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The Effect of the Application of the Drill Method on the Ability of Badminton Forehand Short Service for Grade VII Students of Tunas Bangsa Mundu Junior High School, Cirebon Regency

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Abstract

Study purpose. Mastery of basic badminton techniques, particularly the forehand short serve, is a crucial component for successful student performance. However, observations indicate that seventh-grade students' serving skills are still low, necessitating effective training methods to improve these skills. This study aimed to determine the effect of implementing a drill method on the forehand short serve skills of seventh-grade students at Tunas Bangsa Mundu Junior High School, Cirebon Regency.

Materials and Methods. The study used a one-group pretest–posttest design with a quantitative approach. The sample size was 32 students (22 boys and 10 girls) selected using a purposive sampling technique. The test instrument measured forehand short serve accuracy, while data analysis used prerequisite tests (normality and homogeneity) and a paired-sample t-test to determine differences before and after treatment.

Results. The results of the normality and homogeneity tests showed that the data were normally distributed and homogeneous. The paired-sample t-test yielded a Sig. (2-tailed) of 0.000 (<0.05), indicating a significant improvement in forehand short serve ability after implementing the drill method.

Conclusion. The drill method has proven effective in improving the forehand short serve ability of seventh-grade students at Tunas Bangsa Mundu Junior High School. Structured and continuous practice repetitions help students master movement techniques more optimally.

Keywords: Serve, Forehand, Badminton, Student, Junior High School

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Introduction

One form of net game contained in PJOK learning materials at the junior high school level is the game of badminton. Students are expected to be able to understand and practice basic techniques of playing badminton, one of which is service techniques. Basically, the service technique in the game of badminton is divided into two, the first is the long service or often known *as long service* and the second is the short service or often known *as short service.*

(Setiawati et al., 2014) Explains that serving in badminton is divided into two types, 1) short serve which is a slow blow whose shuttlecock falls near the opponent's net, and 2) long serve which is a hard blow to propel the shuttlecock upwards towards the opponent's back.

Serving in a badminton game is defined as the first shot to start a game where the punch is done under the hand (Guntur et al., 2020). This is in line with the explanation (Nugroho, 2016) that a serve is the first blow to start a game. It is important for every badminton player to be able to master the skills of serving techniques, this is because the service punch can also be used as one of the attack techniques to obtain points (Guntur et al., 2020) Mastery of this service technique can be done by providing repetition exercises, one of which is with *the drill method,* the goal is of course to master the service technique properly and optimally.

About *the Ma'mun and Subroto* drill methods (2000) in the (Artha, 2021) Explained that *the drill* practice method is one of the ways that can be used in the learning process to focus on mastering the technical component material. Moreover (Mardiana, 2022) explained that *the drill* method is a form of continuous repetition of material so that children can develop technical skills in sports. Based on the opinion about the *drill* method, it can be concluded that the *drill* method is a form of training or teaching method that emphasizes more intensive repetition time so that children will really understand and master a movement.

In PJOK learning in junior high school, one of the materials that must be understood and mastered by children is basic technical skills of playing badminton with service technique sub-material. At Tunas Bangsa Mundu Cirebon Junior High School, the badminton sub-material chosen was *the forehand* short serve technique.Therefore, as a PJOK teacher, it is supposed to provide meaningful and fun learning, but children still understand and master the learning material.

Materials and Methods

Study participants.

In quantitative research, namely pure experimental or quasi-experimental research, there needs to be a research subject. The research subjects in this experimental research are the presence of a population and a research sample. The research population is defined as all research subjects used in the research. In this study, the population used by the researcher was all grade VII students of SMP Tunas Bangsa which amounted to three classes with a total of 96 students. Meanwhile, what is meant by the research sample is part of the research population, meaning that it represents the population, either partially or completely. The sample determination technique in this study uses *purposive sampling* with the following criteria:

1. Classes with PJOK scores below the KKM score or according to the KKM score at most.
2. The class with the least participation in the presence of PJOK lessons.
3. The class whose PJOK teacher is not a researcher.

Based on these criteria, the sample in this study is all students of class VII A totaling 32 students, 22 males and 10 females.

Study organization.

This type of research is quasi-experimental research. The design used in this study is "*One Groups Pre-test-Post-test Design*", which is a research design that contains a pretest before being given treatment and *a post-test* after being given treatment without involving a control group. The design can be described as follows:

O_1 -------- X --------O_2

Figure 1. One Group Pretest-Postest Design

Information:
O1 : Pretest (Tes awal)
X : (Treatment)
O2 : Posttest (Tes akhir)

In this study, the data collection technique used a service practice test that the researcher adapted from (Haerun, 2020) and (Amrullah, 2024). This assessment of service ability is seen from the ability of the child to serve to the opponent's court area which has been marked by a score. The scores given when the child is able to hit a serve are 1, 2, and 3. The lowest score is 1 and the highest score is 3, and each child is given the opportunity to carry out the short service test 10 times. The badminton court used for the test was given a score tag with an arena sign. For more details about the field used for the test, you can see figure 2 as follows:

