



The Effect of The Drill Training Method on Increasing the Accuracy of Volleyball Services

Yudhi Kharisma¹, Moch.Zakky Mubarak², Bagus Hermawan³

^{1,2,3} Pendidikan Jasmani Kesehatan dan Rekreasi, STKIP Nahdlatul Ulama Indramayu, Indonesia

email: yudhi_kharisma@stkipnu.ac.id, mubarokzakky10@gmail.com

 : <https://doi.org/10.20884/1.paju.2024.5.2.11693>

Abstract

This study aimed to examine the method to improve the accuracy of the upper serve in volleyball games. The method applied is experimental with a pretest-posttest design. The research participants are 20 female active students of SMPN 1 Tukdana who attend volleyball extracurricular activities. The treatment provided is top-service training using the drill method with target aids. The instrument utilized was the volleyball skills test from Russell-Lange. This skills test measures the level of service mastery in volleyball. The research results obtained an average initial test of 14.75, a final test of 25, a standard deviation of the initial test of 3.08, and a final test of 4.59. Data analysis results of normality test L count $<$ L table is 0.04. This number stated the normal result because its value is lower than the maximum passing grade ($<$ 0.20). Due to the results of the calculations, t count $<$ t table, specifically 1.73, is $<$ 2.10, which means that H_0 is accepted. The results reveal that applying the drill training method effectively improves the quality of the volleyball top serve.

Keywords: Training Method, Practice Drill, Accuracy, Volleyball Service

INTRODUCTION

Physical education is a compulsory subject in the school curriculum, from elementary to high school. As Lauh (2016) explains, "Physical education is an educational process that involves physical activity with tools to achieve educational goals." This statement indicates that physical education in teaching instills a spirit of solidarity, togetherness, tolerance, and cooperation. Kharisma et al. (2022) strengthen this statement by stating that physical education, sports, and health are among the subjects. The physical education, sports, and health curriculum is an integral part of the program national education and aims to develop aspects of physical fitness and skills movement, critical thinking skills, social skills, reasoning, emotional stability, action morals, healthy lifestyles, and introduction to a clean environment through providing learning experiences using

Correspondent Address: STKIP Nahdlatul Ulama Indramayu, Indonesia

Email : yudhi_kharisma@stkipnu.ac.id



Jurnal Physical Activity Journal (PAJU) This work is licensed under a [Creative Commons Attribution 4.0 International License](#).

selected physical activities and carrying them out systematically (Junaedi & Wisnu, 2016). Physical education is part of comprehensive education that prioritizes physical activity and healthy living coaching for harmonious and balanced physical, mental, social, and emotional growth and development. Besides mandatory subjects, students' sports guidance activities are obtained through extracurricular activities.

Extracurricular activities are development and coaching accomplished by students beyond teaching and learning activities. In extracurricular activities, students are more active and have more time to develop themselves and improve their quality or potential. Extracurricular activities are also educational activities outside of class hours that help develop students according to their needs, potential, talents, and interests. This benefit could be reached through activities organized by students and education personnel with the ability and authority at school (Wiyani, 2013). Extracurricular activities in schools are more centered on a continuous training process. This training process demands an increase in the quality of skills students retain and develops potential in the sports field.

Training is all the power and effort to improve the desired ability. According to Mubarok (2021), training can be interpreted as a repetitive process of practicing or working on activities with an increasing task or exercise load. Furthermore, Sidik(n.d.) explains that training consists of various forms of brushes and movements, directed and repeated, with increasing loads to improve ability efficiency. The kind of sport that requires repetitive training is volleyball. Volleyball is familiar and widely found both in cities and rural areas. Volleyball has

rapidly developed due to its application at every school level.

A volleyball game is played by two teams that aim to drop the ball into the rival's area using their hands, and each team consists of 6 people (Kharisma, 2019). Furthermore, Yudiana (2010) stated that volleyball is played back and forth over the net/net, intending to drop the ball in the rival's field plot to seek achievement. Volleying and bouncing the ball into the air can use any body part if the impact is perfect (Junpalee et al., 2023). Volleyball games at the high school level are played similarly to collegiate volleyball based on a rally system for scoring. It allows the rival team to gain a point if our team fails to follow a rule.

Serving is the first

basic technique in volleyball games that players should master. This basic technique initiates the game and attacks to get points. The type of service is divided into 2, specifically up and down services. According to Yudiana (2010), "The serve is the first blow to start the game. The serve is produced from the service area into the rival's field over the net".

