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## Analysis of Slam Tehcniques for Point Acquisition in Sambo Martial Arts Athletes in Semarang City

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### **Abstract**

The slam technique is one of the techniques in Sambo that produces the most points. There are some athletes who do not understand the slam technique, so it is necessary to practice. There are 5 slam techniques, namely slamming legs, hands, neck, hips and dropping. The purpose of this study was to find out how to improve the ability of slam techniques, knowing the effect of training and the effectiveness of slam techniques, and which slam techniques were most effective on Sambo athletes in Semarang City. This study uses a mixed methods approach and the method used is comparative-descriptive. The data collection technique uses qualitative interviews, while the quantitative uses direct tests on athletes to take the points obtained by Sambo athletes in Semarang City. The results showed that how to improve the ability of the Sambo slam technique with verbal communication (instructions and directions) and nonverbal trainers (demonstrating and drill exercises), there was an effect of kickback technique training on the acquisition of points (the percentage increase from the previous exercise included 23% for the first exercise, 32 % for the second exercise, 17% for the third exercise, and 18% for the fourth exercise. The results of the third study are the order of effectiveness, namely hands (2.3) > hips (2.25) > feet (2.17) > dropping down (2.09) > neck (1.76). Of the five slam techniques the most effective was the hand kick with 32.79% points, then leg kick 24.77%, neck kick 15.37%, hip kick 14.91 %, and the last technique is flopped with a percentage point of 12.16%.

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### **INTRODUCTION**

Sambo is one of the martial arts sports that scored the nation's achievements. Sambo exists in Indonesia and has been included in the list of branches competed in Indonesia at the 2018 Asian Games, but at that time none of the eight Indonesian athletes won medals. During the 2019 SEA Games in the Philippines, it was the Sambo sport that gave Indonesia achievements by bringing four gold medals, a silver piece and two bronze. Indonesia became the overall champion in the Sambo branch. This achievement deserves to be proud considering that Sambo sports can contribute medals to Indonesia.

Sambo is known to be very effective because it combines five martial arts techniques, namely wrestling, judo, jujitsu, boxing and savate. The advantage of Sambo is to rely on control and foot locks, then knock down opponents with fast attacks.

In Sambo, there are several techniques used, namely punches and kicks, slams, hold downs, fractures, strangles, and counterattacks (Persambi, 2020). One of the techniques in Sambo that earns the most points is the slamming technique. Many Sambo athletes lack understanding in performing slamming techniques. They don't understand how to do the slamming and locking techniques, even though the most points come from the slamming and wrestling techniques below. They have difficulty performing slamming techniques, as most are not derived from judo, wrestling or jiujutsu. Many come from the disciplines of boxing, wushu, and other standup sports. Athletes lack mastery when they are in a ground finghting position).

The initial survey was conducted by researchers on the trainer of the Sambo Semarang City martial arts branch (PERSAMBI) which is located at Jl. Kyai Saleh No 1, Randusari, South Semarang District, Semarang City. According to the results of an interview with the PERSAMBI coach, usually the Semarang City Sambo athletes mostly use the slamming technique. There are 5 slamming

techniques that are often used, namely the technique of slamming feet (oso eigori), hips (ogosi), hands (tae otoshi), neck (kataguruma), and the technique of dropping down. According to the trainer, among the 5 slamming techniques that are often used are the foot slamming technique and the most effective slamming technique is the hand slamming technique. Effective because it earns the most points. This slamming technique is much liked by Semarang City Sambo athletes compared to other Sambo techniques such as kicks, punches and chokes, but most Semarang Sambo athletes are still lacking in mastery, especially the 5 slamming techniques so that many more exercises are needed guided by a coach.

For this reason, the author is interested in carrying out research on 'Analysis of Slam Techniques For Points Acquisition in Sambo Martial Arts Athletes in Semarang City".

### **METHODS**

This study used a mixed methods approach and the method used was comparative-descriptive. The population in this Semarang was all City athletes. For the determination of samples by purposive sampling, which is taken based on certain criteria, namely inclusion criteria. The inclusion criteria in question are: Sambo athletes who come and do training during the study; athletes who are willing to be respondents and conduct initial tests; active and cooperative athletes. From the sampling results, 8 Sambo athletes were obtained. The qualitative research instrument uses interview and documentation methods, while the quantitative research instrument uses data on the results of obtaining points before and after being given training.

