



## The Effect of Drill Practice on Students' Underhand Passing Skills

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**Abstrac:** The problem addressed in this study is the effect of drill method training on the underhand passing skills of extracurricular students at SMAN 1 Enam Lingkung Padang Pariaman. This study aims to determine the effect of drill method training on the underhand passing skills of extracurricular students at SMAN 1 Enam Lingkung Padang Pariaman. This study is a quasi-experimental study. The research design used a 'one group pretest-posttest' approach. The research subjects were 20 extracurricular players from SMAN 1 Enam Lingkung, consisting of 12 boys and 8 girls. Using purposive sampling, the sample size for this study was 8 female players. The research instruments used were pre-tests and post-tests. Data analysis techniques used t-tests. Based on the results of the study, there was a significant effect of drill method training on the underhand passing skills of extracurricular students at SMAN 1 Enam Lingkung. This is indicated by the average pre-test score of 26, while the average post-test score increased to 47 (an increase of 19), obtained from the T-test, namely ( $t\text{-count } 51.002 > t\text{-table } 1.860$ ). Therefore, it can be interpreted that the treatment of providing training through rode drills based on an approved training programme can have a positive effect on underhand passing ability.

**Keyword:** Drill method training, Underhand passing skills, Volleyball, Extracurricular.

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## INTRODUCTION

Sport plays a role in the community, so nowadays it is closely linked to sporting activities, ranging from improving physical health to winning championships, which can shape society and improve its quality. Sports achievements are the results of the efforts made by athletes or teams in terms of their ability and skills to complete movements, both in training and in competitions. Achieving high sports achievements is not easy, as it requires systematic, diligent, and continuous planning and training over a long period of time. High achievements can also be obtained if supported by talented athletes in their prime (Liqiang et al., 2024).

From the above description, it can be said that serious training is essential to improve athletes' performance. Meanwhile, in order to improve athletes' performance, continuous training efforts are also needed, which are constructive, scheduled, and aimed at improving the quality and performance of athletes. Achieving success is not easy because training athletes also requires a lot of effort to create good athletes who can bring pride to their region, nation and country. Of the many sports that are currently being developed, one sport that has gained attention is volleyball. Volleyball is a game or sport that is very popular among Indonesians and is part of the school physical education curriculum (Hoedaya & Rohendi, 2021). It is mandatory to teach volleyball in physical education classes and even needs to be improved at higher levels. Volleyball is a team sport, but mastering the basic techniques independently is essential. This means that in the early stages of training, emphasis must be placed on mastering the basic techniques (Ikadarny et al., 2023).

As a competitive sport, the development and training of volleyball must be carried out continuously through practice and a greater focus on proper technique, tactics and strategy. The techniques in volleyball consist of: serving, passing, smashing and blocking. With the correct techniques, players can execute beautiful movements, effective attacks, and strong defence. Therefore, athletes must be monitored for their development and given guidance to enable them to compete effectively and achieve high levels of performance at the regional, national, and international levels (Rizki Y & Nining W, 2021).

Volleyball is a team game played by two teams facing each other with six players per team. Volleyball is a game played by teams consisting of six people, separated by a net, and the ball is only played once (Saputra & Aziz, 2020). Volleyball is played on a court measuring 18 metres long and 9 metres wide, with a net height of 2.43 metres for men and 2.24 metres for women (Amelia, 2024). Meanwhile, according to (Umar & Prasetyo, 2020) 'volleyball is a team sport played by men and women. Most people play volleyball to fill their free time, work up a sweat, and achieve accomplishments that help them continue their education to a higher level.' Volleyball is a sport that is very popular among the public, played by two teams with six players each (Dimas Anggara, 2019). To master these basic techniques, one must continuously practise them and repeat them from a young age until one becomes truly proficient. Techniques—Volleyball is one of the most popular and competitive sports worldwide, involving techniques such as serving, passing, blocking, and smashing (Barlian & Anpolu, 2021). Volleyball is a simple recreational game played indoors (Liu, 2022). Later, it developed into a game that could be played outdoors and became a popular sport among all levels of society (Hidayat et al., 2020). Volleyball is a sport played by two teams on a court divided by a net. The objective of the game is to pass the ball over the net so that it falls on the opponent's court and to prevent the opponent from doing the same. Each team can play three bounces to return the ball (Kurniawan & Irsyada, 2013).

