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# Improve the skill of dropping techniques with catches in pencak silat through the section method

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## **Abstract**

The background of this research is the need to increase the effectiveness of the dropping technique with a catch in pencak silat athletes because mastery of this skill is very important to improve performance in the fighter category. This study aims to improve the drooping technique with catches at PPS Merpati Putih Bekasi. The subjects of this study are beginner pencak silat athlete Merpati Putih in Bekasi, fighter category. The youth category consists of male athletes and female athletes. The method used in this study is the section method with Action Research. The indicators measured in this study are preparatory movement, execution movement, follow-up movement, and final movement. Based on the study's results, conclusions can be obtained. Action Research and the section method in training can improve the dropping technique with catches at pencak silat Merpati Putih Bekasi. With one cycle of action research. The success rate of athletes in the pretest amounted to 4 or 18.18%, then after being trained with the part-by-part method in the first cycle, the success of athletes reached 20 people or 90.91%. From the research data, a tcount of 21.3 was obtained with a significant level of 0.05, and ttable was 1.72, then tcount (21.3) > ttable (1.72) means that there was a significant increase between the pre-test and the post-test.

**Keywords:** Pencak Silat, dropping, action research.

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**Authors contribution:** a – Preparing concepts; b – Formulating methods; c – Conducting research; d – Processing results; e – Interpretation and conclusions; f - Editing the final version.

#### INTRODUCTION

Pencak silat is a traditional Indonesian martial art rooted in Melayu culture and can be found in almost all parts of Indonesia (Deng & Pu, 2021). Pencak silat is one of the original cultures of the Indonesian nation, where it is strongly believed by warriors and pencak silat experts that the Malay

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community created and used this martial art since prehistoric times (Rahman et al., 2022; Salabi & Hasanuddin, 2022). Pencak silat has been known since the time of the Majapahit kingdom, and it is known for the ability of its soldiers (Setiyarini & Junaidi, 2022). Each region has its peculiarities of movement characteristics. The techniques in pencak silat are highly varied and often differ between different schools or institutions (Rony Syaifullah, 2023). In general, pencak silat techniques include punches, kicks, locks, blockades and dodges. The basic principles of pencak silat in the sparring category are to carry out attacks (kicks and punches), counterattacks and falls both through catches and kicks on the target to get as much value as possible (Andriawan & Irsyada, 2022). Moreover, pencak silat also encompasses training in traditional weapons, including swords, machetes, staffs, spears, sickles, knives, tridents, kerambit (a curved blade), keris, and many other weapons (Fahrizal et al., 2024).

Currently, Pencak Silat has competed at national and international levels. The training uniforms of pencak silat are very diverse, according to the college. The standard uniform is black, with the emblem of IPSI (Pencak Silat Organization in Indonesia) on the chest. The rank in Pencak silat is often marked with the colour of the belt. However, some colleges differ in deciphering colours. Perpetrators of pencak silat are called pencak silat artists. Skilled fighters are sometimes referred to as pencak silat warriors. The national organization that houses pencak silat in Indonesia is IPSI (Indonesian Pencak Silat Association). IPSI plays a role in officially formulating the terms and rules of the pencak silat match in Indonesia. Pencak silat is acknowledged globally, as shown by the establishment of various pencak silat academies both domestically and internationally (Br. Ginting et al., 2024).

The international pencak silat organization is the Inter-Nations Pencak Silat Guild, abbreviated as Persilat. The term pencak silat itself has actually not been known for a long time (Saraiva et al., 2023). The term pencak silat has only been used since IPSI was established on May 18, 1948, in Surakarta, Central Java. Thus, pencak silat became the official

name of the Indonesian martial art. In its development, pencak silat was heavily influenced by foreign pencak silat, such as Chinese wushu or Japanese karate. This makes pencak silat even richer in techniques. There are so many pencak silat streams that almost every region has its own flow. Some of the famous streams are Cimande (West Java), Cikalong (West Java), Sahbandar (West Java), Silek Tuo (Minangkabau), Cingkrik (Betawi), Kwitang (Betawi), Silat Cekak (Malaysia), and Bawean (East Java). As the stream, the number of pencak silat colleges is very large. Their differences are most evident in the uniforms worn. However, when competing in official championships (according to IPSI rules), fighters wear standard black uniforms (Wardoyo & Ali, 2022).