According to Beuthelestahl, "The serve is the first touch with the ball; at first, the serve was not solely considered as the first blow, but it developed into a powerful weapon to attack" (Saifudin, 2023). Serving complicates the rival and takes it in to score points. A team of players with passing, hitting, and good blocking skills will win if we can serve correctly.

Based on the problems researchers face, observations during training, and extracurricular activities, the main problem is the requirement for more serviceability. The service

ball often fails to pass over the net. A specific method is offered to overcome the basic problem. Applying the drill method in volleyball serving training is expected to solve a basic problem. The drill method has been proven in previous studies to improve the basic technique ability

and quality effectively (Krističević et al., 2016). Besides improving basic serviceability, the drill method develops technical skills and decision-making ability.

Selecting a suitable method is the key to successful training; this can be proven in games, especially volleyball. The practice arrangement of this drilling method consists of the continuous repetition of movements, increases the intensity of athletes' movements, upholds discipline, and automates athlete movements

(Aknasari et al., 2021). Align with Irwanto (2017) stated, "The drill method is an exercise or training method which is an adequate way of teaching to instill certain habits. Also as a means of obtaining a dexterity, accuracy, opportunity, and skill ". It is necessary to use the drill training method continuously and pay attention or analyze the movements in accomplishing a good and correct serve to improve the direction of the accuracy of the serve due to lack of service training. In its implementation, this service's accuracy applies the drill training method by using targets to achieve the desired goals.

The function of applying this drill method is to perfect a movement or basic technique in a volleyball game. With a structured exercise, the player's skill level will be

able to develop thoroughly. This research is essential to solving the basic volleyball problem at the junior high school level. This research focuses on the effectiveness of the drilling method for basic serving ability in volleyball games.

METHOD

The research is utilizing the experimental method. Regarding Ginanjar (2019), experimental research is simply a research method that seeks treatment/treatment controlled to test the hypothesis of a causal relationship. The population in this study was 20 volleyball extracurricular students at SMPN 1 Tukdana. The sample used was purposive sampling. Based on opinion (Ginanjar, 2021), "Purposive sampling is sampling with certain considerations or determining research samples with specific objectives ." Ball serving ability was measured through pretest and posttest. The respondents' initial abilities were measured and then measured again after receiving treatment by applying the drill method. The instrument employed is the volleyball skills test from Russel-Lange (Winarno, 2006). This skill test measures the level of mastery of the serve in volleyball.

The hypothesis in this research consists of H0 and H1.

H0: The drilling method able to improve volleyball serviceability

H1: The drilling method is not able to improve volleyball serviceability

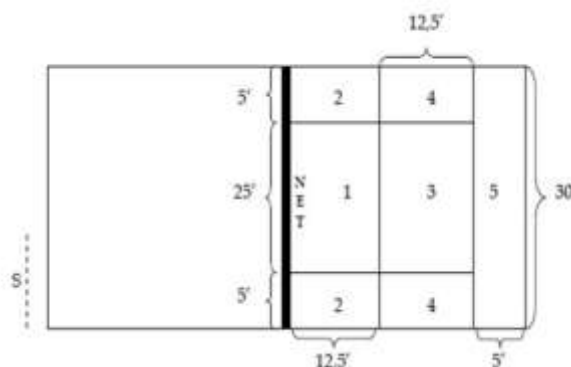


Figure 1. Shape and Size of Service Test Instrument

RESULT

The data acquired from the volleyball service skill test results are based on the initial test results (pretest) and the final test (posttest), according to the volleyball skill test instrument.

Table 1. Volleyball serve pretest and posttest

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	20	10	20	14.75	3.08
Posttest	20	19	35	25	4.59

Table 2. Test of Normality

The normality test was carried out using Microsoft Excel. The sample criteria are normally distributed if the P-value > 0,05.

Test of Normality	L Count	L Table	Description
Pretest -Posttest	0,044	0,198	Normal

Based on the data from the table above, the data from the normality test analysis results can be concluded that if L count < L table, then H0 is accepted. Because L count < L table, specifically 0.04 < 0.19, H0 is accepted, or the distribution is "NORMAL." This result means that the measuring instrument is feasible.

