



## Volleyball Smash Ability Level of the Athletes of the Medan Women's Club Volleyball

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### Abstract

The purpose of this study was to determine the level of smash ability of the athletes of the Women's Volleyball Club. This research is a descriptive study with the research population at the Bina Putri Volleyball Club with the sampling technique using the total sampling technique, which means the number of samples is 10 people. The instrument used to measure the ability to smash is the Nurhasan smash attack instrument. From the tests carried out, the results of the athlete's smash ability were obtained with an average score of 6.6. The average score obtained shows that the smash ability of the athletes of the Bina Putri Medan Volleyball Club is included in the less category with a value of 2. One of the factors causing the low smash ability of the athletes of the Bina Putri Medan Volleyball Club is the weak explosive power of the athletes' leg muscles. These results indicate that it is necessary to carry out exercises aimed at increasing the explosive power of the leg muscles regularly and continuously in an effort to increase the explosive power of the leg muscles.

**Keywords:** Smash, Bina Putri Volleyball Club In Medan, Descriptive Analysis, Leg Muscle Explosive Power

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## **A. Introduction**

Olahraga merupakan salah satu bagian from daily activities which are important and become human needs as one of meeting the needs of a healthy body and spirit. This is in line with the opinion (Oktariana & Hardiyono, 2020) which explains that sport is a human need which is a basic element and is very influential in forming a strong soul (spiritual) and body (body or body). According to (Lardika & Salam, 2019) sport is a means by which individuals and groups can actualize themselves to arouse their sense of self-confidence and national pride.

Today sport is one of the ways to get achievements from the regional level to the national level. Sport is one of the nation's unifying tools that can shape an individual and collective character, as well as influence other development sectors. This is the potential that exists in sports (Rachmi et al., 2021). Exercise also influences mental health for the perpetrators, while the benefits of exercising include: (1) reducing stress, (2) improving brain performance, (3) reducing anxiety and depression, (4) expediting brain neurotransmitters, (5) as an antiaging, (6) increase feelings of happiness and self-confidence (Siahaan, 2017) including volleyball.

Bola voli merupakan salah satu cabang

a sport that is loved by the people of Indonesia because this sport can be played by all levels of society from children to adults. According to (Syauki, 2021) volleyball is a team game on a field measuring 18 m long and 9 m wide which divides the field into 2 equal sizes. Straight above it is the net, which is 2.43 m high and 2.24 m high. According to (Heriyadi & Hadiana, 2018) the game of volleyball is played using one ball which is reflected from one player to another by passing and ending with a smash on the opposing team, and the two teams are separated by a net with a certain height. The game of volleyball itself is included in the type of big ball game. In volleyball games, of course, there are aspects that need attention, one of which is the basic technique (Syamsi et al., 2021). There are four basic techniques in volleyball games, namely: serving, passing, blocking, and smashing (Edwan & Sutisyana, 2017).

Smash in volleyball is a technique for attacking and getting points. This is in line with (Wahyu Cirana et al., 2021) which suggests that smashes are a way of attacking each team to gain points. Smash itself is an act of hitting the ball down with full power, by jumping up and hitting the ball toward the opponent's field (Pujianto et al., 2021). Smash is a very important technique in volleyball. According to

(Pranopik, 2017) the smash technique is the most difficult technique and has complex movements so the smash technique must be trained in athletes from an early age because at an early age it is a stage that is vulnerable to motion errors. From some of the above expressions, it can be concluded that the smash is the most important technique in volleyball that is done to attack and the most difficult to do.

Likewise, the Bina Putri Club is quite an active volleyball club located in the city of Medan. This club contains female athletes. Based on observations at the Women's Development Club in April 2022. When the researchers made the observations, the researchers found that many athletes were still not good at smash techniques. This can be seen when smashing the resulting ball tends to get stuck in the net and out.

From the results of the observations made, it can be concluded that when carrying out the smash technique, most of the Bina Putri Club athletes are still not proficient at doing it, such as when making jumps, the athletes tend to have no explosive power in the leg muscles, so they often don't get to the resulting ball, which tends to get stuck in the net. One of the contributing factors is the lack of effectiveness of the training program given by the coach to athletes and the lack of ability of athletes to understand smash

techniques. On this basis, the researcher is interested in conducting tests and measurements of the smash ability of the Women's Development Club athletes. The aim is to find out and describe in fact and systematically the abilities possessed by athletes and can be the basis for having the right training program. This is in line with the opinion (of Sepdanius et al., 2019) who says that data obtained from measurement results are very useful for evaluation needs and decision-making in the training process. For this reason, it is necessary to carry out a study related to tests and measurements to determine the level of smash ability of Medan Women's Club athletes.

## **B. Method**

This research uses the descriptive research method. The population in this study were Female Development Club athletes with samples taken using the total sampling method, which means the number of samples in this study was 10 athletes. This study will be described how the level of smash ability of Medan Women's Club volleyball athletes.

