



The Effect of Kick Training Model on Crescent Kick Ability in Pencak Silat Athletes

Revy Sarah Dwi Yanti^{1A-E*}, Nurkadri^{2B-D}, Yudika Syah Putri Damanik^{3B-D}, Nihlu Sekar Ayu Purba^{4B-D}, Fatimah Azzahra Wardani^{5B-D}, Nurafni Pribadi^{6B-D}, Gerry Gabriel Sirait^{7B-D}

^{1,2,3,4,5,6,7} Universitas Negeri Medan, North Sumatra, Indonesia

revysarahdwiyaniti@gmail.com^{1*}, nurkadri@unimed.ac.id², yudikadamanik@gmail.com³,
nihlupurba12@gmail.com⁴, ftmhzhawardni@gmail.com⁵, nurafnipribadi@gmail.com⁶,
gerrysirait2@gmail.com⁷

ABSTRACT

This study aims to determine the effect of the Kick Training Model on the ability to perform a hook kick in male athletes of Pencak Silat Merpati Putih Medan Baru in 2025. The research method used is the experimental method. The sampling technique used involved 8 participants, and the study was conducted over 6 weeks with a training frequency of 3 times per week. Statistical calculations were performed using a t-test. Hypothesis analysis was conducted using pre-test and post-test data on kicking ability, where the calculated t-value was 4.554. This value was compared with the critical t-value with $df = n - 1 (8 - 1 = 7)$ at a significance level of $\alpha = 0.05$, which was 1.895. Thus, the calculated t-value was greater than the critical t-value ($4.554 > 1.895$). The research data showed that the pre-test average was 31.9 and the post-test average was 39. The data obtained were tested for normality and homogeneity. The data were normally distributed and homogeneous, followed by hypothesis testing using statistical tests via SPSS version 29. The sig. The value was 0.004. This sig. The value is smaller than 0.05. Therefore, H_0 is rejected and H_a is accepted, concluding that there is a significant effect of the kicking training model on the crescent kick. The state of the art and novelty of this study is to improve the crescent kick ability in pencak silat using the implemented training model.

ARTICLE HISTORY

Received: 2025/06/20

Accepted: 2025/06/26

Published: 2025/06/28

KEYWORDS

Kick Training Model;
Hook Kick;
Crescent Kick;
Pencak Silat;
Experimental Method.

AUTHORS' CONTRIBUTION

A. Conception and design of the study;
B. Acquisition of data;
C. Analysis and interpretation of data;
D. Manuscript preparation;
E. Obtaining funding

Cites this Article : Yanti, Revy Sarah Dwi; Nurkadri, N.; Damanik, Yudika Syah Putri; Purba, Nihlu Sekar Ayu; Wardani, Fatimah Azzahra; Pribadi, Nurafni; Sirait, Gerry Gabriel. (2025). The Effect of Kick Training Model on Crescent Kick Ability in Pencak Silat Athletes. **Competitor: Jurnal Pendidikan Kepeleatihan Olahraga**. 17 (2), p.1356-1364

INTRODUCTION

Sport is a form of activity, both physical and mental, that provides significant benefits in maintaining and improving a person's health. The term 'sport' comes from the Old French word *de sport*, which means 'pleasure'. In English, the term was first used around 1300 to describe any activity that was enjoyable and entertaining for humans. In addition to its health benefits, sports have also become one of the main sources of entertainment, as they have many fans and spectators and can be widely broadcast through the media. (Ferianto Tjahyo Kuntjoro, 2020)



Pencak silat is a traditional martial art originating from Indonesia. As one of the nation's cultural heritages, pencak silat has developed and progressed alongside the historical journey of Indonesian society. Today, pencak silat is widely recognised domestically and has begun to spread and develop in neighbouring countries that use the Malay language. (Kholis, 2016)

Pencak silat is an indigenous Indonesian martial art that is easy to learn for anyone interested. Additionally, pencak silat plays a crucial role as a means of self-protection, especially amid the rising incidence of crime today. Unfortunately, many physical education teachers do not teach pencak silat to their students because they feel they lack mastery of the subject matter. On the other hand, society now tends to prefer practical matters and more frequently uses smartphones or gadgets to access various information. Therefore, an alternative is needed, such as the development of a method for teaching the basic techniques of pencak silat that is more in line with the needs of the times. (Khoiro et al., 2017)

Meanwhile, according to Robbin and Timothy (in Amrullah, 2015), competence means the capacity or ability of a person to master a skill that is then used to complete various tasks in a job.

