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# Proceedings of the 1<sup>st</sup> International Summit Conference on Exercise Science, Sports Management, Outdoor Recreation, and Physical Education, ExSPORT 2024, 28<sup>th</sup> - 29<sup>th</sup> August, Malaysia

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# Identification of Types of Drop Techniques with Pulling on Pencak Silat Matches Regulation in 2022




Zulfikar Ubaidillah Riky\*, Kurniati Rahayuni, and Alwi Idrus.

**Abstract** | Changes to the pencak silat regulations in 2022 regarding technical playing in the sparring category pencak silat athletes have an impact on the emergence of new types of fall techniques. But until now, there has been no scientific evaluation or discussion of the types of fall techniques with the pull that have been used. Therefore, this research aims to analyze the types of fall techniques with pulls in the sparring category pencak silat athletes as the first step of evaluating and learning techniques in depth. This research method uses a visual research method with qualitative and quantitative data analysis techniques. The number of subjects identified was 354 videos of matches in 2023 with details, 155 videos from provincial championships, 161 videos from national championships, and 38 from international championships. The research findings are eleven types of fall techniques with pulls described qualitatively. From the results of quantitative data, it is known that three types of techniques are often used in provincial, national, and international matches, including type 6 – pull, catch, and sweep (25.61%), type 3 – pull and cutout (19.35%), and type 5 – pull and side fall hook (18.77%).

**Keywords:** *Pencak silat, regulation 2022, drop technique with pull.*

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## I. INTRODUCTION

Pencak silat is a competitive sport that is officially contested at both national and international levels. As a result, countries that develop pencak silat strive to win championships through optimal performance development by utilizing advancements in sports science and technology [1]. Pencak silat is a martial art or combat sport. Combat sports involve two individual combatants opposing each other under predetermined rules and techniques with the goal of achieving victory and defeating their opponent [2]. Pencak silat is a sport that combines elements of art and sports with a competitive nature, requiring specific competition rules (Ihsan, 2018). Every sport undergoes development, especially in terms of competition rules. Therefore, it is natural that pencak silat rules have undergone updates and gameplay developments since 1980, resulting in the 2022 pencak silat rules that align with global martial arts trends.

Technique is a crucial component of pencak silat. A pencak silat athlete must master techniques to win competitions. Fundamentally, the principle of victory in pencak silat is to accumulate as many technical points as possible. Additionally, technique is essential for coaches in competitive sports to determine characteristics and benchmarks for designing training programs [3]. Technique is part of the specialization principle in specific sports. The specialization principle, or specificity, refers to training that must be tailored to the specific needs of a particular sport [4]. Technique itself is a training component to solidify tactics and strategies in competition [5]. In competitive pencak silat, techniques are not limited to direct punches and kicks but involve attacking and defending movements (counterattacks) and takedowns using various techniques [3].

Based on several theoretical studies on techniques, all pencak silat practitioners should understand the basic techniques of competition as a foundation for creating training programs and devising tactics and strategies. However, the technical changes in the 2022 rules have forced all pencak silat practitioners to readjust to the game of pencak silat. This is because technical changes impact the playing style and give rise to new types of techniques, especially pulling-based takedowns, which remain highly controversial.

Previous research identified several techniques that determine victory, including kicking techniques, punching techniques, takedowns with grip, and takedowns without grips, kicks with blocks, punches with blocks, and points at the opponent's fouls [6]. However, this research did not include the victory points from pulling-based takedowns, as the subjects were matches under the 2016 rules. Based on this research, it can be inferred that pulling-based takedowns are a newly emerged technique that requires in-depth identification as an initial step in evaluating and learning about the types of takedowns in pencak silat competitions under the 2022 rules.

Pulling-based takedowns are part of the basic takedown techniques that competitive pencak silat athletes must master, as new types of pulling-based takedowns have emerged in pencak silat competitions. In the researcher's initial observations of a match at the 19<sup>th</sup> World Pencak Silat Championship Malaysia Open, two types of pulling-based takedowns were found: one combined with a scissor technique and the other combined with a sweeping technique. This indicates the development of new techniques in pencak silat, especially pulling-based takedowns. However, there has been no research or case study on the types of pulling-based takedowns in competitive pencak silat athletes since the change in pencak silat rules in 2022. Yet, it is necessary to identify techniques or conduct research to study the latest rules as an initial step in developing pencak silat under the 2022 rules so that all pencak silat practitioners can easily learn the techniques of competition.