Table 3. Test of Hypothesis

t-Test: Paired Two Sample for Means		
	POSTEST	PRETEST
Mean	25	14,5789474
Variance	22,2222222	9,36842105
Observations	19	19
Pearson Correlation	0,85092802	
Hypothesized Mean Difference	0	
Df	18	
t Stat	17,125909	
P(T<=t) one-tail	6,8823E-13	
t Critical one-tail	1,73406361	
P(T<=t) two-tail	1,3765E-12	
t Critical two-tail	2,10092204	

The data show that the t count is 1.73 and the r table is 2.10. It can be concluded that H0 is accepted because t count < t table. H0 is accepted because the value of the t count is less than the t table calculation results in 1.73 < 2.10. The conclusions obtained are the same. Data from analysis of hypothesis testing t-Test: Paired Sample for Means

DISCUSSION

Several factors must be considered to improve sports achievement. One of them is a training method; a structured method can improve the quality of a skill. Providing a suitable training method will impact the athletes. The drill method was applied to the volleyball training process, especially regarding serving skills. This service skill is essential and the game's most important part. It is crucial since the opening of a match the serve and the attack to accumulate points from the rival. The success rate of training utilizing this drill method can be seen in terms of the quality of the serve retained by the player. It was revealed that the ability to serve the ball down in volleyball games taught by the drill training method has learning outcomes that tend to be better than the lower service skills of students not taught by the drill training method (Ruslan, 2021). It means that applying the drill method to improve the quality of volleyball serving is suitable because it has positive results.

Previous research has also revealed that the drill training method has an increased value of 2.13. This value means that improving basic volleyball technique skills using the drill training method is better than learning using the reciprocal method (Irwanto, 2017). Applying the drill method focuses on one direction and goal so that the training can improve the quality of these skills. It was revealed by previous research by Falid and Hidayat (2016). Their research shows that patterned drills are effective in gaining the focus on moderate movement training. Patterned drills are performed repeatedly using several types of training techniques. The movements are under the coach's provisions/instructions

. Drill training is a centralized method, meaning the movement or skill is repeated continuously to determine success, especially in volleyball service. Aligns with Muhammad's research (2022) regarding the drill training method, the implementation process is carried out in a manner over and over again that students understand, and the process's better implementation is easy to understand so that it can produce top service techniques correctly. This training exercise aims to consistently improve accuracy in performing top serves (Ruslan et al., 2021). It strives to improve accuracy and consistency in performing top services and improve top services that are less targeted. The accuracy and determination will improve the athlete's serve ability, so performing top serve techniques in volleyball will be more manageable.

The importance of choosing a training method influences match planning; trainers must be able to sort and choose the offering programs and to whom we should give or apply them. An athlete's success depends on the trainer's accuracy in providing a training program. It was also stated (Ruslan, 2021) that Training methods should be based on what is taught, by whom, to whom, under what conditions, and for what purpose.

CONCLUSION

Based on the data results of research, analysis, and discussion related to the results of volleyball top service skills, it is concluded that the drill training method improves the results of the SMPN 1 Tukdana extracurricular volleyball serviceability. Applying the drill method in volleyball, especially the top serve, has a significant impact. This method is suitable for volleyball because this drill method focuses on producing automatic movements.

It is hoped that further research could be accomplished using more than one training method. Providing varied methods can improve training results, especially volleyball skills.

REFERENCE

- Aknasari, R. Z., Firlando, R., & Syafutra, W. (2021). Penerapan Metode Latihan Drill pada Atlet Bola Voli Pengcab Kabupaten. *Gelanggang Olahraga: Jurnal Pendidikan Jasmani Dan Olahraga (JPJO)*, 5(1), 62–71. <https://doi.org/10.31539/jpjo.v5i1.2874>
- Falid, C., & Hidayat, T. (2016). Pengaruh Latihan Drill Berpola Terhadap Peningkatan Keterampilan Underhand Pass Bolavoli (Studi Pada Ekstrakurikuler Siswa Putra Bolavoli SMP N 3 Sidayu). *Jurnal Pendidikan Olahraga Dan Kesehatan*, 4(1), 113–117.
- Ginjar, A. (2019). *Ginjar A. (2019). Metode Penelitian Kuantitatif Dalam Pendidikan Jasmani Dan Olahraga. Program Studi Pendidikan Jasmani Kesehatan Dan Rekreasi STKIP Nahdlatul Ulama Indramayu. 2019.*
- Ginjar, A. (2021). *Ginjar A. (2021). Statistik Terapan Dalam Pendidikan Jasmani & Dan Olahraga Aplikasi Microsoft Excel & SPSS . Program Studi Pendidikan Jasmani Kesehatan Dan Rekreasi STKIP Nahdlatul Ulama Indramayu. 2021.*
- Irwanto, E. (2017). Pengaruh Metode Resiprokal dan Latihan Drill Terhadap Peningkatan Keterampilan Teknik Dasar Bolavoli. *Jurnal Pendidikan Olahraga*, 6(1), 10–20. <http://www.journal.ikipgripta.ac.id/index.php/olahraga/article/view/570>