The initial step carried out in this study is to survey the location object by conducting interviews with coaches to find out the problems in athletes in that place, then design / design to conduct experiments, after an agreement on the research schedule. During the research, thorough interviews were conducted with coaches, administrators, and athletes who will

trained. To obtain quantitative data, experiments were carried out on athletes, 2 treatments were made, namely the treatment before being given training and after being given slamming technique training. Then a trial match was carried out for treatment before training and after being given slamming technique training, and observed and calculated the points, which would later be used to find out which slamming technique was the most effective, so that athletes were expected to be more efficient in time during the match in order to get the most points and score achievements. From the results of data obtained either from surveys, interviews, or experiments, data processing is then carried out, compared or connected between qualitative and quantitative data, then interpretation is carried out.

Qualitative data analysis in this study is: (1) recording all findings of phenomena in the field both through observations, interviews and documentation in the form of field notes. (2) field notes from observations, reviewing interviews and separating data that are considered important and unimportant, this work is repeated again to check for possible misclassifications. (3) describe the data that has been classified, for the benefit of further study by taking into account the focus and objectives of the research. (4) make a final analysis that may be set forth in the report for the benefit of writing this thesis. For quantitative data analysis by presenting the results of points acquisition figures in the form of tables and graphs as well as pie charts and with descriptive statistical tables.

For the validity of qualitative research data using source triangulation, member checking and peer discussion (Moleong, 2007:

324). The quantitative research used the value criteria of each athlete, and calculated the effectiveness value of the five existing slamming techniques to find out the most effective slamming technique in the Sambo athlete competition in Semarang City, Central Java.

Interview guidelines given management, coaches and athletes of Sambo Semarang City include: Slamming technique movement instructions, slamming technique direction, explanation of the benefits of slamming technique movements, slamming movement regulation information, overall verbal evaluation of exercises, trainers demonstrating movements, the existence of drill exercises, the influence of slams on earning points, the effectiveness of slamming technique movements seen from earning points, and the most effective type of slam.

The procedure for taking grades (points) and their processing:

1. Of the 8 Sambo athletes, 4 pairs were formed, against each other and conducted 4x match training to find out how many points were generated from the training that the coach had taught. 2. Practice is done every 3 minutes and matches are 5 minutes in rounds. 3. The value (points) of each athlete for each slamming technique is a combination of points 1, 2, and 4. Ø The value of 1 means that when the position falls, the opponent sits/chest/stomach. Ø The value of 2 means that if the position falls, the opponent is sideways. Ø Value 4 means that if the position falls, the opponent hits the back and followed by the opponent slamming. 4. The points obtained are calculated mean value, standard deviation converted into norms scale five to interpret the value criteria of each athlete. Table norms scale 5 as follows:

Table 1. Guideline Criteria Table

No	Formula	Value Conversion	Value Categories
1.	X > (M + 1.5 SD)	A	Very high
2.	$(M + 0.5 SD) < X \le (M + 1.5 SD)$	В	Tall
3.	$(M - 0.5 SD) < X \le (M + 0.5 SD)$	С	Enough
4.	$(M-1.5 SD) < X \le (M-0.5 SD)$	D	Less
5	$X \leq (M - 1.5 \text{ SD})$	E	Very Lacking

Description: X = Mean (M) research data, SD = Standard Deviation of research data (Nana Sudjana, 2005)

- 5. Then descriptive statistical analysis is carried out through SPSS to determine the mean, median, mode, standard deviation, maximum and minimum values from before the exercise to the exercise.
- 6. To find out the value of effectiveness using the theory of Schemerhon, John R. Jr. that it will be effective if the value of effectiveness is  $\geq 1$ .

$$Efektivitas = \frac{OutputAktual}{OutputT \text{ arg } et} \ge 1$$

7. The results of earning points are made percentages and pie charts are made.

### **RESULTS AND DISCUSSION**

The objectives of this study are grouped into 4 types, namely: 1) knowing how to improve the ability of slamming techniques of Sambo athletes in Semarang City, 2) knowing the effect of slamming technique training on earning points in Sambo athletes in Semarang City, 3) knowing the effectiveness of Sambo athletes' slamming techniques and 4) knowing what is the most effective hand slamming technique in Sambo athletes in Semarang City.