As a competitive sport, the development and training of volleyball must be carried out continuously through practice and a greater focus on proper technique, tactics and strategy. According to Mardela (2016), inadequate motor skills can have a negative impact on physical competence and motor activity in later life. According to Hermanzoni (2017), passing is a technique in volleyball that aims to pass the ball to a certain place or to a teammate in order to play it again and can also be said to be the first step in organising an attack on the opposing team. Passing technique in volleyball is important because it greatly determines the quality of a team's attack. A pass is a form of presenting the ball to a teammate so that the ball is crossed into the opponent's area in the form of an attack.

According to Mulyanto & Prabowo (2024) the underhand pass is a basic technique that volleyball players must master, as it is very useful for receiving the opponent's serve and smash, then passing the ball to the setter so that they can deliver a good pass to the smasher. The underhand passing technique must be practiced intensively to maximize passing accuracy, and when performing an underhand pass, the setter receiving the ball must form a good attack pattern for the smasher. According to Noor et al., (2023) Underhand passing is a basic technique in volleyball that must be mastered by volleyball players, where this underhand pass is very useful for receiving the serve and then passing it to the setter to make it easier for them to provide a good pass to the smasher. Underhand passing must be practised well so that the accuracy of the pass can be maximised. Haloho (2022) states that underhand passing is a way of playing the ball using both arms intertwined or with one arm. The ball is passed above the wrist. A volleyball player's ability to perform underhand passing well and correctly has many benefits, especially for receiving hard and sharp balls such as overhead serves or smashes.

SMAN 1 Enam Lingkung is located in Enam Lingkung Subdistrict, Padang Pariaman Regency. SMAN 1 Enam Lingkung is one of the schools that has fairly good facilities and infrastructure in the field of sports. SMAN 1 Enam Lingkung is one of the schools that conducts extracurricular activities every Tuesday, Wednesday, and Friday, starting at 4:00 p.m. However, despite the fact that the available facilities are quite good and the extracurricular schedule is carried out regularly, in reality there are still several obstacles in the implementation of training. This was seen during the inter-school competition in Padang Pariaman, where the SMAN 1 Enam Lingkung extracurricular team suffered a defeat and was only able to place 4th, and finally only made it to the top 8 in the provincial competition. To win a match, a deadly attack is needed to score points. One of the keys to this is the underhand pass. Ideally, a good underhand pass can be seen from the passing ability of the players to the team's setter, so players must master the basic techniques of underhand passing and be supported by good technique. A good underhand pass can be effectively fed by the setter, enabling the team to launch a counterattack against the opponents with a sound strategy. This results in the ball landing in the opponents' territory, allowing the team to score points and ultimately win the match.

However, in reality, the underhand passes made by the extracurricular students of SMA N 1 Enam Lingkung often result in failed attacks on the opponent's court, such as underhand passes that are off target and do not reach the setter, underhand passes that are too sharp, improper passing techniques, or underhand passes that do not reach the setter, resulting in failed counterattacks that make it difficult for the extracurricular students of SMA N 1 Enam Lingkung to score points. After conducting observations, the researcher concluded that the underhand passing skills possessed by the extracurricular students of SMA N 1 Enam Lingkung are currently not good enough, resulting in underhand passes that cause failed counterattacks or failed to organise attacks with good strategies by the team.

## METHOD

The purpose of this study was to determine the effect of drill training methods on the underhand passing skills of extracurricular students at SMAN 1 Enam Lingkung Padang Pariaman. This study used a quasi-experimental method. The design of this study used a one-group pre-test post-test design, which is an experimental study conducted in an experimental group without a comparison group (William & Hita, 2019). This study has one independent variable and one dependent variable. The independent variable (X) in this study is drill training, while the dependent variable is underhand passing ability (Y).