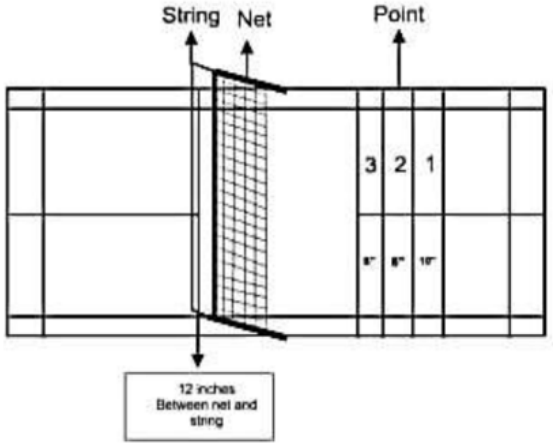

Figure 2. Service test field

Statistical analysis.

Data analysis is an important step in research, because in data analysis it will be possible to draw conclusions based on the hypotheses that have been proposed.

1. Normality Test

This test is used to find out whether the data to be analyzed is normal or not. This normality test aims to assess the distribution of data in a group or variable, whether the data is normally distributed or not. The normality test used by the researcher is the *Shapiro-Wilk* test with the criterion in the normality test is Accept H0. if the calculated value is greater than α 0.05 so that it can be concluded that the data is normally distributed, and minus H0. If the calculated value is less than α 0.05, it can be concluded that the data is not normally distributed

2. Homogeneity Test

Homogeneity testing is a statistical test procedure that aims to show that two or more groups of sample data that have been taken come from populations that have the same variation. In general, homogeneity tests are carried out to convince the examiner that the data taken is indeed from the same poplasy. The homogeneity test used in this study is *the Lavene Test* with the test criterion of Accept H0. if the calculated value is greater than α 0.05 so that it can be concluded that the data is homogeneously distributed, and minus H0. If the calculated value is less than α 0.05, it can be concluded that the data is not homogeneously distributed.

3. Uji paired sample t test

The paired sample t test was used by the researcher to find out whether there was a difference between before being given treatment and after treatment for the paired sample group. This hypothesis test is in accordance with the research conducted by the researcher because in this study there is no control group.

Results

Data Processing and Analysis Results

1. Normality Test

The normality test is carried out to find out whether the distribution of research data is normally distributed or not, this is to determine what statistical test will be used next. In this study, the normality test criteria used were the shapiro-wilk normality test with the following conditions: Accept H0. if the calculated value is greater than α 0.05 so that it can be concluded that the data is normally distributed, and minus H0. If the calculated value is less than α 0.05, it can be concluded that the data is not normally distributed. The following is a table of the results of the initial and final test normality tests.

Table 1. Initial test normality test

Tests of Normality

	Shapiro-Wilk		
	Statistic	df	Sig.
Initial_Test	.947	32	.120

a. Test distribution is Normal.
b. Calculated from data.
c. Liliefors Significance Correction.

Table 2. Final test normality test

Tests Of Normality

	Shapiro-Wilk		
	Statistic	df	Sig.
Final_exam	.986	32	.949

a. Test distribution is Normal.
b. Calculated from data.
c. Liliefors Significance Correction.

From the results of the normality test in table 1, table 2, and table 3, the initial test Sig count value was 0.120 and the final test 0.949. The results of this normality test are known to be greater than α 0.05 so that it can be concluded that the distribution of data for the initial test, final test, and score gain is distributed normally.

2. Homogeneity Test

The next prerequisite test is the homogeneity test. This test is to find out whether the distribution of data comes from homogeneous groups or is heterogeneous. In addition, the results of this test will also determine the next statistical test. The homogeneity test used in this study uses *the Lavene test* with the test criteria: Accept H0. if the calculated value is

greater than α 0.05 so that it can be concluded that the data is homogeneously distributed, and minus H0. If the calculated value is less than α 0.05, it can be concluded that the data is not homogeneously distributed. The following are the results of the homogeneity test

Table 4. Homogeneity test
Test of Homogeneity of Variance

		Lavene Statistic	df1	df2	Sig.
Test_Results	Based on Mean	.044	1	62	.834
	Based on Median	.017	1	62	.897
	Based on Median and With adjusted df	.017	1	61.987	.897
	Based on trimmed mean	.045	1	62	.832

Based on the results of the calculation using the help of SPSS, it can be seen in table 4 above, that the Sig. value is calculated as 0.834 which means that it is greater than α 0.05. This means that it can be concluded that the data is homogeneously distributed.

3. Hypothesis Test

After the prerequisite test is completed, the next step is to conduct a hypothesis test using the paired smaple t test. The criteria for this test are, accept H0 if the Sig. value is calculated is less than α 0.05 which means there is a significant effect of drill method training on forehand service ability, and reject H0 if the Sig. value is greater than α 0.05 which means there is no significant effect of drill method training on forehand service ability. The following are the results of the paired sample t test.

