

The Effect of Wall Shooting Training and on Your Back Shooting Training on Increasing Free Throw Results in Boys Basketball Athletes of Club Boemsa in 2025

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ABSTRACT

This study aims to determine the effect of Wall Shooting and On Your Back Shooting training on improving free throw results in men's basketball athletes from Club Boemsa in 2025. Basketball focuses on physical, technical, and mental development. Every athlete is expected to achieve the highest level of achievement in their chosen sport. To achieve this, they are required to possess good technique, which can support improved performance. This research method was experimental, with a six-week study period, with training three times a week. The sample size was conditional sampling, with 10 athletes. All athletes performed the training programs and took a pre-test before entering the program and a post-test after the program ended. Based on the results of the study, a 2-tailed significant value of $0.001 < 0.05$ was obtained for hypothesis testing, indicating a significant difference between the initial (pre-test) and final (post-test) variables. This indicates a significant effect of Wall Shooting and On-Your-Back Shooting training on improving free throws. So it can be concluded that there is an influence of Wall Shooting training and On Your Back Shooting training on increasing Free Throw results in the 2025 Boemsa Club Men's Basketball athletes.

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INTRODUCTION

Sport is a physical and mental activity that plays an important role in maintaining health, improving fitness, and forming character such as discipline and cooperation. One of the popular and popular sports is basketball, which is a team game that requires optimal mastery of basic techniques, especially shooting techniques. One of the most decisive forms of shooting in the game is the free throw, because each success is worth one point and is often the determinant of the team's victory.

Success in making free throws does not happen by chance, but requires directed practice, consistency, concentration, and good mastery of technique. However, based on previous research, there are still many players who have not been able to make free throws optimally. The results of the study show that around 65% of basketball players have not been optimal in making free throws, and the use of free throw opportunities in the game is still low. This indicates that shooting ability, especially free throws, is still a weakness that needs to be improved.

Based on an initial survey conducted on Club Boemsa boys basketball athletes at Private High School Budi Murni 1 Medan, data was obtained that 70% of athletes were in the "less" category, 20% were "less than once", and only 10% were in the "sufficient" category, with an average score of 3.1 and no athletes reached the "good" category. The results of the interviews also show that athletes have difficulty in making free throws due to a lack of effective training, inappropriate shooting techniques, and exercises that tend to be monotonous and non-specific.

This problem shows that the training program implemented is not optimal, both in terms of variety and focus on basic shooting techniques. In fact, structured and specific exercises are needed to improve the accuracy and consistency of free throws. Therefore, more effective training methods, such as wall shooting and on your back shooting exercises, are needed, which focus on improving basic techniques such as elbow position, balance, ball control, and follow through.

With the application of proper and directed training, it is hoped that athletes' free throw skills can increase significantly. Therefore, this study was conducted to determine the effect of wall shooting and on your back shooting exercises on increasing free throw results in Club Boemsa men's basketball athletes in 2025.

IMPLEMENTATION METHOD

This research was carried out on the basketball court of Private High School Budi Murni 1 Medan for 6 weeks (October 21–November 29, 2025) with a frequency of practice 3 times a week (18 meetings). The research design used was an experiment with the One-Group Pre-test–Post-test Design approach. The study population amounted to 15 Club Boemsa men's basketball athletes aged 16–18 years, while a sample of 10 athletes was selected using purposive sampling techniques based on certain criteria, such as actively practicing and participating in extracurricular activities.

This study used two variables, namely wall shooting practice and on your back shooting as free variables, and an increase in free throw results as bound variables. The research procedure began with a pre-test to measure the initial ability of the free throw, then was given treatment in the form of training for 6 weeks, and ended with a post-test to see the improvement in results.

The research instrument used a free throw test 10 times, with an assessment based on the number of balls that entered the hoop. Data were collected through pre- and post-treatment tests. Data analysis was carried out using a t-test statistical test with the help of SPSS, after first carrying out a prerequisite test, namely the normality test (Shapiro-Wilk) and the homogeneity test. The hypothesis test used a significance level of 0.05 to determine whether exercise had an effect on improving free throw ability.