### Improve The Slamming Technique of Semarang Sambo Athletes

According to the coach, to improve the ability of slamming techniques is done in two ways, namely 1) conducting verbal communication of the coach, 2) conducting nonverbal communication to improve the ability of athletes' slamming techniques in order to get points so that they can achieve achievements. This verbal communication includes: a) Instruction of slamming technique movements by the coach, b) Direction of slamming techniques in practice, c) Explanation of the benefits of slamming technique movements, d) Information slamming movement rules in matches, e) Verbal evaluation of exercises.

From some of the informant's answers, it can be concluded that the coach always provides movement instructions that are easy to understand and exemplify directly to athletes, so that athletes are easy to imitate and practice the movements instructed, in this case it is the slamming technique movement. The coach will also provide examples of correct slamming techniques if the athlete makes the wrong movement.

Direction of slamming training techniques is also needed by athletes. Briefing is done patiently, gradually, with good communication, so that it is easily accepted and understood, and if practice is needed, it must be exemplified directly. The direction of this slamming technique can correct and correct if the athletes are still stiff in performing movements. The briefing is carried out in stages from the beginning to the end of the movement to increase the athlete's understanding of the slamming technique.

The explanation of the benefits of movement techniques is explained by the trainer before doing the exercise, and the benefit is to knock down the opponent so as to get points. With the coach's explanation, it is hoped that athletes can increase the intensity of their training so that they are more agile and faster to down opponents and knock get points. With the explanation of the benefits of these movement techniques to make the exercise run correctly and smoothly, athletes can increase the intensity of slamming technique movement exercises. Thus athletes can develop and score high points to achieve achievements.

Information on the rules of the game is very necessary for athletes to win the game. Because with this information athletes will better understand the basics of movement, mistakes that should not be made, which movements can get the most points, and be more relaxed in training or matches. Mastery of the rules of the game is a basic thing that must be possessed by athletes to be able to keep themselves from making mistakes that endanger themselves. In addition, athletes can also plan movement strategies to knock down their

opponents, so as to get points / points to win matches and be able to take advantage of their opponent's mistakes.

Verbal evaluation, be it the results of training or matches, is essentially to improve movement techniques so as to produce the desired points and certainly win the game. Besides that, there is self-development that makes athletes more shrewd and better at every movement made. This means that athlete victory can also be achieved if the athlete exercises a lot and is willing to accept input / advice from his coach. So in improving the performance of athletes, a continuous evaluation is needed to improve the quality and ability of these athletes.

Nonverbal communication is communication process in which the message conveyed does not use words. Usually in exercises, a trainer provides information with actions or movements. There five movements in this slamming technique including: hands, feet, hips, neck, as well as flopping. The correct way of taking technique affects Sambo athletes in competing. In nonverbal communication this includes 2 ways, namely: a) demonstrating 5 movements of slamming techniques, b) doing drill exercises in pairs.

The coach always demonstrates the movement of the slam technique, exemplifies well and patiently, and does drill exercises. This will affect the quality of the slam technique of these athletes. Trainers also have special tricks in exemplifying so that they are easy to understand

and imitate. This means that the coach has an important role in the process of developing the athlete's technique. If the coach is able to do good technique, the athlete will be good at doing slamming techniques, and vice versa, so that certainly achievements will be easy to achieve.

### The Effect of Slamming Technique Training on Points Earned in Semarang City Sambo Martial Arts Athletes

According to the Coach, slamming technique training affects the earning of points. There are 5 slamming techniques that are trained, namely legs, hips, hands, neck, and flopping. Each of these slamming techniques has a different value (point) depending on the position of the opponent's fall. The time used for slamming drills is 3 minutes of exercise. As for the 5-minute match in 1 round.

The difference in points means that the level of understanding of the athlete's ability for the movements taught by the coach varies, so this can spur athletes to do Sambo slamming technique movement exercises more often. Researchers record grades while doing exercises. Of the 8 athletes, 4 pairs were made, fighting each other. Match practice is carried out 4x to find out how many points are generated from the training that has been taught by the coach. The following is a table of data on the results of obtaining slamming technique movement points during training by 4 pairs of Sambo athletes in Semarang City (Pairs 1-2: Cyntia-Rosaline, pairs 3-4: Venna-Berli, pairs 5-6: Kristian-Rastra, pairs 7-8: Khavindra-Risqi).

