The Influence of Personal Training Methods on Under Passing Skills In Volleyball Extracurricular Students of State 5 State Junior High School Pangkalpinang

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Abstract. This research was motivated by the students' skills in volleyball extracurricular activities, namely the lack of forearm passes due to lack of mastery of excellent and correct forearm pass techniques. This study aims to determine the effect of individual training methods on volleyball forearm pass skills in extracurricular students of SMP Negeri 5 Pangkalpinang. This research was quantitative research that was a pre-experimental one-group pretest-posttest design. The sample in this study was extracurricular volleyball students at SMP Negeri 5 Pangkalpinang, totaling 22 people with a sampling technique using saturated samples. The data analysis technique in this study used the t-test. Based on the calculation of the hypothesis using the t-test, the results were obtained (t-count = 10.168> t table = 1.721) with a significant level of 0.05, which means Ho was rejected and Ha was accepted. So it could be concluded that individual training methods were affected the volleyball forearm pass skills in extracurricular students at SMP Negeri 5 Pangkalpinang.

Key words: individual training method, volleyball bottom passing.

Abstract in Indonesia. Penelitian ini dilatarbelakangi oleh kemampuan siswa dalam kegiatan ekstrakurikuler bola voli, yaitu kurangnya umpan lengan bawah karena kurangnya penguasaan teknik umpan lengan bawah yang sangat baik dan benar. Penelitian ini bertujuan untuk mengetahui pengaruh metode pelatihan individu terhadap keterampilan Passing lengan voli pada siswa ekstrakurikuler SMP Negeri 5 Pangkalpinang. Penelitian ini merupakan penelitian kuantitatif yang merupakan rancangan pre-experimental one-group pretest-posttest. Sampel dalam penelitian ini adalah siswa bola voli ekstrakurikuler di SMP Negeri 5 Pangkalpinang, berjumlah 22 orang dengan teknik sampling menggunakan sampel jenuh. Teknik analisis data dalam penelitian ini menggunakan uji-t. Berdasarkan perhitungan hipotesis menggunakan uji-t, diperoleh hasil (t-hitung = 10,168> t tabel = 1,721) dengan taraf signifikan 0,05, yang berarti Ho ditolak dan Ha diterima. Sehingga dapat disimpulkan bahwa metode latihan individu berpengaruh terhadap keterampilan passing lengan voli pada siswa ekstrakurikuler di SMP Negeri 5 Pangkalpinang.

Kata Kunci: metode pelatihan individu, passing bawah bola voli.

INTRODUCTION

Volleyball is one of the most popular sports games in various parts of the world. Volleyball can be played by all levels of society, from children, adolescents, to adults. Volleyball is a sport that is played by two opposing groups, each group consisting of 6 players. The sport of volleyball in the world is under the umbrella of an international organization called the Federation Internationale de Volleyball (FIVB), while in Indonesia it is under the auspices of the National Organization of the Indonesian Volleyball Association (PBVSI).

According to Sukirno and Waluyo (2012: 12) the sport of volleyball has always received attention from all levels of society, so that this sport has an extraordinary interest after the sport of football. Volleyball in the Bangka Belitung Islands Province is quite popular. Volleyball games in Bangka Belitung are in great demand by the public, especially students because every year events or tournaments are often held between students, including O2SN, POPDA, and PORWIL.

Based on observations made on volleyball extracurricular students at SMP Negeri 5 Pangkalpinang, there are mistakes that students often make when doing underhand passing,

including: standing unbalanced because the legs are not open, the knees are not bent, the arms are not tightly closed, the arms are swinging and straightening the knees not at the same time, hitting the ball on the palms of the hands, when in contact with the ball the arms are not parallel so that the resulting passing is not optimal, such as the results of passes not reaching friends, the ball does not go up, and so on so that the team cannot build effective attacks to get points . This made the researchers want to try to do research using training methods that had never been applied in extracurricular activities at SMP Negeri 5 Pangkalpinang.

The training method that will be used in this study is the individual training method. The form of training in this training method is carried out by cradling the ball and bouncing the ball against the wall which is expected to be able to improve students' lower passing skills.

METHODS

According to (Sugiyono, 2018: 73) the research method used in this study is an experimental method. The research design used in this study was pre-experimental, namely the one-group pretest-posttest design.

The place of research will be conducted at SMP Negeri 5 Pangkalpinang. Its address is at Jalan Pahlawan 12, Keramat Village, Rangkui District, Pangkalpinang City, Bangka Belitung Islands Province.

When the research was carried out on October 26 - November 30 2021, this research was conducted 16 times with a frequency of 3 meetings in one week.

The population used in this study were 22 volleyball extracurricular participants at SMP Negeri 5 Pangkalpinang.

The sampling technique used in this study is non-probability sampling with saturation techniques. So the sample in this study were all volleyball extracurricular students at SMP Negeri 5 P angkalpinang, totaling 22 students. The data collection technique in this study was to use the bottom passing test instrument.

Testing the reliability of this instrument will be carried out at MTs AIAI Sungaiselan which is located in Sungaiselan Atas Village, Sungaiselan District, Central Bangka Regency. The sample used as a respondent was volleyball extracurricular students at MTs AIAI Sungaiselan. Reliability is measured from the correlative and significant coefficients, so the instrument has been

declared reliable (Sugiono, 2017: 354).

The normality test uses the Kolmogrov Smirnov test and uses the SPSS 16.0 program. Hypothesis testing using the SPSS 16.0 program for windows method of paired-samples T test (related T test) or dependent T test with a significant level = 0.05.