The research was conducted at the volleyball court of SMA N 1 Enam Lingkung, Padang Pariaman. The research, including tests and treatment, was carried out from June to July 2025. The population in this study consisted of all 20 volleyball extracurricular students at SMAN 1 Enam Lingkung, comprising 12 boys and 8 girls. The sampling technique used was purposive sampling. According to Sugiyono, (2015), purposive sampling is a technique in which samples are determined based on specific considerations. In this study, the author only researched female students because they often competed and were more active in training than male students, making the research more practical and efficient in terms of data collection. Therefore, the

researcher determined the number of samples to be studied, namely 8 extracurricular volleyball players from SMAN 1 Enam Lingkung.

The measurement tool used is the Brumbach Forearms Pass Wall-Volley Test by Cox Richard (1980:102) The validity coefficient is 0.80 with passing skills in game situations as the criterion and reliability as high as 0.896. This test aims to measure the ability and accuracy in performing underhand passes by volleying against a wall.

The data analysis techniques used in this study were normality tests and hypothesis tests. Normality tests were conducted to determine whether the data were normally distributed, which is a prerequisite for parametric analysis. After confirming normality, hypothesis tests (using t-tests) were applied to determine whether there was a significant effect of the drill training method on students' underhand passing skills.

## RESULT

### Preliminary Test Results (Pretest)

This study is an experimental study aimed at determining the effect of drill training methods on the underhand passing skills of extracurricular players at SMAN 1 Enam Lingkung, Padang Pariaman. Technical skills were measured twice, namely before treatment (pretest) and after treatment (posttest).

In the pretest stage, the results of the underhand passing ability measurement of 8 samples showed the highest score of 33 and the lowest score of 21, with an average of 26 and a standard deviation of 3.78. This illustrates that the students' initial abilities were still moderate. After being given treatment in the form of training using the drill method, a posttest was conducted to see the change in ability. The post-test measurement results showed a highest score of 60 and a lowest score of 29, with an average of 47 and a standard deviation of 12.06, indicating a significant improvement in underhand passing skills.

For further clarification, the following table shows the pre-test and post-test results of the underhand passing skills of extracurricular players at SMAN 1 Enam Lingkung Padang Pariaman.

Tabel 1. Frequency Distribution of Underhand Passing Ability Scores

Classification	Pretest		Classification	Posttest		Category
	Frequency	Percentage (%)		Frequency	Percentage	
> 31	1	13%	> 65	0	0%	Very good
27 - 30	1	13%	53 - 64	3	38%	Good
24 - 26	4	50%	41 - 52	2	25%	Fair
20 - 23	2	25%	29 - 40	3	38%	Poor
< 19	0	0%	< 28	0	0%	Very poor