The Pencak Silat competition has several categories: a competition category and an art category (Rony Syaifullah, 2023). According to the latest pencak silat match rule book for 2022 (Moore et al., 2020), the pencak silat categories that are competed include sparring, single, double, team, and creative solo categories, while when viewed based on age there are categories of lion (3-6 years), tiger (7-9 years), pre-teen (10-12 years), pre-junior (12-13 years), junior (14-16 years), senior (17-45 years), master A (46-60 years old) and master B (61 years and above). For senior or adult sparring category classes, there are 24 classes consisting of 13 men's sparring categories (under A to open 2) and 11 women's sparring categories (under A-H and open 1.2).

The emergence of the pre-adolescent age because pencak silat matches began to be played at the elementary level from the provincial to the national level, organized by the Ministry of National Education, the General Directorate of Kindergarten and Elementary School as an educational sport and is an initiation program. Followed by middle and high school level competitions, the championship in 2008 was named the National School Sports Olympiad (O2SN) (Bafirman et al., 2023; Nur et al., 2023). Student-level matches often do the process of falling with a hold, but it does not work, most student-athletes can only catch the opponent's leg

after that, and it is difficult to knock the opponent down, the fall technique with a hold is very effective in getting a score as all judges are required to write if the fall was allowed by the referee. For now, the value of falling with catch is the highest value, which is 3 when compared to kick value 2 and punch value 1. The falling technique with catch is a combination of 2 techniques, namely the catch technique and the dropping technique (Subekti et al., 2021). Dropping is a method used to take an opponent to the ground, executed as a follow-up action after performing a catch (Tri Wulandari & Sujarwo, 2023).

The catchment technique involves using the hands and is applied when the opponent is in very close range, making it impossible to dodge, evade, or block (Zulfa et al., 2022). Catch is a defensive effort by holding the opponent's arm or leg to guard the next attack, including a fall or lock technique, the catch can be done using one arm or two arms (Rubin, 2022). The catch technique is catching hands, feet, or anything from a limb with one or two hands. It will be followed by other movements, such as falling (Del Vecchio et al., 2018). A catch is a defensive technique where the opponent's arm or leg is grabbed in order to perform a takedown maneuver (Sinulingga et al., 2023).

On this basis, researchers want to solve existing problems, given how important basic techniques are in supporting other techniques. The problem to be solved in this study is improving the skill of falling with catches. According to researchers, it is important to raise the issue of falling because falling is the highest point in a pencak silat match and is an absolute value that does not depend on the judge's point of view. Furthermore, it was felt effective to win the match.

Previous research has focused more on basic techniques such as kicks, punches and others. For beginners, the technique of dropping with a catch is important because it has a high risk of injury, especially when we cannot do the right defence or technique when dropped. Furthermore, at this teenage level, there is a risk of trauma as well, which makes athletes finally stop continuing their careers because of trauma when slammed by

opponents. With this research to improve falling skills with catches, it is hoped that athletes will be able to learn and improve their falling techniques well and recover from fatal injuries.

#### **METHOD**

The research method used in this study is action research. Action research is a study developed jointly between researchers and decision-makers (collaborators) about variables that can be manipulated and can be immediately used to determine policy and development. This study has systematic steps consisting of action planning, action implementation, observation and reflection. The relationship between the four components indicates a cycle or repetitive activity. This "cycle" is actually one of the main characteristics of action research, namely that action research must be carried out in the form of cycles, not just one intervention. According to Hopkin, action research is a process designed to empower all participants (athletes, coaches, and others) to improve the practices organized within the educational experience.

The technique of falling with a catch is the technique that gets the highest score than other techniques. Falls with catches are divided into two types, namely falls with inside catches and falls with outside catches. The fall used in this study is a fall with a deep catch. All participants are active members in the research process. This research is collaborative and participatory because it is carried out by coaches. The action research model used is the model of Kemmis and Taggart. Kemmis & Taggart's model is a further development of Kurt Lewin's model. Fundamentally there is no difference in principle between the two. This model is widely used because it is simple and easy to understand. Kemmis & Taggart design can include several cycles, each consisting of stages: plan, action, observe, and reflect in a single cycle.

