



The Effect Of Waist Flexibility Training On Smashing Ability In Extracurricular Volleyball Games SMA Negeri 10 Kota Bengkulu

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Abstract. This study aimed to determine the effect of waist flexibility training on smashing ability in extracurricular volleyball games at State Senior High School 10, Bengkulu City. A total sampling method was used to determine the number of respondents, resulting in 16 respondents participating in the extracurricular volleyball games at State Senior High School 10, Bengkulu City. This experimental study employed a One Group Pretest-Posttest design, a pre-experimental design consisting of a pretest (test before treatment) and a posttest (test after treatment) within one group. Data collection used test scores. Descriptive data analysis techniques and t-tests were used. The results of this study indicate an effect of waist flexibility training on smashing ability in extracurricular volleyball games at State Senior High School 10, Bengkulu City, with a calculated t-value of 3.437 and a t-table value of 1.753, with a significance level of $\alpha = 0.05$ and $df = 16$.

Keywords: *Waist Flexibility, Smash, Volleyball Extracurricular Activities.*

INTRODUCTION

Sport is a systematic activity to encourage, foster, and develop physical, spiritual, and social potential. Nowadays, sport has become a mandatory activity for everyone to maintain physical fitness and health. It can be said that sport plays a vital role in life. Law of the Republic of Indonesia No. 3 of 2005 concerning the National Sports System, Chapter II, Article 4, states: National sport aims to maintain and improve physical fitness and fitness, achievement, and human quality, instill noble moral and ethical values, sportsmanship, and discipline, strengthen and foster national unity, strengthen national resilience, and elevate the nation's dignity and honor. Based on the quote above, it can be concluded that the objectives of national sport encompass some aspects of life needed by the nation. In addition to improving physical fitness, sport embodies numerous moral values, which can shape the Indonesian people into individuals with personalities that foster a sense of national pride. There are many types of sport, one of which is volleyball.

In general, volleyball is not dangerous for players because there is no direct contact with opposing players on the court. Furthermore, through this practice, all parts of the body can be moved to achieve conditions that can improve physical health. Volleyball has developed into an educational sport. As an educational sport, besides being a means of achieving educational goals, its primary purpose is to support the development and maintenance of physical fitness in students. Volleyball can be used as a development effort, such as physical fitness and the development of positive traits in students. Competitive spirit and mental development can be developed through intergroup, interclass, and interschool matches, so that this game has become a sport regularly held in schools. Schools are equipped with a physical education curriculum that includes volleyball as part of the curriculum.

LITERATURE REVIEW

Volleyball is a very popular sport and is highly favored by the community. This can be seen from the many children, teenagers, and adults playing volleyball. This volleyball game is mushrooming in urban and rural areas. Volleyball has been known in Indonesia since 1982, brought by Dutch teachers. The development of volleyball seems to have advanced rapidly in Indonesia since facing the 1st Asian Games in Jakarta. However, when viewed in terms of achievements, the Indonesian volleyball team has not yet met what was expected. Volleyball is one of the sports that is very popular among the Indonesian people. Government attention to the sports sector is increasing, especially supporting factors for achieving success at the regional, national, and international levels. Volleyball does not require a large space, the rules are simple and the equipment and infrastructure are easily available, so almost anyone can learn and practice.

METHODS

Research involves observing an object to be studied and then drawing conclusions from the results. Within research itself, there are two important things to understand: method and research. Meanwhile, according to Sugiyono (2019, :2), "a research method is essentially a scientific way to obtain data for a specific purpose and purpose." Therefore, a research method is a method taken to achieve research objectives. The method used for this research was the experimental method. Experimental methods are used to determine the effects of a given treatment on an object being studied. In this study, the treatment used was waist flexibility training, with a pre-test before the treatment and a post-test after the treatment. Research data was obtained through pre-tests and post-tests on the smashing ability of volleyball players at SMA 10 Kota Bengkulu. This research was conducted 16 times in April 2025.

RESULTS

Data Description

Table 1 Average Smash Ability in Volleyball Exercise Waist Flexibility

Variables	Mean	Elementary School	Min	Max	N
Smash Ability	3.5	0.7	2.0	5.0	16

Table 2 Frequency Distribution of Smash Ability in Volleyball

Value Scale	Category	Frequency (f)	Percentage (%)
> 4.7	Very good	1	6.3
4.0 – 4.6	Good	7	43.8
3.2 – 3.9	Enough	0	0.0
2.5 – 3.1	Not enough	7	43.8
< 2.4	Very less	1	6.3
	Amount	16	100.0

Table 2 shows the frequency distribution of smash ability in extracurricular volleyball games at SMA Negeri 10 Kota Bengkulu before training. The waist flexibility of the 16 samples was 1 person (6.3 %) in the very good category, 7 people (43.8 %) in the good category, 7 people (43.8 %) in the less category, 1 person (6.3 %) in the very less category and none were in the sufficient category.



Figure 1 Smash Ability in Volleyball Games

Table 3 Average Smashing Ability in Volleyball Games After

Variables	Mean	Elementary School	Min	Max	N
Smash Ability	4.8	0.4	4.0	5.0	16

Table 4. Frequency Distribution of Smashing Ability in Volleyball

Value Scale	Category	Frequency (f)	Percentage (%)
≥ 4.7	Very good	13	81.3
4.0 – 4.6	Good	3	18.8
3.2 – 3.9	Enough	0	0.0
2.5 – 3.1	Not enough	0	0.0
< 2.4	Very less	0	0.0
	Amount	12	100.0

Table 4 shows the frequency distribution of smash ability in extracurricular volleyball games at SMA Negeri 10 Kota Bengkulu after training. The waist flexibility of the 16 samples was 13 people (81.3 %) in the very good category, 3 people (18.8 %) in the good category and none were in the sufficient, less or very less categories.

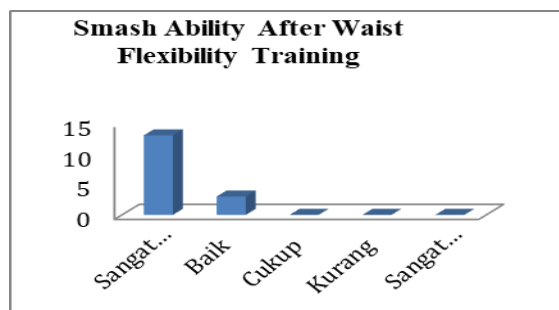


Figure 2 Smash Ability in Extracurricular Volleyball Games

CONCLUSION

Based on the table above, the calculated t value is 3.437 while the t table is 1.753 with a significance level of $\alpha = 0.05$ and $dk = 16$. Based on the decision making above, the $\text{calculated } t > t \text{ table}$ ($3.437 > 1.753$). It can be concluded that there is an influence exercise waist flexibility on smash ability in extracurricular volleyball games at SMA Negeri 10 Kota Bengkulu.

Aip and Syapudin (2016: 12) state that a *smash* is a hard, sharp shot that hits the opponent's court. This *smash* can be used to stop an opponent's attack. If the *smash* is executed quickly and precisely, it can be difficult to win. received by the opponent, will also be able to kill.

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