Based on these findings, the researcher is interested in conducting research that identifies the types of pulling-based takedowns in pencak silat since the rule change in 2022. The researcher views this rule

change as a new development that must be identified to bring about improvements in pencak silat, making it more effective, dynamic, and engaging. This research aims to determine the types of pulling-based takedowns in pencak silat competitions at the provincial, national, and international levels. The findings of this research are expected to serve as a reference for learning and developing techniques as a basis for creating training programs for technique, physical fitness, tactics, and playing strategies.

## II. METHODS

This research is a type of survey research using a descriptive approach. The descriptive approach is an attempt to describe data based on events or phenomena that occur in the present based on facts. Qualitative descriptive research is done by writing the analysis in a descriptive form of observation. Meanwhile, quantitative descriptive is done by explaining the observed phenomenon in the form of numbers. The conclusion of quantitative data analysis is obtained using the percentage formula, namely,  $P = (f) / n \times 100\%$ .

This research method uses visual research method, which is an observation technique that utilizes visual media, namely video. The group of data objects is in the form of video recordings of the 2022 regulation pencak silat match. The number of videos identified was 354, consisting of 155 videos from provincial championships, 161 videos from national championships, and 38 videos from international championships. The limit of video data search and retrieval is from July 2023 to March 2024.

## III. RESULTS AND DISCUSSION

### A. Results

Based on the results of the analysis and identification of types of pulling-based takedown techniques in the 2022 pencak silat competition rules, the researcher found 11 techniques. These eleven techniques are performed with various combinations, including:

#### *i. Technique 1 – Direct Pull*

This technique begins by gripping the upper part of the body protector with one hand. Then, the body protector is pulled downward or thrown backward with a strong pull. This pulling technique is performed using the strength of the hands and shoulders, and by utilizing the body's weight to maximize pulling power. A video of Technique 1 – Direct Pull can be found at the following link <https://bit.um.ac.id/Teknik1>.



Fig. 1 Direct pull

*ii. Technique 2 – Pull and Sweep*

Begins by gripping the upper part of the body protector. The movement is then continued by catching one of the opponent's legs. The technique is finished by pulling the body downward until the opponent falls, followed by a backward step in sync with the pulling motion. The final position in this technique should maintain a distance from the opponent's reach and keep the stance ready [https://bit.ly/Teknik\\_2](https://bit.ly/Teknik_2).



Fig.2 Pull and sweep

*iii. Technique 3 – Pull and Front Scissor*

Starting from a fighting stance, grip the upper part of the body protector with one hand. Next, perform a front scissor technique, targeting both legs or one leg to disrupt the opponent's balance. The scissor technique involves trapping both legs around the opponent's neck, waist, or legs. The technique is completed by simultaneously pulling the upper body with one hand and performing the front scissor until the opponent falls [https://bit.ly/Teknik\\_3](https://bit.ly/Teknik_3).



Fig.3 Pull and front scissor

*iv. Technique 4 – Pull and Cross Scissor*

The pull and cross scissor technique involves pulling the upper part of the body protector and performing a cross scissor. A cross scissor is a technique where both legs, the lower limbs, and the midsection/hip are trapped. This technique begins by gripping the body protector, followed by performing a cross scissor targeting the midsection or lower body [https://bit.ly/Teknik\\_4](https://bit.ly/Teknik_4).



Fig.4 Pull and cross scissor



*v. Technique 5 – Pull and Side Sweeping Takedown*

This technique begins by gripping the upper part of the body protector and continues with a leg attack using a sweeping technique, causing a sideways fall. The sideways fall is executed by initiating a hook and then dropping the body to the side. The hook is a lower leg attack <https://bit.ly/Teknik5>.



Fig.5 Pull and side sweeping takedown

*vi. Technique 6 – Pull, Grab, and Sweeping Trip*

This technique begins by gripping the upper part of the body protector and grabbing one of the opponent's legs. Then, attack the lower supporting leg to trip the opponent with a sweeping motion, accompanied by pulling the upper part of the body protector downward until the opponent falls [https://bit.ly/Teknik\\_6](https://bit.ly/Teknik_6).