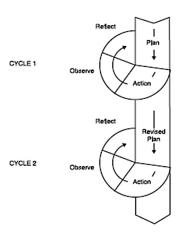


Figure 1. Action Research Image of Kemmis and Taggart Model

#### **Research Procedure**

The research procedure used in this study is action research using the pre-test and the post-test. By making observations of every action taken and providing notes during the research process, which will later be used as evaluation material for each process carried out. Data processing uses quantitative and qualitative data. The planning stage in this study includes taking pre-test data at the first meeting, then doing a falling technique with a tidal attitude capture and a catch attitude in the second meeting, the third meeting doing a falling technique with a tidal attitude capture and a catch attitude in pairs, the fourth meeting doing a falling technique with a dropping attitude capture individually and pairs, the fifth meeting doing a tidal attitude after dropping, the sixth meeting assembles all attitudes into a series of movements individually and pairs, the last meeting conducts the post-test.

Action is the implementation of a lesson plan that has been prepared. The action that will be taken is to apply a section training model that has been designed to improve the falling technique with catches on novice athletes of the Bekasi Merpati Putih Pencak Silat College. The actions taken are in the form of taking pre-test data, justifying tide attitudes, training capture techniques, training dropping techniques, combining all stages into one series, and taking post-test data. Observation researchers and trainer researchers observe athletes using the section-by-part method to learn the technique of falling with a catch. This observation activity is carried out

during the training process, namely at each meeting. Reflection on actions is a stage for processing data obtained at the time of observation. Discuss the implementation of the training process of falling techniques with catches using the section method in athletes and collaborators. Then, researchers and collaborators discuss the implementation of evaluation in the data review process using feedback and the results of the actions given. In this study, this reflection process, all experiences, knowledge and theories of exercises carried out previously became material for consideration and comparison to draw valid conclusions.

### **RESULT**

The results of the fall technique test with catches from 22 athletes, namely the pre-test of the average score of athletes 7.86 and cycle I, the average value of athletes 9.89, were obtained. For the success of athletes' training results, the pre-tests of athletes who were declared successful were 4 (18.18%), and 18 were unsuccessful. In the first cycle of athletes who were declared successful, a total of 20 athletes (90.91%) and 2 athletes did not succeed.

**Table 1.** Results of the fall technique test with catches

	Pre-Test	Cycle
Average	7.86	9.89
Successful Athletes	4	20
Unsuccessful Athletes	18	2

This research began with biodata collection and pre-test. The implementation of pre-test activities carried out by researchers to Pencak silat athletes pencak silat Merpati Putih in Bekasi totalled 22 Atlete, consisting of 13 men and 9 women. This pre-test activity is carried out to identify the initial condition of the athlete's ability to train, especially for the falling technique with catches. After the pre-test, the results were as follows: Of the 22 athletes, only 4 athletes were declared successful because they scored 10. While the other 18 athletes scored less than 10, namely an average score of 7.86, so for this pre-test, 18 athletes were declared unsuccessful. The preliminary test results are as follows: The lowest score

is 5.81, the highest score is 10, and the average score is 7.86; the most scores appear to be 10, and the middle score is 7.5.

Table 2. Distribution of Pre-Test Results of Fall Technique with Catch

No	Interval class	Frequency	Relative (%)
1	1-2	0	0
2	3-4	0	0
3	5-6	8	36,4
4	7-8	7	31,8
5	9-10	7	31,8
	Total	22	100

So, it can be seen from the distribution table above that 7 athletes, or 31.8% %, entered the range of 9-10, 7 athletes, or 31.8% %, entered the range of 7-8, 8 athletes, or 36.4% %, entered the range of 5-6, and interval classes 1-2 & 3-4 are zero or 0%.

The condition of athletes before training can be known by holding pre-tests. From the results of the pre-tests that have been carried out, there are 4 athletes (18.18%), with a value of 10, who are declared successful. The results of the Cycle I test are as follows: The lowest score is 8.81, the highest score is 10, and the average value is 9.89; the most scores appear to be 10, and the middle value is 10. After the first cycle action, the percentage of athlete success was 90.89%, namely athletes who succeeded as many as 20 athletes with a value of 10. So with this, there is an increase in the practice of falling techniques with capture using the section-by-part method.

**Table 3.** Distribution of Drop Post Test Results with Catch

No.	Interval Class	Frequency	Relatif (%)
1	1-2	0	0
2	3-4	0	0
3	5-6	0	0
4	7-8	2	9,09
5	9-10	20	90,89
	Total	22	100

Based on the table data above, it can be concluded that 20 athletes scored 10 or 90.89%, and 2 athletes were in the range of 8–9 or 9.09% of the total number of athletes. The results of the I cycle showed an

improvement compared to the pre-test. Thus, it can be concluded that there was an increase in the ability to fall technique skills with the catch on Pencak Silat athletes, Pencak silat Merpati Putih Bekasi from the average score of pre-test 7.86 and athletes who succeeded only 4 athletes to an average of 9.89 in cycle I and athletes who succeeded to 20 athletes. Based on the test results in cycle I, researchers and collaborators concluded that in cycle I, athletes experienced an improvement from the results of pre-tests that had been done. So, it can be concluded that improving falling techniques by catching Pencak Silat using the section method can improve the skills of falling techniques.

