



### The Effect of Sneaking APE and HOP Exercises on Scrick Kicking Ability in BKMFC Pencak Silat FIK UNM Athletes

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#### ABSTRACT

Based on data results, the influence of Sneaking APE and HOP Training on Scythe Kick Skills in BKMFC Pencak Silat FIK UNM Athletes. is from the results of the analysis From the T-test data, the sneaking and Hop training test on the Crescent Kick Skills of BKMFC Pencak Silat FIK UNM Athletes obtained the value of the paired T-test variable test data. Sneaking Ape and Hop Training on the Crescent Kick Skills of BKMFC Pencak Silat FIK UNM Athletes obtained the sneaking value N( sample )15 people, has an initial value of 77.3333, a final value of 89.4667, a difference of 12.1333 with a sig value of 0.000. It can be interpreted that the effect of sneaking training on the Sickle Kick of BKMFC Pencak Silat FIK UNM Athletes has an influence with a difference of 12.1333, from the paired T-test test data the hop training variable on the Sickle Kick of BKMFC Pencak Silat FIK UNM Athletes obtained a hop N value (sample) of 15 people, has an initial value of 77.1333. The final value of 79.7333, difference of 2.60000 with a sig value of .000. It can be interpreted that the effect of hop training on the sickle kicks of BKMFC Pencak Silat FIK UNM athletes has an influence with a difference of 2.60000 and the paired T-test test data for the Sneaking Ape and Hop training variables on the sickle kick skills of BKMFC Pencak Silat FIK UNM athletes obtained a value of N(sample) 15 people, have a sneaking difference of 12.1333 and a difference value of 2.60000 with a sig value of .000. It can be interpreted that the effect of sneaking Ape and Hop training on the Scythe Kicks of BKMFC Pencak Silat FIK UNM Athletes has a greater influence, Sneaking Ape training is because it has a bigger difference involving 30 samples divided into 2 groups.

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#### INTRODUCTION

In Indonesia, public interest and participation in sports is increasing. Pencak Silat as a martial sport has gained recognition at the global level. Currently, Pencak Silat routinely competes in various competitions at both national and international levels, making it an integral part of the world of competitive martial arts.



Pencak silat a traditional Indonesian martial art, has an extraordinary wealth of techniques. However, in its development, several pencak silat schools still face challenges in developing new techniques that can meet the needs and demands of the times. Therefore, this research will discuss the development of Pencak silat techniques as an effort to enrich cultural heritage and increase the effectiveness of this martial art in dealing with various situations.

South Sulawesi as a province in Indonesia has unique cultural diversity, one of the martial arts sports that is very popular with the public is pencak silat. Although South Sulawesi has a rich pencak silat tradition, there is a lack of in-depth research examining specific aspects related to the development and sustainability of pencak silat in this region. This fact is proven through the active participation of martial artists from South Sulawesi who managed to record brilliant achievements at both national and international levels, making proud achievements for the province.

Nowadays, pencak silat is amid a complex dynamic, between increasing appreciation of cultural heritage and the challenges of changing people's lifestyles. While more and more people are realizing the importance of maintaining tradition, changes in modern interests and lifestyles, especially among the younger generation, can significantly influence the practice and sustainability of Pencak Silat.

The main gap at this time involves the current generation's lack of understanding and interest regarding the values contained in the martial art of pencak silat. The influence of modern martial arts and global sports trends is often the focus, or focus, on traditional martial arts, namely Pencak Silat. Additionally, the spiritual and philosophical dimensions of Pencak Silat often receive inadequate attention, leaving this aspect without adequate exploration by modern practitioners.

Apart from that, another challenge is how to integrate the traditional values of Pencak Silat with the demands of the modern era. How can this martial art be adapted to retain its cultural essence while responding to the needs and expectations of today's society? The harmony between tradition and modernity in Pencak Silat's practice is an issue that requires deeper understanding.

