paired sample t-test to determine H.0there is no influence while H1 has an influence. If the sig p value > 0.05 H1 is rejected while If the sig p value <0.05 then H1 is accepted. For the independent sample test to find out the difference HO there is no difference in influence while H1 has a difference in influence If the sig p value > 0.05 then H1 is rejected while If the sig p value <0.05 then H1 is accepted.

Can be seen in **Table 4.** Can be seen in the results of the right kick.Weight Trainingleg muscles 0.000 < 0.05 it is concluded that H1 is accepted, so in this study there is an influence of training, whereas, while the results of the left

kickWeight Trainingleg muscles 0.002 < 0.05 concluded H1 is accepted, then in this study there is an influence of training, while the results of the right kick shuttle drill kick 0.001 < 0.05 concluded H1 is accepted, then in this study there is an influence of training, while the results of the left kickShuttle Drill Kick0.001 < 0.05, it is concluded that H1 is accepted, so in this study there is an influence of training. Based on the data that has been analyzed, it shows that the results of leg muscle weight training andShuttle Drill Kick increasing the speed of the crescent kick in the Tapak Suci extracurricular participants of Muhammadiyah Majalya Middle School, then to find out how big the influence is, the next step is to carry out an R-square test.

Table 4. paired sample t-Test

	t	Sig.p
pretest weight training right leg muscles-Posttest weight training right leg muscles	-7,154	. 000
pretest weight training left leg muscles -Posttest Weight Training left leg muscles	-4,358	. 002
Shuttle Drill Kick Pretest right leg – posttest Shuttle Drill Kick right foot	-4,881	. 001
Pretest shuttle drill lick left foot -Posttest Shuttle Drill Kick left foot	-4,630	. 001

Table 5. Independent Sample t-Test

	t	df	Sig.p
Right foot	1,374	18	. 186
Left foot	. 490	18	. 630

It can be seen in **Table 5.** It can be seen that the results of the right kick are 0.186 > 0.05, it is concluded that H1 is rejected, so in this study there is no difference in the influence of training, while the results of the left kick are 0.630 > 0.05, it is concluded that H1 is rejected, so in this study there is no difference in the influence of training.

The R-Square test is a test that is used to determine how much influence the training has. weight training leg muscles and shuttle drill kick-in the crescent kick at the Tapak Suci extracurricular at Junior High School Muhammadiyah Majalaya. The following is a table of the results of the R-Square test using the SPSS application and the results of R square x 100%

It can be seen in **Table 6** that it shows the exercisesWeight Training right leg muscles have an effect that increases speed by 68.7%, while the exercise Weight Training muscle left leg has an effect that increases speed by 64.0%, while the exercise Shuttle Drill Kick right leg has an effect that increases speed by 86.0%, and while the exercise Shuttle Drill Kick The right foot has an effect that increases speed by 66.9%.

Table 6. R-Square Test

	R-Square	Influence
Weight Trainingleg muscles(right)	. 687	68.7%
Weight Trainingleg muscles(left)	. 640	64.0%
Shuttle Drill Kick (right)	. 860	86.0%
Shuttle Drill Kick (left)	. 669	66.9%

Leg Muscle Weight Training is one of the strength training methods designed to increase muscle explosive power. In pencak silat, the speed of the sickle kick is highly dependent on the strength and coordination of the Leg Muscles. Therefore, Leg Muscle Weight training that focuses on the Leg Muscles can help improve athletes' performance in performing sickle kicks faster and more powerfully. Leg Muscle Weight Training is weight training Farhiah et al.,(2019). Stated that Leg Muscle Weight Training (weight training) is a basic exercise in physical fitness that aims to increase muscle strength and speed, so that it can kick more lightly and have explosive power. The application of the Leg Muscle Weight Training method can increase the speed of the sickle kick. If you do a sickle kick with Leg Muscle Weight Training which is done in a structured manner, then muscle strength and endurance will increase, allowing athletes to produce greater power in a shorter time. As a result, the speed of the kick also increases. The results of the data calculation study using the paired sample t-test above table 4 which obtained the results of the right and left kicks showed an effect. And to find out how much influence the results of the R Square value calculation above in table 6 show that the right Leg Muscle Weight Training exercise has an effect that increases speed by 68.7%, while the left Leg Muscle Weight Training exercise has an effect that increases speed by 64.0%. This shows that pencak silat athletes who undergo the Leg Muscle Weight Training program specifically for Leg Muscles experience a more significant increase in kick speed compared to those who do not undergo it. The weight training method has also been carried out by other studies.