RESULTS

1. Description of Research Data

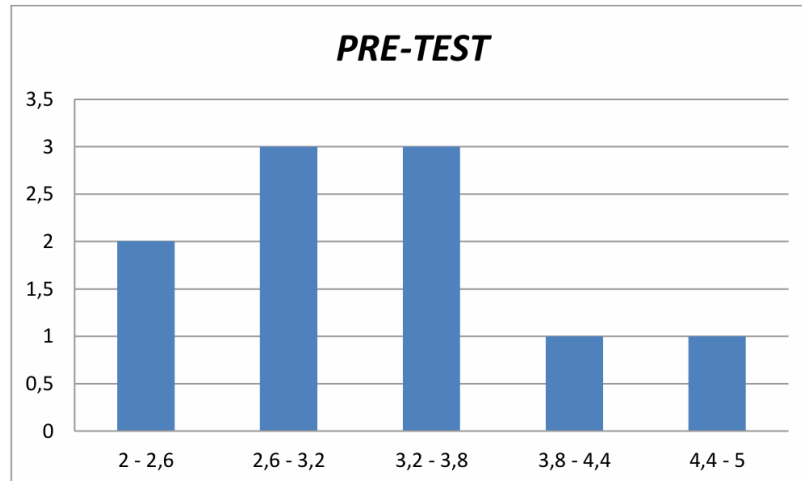
This research was conducted at Private High School Budi Murni 1 Medan, the place used for this research was the Basketball Court of Private High School Budi Murni 1 Medan. This research was conducted in 18 meetings, with the beginning of the pre-test and the end of the post-test. This research was conducted from October 2025 to November 2025. The frequency of training is 3 times a week for six weeks on Tuesdays, Thursdays and Saturdays at 15.00 WIB. The mechanism for carrying out research is to always carry out prayers and check samples, then provide briefings in the form of instructions on the implementation of activities, explaining the procedures for carrying out Wall Shooting exercises and On Your Back Shooting exercises. Then the sample carried out a warm-up, followed by both forms of shooting practice and closed the training session with cooling and prayer.

The implementation of the Wall Shooting exercise and the On Your Back Shooting exercise given is a form of exercise to improve shooting results, especially free throw results. The purpose of this study is to determine the significant influence of Wall Shooting and On Your Back Shooting practice exercises on the increase in free throw results in Boemsa club men's basketball athletes in 2025. Below are the results of the pre test and post test

Frequency Distribution and Histogram Graph Pre – Test and Post – Test Free Throw

Table 1. Frequency Distribution of Free Throw Pre-Test Results

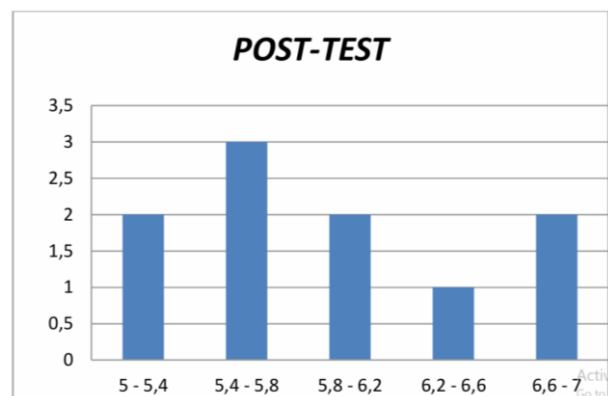
No	Value	Frequency
1	2 – 2,6	2
2	2,6 – 3,2	3
3	3,2 – 3,8	3
4	3,8 – 4,4	1
5	4,4 – 5	1
Quantity		10

**Figure 1. Free Throw Pre-Test Diagram Graph**

The frequency distribution data of the pre-test results processed using the Sturges frequency distribution technique obtained the result, namely the class interval of 0.6. Of the 10 athletes included in the interval class 2-2.6 are 2 people, 2.6-3.2 are 3 people, 3.2-3.8 are 3 people, 3.8-4.4 are 1 person, and 4.4-5 are 1 person. Then after doing a programmatic exercise for 6 weeks with a frequency of training 3 times a week and then taking post-test data as the final test.