It is hoped that this research can identify solutions to overcome this gap, stimulate public interest in Pencak Silat, and maintain the sustainability and authenticity of this martial art in the contemporary era. Through a deeper understanding of changes in the social, economic and technological environment, it is hoped that strategic steps can be developed to advance And pencak silat is an inseparable part of Indonesia's cultural richness.

Currently, the martial art of Pencak Silat has spread across various regions in Indonesia, taking root in various forms and styles but still maintaining similar core aspects. Each region characterizes Pencak Silat with its uniqueness, from the techniques to the fighting style. With this variation, various kinds of movements are created that differentiate one tradition from another.

This research aims to explore critical aspects related to Pencak Silat, including its influence on physical health, mental development, and social roles in society. By exploring these elements, it is hoped that this research can contribute to further understanding the role of Pencak Silat in forming empowered individuals and a cultured society.

The development of the sport of pencak silat has attracted significant attention. Apart from being a subject in lectures, many universities have formed Pencak Silat Student Activity Units (UKM) and Faculty Student Activity Bureaus (BKMf), as well as various other Pencak Silat organizations on campus. The aim is to provide a platform for students to channel their interests and talents in this field. For example, at the Faculty of Sports Science, Makassar State University, there is an organization called "BKMf PENCAK SILAT BEM FIK UNM" which has 50 members.

Of the techniques in pencak silat, kicks are one of the important factors in the sport of pencak silat itself. Kicks in pencak silat martial arts consist of several techniques. However, this research focuses on just one kick technique, namely the crescent kick in terms of the martial artist's skill in carrying out kick attacks. The focus or target point for the sickle kick is the side areas of the body, namely the left and right sides of the stomach. To get good results in doing crescent kicks, you need leg strength which greatly influences the strength of the kick. The exercises in question are sneaking ape and hop exercises, especially crescent kicks. Sneaking ape and hop training affects leg strength so that the kicks can be maximal and powerful. The power of a kick can create difficulties for the opponent in anticipating actions, such as parrying and dodging. A fighter who has optimal leg and kick strength will be better able to launch attacks quickly against his opponent. To achieve optimal leg strength in sickle kicks in pencak silat martial arts, programmed and intensive training is required.

## **METHODS**

In this research, researchers applied experimental methods. One important aspect of research is determining whether there is a causal relationship between certain phenomena and formulating laws related to this causal relationship. Experimental research is research that is always carried out to see the effects of a treatment that has been given within a certain time (Arikunto, 2019). This research was conducted after the author completed a proposal seminar in the Gymnastics Room, Faculty of Sports Sciences, Makassar State University. The research applied in this study is an experimental method, which aims to identify causal or causal relationships. The experimental method is recognized as the most scientific type of research because researchers can control and manipulate treatment to observe its effects in a more controlled manner. In the context of research, experimentation is a method in which researchers deliberately create certain conditions or treatments to understand the relationship between cause and effect between two factors. By controlling variables that might influence outcomes, experiments help researchers identify the direct impact of a particular change or treatment.

This study aims to compare the results of the pretest and posttest in the two sample groups that have been divided. Both groups performed plyometric exercises simultaneously. The design used in experimental research uses a "PreTest and PostTest design", namely a design that has a pretest before treatment and a posttest after treatment. In this way, it can be known more accurately, because it can be compared with what was done before being given treatment (Sugiyono, 2016).

The population in this study was BKMFC Pencak Silat FIK UNM athletes, consisting of 50 people. According to Sugiyono, (2016) Population is "a generalization consisting of objects/subjects that have certain qualities and characteristics determined by the researcher to be studied and then conclusions drawn". A research sample is "an object that will become research material". According to Sugiyono, (2016), "a portion taken from the population is called a sample". As for determining the size of the sample to be studied, the researcher used a quota sampling technique which determines the number of samples based on the desired quota number according to certain criteria (Sugiyono, 2016). So the researcher will take a sample of 30 with the criteria of actively practicing at BKMFC Pencak Silat FIK UNM. To avoid errors that may arise due to incorrect interpretation of the words or expressions used by the author, there needs to be clarification regarding the following terms:

1. Strength and endurance training of leg muscles is very crucial to improve basic leg function, coordinate multiple movements (stimulation), and facilitate mastery of advanced techniques.
2. Sneaking ape training is an exercise designed to improve athletes' sickle kicking ability, as well as facilitate technique learning, prevent injury, and achieve optimal performance.
3. Hop training is a type of exercise that increases leg muscle strength and helps strengthen the leg muscles, including the thighs, calves and lower back muscles. It can increase muscle endurance and help with daily activities.
4. The sickle kick is a variant of attack using the legs or feet. This technique involves the use of the legs and feet as the main element in the attack. The sickle kick is performed with the body tilted to the left or right, with the kick trajectory curved from the side and moving towards the front, resembling the movement of a sickle. In some cases, the main point of contact occurs on the instep.

The implementation of data collection in research has an important role because it is closely related to the data that will be used in the study. Therefore, researchers carry out a series of certain steps in the data collection process, which can be described as follows:

### **Initial Test (PreTest)**

The initial test or pre-test is the first test carried out by researchers to equalize the level of training for each subject so that differences in results can be known after being given treatment for 16 meetings. The test held in this research was the Pencak Silat Sickle Kick. Before the pre-test is carried out, the sample is required to warm up. The sample performed crescent kicks 5 times. The method for measuring the sickle kick test is as follows: The sample gets ready to stand behind the marking with both feet in the middle of the line. On the "yes" signal, the athlete performs a right crescent kick, where the left foot as the supporting leg is next to the right line, then performs a left crescent with the right as the supporting leg next to the left line as much as possible for 15 seconds. The implementation was carried out 3 times, and the best time was taken as the result.

### **Providing Treatment**

The treatment in this experiment was carried out in 16 meetings because it was deemed sufficient to provide changes, so the researcher tried to take the final test after

training which was carried out for 16 meetings by the minimum training time limit (Bompa, 2015). Training starts at 16.00 WITA until finished, held six times a week, namely from Monday to Saturday. Experimental group I focused on sneaking ape training, while experimental group II concentrated on hop training.

### Final Test (Post Test)

The final test applied in this study is identical to the initial test, aiming to evaluate the achievements of each test participant from each group after undergoing training. Final test results are recorded to assess the impact of both types of training and determine which results in better performance.

Data collection methods are approaches or techniques used by researchers to collect relevant information or data in the context of research. Obtaining the desired data by the researcher's objectives as part of the data collection step is a difficult step because wrong data will cause the conclusions drawn to be wrong. Arikunto (2019). Data is collected through administering tests and measurements, with research directly observing the implementation of tests and measurements in the field. Measurement is the process of collecting data or information from a particular object and in the measurement process a measuring instrument is needed (Hasbunallah & Bachtiar, 2021).

The instrument used to collect data in this research was a test and measurement of crescent kick ability to determine the results of pencak silat athletes' crescent kicks (Johansyah Lubis, 2018). Data analysis or data processing is an important step in research. According to Sugiyono, (2016:207) In quantitative research using statistics, there are two types of statistics, namely parametric and non-parametric statistics. Parametric statistics is used to analyze data that is interval, or ratio, has a large sample size, and assumes that the data to be analyzed has a normal distribution. In contrast, nonparametric statistics is used to analyze data that is nominal and ordinal, has a small sample size, and does not require the assumption of a normal distribution. In this study, the data evaluated involved independent variables, namely Sneaking Ape Training (X1) and Hop Training (X2), as well as the dependent variable, namely the results of sickle kicking ability (Y). Parametric statistics may be more appropriate for analyzing this data if it meets the assumptions of a normal distribution, while nonparametric statistics may be used if the data is nominal or ordinal, the sample size is small or does not meet the assumptions of a normal distribution