**Table 2.** Total Slamming Technique Points Earned by Each Sambo Athlete in Semarang City

Athlete	Leg Slams	Hand Slams	Neck Slams	Hip Slams	Flopping	Total Points
1	9	14	7	8	7	45
2	14	17	7	7	8	53
3	14	17	7	7	4	49
4	13	21	9	8	7	58
5	25	32	20	17	12	106
6	12	18	8	6	6	50
7	21	24	10	10	7	72
8	12	15	8	9	8	52

Source: Processed Data, 2023

The points obtained from each athlete each slamming technique are different on average. These points are the total of each athlete's points before training and training. Each exercise is 3 minutes, and matches are 5 minutes in one round. The value (points) of each athlete of each slamming technique is a combination of points 1, 2 or 4. A value (point) of 1 means that if the position falls, the opponent sits / chest / stomach. Point 2 means that if the position falls, the opponent is sideways, while point 4 means that if the position falls, the opponent hits the back & followed by the opponent slamming. The order of total points from the largest are athletes Kristian (75 kg), Khavindra (73 kg), Berli (65 kg), Rosaline (63 kg), Risqi, Rastra (90 kg), Venna (70 kg), Cyntia (57 kg).

Training affects the athlete's point gain. The initial point before the training was still unstable because they did not understand the proper movement of the slam technique. The percentage increase for the first exercise was

23% against no exercise, the second exercise was 32% against the first exercise, the third exercise was 17% against the second exercise, the fourth exercise was 18% against the third exercise, so it can be seen that the more exercises, the greater the result of slamming technique points, although the percentage increase was unstable due to the condition of each athlete at that time.

From the picture above that the more athletes do a lot of training, the higher the points, automatically if more training is done, achievements can be achieved, because of the high points. This means that the first hypothesis is accepted, namely the influence of slamming technique training on the acquisition of points for Semarang City Sambo athletes.

### The Effectiveness of The Semarang City Sambo Athlete Slamming Technique

The following is a table of the effectiveness of the Semarang City Sambo athlete slamming technique.

<b>Table 3.</b> table of the effectiveness of the Semaran	g City Sambo athlete slamming technique.
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Exercise	Leg Slams		Hand Slams		Neck Slams		Hip Slams		Flopping	
Exercise	%NE	%E	%NE	%E	%NE	%E	%NE	%E	%NE	%E
1	40	60	38.46	61.54	45	55	38.89	61.11	42.86	57.14
2	31.58	68.42	30	70	39.13	60.87	30.43	69.57	31.58	68.42
3	28.57	71.43	27.27	72.73	33.33	66.67	28	72	28.57	71.43
4	26.09	73.91	25.42	74.58	27.27	72.73	25.93	74.07	26.09	73.91
Total	126.24	273.76	121.15	278.85	144.73	255.27	123.25	276.75	129.1	270.9
Effectiveness	2.16856	2.17	2.30169	2.3	1.7637	1.76	2.2454	2.25	2.09837	2.09

Judging from the effectiveness value when compared to those without practice, everything from drill training is effective because the value obtained is higher than without training. As in Schemerhon's theory, John R. Jr. (1986: 35) that it will be effective if the value of effectiveness is  $\geq 1$ . And the effectiveness of each slam > 1. The order of effectiveness value is hands > hips > legs > drop > neck. So effectiveness can be seen from the acquisition of practice drill points compared to no practice. The existence of drill exercises results in more and more effective points, which is indicated by an effectiveness value of > 1. By giving instructions and

modeling correctly and patiently, surely athletes will easily understand the movements so that they will certainly earn more points. So the key is in the coach, and also the focus of the athletes to hear the explanation and see and practice the right way. The more drills are made, the better the point value, because they are used to the movement, so that the targeted value is achieved.

### The Most Effective Slamming Technique

The most effective slamming technique for Sambo athletes in Semarang City out of the five movements of the slamming technique is the hand slamming technique, whose points stand out the most. The following is shown in a pie chart.