Fig.6 Pull, grab, and sweeping trip

*vii. Technique 7 – Pull, Grab, and Scissor*

Starting with a grip on the upper part of the body protector using one hand and grabbing one part of the opponent's leg. This is followed by a front scissor technique, targeting one of the supporting legs. The technique is completed by simultaneously pulling the upper part of the body protector with one hand and performing the front scissor until the opponent falls [https://bit.ly/Teknik\\_7](https://bit.ly/Teknik_7).



Fig .7 Pull, grab and scissor

*viii. Technique 8 – Pulling the Upper Body and Lower Body*

Begin by gripping the upper part of the body protector. Then, pull the body protector downward with force using the hands while simultaneously pulling one of the opponent's legs, either right or left. The downward pull of the body protector is accompanied by a step forward to close the distance with the opponent. After stepping in, reach for the leg with the hand to pull it and disrupt the leg movement,

destabilizing the opponent's stance. Pull both the upper and lower body until the opponent falls [https://bit.ly/Teknik\\_8](https://bit.ly/Teknik_8).



Fig.8 Pulling the upper body and lower body

*ix. Technique 9 – Pulling and Leg Hook*

This technique begins by gripping the front or back of the body protector while simultaneously performing an inside leg hook. The hook is executed by swinging the leg inward from the outside. Once the opponent is brought down by the hook, maintain a strong fighting stance to anticipate any counterattacks [https://bit.ly/Teknik\\_9](https://bit.ly/Teknik_9).



Fig.9 Pulling and leg hook

*x. Technique 10 – Pulling and Rear Leg Hook*

This technique begins by gripping the front of the opponent's body protector. The manoeuvre involves pulling the opponent's upper body backward, causing them to fall. Simultaneously, a rear leg hook is performed in the opposite direction of the pull. Once the opponent is down, maintain a strong stance to defend against any counterattacks [https://bit.ly/Teknik\\_10](https://bit.ly/Teknik_10).



Fig.10 Pulling and rear leg hook

*xi. Technique 11 – Pull and Push*

This technique involves two types of attacks: pulling and pushing. The technique begins by pulling the upper part of the body protector downward. This is followed by pulling the lower part of the leg and pushing the upper body until the opponent falls [https://bit.ly/Teknik\\_11](https://bit.ly/Teknik_11).



Fig.11 Pull and push

TABLE I  
QUANTITATIVE ANALYSIS

Type	Province		National		International		Total	
	n	%	n	%	n	%	N	%
Technique 1	71	20,58	76	15,02	8	4,65	155	15,15
Technique 2	7	2,03	8	1,58	5	2,91	20	1,96
Technique 3	65	18,84	96	18,97	37	21,51	198	19,35
Technique 4	28	8,12	4	0,79	5	2,91	37	3,62
Technique 5	57	16,52	98	19,37	37	21,51	192	18,77
Technique 6	63	18,26	150	29,64	49	28,49	262	25,61
Technique 7	5	1,45	11	2,17	11	6,40	27	2,64
Technique 8	37	10,72	44	8,70	8	4,65	89	8,70
Technique 9	5	1,45	8	1,58	2	1,16	15	1,47
Technique 10	7	2,03	1	0,20	0	0,00	8	0,78
Technique 11	0	0,00	10	1,98	10	5,81	20	1,96
Total	345	100,00	506	100,00	172	100,00	1023	100,00

**B. Discussion**

A quantitative analysis of this research reveals that the three most frequently used techniques at the provincial level are Technique 1 (20.58%), Technique 3 (18.84%), and Technique 6 (18.26%). At the national level, the top three techniques are Technique 6 (29.64%), Technique 5 (19.37%), and Technique 3 (18.97%). Internationally, the most common techniques are Technique 6 (25.61%), Technique 5 (21.51%), and Technique 3 (21.51%). Overall, the most widely used technique is Technique 6 (25.61%), followed by Technique 3 (19.35%), and Technique 5 (18.77%). These results are summarized in the table below.

Based on the research results, eleven types of pulling takedown techniques were found. Pulling takedown techniques have had an impact on changing the playing style of pencak silat athletes when compared to the 2016 pencak silat regulations. The technical difference in playing, which is about pulling techniques, has resulted in the emergence of new types of takedown techniques. Takedowns are performed within five seconds. In pencak silat regulations, there are two types of legal takedowns, namely direct takedowns and indirect takedowns [7] [8].