## RESULTS AND DISCUSSION

### Result

**Table 1.**

Summary of descriptive test results analyzing the Effect of Sneaking Ape and Hop Training on Scythe Kick Skills in BKMFC Pencak Silat FIK UNM Athletes

Variable	N	Range	Min.	Max.	Sum	Mean	Std. Deviation
Pre tes Scythe Kick Sneaking	15	12.00	70.00	82.00	1160.00	77.3333	3.79222
Post tes Scythe Kick Sneaking	15	9.00	85.00	94.00	1342.00	89.4667	2.09989
Pre tes Scythe Kick HOP	15	6.00	75.00	81.00	1157.00	77.1333	2.32584
Post tes Scythe Kick HOP	15	5.00	77.00	82.00	1196.00	79.7333	1.57963

## Data Normality Test

**Table 2.**

summary of normality test results Effect of Sneaking Ape and Hop Training on Scythe Kick Skills in BKMFC Pencak Silat FIK UNM Athletes

Variable	N	S-Z	Asymp.Sig (2 tailed)	Information
Pre tes Scythe Kick Sneaking	15	0.787	0.566	Normal
Post tes Scythe Kick Sneaking	15	0.774	0.588	Normal
Pre tes Scythe Kick HOP	15	1.112	0.168	Normal
Post tes Scythe Kick HOP	15	0.905	0.386	Normal

## Homogeneity Test

**Table 3.**

Sneaking Ape Exercise Homogeneity Test Results

Levene Statistic	df1	df2	Sig.
1.383	1	10	.267

**Table 4.**

Results of the HOP Exercise homogeneity test.

Levene Statistic	df1	df2	Sig.
.201	1	10	.664

## Hypothesis I

**Table 5.**

Summary of paired T-test test results data Data Effect of Sneaking Ape Training on Scythe Kick Skills in BKMFC Pencak Silat FIK UNM Athletes

Variable	N	Initial Value	Final score	Difference	sig. (2 tailed)
Exercise sneaking	15	77.3333	89.4667	12.1333	0.000

## Hypothesis II

**Table 6.**

Summary of paired T-test test results data Data Effect of Hop Training on Crescent Kick Skills in BKMFC Pencak Silat FIK UNM Athletes

Variable	N	Initial Value	Final score	Difference	sig. (2 tailed)
Exercise sneaking	15	77.1333	79.7333	2.6000	0.000

## Hypothesis III

**Table 7.**

Summary of paired T-test test results data Data Effect of Sneaking Ape and Hop Training on Crescent Kick Skills in BKMFC Pencak Silat FIK UNM Athletes

Variable	N	Difference Sneaking Ape	Difference HOP	sig. (2 tailed)
Training of Sneaking Ape dan HOP	15	12.1333	2.6000	0.000

## Discussion

Based on the hypothesis test in this research, the results showed that there was an influence of Sneaking Ape and Hop Training on Scythe Kick Skills in BKMFC Pencak Silat FIK

UNM Athletes. This can be seen from the value of the SPSS test results, namely from the T-test data of the sneaking and Hop training test on the Sickle Kick Skills of BKMFC Pencak Silat FIK UNM athletes, the value of the paired T-test test data for the Sneaking Ape and Hop Practice variables on the Sickle Kick Skills of BKMFC Athletes was obtained. Pencak Silat FIK UNM obtained a sneaking value of N (sample) from 15 people, had an initial value of 77.3333, a final value of 89.4667, a difference of 12.1333 with a sig value of 0.000. It can be interpreted that the effect of sneaking training on the crescent kicks of BKMFC Pencak Silat FIK UNM athletes has an influence with a difference of 12.1333, from the paired T-test test data, the hop training variable on the crescent kicks of BKMFC Pencak Silat FIK UNM athletes obtained a hop value of N (sample) 15 people, had Initial value 77.1333 Final value 79.7333, difference 2.60000 with sig value .000. It can be interpreted that the effect of hop training on the sickle kicks of BKMFC Pencak Silat FIK UNM athletes has an influence with a difference of 2.60000 and the paired T-test test data for the Sneaking ape and Hop training variables on the sickle kick skills of BKMFC Pencak Silat FIK UNM athletes obtained a value of N (sample) 15 person, has a sneaking difference of 12.1333 and a difference value of 2.60000 with a sig value of .000. It can be interpreted that the effect of Sneaking ape and hop training on the Scythe Kicks of BKMFC Pencak Silat FIK UNM athletes has a greater influence, namely Sneaking ape training because it has a bigger difference.