The crescent kick is one of the most important attacking techniques in pencak silat. This technique is characterised by a curved movement from the side to the front, with the point of contact being the top of the instep or the base of the toes. The crescent kick is often relied upon in competitions due to its speed, practicality, and ability to put pressure on opponents. However, male athletes from the Merpati Putih Medan Baru pencak silat club face significant challenges in executing this technique, resulting in suboptimal performance on the competition arena. These issues are of serious concern as they can impact athletes' ability to compete at higher levels of competition.

The first prominent issue is the athletes' lack of ability to execute the hook kick, resulting in the kick often missing the target and failing to hit the desired mark. This inability renders the attack ineffective and significantly reduces the chances of scoring points in the match. Accuracy is a crucial element in the hook kick, as without it, the kick's power will not have the maximum impact on the opponent. In addition to not scoring points, missed kicks also allow opponents to counterattack, putting athletes at a disadvantage. This can be caused by various factors, such as a lack of mastery of the basic techniques of roundhouse kicks, insufficient training focused on accuracy, and a lack of understanding of the correct body position when performing kicks.

The second issue identified based on initial data is the weakness in body coordination when performing a roundhouse kick. A roundhouse kick requires good coordination between leg muscle strength, body flexibility, balance, and movement technique. Athletes often struggle to maintain body balance while kicking, resulting in unstable movements that are easily read by opponents. In addition, a lack of leg muscle strength is also a major obstacle that prevents athletes from producing kicks with optimal speed and power. In pencak silat, coordination skills are very important to ensure that every movement is performed efficiently and effectively. The athletes' poor body

coordination shows that they need additional training to improve their physical and technical aspects to perform roundhouse kicks better.

The third issue identified after interviewing coaches and reviewing several of their programmes was that the training provided by coaches tended to be monotonous and lacking in variety. Uninnovative training can cause boredom among athletes and reduce their motivation to train to the fullest. The lack of diversity in training methods also slows down the development of athletes' technical abilities because they do not receive the new challenges or stimulation necessary to improve their skills. Monotonous training often focuses solely on repeating movements without providing variation or simulating match situations that could help athletes understand how to apply the scissor kick effectively in real-world conditions. As a result, many athletes are unable to develop their abilities optimally despite participating in regular training sessions.

These issues began to be identified through observations during six meetings. In the first meeting, an initial observation was conducted through a pre-test to measure the athletes' basic abilities in performing scissor kicks. This pre-test covered several important aspects such as target accuracy, kicking power, body balance when kicking, and overall movement stability. The results of the observation showed that most athletes had low accuracy and poorly coordinated movements. Many athletes failed to consistently hit the target, indicating that their basic techniques were not well-trained.

In the second meeting, the coach conducted direct observations during regular training sessions to identify specific weaknesses in the roundhouse kick technique. These observations revealed that many athletes did not understand the correct body position when kicking, such as the position of the supporting foot, the angle of the leg swing when kicking, and control of body balance during the movement. Additionally, it was found that many athletes had weak leg muscle strength, resulting in kicks that were not strong enough to apply pressure to opponents.

The third to fifth meetings continued to show that the main issue stemmed from a lack of variety in training methods. During these sessions, the coach noted that many athletes appeared to lose focus and motivation because the monotonous training did not provide new challenges for them. Training tended to focus on repetitive movements without providing variation or simulating real match situations. As a result, important aspects such as body flexibility, kicking speed, and movement coordination did not develop optimally due to the lack of stimulation from varied training.

At the sixth meeting, the final observation was conducted to analyse the overall development of the athletes' technical and physical abilities after several intensive training sessions using a new approach. Although there were some minor improvements in the execution of the hook kick technique, such as increased leg muscle strength and body stability when kicking, fundamental issues, such as accuracy and coordination, remained the main concerns.

Through this observation phase, it became clear that these issues are interconnected and require solutions in the form of more varied training approaches focused on the athletes' specific needs. By deeply understanding the root of these issues

through direct observation during several training sessions, it is hoped that the coach can design a new, more effective training programme to significantly improve the athletes' roundhouse kick ability and prepare them to be more competitive in future pencak silat competitions. This approach must include improving basic techniques through targeted training and applying varied training methods to maintain the athletes' motivation and enthusiasm throughout their development process at the Merpati Putih Medan Baru pencak silat club.