**Table 4.** Athletes' results are successful and unsuccessful

Pre-Test		Post-Test	
Athletes	Athletes	Athletes	Athletes
Successful	Unsuccessful	Successful	unsuccessful
4	18	20	2

#### DISCUSSION

This result is the result of the assessment in the pre-test that has been carried out and is an initial reflection of the research to make a research plan. Actions, observations and subsequent reflections on its cycle. So it has been known from the results of the pre-test of falling with Pencak Silat catches that henceforth, action will be given through the practice of improving falling techniques with catches with the section method in an effort to improve the skills of falling techniques with catches on Merpati Putih pencak silat athletes in Bekasi. Falls with a deep catch are affected by the flexibility of the legs, hips and back. The better the flexibility of eating, the higher the success of falling with catches (Phung & Goldberg, 2021).

Forming a cycle is the first step for researchers to make a plan. Based on the results of the researcher's discussion with collaborators, the planning must refer to the results of the initial observations that have been implemented. In this plan, training strategies are how and what researchers

apply to athletes so that they are based on training objectives. Researchers also prepare the equipment needed to be used in the training process. Action and observation are the next stages of the cycle carried out by researchers after the planning stage is completed. The implementation of the action concentrates on the practice of falling techniques with capture using the section by part method (Blue, 2017; Holmes et al., 2023; Kim et al., 2020).

Observing the implementation of actions, observing the training process, seeing the behavior shown by athletes, and seeing athletes' ability to accept and respond to given actions is the task of researchers during the action process. The final process in the cycle is important, namely reflection, which is the evaluation carried out by researchers and collaborators on implementing actions that have been taken. Researchers and collaborators deliberate on the limitations, achievements, and execution process to establish guidelines for the subsequent stage. In this study, collaborators participated by observing and offering input throughout their cycle (Fahrizal et al., 2024).

The result of the fall technique training with the catch of Merpati Putih Pencak silat athletes in the City of Bekasi was the implementation of a pretest with an average athlete value of 7.86 in the first cycle of the average athlete value of 9.89. Furthermore, the success of athletes' training results in pre- test that were declared successful amounted to 4 athletes or 18.18% only. For the results of success in the first cycle, 20 athletes were declared successful, or 90.89%. Improved pre-test results and cycle I in the exercise of the fall technique with catches were seen very well.

Researchers and collaborators have found the answer to the results of the formulation of the researcher's problem, namely whether the section method can improve falling skills with catches on Merpati Putih Bekasi pencak silat athletes, and the resulting improvement looks progressive. The section method that divides the falling technique with the catch into several stages makes it easier for athletes to understand the training material provided so that the procedure in the action research stage can proceed

(ICoSHR) 10 (4) 2024 | 49-62

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smoothly. So, these collaborators and researchers decided to stop the research because of the formulation of the problem that had been answered. A study conducted by (Lafuente et al., 2021) shows that the division method is also effective in improving the "egos skills" of SMI pencak silat athletes.

The limitation of this study is that the number of samples is not so much; it would be better if the sample was more than put together with the same age group (Caron et al., 2017; Linhart et al., 2019; Stanbouly et al., 2022). It is also better to differentiate between genders in groupings.

### CONCLUSION

The study results concluded that there was a change or increase in students from the pre-test and post-test results. Progressive improvement was seen. From the pre-test average score of students was 7.86, in post-test the average score of students was 9.89. The success rate of students in pre-test amounted to 4 students or 18.18%, in post-test the successful students amounted to 20 students or 90.91%. From the research data, tcount was obtained by 21.3 with a significant level of 0.05, and ttable was 1.72, then tcount (21.3)>ttable (1.72) means that there was a significant increase between pre-test and post-test. The division method is very suitable for training athletes to master a specific technique and making it easier for athletes to learn the technique, especially for beginner athletes. For techniques that have high difficulty, such as falling, it is also easier for beginner athletes to learn. In the future, the method of division can be used in other studies.

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