### **Responsiveness factor**

Responsiveness is the act of taking action automatically, the manager's goal is to help users provide services quickly and accurately. The manager's authority is to provide the most effective service to users. Goro Arena has different managers in different areas. Each area is dedicated to providing services to users accurately and efficiently. Services that consistently show a consistent response to other people's emotions that are specific to the service provider's brand make an impression on users (Rahman, 2009).

### **Assurance factor**

When members believe in managers who instil a sense of security, then members will be more focused on doing sports activities. This is very important because when members are not focused, it can cause imperfections in exercise. When sports movements are not perfect, members can experience injuries and become traumatized and afraid to do sports activities again. In line with Hardyanto & Nirmalasari (2020) sports injuries from internal factors are caused by improper training methods.

### **Tangibles Factor (Direct Evidence)**

Service facilities based on direct experience or tangible evidence are all things that consumers can feel about all aspects of their condition at Goro Arena. Users can directly feel the condition of the Goro Arena building, the existence of facilities and infrastructure around the Goro Arena, the condition of supporting facilities such as toilets, rest areas, places of worship, and parking, as well as the impact that Goro Arena has on them.

### **Empathy Factor**

Empathy is the ability to understand the needs of others through communication, personal attention, and understanding consumer desires, this makes it easier to manage or utilize Goro Arena. The interaction occurs when users communicate before, during,

and after using the Goro Arena facility. Parasuraman Riyanto (2014) "A service can take place easily and with quality if all parts involved in the service process empathize or show the same commitment to the implementation and management of these services."

### **Reliability factor**

The reliability factor is the consistent quality of the Goro Arena service, this service is provided quickly, and accurately and satisfies users. Users evaluate this quality when using resources. The dependability factor is seen when users interact with the event manager or organizer, such as the crew's willingness to help members, and the crew's readiness to deal with members, the schedule provided by Goro Arena can make it easier for members.

Moenir in Rohmadi (2015) describes good service, namely, there is an understanding of the manager in the service, has rules that become the basis of service, and the organization functions as a service system. Darmawati (2015) states that the quality and performance of human resources influence the success of the organization. Rahmawati (2015) argues that effective attention to consumers has a direct influence and understands emotions, which causes happiness or sadness.

## **CONCLUSION**

Based on data analysis and discussion, the results of this research can conclude that there is an influence of Sneaking Ape and Hop Training on Scythe Kick Skills in BKMFC Pencak Silat FIK UNM Athletes as follows:

1. There is an influence of sneaking ape training on the ability of sickle kicks in FIK UNM BKMFC pencak silat athletes.
2. There is an influence of hop training on the sickle kick ability of FIK UNM BKMFC pencak silat athletes.
3. There is an influence between sneaking ape and hop training on the ability of sickle kicks in FIK UNM BKMFC pencak silat athletes.