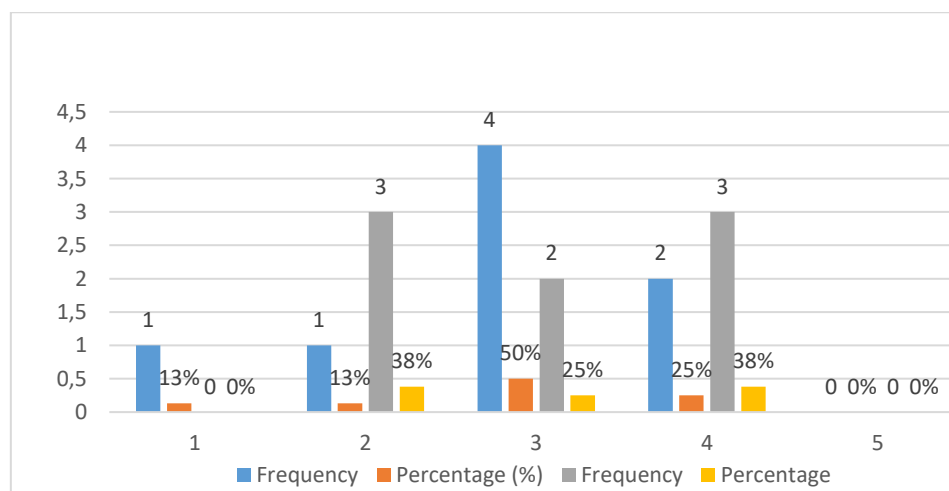


Figure 1. Frequency Distribution of Underhand Passing Ability Scores

Based on the table above, pre-test data on the underhand passing skills of extracurricular volleyball players at SMAN 1 Enam Lingkungan Padang Pariaman shows that out of 8 students, 1 student (13%) was in the excellent category, 1 student (13%) in the good category, 4 students (50%) in the fair category, and 2 students (25%) in the poor category. After applying the drill training method, the post-test results showed a significant improvement. A total of 3 students (38%) achieved the good category, 2 students (25%) were in the fair category, and 3 students (38%) remained in the poor category. Although no students achieved the excellent category in the post-test, the number of students in the good category increased substantially compared to the pre-test.

This change indicates that the drill training method has a positive impact on improving students' underhand passing skills. The distribution of skill levels shifted from predominantly fair and poor in the pretest to more good performance in the posttest. Therefore, it can be concluded that consistent drill training effectively improves students' technical abilities in volleyball underhand passing.

### Normality Test

The pretest and posttest data for the underhand passing drill were tested for normality with a significance level ( $\alpha$ ) = 0.05. The results of the test were obtained and analysed using Excel.

Table 2. Frequency Distribution of Final Test Results (Post-test) for lower passing ability

Extracurricular players from SMAN 1 Enam Lingkungan Padang Pariaman		N	L <sub>count</sub>	L <sub>table</sub>	Distribution
The influence of drill method training	<i>Pre-test</i>	8	0,267	0,285	Normal
	<i>Post-test</i>	8	0,070	0,285	

Based on Table 2 above, the pretest data in the normality test column shows the researcher's calculation results in the normality test of the research group above, which obtained an initial test of L<sub>count</sub> of 0.267, which is smaller than L<sub>table</sub> 0.285. Then, there is a final test of L<sub>count</sub> of 0.070 and L<sub>table</sub> of 0.285 at a significance level of 0.05. Thus, it can be concluded that all groups of researcher data were taken from a normally distributed population and can therefore be used for testing research hypotheses.

### Hypothesis Testing

The hypothesis proposed is 'there is an effect of drill training methods on the underhand passing ability of extracurricular students at SMAN 1 Enam Lingkungan, Padang Pariaman'. Based on the t-test analysis conducted, the results of the t-test analysis can be seen in the following table.

Table 3. Results of the t-Test for Underhand Passing Ability

Variable	Average	N	T <sub>count</sub>	T <sub>table</sub>	Description	
The effect of drill training	<i>Pre-test</i>	26	8	51,002	1,860	significant
	<i>Post-test</i>	47				

Based on the table, there is an effect of the drill training method on the underhand passing ability of students in the Extracurricular Programme at SMAN 1 Enam Lingkungan, Padang Pariaman, with an average pre-test score of 26 and a post-test score of 47. Furthermore, the results of the mean difference test (t-test) showed a t-count of 51.002, while the t-table was 1.860 with a significance level of  $\alpha$  = 0.05 and n = 8. In accordance with the above decision-making concept, t-count > t-table (51.002 > 1.860). Thus, it can be concluded that there is an effect of the drill training method on the underhand passing skills of students in the Extracurricular Programme at SMAN 1 Enam Lingkungan, Padang Pariaman.

### DISCUSSION

Based on the results of research conducted in the field, it can be proven that there is an effect of drill training methods on the underhand passing skills of students in the extracurricular

programme at SMAN 1 Enam Lingkung, Padang Pariaman. Before the treatment was given to the research sample, a preliminary test was conducted. Based on the results of the initial test, the average underhand passing ability was 26. However, after the treatment was given, there was an increase with an average of 47.