Based on the picture above, it can be seen that the slamming technique that has the highest percentage of points is the hand slamming technique, which is 32.79% greater than other slamming techniques (foot slam 24.77%, neck slam 15.37%, hip slam 14.91%, and drop 12.16%). This means that the second hypothesis is accepted, namely that the hand slamming technique is most effective for Semarang City Sambo athletes. This is possible because athletes are easier to perform hand slamming movements than others are more risky. The results of this study are in accordance with the statement of the Semarang City Sambo coach, namely that the hand slamming technique is the most effective because it produces the points. The management also said the same thing, the most effective hand slamming technique for Sambo sports athletes in Semarang City.

### **DISCUSSION**

This study aims to determine the effect of Sambo slamming technique training on earning points and find out the most effective slamming technique among the five Sambo slamming techniques. This research was conducted because no one has revealed research into Sambo martial arts, but it was carried out on karate and other sports, such as Novi Dwi Sasmita's research (2022). He revealed that using the drill training method can improve the skills of mawashi-geri karate kicks in Kakado karateka. This shows that drills improve kicking skills, which will automatically increase points so that they can win the game. Not only kicks, exercises can also be used for other techniques such as slams, locks etc. In a study by Muhammad Sheraz, Alfayed Rizal (2022) stated that the 5post drill training method has a significant effect on obtaining a three-point shooting score in basketball games. This shows that the more often you do the exercise, the higher the score (points). Research by Yuyun Dwi Astyorini (2016) revealed that rope jump exercises have an

effect on increasing leg muscle power and agility. In this case it means getting more skilled, thus increasing the acquisition of points (value). Then the research of Kurniawan Ari Wibowo and Bagus Januarto (2022) also states that the drill training method will improve kicking skills.

From the results of the analysis of the points earned by Sambo Semarang City athletes, it was obtained that points increased hen training drills were carried out or the frequency of training was increased. This shows that the proposed hypothesis is accepted that there is an effect of slamming technique training on earning points in Semarang City Sambo athletes. The frequency of slamming technique training is getting more frequent, the skills and slamming skills are getting better, agile, so that the points increase, and of course victory is easy to achieve

The difference in points of each athlete shows the level of understanding of the athlete's ability to the movements taught by different coaches, so this can spur athletes to practice Sambo sports slamming techniques more often. In addition to the athlete's understanding of the material, also the condition of the athlete at that time was in a state of lack of mood / fatigue. This also affects athletes in training to be less than optimal. But the difference in points is not so far. They are quite easy to understand and can immediately practice the movement of the slam technique. The coach patiently and coherently applies the slamming exercise by explaining, giving step-by-step examples of how the process of carrying out the slam from the beginning of the movement to the end of the movement, and the athletes pay close attention to the movements exemplified so that later they can practice correctly, and the results do not disappoint.

There are five movements of the slamming technique: hands, feet, hips, neck and flopping. Of the five movements that are most liked, the one that gets more points is the hand slamming technique movement. The most effective slamming technique is the slamming technique that earns the most points. So from the results of the analysis conducted by

researchers, the most effective slamming technique is the hand slamming technique, because it produces the most points of 32.79%. According to coaches administrators also state the same thing, that the most effective hand slamming technique. After analysis, it turned out that the results were the same as the statement of the Semarang Sambo trainer, which means that the hypothesis proposed by the researcher is accepted which states that the hand slamming technique is the most effective, because the largest percentage of points is the hand slam technique. Then the foot slamming technique is 24.77%, after that the neck slamming technique is 15.37%, the hip slam technique is 14.91%, and the last one is dropping with a percentage point value of 12.16%. The lowest throwing technique, it may be more difficult to knock down the opponent with this slam because you have to drop by pulling the opponent's shirt while dropping and then throwing with your feet.

### **CONCLUSION**

Improvement of Sambo athletes' slamming technique skills with coach's verbal communication (movement instruction, direction, explanation of benefits, rules and evaluation) and coach's nonverbal communication (movement demonstration and drill exercises).

The effect of slamming technique training on earning points, on the first exercise 23%, the second exercise 32%, the third exercise 17%, and the fourth exercise 18%.

The order of the effectiveness value of the slamming technique is hand (2.3) > hip (2.25) > foot (2.17) > flopping (2.09) > neck (1.76).

Of the five techniques, the most effective is the hand slamming (32.79%), leg slamming (24.77%), neck slamming (15.37%), hip slamming (14.91%), and flopping (12.16%).

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