## **REFERENCES**

- Andriana, L. M., & Ashadi, K. (2019). Comparison of two types of exercise in the morning and evening on sleep quality. *SPORTIF Journal: Journal of Learning Research*, 5(1), 98. [https://doi.org/10.29407/js\\_unpgri.v5i1.12800](https://doi.org/10.29407/js_unpgri.v5i1.12800)
- Baun, A., Pendi, R. A., & Navie, A. J. (2022). An Overview of the Basic Technique of Sickle Kicks in Pencak Silat of the Faithful Heart Brotherhood of Terate (Psht) East Penfui Branch. *Borneo Physical Education Journal*, 2(2), 11–18. <https://doi.org/10.30872/bpej.v2i2.734>
- Hasbunallah, A., & Bachtiar, I. (2021). Efforts to Improve Bottom Passing Ability in Volleyball Games Through Rubber/Plastic Ball Modifications for Students at Perumnas Antang 1 Elementary School Makassar. *National Seminar*, 1167–1178.
- Ilyas, M. Bin. (2013). The Influence of Physical Fitness, Nutritional Status and VO<sub>2</sub> Max on the Pencak Silat Ability of Tapak Suci College, Palopo City. *UNM PPs Physical Education and Sports Study Program*, 53(9), 1–14.

[http://eprints.unm.ac.id/12926/%0Ahttp://eprints.unm.ac.id/12926/1/ARTIKEL MUSLIM BIN ILYAS.pdf](http://eprints.unm.ac.id/12926/%0Ahttp://eprints.unm.ac.id/12926/1/ARTIKEL%20MUSLIM%20BIN%20ILYAS.pdf)

- Kamaruddin, I. (2018). Analysis of Physical Fitness Levels on Learning Achievement of Students at Bawakaraeng III Makassar State Elementary School. *SPORTIVE: Journal Of Physical Education, Sport and Recreation*, 1(2), 85. <https://doi.org/10.26858/sportive.v1i2.6393>
- Lestari, A. (2020). The Effect of Combination Zig-zag Run Technique and Rubber Inner Tube Training on Sickle Kick Speed in BKMFC FIK UNM Pencak Silat Athletes.
- Nabila, Y., Malinda, M. S., Maulana, Y. I., Panggraita, N., Muhammadiyah, U., & Pekalongan, P. (2021). Volume 4 no 1 Year 2021 ISSN 2614-2775(Print) ISSN 2621-8143(Online) THE EFFECT OF KICKING TRAINING USING RUBBER TIRES ON THE RESULTS OF PENCAK SILAT SCRICK KICKS INTRODUCTION Sport is a systematic activity and can encourage, encourage. 4(1), 77-88.
- Rahman, M. A. (2021). Evaluation of front kick speed in pencak silat athletes in the sparring category (study of PPLP pencak silat athletes in East Java). Surabaya State University, 1-9.
- Saharullah, H. (2019). Basics of Coaching Science
- Saleh, M. S., & Ramdhani, S. (2020). Survey of Physical Education Facilities and Infrastructure and Level of Physical Fitness of Class VIII Students of PGRI Barebeng Middle School, Gowa Regency. *Sports Education Coaching Journal*, 1(1), 49-62. <https://doi.org/10.31599/jces.v1i1.86>
- Sugarwanto, S., & Okilanda, A. (2020). The Effect of Single Leg Hops Training on the Triple Jump Results of Sungai Lilin Middle School 1 Students. *Kinesthetics*, 4(1), 85-89. <https://doi.org/10.33369/jk.v4i1.10472>
- Suyudi, I., Sahabuddin, & H., H. (2022). Socialization of Types of Injuries and How to Handle Them in South Sulawesi Province PPLP Athletes' Martial Arts Sports. *Journal of Physical Literacy Service*, 4(2), 49-54. <http://aksaraga.stkippasundan.ac.id/index.php/aksaraga/article/view/47>
- Widiyanto, & Hariono, A. (2014). Movement Analysis of Front Kick Techniques for PPLM DIY Pencak Silat Athletes (A Study of Sports Biomechanics). National Sports Seminar, 26-44.
- WOMAL, R., Sudirman, S., & Hudain, M. A. (2018). Analysis of the level of physical fitness on the basketball playing skills of SMA NEGERI 2 Makassar students. <http://eprints.unm.ac.id/11705/%0Ahttp://eprints.unm.ac.id/11705/1/jurnal.pdf>
- Yunyun Yudiana, Herman Subardjah, T. J. (2019). Physical exercise on. Physical training. York: Routledge.