Table 2. Frequency Distribution of Post-Test Free Throw Results

No	Value	Frequency
1	5 – 5,4	2
2	5,4 – 5,8	3
3	5,8 – 6,2	2
4	6,2 – 6,6	1
5	6,6 – 7	2
Quantity		10

**Figure 2. Grafik Diagram Post-Test Free Throw**

Data distribusi frekuensi hasil post-test yang diolah menggunakan teknik distribusi The frequency of Sturges obtained the result, namely the class interval which is 0.4. Of the 10 athletes included in the interval class 5-5.4 are 2 people, 5.4-5.8 are 3 people, 5.8-6.2 are 2 people, 6.2-6.6 is 1 person, and 6.6-7 is 1 person. Then after doing a programmatic exercise for 6 weeks with a frequency of training 3 times a week and then taking post-test data as the final test.

2. Testing Requirements Analysis

Normality Test

The normality test aims to find out whether the variables in the study have a normal distribution of data distribution or not. In this study, the normality test using the Shapiro-Wilk method was carried out on the results of pre-test and post-test data in the form of free throws using Wall Shooting and On Your Back Shooting treatments or exercises. The Shapiro Wilk normality test is a statistical method to test whether a sample of data is normally distributed. This test is especially useful for data with a small sample count (usually less than 50). The results of this test will provide a p-value that is used to determine whether the data can be considered normally distributed or not.

Table 3. Normality Test

Variabel	Sig. (P-Value)	a	Remarks
<i>Pre Test Free Throw T-Test</i>	0,072	0,05	Normal
<i>Post Test Free Throw T-Test</i>	0,238	0,05	Normal

Description :

If the sig value > 0.05 , then the research data is normally distributed

If the sig value < 0.05 , then the research data is not normally distributed

In the normality testing of the data using IBM SPSS Statistics 27 using the Shapiro-Wilk method, from the pre-test and post-test columns of variation of shooting practice to improve shooting results, it is known that the significance value of the pre test is $0.072 > 0.05$ and the post test $0.0238 > 0.05$, that the residual value is normally distributed, then it can be concluded that the sample comes from a normal population.

Homogeneity Test

The Test of Homogeneity (Test of Variance) aims to find out whether the variables in the study are homogeneous or not. The purpose of the homogeneity test is to find out whether the sample taken has uniform variance or not. In this study, the homogeneity test aims to determine the variance between the results of pre-test and post-test data for Wall Shooting and On Your Back Shooting training on the increase in Free Throw results in Boemsa club men's basketball athletes in 2025.

Table 4. Homogeneity Test

Variabel	Sig. (P-Value)	a	Remarks
<i>Pre Test Free Throw</i>	0,559	0,05	Homogeneous

Description :

If the value of sig > 0.05 , then the distribution of the data is homogeneous

If the sig value < 0.05 , then the data distribution is not homogeneous

In the homogeneity test of the data using IBM SPSS Statistics 27, from the pre-test and post-test columns of Wall Shooting and On Your Back Shooting exercises to improve the results of free throws, it is known that the significance values are $0.559 > 0.05$, so it can be concluded that the data is homogeneous.

Hypothesis Test

The solution to the problem formulated and the research goal is how much impact the Wall Shooting and On Your Back Shooting exercises will have to increase free throw results in Boemsa club men's basketball athletes in 2025. Therefore, hypothesis testing is carried out with a sample t-test using information from the initial test before being given treatment and information from the final test after being given treatment.

Table 5. T Test

Groups	Correspondence	Sig. (P-Value)	T-Test a	Remarks
<i>Pre-Test</i>	3,1	0,001	0,05	Ha accepted & Ho rejected
<i>Post-Test</i>	5,7			

Description :

1. The sig (2-tailed) value < 0.05 indicates a significant difference between the initial variable and the final variable. This shows that there is a significant influence on the difference in treatment given to each variable.
2. The value of sig (2-tailed) > 0.05 indicates that there is no significant difference between the initial variable and the final variable. This shows that there is no significant influence on the difference in treatment given to each variable

Based on the paired sample test table using IBM SPSS Statistics 27, a significance value (2-tailed) of $0.001 < 0.05$ indicates a significant difference between the initial variable (pre-test) and the final variable (post-test), this shows that there is a significant influence of the Wall Shooting and On Your Back Shooting exercises on the improvement of Free Throw results. Therefore, it can be concluded that there is a significant influence of Wall Shooting and On Your Back Shooting exercises on the increase in Free Throw results in Club Boemsa men's basketball athletes in 2025.