Based on the analysis of the types of pulling takedown techniques in pencak silat matches, several types of techniques that are often used were found. At the provincial level, technique 1 – a directly performed takedown technique, was the most used. At the national and international levels, technique 6 – a pulling and sweeping technique was the most used. The difference in the most frequent techniques at the provincial, national, and international levels is caused by the difference in the number of participants, the characteristics of the data subjects taken, and the impact on the research results. The number of match



subjects at the provincial level is higher than the number of subjects at the national and international levels. In terms of competitive characteristics, the data subjects at the national and international levels are higher. From the competition standards at the national and international levels, the competition is tighter, and the qualification standards are higher. So, athletes have better techniques and compete more intensely. Athletes competing at the national and international levels also have more mature preparations, better athlete resources, compared to athletes competing in all aspects at the provincial level. These quality differences resulted in differences in the most frequent results of technique variations at the provincial, national, and international levels. Then, in the total percentage results of all data subjects, there are three techniques that are most frequently used. From this, the researcher assumes that these techniques have high technical efficiency. Due to the process and regulations, these three techniques only provide a little room for opponents to counterattack.

In addition, the success factors of the technique are seen in the physical elements. Physical elements have a significant influence on pulling takedown techniques, especially strength and explosive power. Pulling takedown techniques are performed by athletes by holding each other, which causes muscle contractions to work with high resistance, so athletes must have good strength. In addition to strength, muscle contraction power with explosive power also occurs when pulling using the hands. Strength and explosive power are very important in all martial arts, especially in pencak silat, which is dominated by pulling and pushing when performing pulling takedown techniques. Strength also contributes greatly to endurance in managing fatigue and reducing the risk of injury [9]. Strength is very important in pencak silat, because in the condition of making contact with takedown techniques, athletes perform several combinations of movements that involve a series of bones and certain muscles [10].

In pulling takedown techniques, there is also a coordination factor because the movement of pulling takedown techniques involves a series of body frame movements and muscles simultaneously. A study by [11], explains that coordination is the ability of several muscles to work together to produce a certain movement, coordinated movement is a complex and complicated movement. The same applies to the eleven types of pulling takedown techniques that involve several coordinated sequences of body movements.

Pulling takedown techniques are often performed in situational conditions, meaning that this technique is often used according to the conditions of the athlete that allow the technique to be successfully performed. In performing pulling techniques, athletes must be able to read and find the opponent's condition when the stance is unbalanced. Athletes must make the right decision when performing pulling takedown techniques. Because if the pulling takedown technique fails or is hit by a counterattack from the opponent, then the athlete who manages to survive will get points. This is a challenge for athletes to truly master pulling takedown techniques and set playing strategies.

Referring to previous research on the analysis of determining factors for winning techniques in pencak silat matches, takedown techniques are difficult to perform even though takedown techniques have the highest achievement point value [12]. Therefore, athletes must be able to master pulling takedown techniques, so that when competing, mastery of the technique has been applied maturely, which will facilitate the application of tactics and strategies to achieve victory.

The results of this study are beneficial for athletes to know how takedown techniques are performed. The results of this study can provide information for pencak silat coaches as a reference for making training programs and learning pulling takedown techniques. Techniques in sports are also very important for a coach in determining the characteristics and references for designing physical conditioning training programs [3].

In addition, the results of this study can provide information and references for researchers who want to develop research in accordance with the topic of pulling takedown techniques. This study has obtained new scientific findings regarding variations in types of pulling takedown techniques, because there has been no research on the types of pulling takedown techniques in pencak silat matches.

The limitations of this study are that it did not observe the same number of videos, at the provincial level (156 videos), at the national level (96 videos), and at the international level (46 videos). This limitation was experienced by researchers due to limited access and availability of videos at all three levels.

#### IV. CONCLUSIONS

Takedowns are a fundamental part of competitive pencak silat techniques. This research identified eleven new scientific types of pulling takedowns. Overall quantitative data showed that three techniques were frequently used: Technique 6 – pulling, grabbing, and sweeping (25.61%), Technique 3 – pulling and scissoring (19.35%), and Technique 5 – pulling and side takedown hook (18.77%).

**ACKNOWLEDGMENT:** Thanks are due to all parties involved in the research and writing of this scientific work. Hopefully, the results of this research can add insight for many people, especially pencak silat practitioners. So that pencak silat practitioners can develop pencak silat wherever they are.

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