



The Influence of One-Handed and Two-Handed Training on Free Throw Shooting in the Basketball Extracurricular of SMA Negeri 15 Medan

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Abstract.

Background

Trains throwing power and balance of both hands. Suitable for beginners. Dominant Muscles The upper arm, wrist, and finger muscles of the dominant hand are more active. The shoulder and chest muscles work more evenly because both hands are used simultaneously. Difficulty Level: More difficult because it requires coordination, directional control, and single-handed strength. Easier for beginners to learn because two hands provide more control and power. Advantages: Accuracy and sharper shooting technique, used in professional shooting (jump shot).

Objectives

This study aims to determine the effect of one-handed and two-handed training on shooting free throws in extracurricular activities at SMA Negeri 15 Medan on shooting free throws.

Methods

This type of research is quantitative research with a population and sample of 26 basketball extracurricular students at SMA Negeri 15 Medan. The researcher selected 14 basketball extracurricular students at SMA Negeri 15 Medan. Where in this study used an experimental method.

Results

The results of this study are described based on a previously planned research design. The research design focuses on two independent variables and one dependent variable to demonstrate the difference between shooting a free throw using one hand and two hands. This is based on the results of experiments conducted during the study.

Conclusion

Basic Technique: Place the ball in your dominant hand, bend your elbow at a 90° angle, and push the ball upward with just one hand. Hold the ball with both hands at chest level or above your head, then push it forward simultaneously. The focus of this exercise is to develop accuracy, shot control, and dominant-hand coordination.

Keywords: One Hand Shooting Practice, Two Hand Shooting Practice, Free Throw Shooting.

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INTRODUCTION

Law Number 3 of 2005 concerning the National Sports System includes a point of aim to improve sports achievements. In line with this, the world of education also has the same goal as stated in Law Number 20 of 2003, namely to develop the potential of students to become people of faith, piety, noble character, health, and knowledge. Furthermore, the 2004 Minister of Education and Culture Regulation stipulates regulations in the world of education regarding extracurricular activities in educational units which explain that extracurricular activities are curricular activities carried out by students outside of school hours, intracurricular activities and co-curricular activities, under the guidance and supervision of educational units. For educational units at the SMA (Senior High School) level, Basketball is the dominant sport that is of interest to students. This can be seen from the many competitions that are held in tiered forms and are routinely held every year.

Medan State Senior High School 15 is one of the schools that has a Basketball extracurricular, according to records it can be said to regularly participate or hold basketball matches and competitions in the city of Medan. Judging from the history of its formation until now, the Medan State Senior High School 15 Basketball Extracurricular has won several competitions, but for the last 2 years after the Covid-19 pandemic, the school's Basketball Extracurricular has experienced a decline. For example, in the last 2 competitions they participated in ISOIKI Series VII, the school was only able to place 3rd in the group phase in Division 2, which made them not continue to compete in the next phase. The CKS Basketball Competition

of Medan State Senior High School 15 also had to stop in the group phase after being defeated by Welington school with a score of 56-44 and again lost to CKS with a score of 65-53.

In line with Based on this, the author feels the need to find the cause of this happening. To get the correct information and from the right source, the author conducted a direct observation of the Basketball field of SMA Negeri 15 Medan to conduct interviews with extracurricular coaches and players. The observation itself was carried out on Monday, November 19, 2024 with the first source being the Coach Based on the results of observations with coach Murviyana, S.Pd, it was concluded that in matches, players in the team are often unable to take advantage of advantageous situations, when getting a free throw or Free Throw. As one example, according to school match record data, it was found that in the match against W. Supratman, the number of free throw shots obtained from all players in 4 quarters was 9 free throws due to fouling by opposing players and 3 team fouls. However, from all these opportunities, the team only got an additional 4 points. From the results of the interview, the author concluded that there was a problem when students got free throw opportunities, which caused the team to lose the opportunity to add points. In line with the opinion (Apifa, 2020) who wrote that in basketball, free throws (free shots) bet a very strong contribution to a team's victory, according to Wicaksono in (Adresta and Chandra, 2020) shooting is one of a series of basic basketball techniques that must be mastered by players and is the ultimate weapon when scoring points.

Based on this, the author concludes that the shooting ability obtained during the free throw of the player is still lacking. Furthermore, directly proportional to the coach's statement, he also said that there are still problems with the hand when shooting. Furthermore, all of these things were confirmed by the player, according to the player, it felt less than optimal in the hand when shooting. Next, in the second observation, the author conducted an assessment by paying attention to the basic mechanics when shooting, namely, eye view, balance, hand position, elbow adjustment, and shooting rhythm (Heri Rustanto, 2017). From the results of the direct assessment conducted, the author saw several fundamental things that still need to be improved, especially in hand position. The hand that the author means starts from the position of the hand when holding the ball, lifting the ball before finally shooting, the weak shooting accuracy is a problem that arises because the hand is still not perfect to carry out the sequence of movement stages when shooting.

Based on the theory of sports, Bumpa in his book says that there are several factors that can improve the ability to exercise. One of them is the capacity of movement. Based on this, the author assumes that the improvement of shooting ability can be improved. The author intends to provide treatment through repetition and providing training loads in the form of variations of exercises arranged in the program. Where the variations in question are divided into two parts, namely between using one hand and using 2 hands. Based on this explanation, the researcher concluded that there needs to be a variety of exercises to help players improve their shooting abilities.

METHOD

Research Design

This research uses a qualitative approach. The qualitative approach itself is called the postpositivistic method because it is based on the philosophy of postpositivity and is used to research natural object conditions where the researcher is the key instrument.