DISCUSSION

The process of carrying out this research, tests were carried out 2 times, namely the initial test and the final test. The initial test or (pre-test) is carried out with the aim of seeing the initial ability or looking for the initial data of Shooting Free Throw skills in the experimental method and the final test (post-test) carried out aims to see the extent of the results of the treatment or treatment applied. From the results of the experiment, whether there is a significant improvement or not from this treatment process, it appears that the ability of Shooting Free Throw is categorized as lacking at the initial test until the final test, the results are better or increased than when conducting the initial test before the sample was given treatment. Which in the early stages of sample training is still relatively lacking with wall shooting exercises and on your back shooting exercises that are programmed systematically and gradually guided by the principles of training which as there is a theoretical study, it has a positive impact on the results of free throw skills in Club Boemsa basketball athletes.

In the normality testing of the pre-test and post-test columns of shooting practice variations to improve shooting results, it was found that the significance value of the pre-test was $0.26 > 0.05$ and the post-test value was $0.08 > 0.05$, that the residual value was normally distributed, then it can be concluded that the sample came from a normal population. In the homogeneity test of the pre-test and post-test columns of Wall Shooting and On Your Back Shooting exercises to improve free throw results, it was known that the significance values were $0.559 > 0.05$, so it can be concluded that the data is homogeneous.

Shooting free throw is a shot made by a basketball offensive player because it is violated by a defensive player during the shooting movement or act of shooting. This shot is taken right in a position behind the free shot line without being guarded by the opposing player according to the rules. The free throw is also an opportunity for a basketball player to get 1 point without being blocked by the opposing player, which is done from behind the free throw line and inside the

semicircle of the basketball court. Based on the paired sample test table, there is a significant difference between the initial variable (pre-test) and the final variable (post-test), this shows that there is a significant influence of Wall Shooting and On Your Back Shooting exercises on the improvement of Free Throw results. Therefore, it can be concluded that there is a significant influence of Wall Shooting and On Your Back Shooting exercises on the increase in Free Throw results in Club Boemsa men's basketball athletes in 2025.

The On Your Back Shooting exercise focuses on improving shooting posture by focusing the hands to shoot the ball at the back of the ball, elbows aligned, releasing with the index finger, follow through, and catching the ball in a position ready to shoot again. This exercise is done while lying down with the idea of a basketball hoop above the head to be used as a shooting target. The ball is shot straight into the air by relying on the wrist stroke gently and smoothly to the maximum height. This exercise strengthens the repulsion and abrasion of the wrist during shooting. The ball goes straight into the air because the athlete is required to recapture the ball after shooting. The athlete's focus is maintained when doing this exercise so that when making the free throw, the athlete remains focused on the basketball hoop which is the main target to enter the basketball. Wall Shooting and On Your Back Shooting exercises improve the player's accuracy, consistency, and ability to enter the ball when making free throws. This exercise makes shooting movements during free throws more efficient and effective, fosters the habit of taking advantage of opportunities, and increases point focus when making free throws in matches.

Based on the results of statistical calculations using the t-test, it is known that Wall Shooting and On Your Back Shooting exercises carried out during 18 meetings have the influence to increase Free Throw results in Club Boemsa men's basketball athletes in 2025. From the average results of the pre-test obtained 3.1 and the post-test obtained 5.7; it can be concluded that the Free Throw in Club Boemsa men's basketball athletes has increased with the increasing number of free throws when making free throws.

The results of this study are supported by research conducted by Meica et al., (2024) which revealed that Exercise On Your Back Shooting can improve the free throw results of basketball players. In addition, in a study conducted by Vidiaflorenza (2023), it was stated that Wall Shooting practice achieved its planned goal. The exercise was analyzed showing that the results between the pre-test and post-test there was an increase in good free throw results. Therefore, it can be concluded that through this study, the provision of Wall Shooting and On Your Back Shooting exercises has a positive effect or can increase free throw results in Boemsa club men's basketball athletes in 2025.

CONCLUSION

The conclusion in this study is as follows: "there is a significant influence of Wall Shooting and On Your Back Shooting exercises on the increase in free throw results in Boemsa club men's basketball athletes in 2025." Therefore, the administration of Wall Shooting exercises has a positive impact on improving the accuracy and consistency of free throw shots, because this exercise helps improve basic techniques such as shot direction, strength, and hand movement coordination. In addition, the On Your Back Shooting exercise also contributes to improving ball control and athlete focus, so overall both training methods are effective in improving the performance of free throws athletes.

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