The state-of-the-art and novelty of this research lie in the effort to enhance the ability to perform a sabit kick in pencak silat through the application of a specially designed training model.

Based on the explanation provided by the researcher above, the researcher aims to use six (6) variations of scythe kick training models using pacing. Therefore, the author feels compelled to conduct research titled 'The Effect of Training Models on Scythe Kick Ability in Male Athletes of the Merpati Putih Medan Baru Pencak Silat Club in 2025.'

METHODS

This study uses a quantitative approach with an experimental method to determine the effect of kicking training models on the ability to perform crescent kicks in male pencak silat athletes. The experimental method was chosen because it can test the causal relationship between independent and dependent variables. According to Sugiyono (2012:107), the experimental method is a research method used to determine the effect of a particular treatment on another under controlled conditions. The research design used was a one-group pre-test-post-test design, in which one group of subjects was given a pre-test, then given treatment, and finally a post-test. This design was considered suitable for measuring the extent of the influence of the training model on the results of the sabit kick ability, as it could show the difference in results before and after treatment in the same group. The population in this study was all 20 male athletes from the Merpati Putih Medan Baru Pencak Silat Club. The research sample consisted of 8 male athletes selected using purposive sampling. According to Lenaini (2021), purposive sampling is a non-random sampling technique in which the researcher selects subjects based on certain considerations relevant to the research objectives. The instrument used was a test of kicking and punching coordination skills against a target. According to Arikunto (2002), a research instrument is a tool or facility used by researchers to collect data to make the work easier and the results better. In this test, athletes were asked to kick and punch a target (sandsack/hand box) for 30 seconds at a height of 100 cm. The test was conducted three times, and the best result was taken as the final score. The score was calculated based on the number of punches and kicks that successfully hit the target. Data collection techniques included direct observation, literature review, and measurement tests (pre-test and post-test). According to Arikunto (2010), data collection is the most strategic process in research, as research results heavily depend on the quality of the data collected. Data analysis was performed using SPSS version 29. Normality was tested using the Shapiro-Wilk test, homogeneity was

tested using Levene’s Test, and hypothesis testing was performed using a paired sample t-test. According to Sudjana (2005), the t-test is used to test the difference between two means from two related groups. The test results showed that the data were normally distributed and homogeneous. The t-test yielded a t-value of 4.554 and a significance value (sig.) of 0.004, which is less than 0.05. This indicates that there is a significant effect of the kicking training model on improving the athletes' scissor kick ability.

RESULTS AND DISCUSSION

Result

Description of Research Data

This study was conducted at the Merpati Putih Pencak Silat club located in the Medan Baru sub-district office hall. The study was conducted from 13 April to 18 May 2025 for six weeks, with a frequency of three times a week on Tuesdays, Saturdays, and Sundays at 16:00 WIB, consisting of initial testing, treatment, and final testing. Overall, this activity was carried out in three stages: the first stage involved collecting initial data (pre-test) before the treatment was administered. The second stage involved administering kicking training (treatment). The third stage was the final stage (post-test), which involved collecting final data by measuring the participants' abilities after they had undergone the training and participated in the training programme. The results of the study can be seen in the table below:

Table 1.
Pre-Test and Post-Test Results

Yes	Name	Pretest	Posttest	B	B ²
1	Kurniawan	25	31	6	36
2	Daniel	32	38	6	36
3	Pablo	31	37	6	36
4	Michkel	30	37	7	41
5	Dede	35	41	6	36
6	Riswan	35	48	13	169
7	Fathir	34	41	7	41
8	Alfaro	30	39	9	81
SUM		252	312	60	476
FRIENDLY		31,5	39	7,5	59,5
STD. DEVIATION		3,33	4,81	6	2192,286

Based on Table 1 above, it can be seen that the pretest values for a sample of 8 athletes ranged from a minimum of 25 to a maximum of 35, with an average of 31.5 and a standard deviation of 3.33. The posttest values for a sample of 8 athletes ranged from a minimum of 31 to a maximum of 48, with an average of 39 and a standard deviation of 4.81.

Normality Test

Referring to the table below, normality testing was performed using the Shapiro-Wilk test, given that the sample size used was less than 50 people. The basis for decision making used a significance level (α) of 5% or 0.05.

- a. If the significance value (sig) is greater than 0.05, the data is considered to meet the normality assumption.

- b. Conversely, if the significance value is less than 0.05, the data does not meet the normality assumption.