Table 5. Paired test sample t test
Paired Sample t Test

	Paired Differences							
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1 Initial_test – Final_exam	-1.562	1.684	.298	-2.170	-.955	-5.250	31	.000

Based on the results of the paired sample t test with the help of SPSS, the results of the Sig. (2-tailed) or Sig. calculation value were obtained less than α 0.05. Because referring to the test criteria of the paired sample t test that the Sig. value is calculated is greater than α 0.05, there is a significant effect of drill method practice on *forehand service ability.*

Discussion

Forehand punching is one of the punching techniques that is easy to do for beginners, including for grade VII students in junior high school, in contrast to *backhand punching* which is claimed to be a punching technique that is difficult to do for beginners (Setiawati et al., 2014). Therefore, referring to the results of analysis and data processing, it shows that *the drill* method can have a significant influence on the *forehand's short service ability*. This is in accordance with the opinion (Saraswati & Hariyanto, 2021) That by providing *the drill method* in learning the mastery of basic techniques, it will be able to accelerate the mastery of movement because

students are required to continue to perform a movement repeatedly so that there is a synchronization between stimuli and responses.

Other opinions were delivered by (Mardiana, 2022) that the *drill* method has several advantages, namely 1) it can increase student active participation and student understanding so that it will be able to optimize the mastery of movement skills in learning, 2) foster student discipline and independence, 3) improve movement skills as a result of repeated exercises. Therefore, it can be interpreted that PJOK learning using the *drill* method can have a positive and significant influence on students' ability to understand, practice and master movement tasks (Hidayati, 2020), Included in learning badminton with the sub-material of forehand short serve techniques .

Conclusions

To optimize PJOK learning with material on mastering basic technical skills such as the ability of *forehand* short service techniques, the *drill* method can be used to obtain optimal results. This is evidenced by the results of data analysis and processing and supported by various previous references, so it can be concluded that the application of the *drill method* has a significant influence on the forehand short service technique ability *of* grade VII A students of Tunas Bangsa Mundu Junior High School, Cirebon Regency.

References

Amrullah, A. (2024). Analisis Tingkat Kemampuan Servis Pada Siswa Ekstrakurikuler Bulutangkis SMA Mahyajatul Qurra' Kab. Takalar. *Global Journal Sport Science*, *2*(1), 84–96. https://jurnal.sainsglobal.com/index.php/gjss

Artha, I. ketut A. (2021). Pengaruh Metode Drill Terhadap Hasil Smash Bulutangkis Kegiatan Ekstrakurikuler Siswa SMP Negeri 4 Busungbiu. *Jurnal Pendidikan Kesehatan Rekreasi*, *7*(1), 46–55. https://doi.org/10.5281/zenodo.4420479

Guntur, Achmad, I. Z., Yuda, A. K., & Izzudin, D. A. (2020). Pengaruh Metode Drill Terhadap Keterampilan Servis Panjang Permainan Bulutangkis Pada Peserta Ekstrakurikuler di SMAN 1 Rengasdengklok. *Jurnal Ilmu Keolahragaan*, *19*(2), 157–162.

Haerun, M. (2020). *Survei Tingkat Keterampilan Servis Pendek Dalam Permainan Bulutangkis Pada Mahasiswa Bkmf Bulutangkis Fik Unm* (pp. 1–15).

Hidayati, N. A. (2020). Penerapan Metode Mind Map Berbasis Drill Untuk Meningkatkan Kemampuan Berbicara Mahasiswa Di Prodi PBSI IKIP PGRI Bojonegoro. *Jurnal Educatio FKIP UNMA*, *6*(2), 462–468. https://doi.org/10.31949/educatio.v6i2.578

Mardiana, I. N. (2022). Metode Drill untuk Meningkatkan Hasil Belajar Penjasorkes pada Siswa Kelas VI SD. *Journal of Education Action Research*, *6*(2), 182–187. https://doi.org/10.23887/jear.v6i2.45821

Nugroho, A. (2016). Pengembangan Tes Keterampilan Servis Pendek Bulutangkis Untuk Atlet Kelompok Anak-anak, Pemula, Remaja, dan Taruna. *Jurnal Pendidikan Dan Kepelatihan Olahraga*, *6*, 1–7.

Saraswati, W., & Hariyanto, E. (2021). Upaya Meningkatkan Keterampilan Teknik Tendangan T Menggunakan Metode Drill Pada Siswa PSHT Ranting Kandangan Cabang Kediri. *Sport Science and Health*, *3*(12), 1024–1031. https://doi.org/10.17977/um062v3i122021p1024-1031

Setiawati, H., Simanjuntak, V., & Atiq, A. (2014). Teknik Dasar Servis, Pukulan Forehand dan Bakchand Bulutangkis Pada Siswa Kelas VIIA di SMP. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa*, *3*(9).

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