This was further reinforced after the researchers conducted a t-test, which yielded a t-value of 51.002, which was greater than the t-table value at a level of  $\alpha = 0.05$  with  $N = 8$  of 1.860. Thus, the results of this study indicate that the proposed hypothesis can be accepted as true. In other words, it can be concluded that there is a significant effect of drill method training on underhand passing ability. Passing under in volleyball is a basic skill. These techniques have several factors, namely: facilities and infrastructure, training programmes, motivation, discipline, and forms of training. Sports facilities and infrastructure in education are inseparable in terms of education. There is a mutual relationship between the two. Facilities are things that can be used and utilised in the implementation of sports or physical education activities.

Meanwhile, infrastructure is something that facilitates or streamlines tasks and is relatively permanent in nature (Bajuri et al., 2018). To achieve the highest level of performance in sports, especially tennis, athletes must continue to train through a systematically structured programme that can be carried out regularly and repeatedly. Training refers to the activities or exercises that an individual performs in a systematic and progressive manner to achieve specific goals. According to Bompa and Carrera (2015), training is a programme for developing athletes for a specific activity through improving skills and energy capacity. Systematic here can be interpreted as a training process that is carried out regularly, planned, methodical and continuous from simple to difficult. Meanwhile, repetitive can be interpreted as each training movement being carried out gradually and repeatedly so that movements that were previously difficult to do become easy to do. Therefore, a training programme is very necessary in training (Bule Jefri & Donie, 2020). Athlete discipline also plays a role in training. Discipline is a tool for creating human behaviour and order as a community. Motivation in training also influences training because motivation is an important driving force in training, helping and maintaining efforts to achieve desired results (Purnomo et al., 2020).

The drill training method is a teaching method that uses repeated movements to strengthen and perfect skills so that they become permanent. This method is effective for improving underhand passing skills in volleyball because it is done repeatedly so that movements that were initially difficult become easy to master. Isman et al., (2020) in a study at SMK Negeri 1 Sengah Temila also found that the drill method significantly improved the underhand passing skills of extracurricular participants, with an average score increase from 18 to 21, a percentage increase of 19.46%. Statistical tests showed that the t-value of 15.789 was greater than the t-table value of 2.039, thus proving that the drill method was effective in teaching underhand passing (Ramadoan et al., 2023). Mastery of technical components through repetition allows basic technical movements such as underhand passing to be mastered perfectly. This can also improve players' agility, speed, and accuracy in passing techniques (Fuchs et al. 2019).

In general, based on expert reviews and research results, the drill training method is very effective in improving the underhand passing skills of volleyball players. This method provides repetitive learning, focuses on the correct technique, and offers progressive improvement so that underhand passing skills increase significantly. With this in mind, it can be used as input for coaches in conducting training to improve and enhance underhand passing skills. Although this study shows positive results, there are several limitations that need to be considered. First, the sample size used was relatively small ( $N = 8$ ), so the results of this study cannot be generalized widely. Second, the short duration of the study meant that the researchers were unable to assess the extent to which underhand passing skills could be maintained in the long term. Third, external factors such as motivation, physical condition, and students' previous playing experience could not be fully controlled, which may have affected the results of the study. Finally, this study was only conducted in one school, so differences in facilities, coach quality, and training environments in other schools may produce different results.

## CONCLUSION

Based on the results of the study, it is known that there is a significant effect of the drill training method on the underhand passing ability of volleyball extracurricular students at SMAN 1 Enam Lingsung, Padang Pariaman. This is evidenced by the t-test results, which show that the calculated t-value (51.002) is greater than the table t-value (1.860) at a significance level of 0.05, with a pretest average score of 26 and a posttest average score of 47. These findings indicate that the regular and repeated application of the drill method can effectively improve basic underhand passing skills.

The results of this study have implications for coaches and physical education teachers to apply the drill training method as an effective learning strategy in improving basic volleyball skills. Systematic and repetitive training helps students master movements better, improve concentration, and strengthen movement coordination. For further research, it is recommended to involve a larger sample and longer training time, as well as to examine the effect of the drill method on other basic techniques or psychological factors such as motivation and training discipline, so that the research results can be more comprehensive and useful for the development of sports science.

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