Table 1.
 Tests of Normality Table

Research Data	Shapiro-Wilk		
	Statistics	Df	Sig.
Pretest	0,902	8	0,303
Posttest	0,935	8	0,564

Based on the normality test results shown, the significance value for both the pretest and post-test data is greater than 0.05. This finding indicates that both data sets meet the normality assumption. Thus, it can be concluded that the distribution of the pretest and post-test data is normal.

Homogeneity Test

Data homogeneity was tested using Levene's test. The basis for decision making used an alpha level of 5% or 0.05, with the following conditions:

- If the significance value > 0.05, then the assumption of homogeneity is fulfilled
- If the significance value < 0.05, then the assumption of homogeneity is not fulfilled.

Table 2.
 Test of Homogeneity of Variance Table

Test	df1	df2	Sig.
Pretest	1	14	,593
Posttest	1	14	,597

Referring to the homogeneity test results shown in the table above, the significance value for the pretest data is 0.593. Since this value exceeds the threshold of 0.05, it can be concluded that the pretest data has homogeneous variance. Similarly, the significance value for the post-test data is recorded at 0.597, which is also greater than 0.05. This indicates that the variance of the post-test data is also homogeneous.

Hypothesis Testing

Once all the prerequisites for analysis have been met, the next step is to conduct testing using the t-test. Decision-making in this test is based on the probability value (significance) with the following criteria:

- If the significance value is greater than 0.05, it can be concluded that there is no significant effect.
- Conversely, if the significance value is less than 0.05, it can be concluded that there is a significant effect.

Table 2.
 Hypothesis Testing

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	7,667	5,268		1,455	,196
Posttest	,611	,134	,881	4,554	,004

Based on the data presented in the table above, the significance value (sig.) in the posttest results was recorded at 0.004, which is below the threshold of 0.05. This indicates that the training model applied had a significant effect on improving the hook kick ability of male athletes at the Merpati Putih Medan Baru Pencak Silat Club in 2025.

Discussion

Based on data analysis, the results of the study indicate a significant improvement in kicking ability among the athletes (sample) studied. The application of the kicking training model had a positive and significant effect on hook kick ability. According to Nurkadri (2014), sport is one of the activities carried out by humans with various motivations, such as for health, achievement, or simply to fill spare time (recreation).

The discussion of the research results aims to facilitate the conclusion of the findings obtained. Based on the research conducted, it was found that there was a significant influence of the kicking training model on the kicking ability of male athletes from the Merpati Putih Medan Baru Pencak Silat Club in 2025.

In pencak silat, the scythe kick is one of the important techniques. To improve kicking ability, structured and targeted training is required, including providing training variations, as this form of training is directly related to movements in the game. Many training models have been developed by experts in the field, each with their characteristics and uses. Essentially, all training models developed aim to improve the training outcomes themselves (Syahputra, 2020).

Based on the above discussion, variations in kicking training models influence kicking ability. This study aims to determine the extent to which kicking training models influence the kicking ability of male athletes from the Merpati Putih Medan Baru Pencak Silat Club in 2025.

By providing 18 training sessions with varied kicking training models, this study introduces new elements in training and provides unique experiences, particularly for pencak silat athletes, to assess their kicking ability, and also for coaches to expand their knowledge in addressing and proving that there is an impact of the training provided through the data obtained, by implementing kicking training models on the results of the kicking ability of male athletes from the Merpati Putih Pencak Silat Club in Medan Baru in 2025.

CONCLUSION

Based on the above discussion and the research conducted, the researcher can draw the following conclusion: the ability to perform a crescent kick among the 8 participants was categorized as good for 3 participants, adequate for 4 participants, and poor for 1 participant. The state of the art and novelty in this study is the improvement of the ability to perform a crescent kick in the martial art of pencak silat using the training model implemented.

However, this study has several limitations, including a limited sample size of only eight athletes, as well as the scope of training conducted in one club and a relatively short period (six weeks). Therefore, the results of this study cannot be generalised to the entire population of pencak silat athletes.

Recommendations for future research include using a larger sample size and involving more than one club or region to ensure more representative results. Additionally, it is suggested that long-term observations be conducted to assess the impact of the training model on athletes' performance in actual competitions. Future research could also examine the influence of training on other physical aspects such as agility, speed, or endurance within the context of pencak silat martial arts.