With different types of training in the results of the S study, it is explained by the research of Nabila, Y., Malinda, M. S., Maulana, Y. I., & Panggraita, G. N. (2021) entitled "The Effect of Kick Training Using Rubber Tires on the Results of Pencak Silat Sickle Kicks". With the

research results obtained, namely (1) The results of research on the effect of kick training with rubber tires on the results of sickle kicks on the left leg with an R-Square value of 0.718. This value means that training has an effect on the results of the crescent kick on the left leg by 71.8%, while 28.2% is the result of the crescent kick skill on the left leg which is influenced by other variables. (2) The results of the study on the effect of kick training with rubber tires on the results of crescent kicks on the right leg with an R-Square value of 0.771. This value means that training has an effect on the results of the crescent kick on the right leg by 77.1%, while 22.9% is the result of the crescent kick skill on the right leg which is influenced by other variables. This study shows that kick training using rubber tires has a significant effect on improving crescent kick skills, especially on the right leg, although there are other variables that influence these results. Based on the research above, it can be concluded that Leg Muscle Weight Training can increase the speed of the crescent kick in Tapak Suci extracurricular athletes at Junior High School Muhammadiyah Majalaya.

Shuttle Drill Kick Training is one of the training methods designed to increase the speed and agility of the feet in kicking. In pencak silat, the speed of the crescent kick is very important to create an effective attack that is difficult for the opponent to anticipate. Therefore, this exercise is one way that can help athletes improve the speed and accuracy of the crescent kick. In this exercise, athletes will run towards a certain point, then kick towards, and return to the starting point. This exercise can help improve an athlete's technical skills, endurance, and quick response in real game situations (Rizhardi et al., 2022).

The results of the data calculation study using the paired sample t-test above in table 4 show that the results of the right and left kicks show an influence. To find out how much influence the results of the R Square value calculation above in table 6 show that the right leg Shuttle Drill Kick exercise has an effect that increases speed by 86.0%, while the left leg Shuttle Drill Kick exercise has an effect that increases speed by 66.9%. shows that pencak silat athletes who routinely undergo Shuttle Drill Kick training experience a significant increase in the speed of the crescent kick. This happens because this exercise trains the body to adapt to fast movements and sudden changes in direction, so that the muscles become more responsive when kicking.

Based on the results of the study Data analysis using the Independent Sample t-Test above table 5 that obtained the Results The results of the right and left leg kicks showed that in this study there was no difference in the effect of training between the Leg Muscle Weight Training and Shuttle Drill Kick exercises on the speed of the sickle kick in Pencak Silat athletes. In the combination of Leg Muscle Weight Training and Shuttle Drill Kick exercises, not only does it increase strength and speed, but it also improves technique and overall physical readiness, making it a very appropriate choice for improving sickle kicks in Pencak Silat. There was no significant difference between Leg Muscle Weight Training and Shuttle Drill Kick exercises in increasing the speed of the sickle kick in Pencak Silat athletes. This means that even though the training methods used are different, both have relatively the same effectiveness in increasing kick speed.

This second method has been carried out by previous studies but with this study with a different training method. In the study of Rosmawati, Darni, & Syampurma, H. (2019)"The Relationship between Agility and Explosive Power of Leg Muscles to the Speed of Sickle Kicks of Pencak Silat Athletes Silaturahmi Kalumbuk, Kuranji District, Padang City". This study with the results of data analysis shows that: There is a relationship simultaneously between agility and explosive power of leg muscles to the speed of sickle kicks of Pencak Silat athletes Silaturahmi Kalumbuk, Kuranji District, Padang City. Where obtained ro = 0.98> Ltab = 0.361 at the level of significant testing $\alpha = 0.05$ contribution of = 46.4% found a significant relationship between agility and explosive power of leg muscles to the speed of sickle kicks in Pencak Silat athletes, which shows the importance of agility and leg muscle strength training in improving sickle kick performance. In conclusion, there is no significant difference between Leg Muscle Weight Training and Shuttle Drill Kick exercises in increasing the speed of sickle kicks in pencak silat athletes. Both are equally beneficial and can be applied according to the specific needs of the athlete. In fact, combining these two exercises can be a more optimal strategy to achieve maximum kicking speed improvements.

CONCLUSION

Based on the results obtained, the application of the exerciseWeight Trainingleg muscles andshuttle drill kick which is done can affect the increase in the speed of the sickle kick. because muscle weight training plays a greater role in muscle strength for kicking power, while the

shuttle drill kick is more about the speed of movement in the sickle kick. In the extracurricular Tapak Suci Junior High School Muhammadiyah Majalaya. Speed is one of the kicks needed when competing in pencak silat.

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