Participant

A population is a generalized area consisting of objects with certain characteristics (Sugiyono, 2014:117). The population in this study was all students at SMA Negeri 15 Medan. The sample in this study was male students who participated in the basketball extracurricular at SMA Negeri 15 Medan. To determine the sample, the study used purposive sampling. From a population of 26 people, the researcher selected 14 students.

Data Analysis

Sample data collection was conducted through interviews and direct observation by the author. The data collection method is "by what means and how the data needed so that the final research results can present valid and reliable information." The interviews and observations were conducted before the training program in the study was carried out. From the interviews and observations, several points were obtained that became the researcher's considerations in designing the entire program and stages in the study.

RESULTS AND DISCUSSION

Results

The results of this study indicate that two-handed free throw shooting practice is more effective in improving student performance than one-handed practice. This may be due to several factors, including: two-handed practice provides more stable control and strength, making it easier to master, especially for beginners; and more balanced muscle coordination, reducing difficulty in directing the ball.

Conversely, one-handed techniques, which require greater coordination and specific dominant muscle strength, require longer and more intensive training for optimal results. In this study, the duration and intensity of the training were likely insufficient to produce significant improvements. Interviews with students demonstrated a good understanding of the technique and the importance of a practice routine, but also indicated that ongoing practice and evaluation are essential to solidify free throw shooting skills, particularly one-handed technique.

Table 1. Comparison of Free Throw Shooting Results from the Pre-Test and Post-Test

Group	Name	Pre Test			Post Test			Description Results
		Total	Average	Information	Total	Average	Information	
One Hand	Yunus Simamora	12	2	Enough	16	3	Enough	Increase
	Christopher Lubis	11	2	Enough	15	3	Enough	Increase
	Mhd. Aditya R	14	3	Enough	16	3	Enough	Increase
	Mario	13	3	Enough	14	3	Enough	Increase
	Wira	14	3	Enough	14	3	Enough	Tidak Meningkat
	Diaz	12	2	Enough	15	3	Enough	Meningkat
	Muhammad N	17	3	Enough	15	3	Enough	Tidak meningkat
Two Hands	Andrew S	17	3	Enough	23	5	Good	Increase
	M Fahdil	17	3	Enough	25	5	Good	Increase
	Yosua	18	4	Good	30	6	Very good	Increase
	Mhd Al Fajar	17	3	Enough	28	6	Very good	Increase
	Mhd Mario	17	3	Enough	30	6	Very good	Increase
	Dhimas Hariyadi	18	4	Good	30	6	Very good	Increase
	Fransisco	15	3	Enough	28	6	Very good	Increase

Discussion

The results of the study showed that two-handed free throw shooting practice was more effective in improving student performance than one-handed practice. This finding indicates that the two-handed technique provides a greater initial advantage, especially for students still in the basic stages of learning shooting skills. Biomechanically, using two hands allows for more stable ball control and a more even distribution of force, making it easier for students to direct the ball to the basket with greater accuracy. This stability also helps reduce technical errors common among beginners, such as imbalanced body position and inaccurate ball release.

Furthermore, muscle coordination in the two-handed technique tends to be more balanced because it involves both sides of the body simultaneously. This makes it easier for students to adjust the power of their push and the direction of their shot, accelerating the learning process and seeing results in a relatively short

time. Thus, the two-handed technique can be considered an effective approach to building a foundation for free-throw shooting skills.

In contrast, one-handed free throw shooting training requires a higher level of coordination, dominant muscle strength, and consistent movement. This technique requires mastery of more complex body mechanics, such as balance, wrist control, and precise ball release. In this study, the duration and intensity of the training were suspected to be insufficient to produce significant performance improvements in the one-handed technique group. This is in line with student interview findings, which indicated a good understanding of the technique's concepts, but not yet fully supported by regular practice habits and ongoing evaluation.

Based on these results, it can be concluded that two-handed free throw shooting practice is more appropriate for early learning, while one-handed practice requires a more structured, long-term, and intensive training program to achieve optimal results. Therefore, teachers and coaches are advised to adapt training methods to students' abilities and provide ongoing evaluation and support to improve the effectiveness of free throw shooting instruction.

CONCLUSION

Based on the research results and the data obtained, the conclusions of this study are as follows: 1. There is a difference in the effect of one-handed and two-handed training variations on students' free-throw shooting ability. This is evident from the statistical test results, which show that the two-handed training variation provides significant improvement, while the one-handed training variation does not. 2. The one-handed training variation does not provide a significantly better effect on free-throw shooting ability compared to the two-handed training variation. Although there was an improvement in post-test results, this improvement was not statistically strong enough. 3. The two-handed training variation provides a significantly better effect on free-throw shooting ability compared to the one-handed training variation. This training is more effective in increasing the number of successful shots and may be a more appropriate method for developing the shooting skills of beginner students.

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AUTHOR CONTRIBUTION STATEMENT

Penelitian ini dikonseptualisasikan dan dirancang oleh Abram Frans Yonathan L. Tobing yang mengembangkan tujuan dan metodologi penelitian serta mengelola pengumpulan data, berkoordinasi dengan partisipan, dan mengawasi kerja lapangan di STOK Bina Guna Medan. Ramadan melakukan analisis data, menginterpretasi temuan, dan berkontribusi signifikan dalam penyusunan naskah. Semua penulis berpartisipasi dalam revisi naskah, menyetujui versi final untuk diserahkan, dan bertanggung jawab penuh atas integritas dan keakuratan karya.

CONFLICT OF INTEREST AND FUNDING

The authors declare no conflict of interest related to the conduct, authorship, or publication of this study.

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