REFERENCES

- Amrullah, R. (2015). Pengaruh Latihan Training Resistense Xander Terhadap Kemampuan Tendangan Sabit Pencak Silat. *Journal Pendidikan Olahraga*, 4(1), 91–92.
- Arikunto, S. (2002). *Prosedur penelitian suatu pendekatan dan praktek*. Jakarta: Rineka Cipta.
- Arikunto, S. (2010). *Prosedur Penelitian Suatu Pendekatan Praktik*, Jakarta: Rineka Cipta. (2013). *Prosedur Penelitian Suatu Pendekatan Praktek*. Edisi Revisi VI. Jakarta: Rineka Cipta.
- Bompa, T. O., & Buzzichelli, C. (2019). *Periodization–theory and methodology of training*. Human kinetics.
- Dwindi Rusdiani, Ferry Hidayad, & Puput Sekar Sari. (2024). Pengaruh Latihan Kelincahan Terhadap Kemampuan Tendangan Sabit Atlit Pencak Silat Dikapasita Desa Teluk Jaya Kecamatan Kelekar. *Khatulistiwa: Jurnal Pendidikan Dan Sosial Humaniora*, 4(2), 274–287. <https://doi.org/10.55606/khatulistiwa.v4i2.3451>
- Ferianto Tjahyo Kuntjoro, B. (2020). Rasisme Dalam Olahraga. *Jurnal Penjakora*, 7(1), 69–77. <https://ejournal.undiksha.ac.id/index.php/PENJAKORA/article/view/19503>
- Herdiman, D. C., Lubis, J., & Yusmawati, Y. (2022). Model Latihan Kelincahan Tendangan Sabit Pencak Silat Menggunakan Alat Bantu Ladder Drill. *Jurnal Speed (Sport, Physical Education, Empowerment)*, 5(2), 121–126. <https://doi.org/10.35706/jurnalspeed.v5i2.7066>
- Juntara, P. E. (2021). *Jurnal Ilmu Olahraga dan Kesehatan*. 12, 1–8.
- Khoiro, U. U., Yahya, K., & Fuad, N. (2017). Aplikasi Belajar Teknik Dasar Pencak Silat (Psh) Untuk Pemula Menggunakan Android. *J-Tiies*, 1(1).
- Kholis, N. (2016). Aplikasi Nilai-Nilai Luhur Pencak Silat Sarana Membentuk Moralitas Bangsa. *Jurnal SPORTIF: Jurnal Penelitian Pembelajaran*, 2(2), 76. https://doi.org/10.29407/js_unpgri.v2i2.508
- Kriswanto, E. (2015). PENCAK SILAT. <https://fliphtml5.com/ykyyc/yxb/basic>
- Lenaini, I. (2021). Teknik Pengambilan Sampel Purposive Dan Snowball Sampling. *HISTORIS: Jurnal Kajian, Penelitian & Pengembangan Pendidikan Sejarah*, 6(1), 33–

39. <http://journal.ummat.ac.id/index.php/historis>

Lubis, J. (2014). Pencak silat (Kedua). Raja Grafindo Persada.

Lubis, J. (2016). Pencak Silat (Ketiga). PT. Raja Grafindo Persada.
https://books.google.com/books?hl=en&lr=&id=vGvoDwAAQBAJ&oi=fnd&pg=PA1&dq=pencak+silat+jatuhan&ots=VpHnIFdQuk&sig=r_SYtftxM-d5RMfTQVaHIGUlr4

Nurkadri, N. 2014. "Kesesambungan Energi Dan Aktifitas Olahraga." Jurnal Pengabdian Kepada Masyarakat 20(75):78-83.

Nabila, Yustiana, Marshanda Salsabila Malinda, Yusril Ihza Maulana, and Gilang Nuari Panggraita. 2021. "Pengaruh Latihan Tendangan Menggunakan Ban Karet Terhadap Hasil Tendangan Sabit Pencak Silat." Halaman Olahraga Nusantara (Jurnal Ilmu Keolahragaan) 4(1):77. doi: 10.31851/hon.v4i1.5074.

Sugiyono, P. D. (2012). Metode Penelitian Kuantitatif Kualitatif Dan R&D (Vol. 8). Alfabeta. Bandung.

Sukadiyanto & Muluk, D. (2011). Pengantar teori dan metodologi melatih fisik. Bandung: Lubuk Agung.

Syahputra, Wahyu Dimas, and M. Nustan Hasibuan. 2020. "Pengembangan Variasi Latihan Dribbling Kombinasi Shooting Pada Olahraga Futsal." Jurnal Penelitian Bidang Pendidikan 26:2.