- Junaedi, A., & Wisnu, H. (2016). Survei Tingkat Kemajuan Pendidikan Jasmani, Olahraga, Dan Kesehatan Di Sma, Smk, Dan Ma Negeri Se-Kabupaten Gresik. *Jurnal Pendidikan Olahraga Dan Kesehatan*, 3(3), 834–842.
- Junpalee, P., Singchainara, J., & Butcharoen, S. (2023). Effects of the intelligence innovative smart ladder drill training program on developing agility of female youth volleyball players at Sriracha School. *Journal of Physical Education and Sport*, 23(4), 1025–1035. <https://doi.org/10.7752/jpes.2023.04128>
- Kharisma, Y. (2019). *2019.Belajar,Bermain dan Melatih Bola Voli. Indramayu: Program Studi Pendidikan Jasmani Kesehatan dan Rekreasi STKIP Nahdlatul Ulama Indramayu*. 2019.
- Kharisma, Y., Mudzakir, D. O., & Aris, F. (2022). Pengaruh Model Pembelajaran Student Teams-Achievement Divisions dan Pembelajaran Langsung Terhadap Kemampuan Servis Bawah Permainan Bola Voli Pada Siswa SMP Mafatihul Huda Krangkeng. *Biomatika : Jurnal Ilmiah Fakultas Keguruan Dan Ilmu Pendidikan*, 8(2), 214–221. <https://doi.org/10.35569/biomatika.v8i2.1192>
- Krističević1, T., Madić2, D., & Krakan1, and I. (2016). Effects Of Game-Based Conditioning Training On Volleyball Skill Accuracy In Junior Players. *Acta Kinesiologica*, 3(2), 13–22.
- Lauh, W. D. A. (2016). Dimensi Olahraga Pendidikan Dalam Pelaksanaan Penjasorkes Di Sekolah. *Jurnal Pendidikan Olah Raga*, 3(1), 83–93. <https://journal.ikipgripta.ac.id/index.php/olahraga/article/view/141>
- Mubarak, M. Z. (2021). *Teori Latihan Olahraga . Bandung, Program Studi Pendidikan Jasmani Kesehatan Dan Rekreasi STKIP Nahdlatul Ulama Indramayu*. 2021.
- Muhammad, R. (2022). Pengaruh Metode Latihan Drill dan Metode Komando terhadap Keterampilan Servis Atas Bola Voli. *Jurnal Menssana*, 7(2), 58–165.
- Ruslan. (2021). Pengaruh Metode Latihan Drill Terhadap Keterampilan Servis Bawah Permainan Bola Voli The Effect Of Drill Training Methods On Underwide Service Skills Ruslan. *Jambura Journal of Sports Coaching*, 3(2), 68–73.
- Ruslan, R., Sandy, G., Nurjamal, N., & Ismawan, H. (2021). Effect of Service Training On Drill Methods And Target Methods On Improving Service Skills For Volleyball. *COMPETITOR: Jurnal Pendidikan Kepelatihan Olahraga*, 13(3), 314. <https://doi.org/10.26858/cjpk.v13i3.21057>
- Saifudin, H. dkk. (2023). Pengaruh Latihan Imagery Terhadap Akurasi Service Floating Bolavoli Pada Ektrakulikuler Bolavoli MA Sunan Bonang Parengan. *Jumper: Jurnal Mahasiswa Pendidikan Olahraga Vol. 4, No.1, Oktober 2023*, 4(1), 107–121.
- Sidik, D. dkk. (n.d.). *2019.Pelatihan Kondisi Fisik.Bandung : PT. Rosda Karya Remaja* (p. 2019).

Winarno, M. E. (2006). *Tes Keterampilan Olahraga. Malang: Laboratorium Ilmu Keolahragaan Fakultas Ilmu Pendidikan Universitas Negeri Malang*. 2006.

Wiyani. (n.d.). (2013)*Manajemen Kelas. Yogyakarta : Ar-Ruzz Media* (p. 2013).

Yudiana, Y. (2010). *Permainan Bola voli.Bandung : FPOK Universitas Pendidikan Indonesia*.