The test instrument for measuring smash ability used in this study is using the smash attack test according to (Cahyaningrum et al., 2018). The implementation mechanism is as follows:

1. The testee is in the attack area or free on the playing field.
2. The ball is bounced or fed near the top of the net toward the testee.
3. With or without starting, the testee jumps and hits the ball over the net into the opposite court where there is a goal with points.
4. Each testee is given 5 times to do the test.
5. How to score: the score is the number where the ball fell. The ball that touches the target is counted as a higher score. Score = 0, if the ball touches the net or the ball falls outside the target area. Test achievement is the sum of all target scores from 5 occasions.

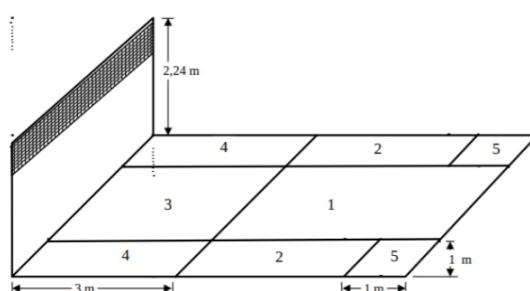


Figure 1. Smash attack test instrument (Lardika & Salam, 2019)

**Table 1. Norma Tes**

Skor Tes	Value	Category
21-25	5	Very well
16-20	4	Well
10-15	3	Enough
5-9	2	Not enough
0-4	1	Less Once

After obtaining the data using the instrument, then the data will be analyzed using descriptive statistical procedures using the following formula:

$$P = \frac{f}{n} \times 100\%$$

Information :

P = Percentage

F = Frequency

N = Number of test samples

## C. Result And Discussion

### Result

The data presented is data obtained from the test results using the Nurhasan smash attack instrument and by what it is with the smash ability of the Medan Putri Bina Volleyball Club. The following are the test results using Nurhasan's smash attack instrument.

**Table 2. Smash Test Results Data**

<b>Sampel</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total</b>	<b>Value</b>	<b>Category</b>
Sampel 1	1	1	1	1	2	6	2	K
Sampel 2	2	2	0	0	5	7	2	K
Sampel 3	4	4	0	2	4	14	3	C
Sampel 4	1	0	2	1	1	5	2	K
Sampel 5	2	1	1	0	2	6	2	K
Sampel 6	0	1	1	0	2	4	1	KS
Sampel 7	2	0	2	1	3	8	2	K
Sampel 8	3	1	1	4	0	9	2	K
Sampel 9	0	0	1	0	2	3	2	K
Sampel 10	0	4	4	4	2	14	3	C

From the data above it is clear that the results of the smash ability test from the Medan Women's Volleyball Club are divided into 3 categories. By the test norms, there are 2 athletes with a value of 3 in the sufficient category, 7 athletes with a value of 2 in a less category, and 1 athlete with a value of 1 in a very poor category.

Based on the results of research conducted from data collection using the snash test instrument without being given previous treatment. For this reason, the reference for discussing the results of this study is: based on the results of the smash athlete ability test of the Bina Putri Medan Volleyball Club using the Nurhasan smash test instrument, the smash ability of the athletes of the Bina Putri Medan Volleyball Club is included in the sufficient category with a value of 2, with an average score obtained 6.6 which has been converted by Nurhasan's smash test norms.

### **Discussion**

By the initial goal of the researcher, namely to determine the smash ability level of the athletes of the Bina Putri Medan Volleyball Club, it can be seen that there were 2 athletes in the moderate category, 7 athletes in the less category, and 1 athlete in the very less category. The average athlete produced is in the less category with a value of 2, with an average total score of 6.6.

The low level of smash ability of the athletes of the Medan Women's Volleyball Club is inseparable from the weak explosive power of the athletes' leg muscles so many of the balls produced tend to get caught in the net. According to (Edwan & Sutisyana, 2017) the jumping smash technique is greatly influenced by the quality of the leg muscles. This is in line with the opinion (Oktariana & Hardiyono, 2020) which suggests that the explosive power of the leg muscles is a factor that

determines success in sports, especially in volleyball smashes.

Based on relevant sources, it can be seen that one of the factors causing the level of smash ability of the athletes of the Medan Women's Volleyball Club in the

#### **D. Conclusion**

Based on the results of the smash attack test according to Nurhasan on the athletes of the Medan Women's Volleyball Club, it can be seen that 2 athletes fall into the sufficient category, 7 athletes fall into the less category and 1 athlete falls into the very less category. Thus it can be concluded that after conducting a review of the smash ability of the athletes of the Medan Putri Bina Volleyball Club, the average level of athlete's smash ability is included in the less category with a score of 6.6.

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#### **F. Conflict of Interest**

No conflict of interest

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less category is the weak explosive power of the athletes' leg muscles. Therefore, exercises can be done to increase the explosive power of the leg muscles regularly and continuously.

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