RESULTS AND DISCUSSION

The pre-test values can be seen in the following graphic figure 1.
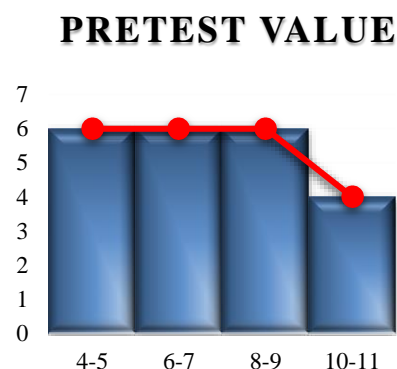

Figure 1. Histogram Graph of Pretest Score Results

Based on the graph above, it can be seen that the pretest value is the maximum value of 11 and the minimum value is 4. In addition, the average value (mean) of the pretest results is 7.09 and the standard deviation value is 2.158. So that the results of the statistical test of the pretest value using SPSS 16.00 can be seen in the following table 1.

After the pretest was carried out, it was then followed by treatment in the form of individual training methods and at the last stage a posttest was carried out to see the students' lower passing abilities.

From the results of the posttest it can be concluded that the posttest values can be seen in the following graphic Figure 2.

Figure 2. Bar Chart of Posttest Score Results

Based on the graph above, it can be seen that the posttest scores are the maximum value of 13 and the minimum value of 4. In addition, the average value (mean) of the posttest results is 8.545 and the standard deviation value is 2.521. So that the results of the posttest statistical test using SPSS 16.00 can be seen in the following table 1.

	Pretest	Posttest
N	22	22
Mean	7.09	8,5
Median	7.00	8
Std. Deviation	2.158	2,521
Variance	4.658	6,355
Minimum	4	4
Maximum	11	13

Comparison of pretest and posttest scores aims to determine whether there is an effect of individual training methods on the lower passing abilities of volleyball extracurricular students at SMP Negeri 5 Pangkalpinang. Comparison of pretest and posttest results. The initial test (pretest) obtained an average value of 7.091 and the final test (posttest) obtained an average value of 8.545. Based on the comparison of the results of the initial test (pretest) and the final test (posttest) above, it can be concluded that after being given treatment (treatment) through individual training methods there is an influence on students' lower passing skills.

The results of the calculation of the pretest normality test value obtained a Dcount value of 0.148 and a Dtable value of 0.281, it can be concluded that the data is normally distributed. Meanwhile, the posttest Dcount value was 0.131 and the Dtable value was 0.281. Thus Dcount < Dtable on the pretest and posttest values it can be concluded that the data is normally distributed.

Calculation of the hypothesis test results of students' practice skills obtained t table = 1.721. The results of the students' practice skills hypothesis test showed that between the pretest and posttest it had a value of tcount = 10.168 > ttable = 1.721. This shows that Ho is rejected, and Ha is accepted, meaning that there is an influence of individual training methods on the lower passing skills of volleyball extracurricular students at SMP Negeri 5 Pangkalpinang.

By looking at the series of tests above, it shows that there is an influence of individual training methods on the lower passing skills of volleyball extracurricular students at SMP Negeri 5 Pangkalpinang. This can be seen from the results of hypothesis testing with the condition that if the value of tcount<ttable then Ho is accepted, and Ha is rejected and if the value is tcount>ttable then Ho is rejected and Ha is accepted. The results obtained are tcount 10.168 > ttable 1.721 which means Ho is rejected and Ha is accepted.

Based on the research results of Rizhardi, R. (2017) it was found that the results of individual training methods had a significant effect on increasing lower passing abilities. Can be obtained from tcount 9.19 > ttable 1.86.

Similar to Putri's research, O. V. (2018) the results of the hypothesis were tcount > ttable (2.99 > 2.015). Thus it can be said that there is a significant effect of the individual underpass training method carried out on the underpass ability of KTC Pakandangan athletes in Padang Pariaman Regency.

In line with Sari's research, M. P. W. (2014) the results of the study concluded that individual training had a significant effect on lower passing ability, it was possible to obtain a mean pretest of 39.75 < mean posttest of 42.12.

In building strong attacks and defenses to win

Table 2. Rating Frequency Distribution

Pretest			Posttest		
Intervals	Frequency	%	Intervals	Frequency	%
4-5	6	27%	4-5	2	9%
6-7	6	27%	6-7	6	27%
8-9	6	27%	8-9	7	32%
10-11	4	18%	10-11	4	18%
Amount	22	100%	12-13	3	14%
Range	7		Amount	22	100%
Interval Class	5.459		Range	9	
P. Interval class	1.282		Interval Class	5.459	

volleyball matches, mastering game techniques is very important, especially in mastering basic volleyball techniques. According to Ghazali (2016) Because to be able to play volleyball, it is necessary to master basic techniques which include service, passing, smash and block. According to Suadnyana et al (2014) There are four basic volleyball techniques, namely: serving, passing, blocking, and smashing. Meanwhile, according to Zainur, and Sulastio, A. (2019) Without mastering basic techniques it is impossible for someone to achieve good performance.

According to Atsani, M. R. (2020) In volleyball, one of the most important things to get points and start an attack is the basic technique of accurate down passing. This is in accordance with the statement of Kresnapati, P. (2020) that passing is basically the basic key in playing volleyball, so passing is absolutely something that all players must master. According to Afdi (2019) of the many volleyball techniques that are trained the most important is passing, under passing which is the beginning of the preparation of an attack strategy to get full points in volleyball games.

To improve lower passing skills, training is needed using the training method. According to According to Gordon in (Soniawan and Irawan, 2018) the training method is a method or strategy that helps a person or player to achieve an expected goal. According to Daya (2015) The training method is the trainer's way of conveying training material in the form of physical activity and technique, in this case the right training method will be seen from how quickly the players carry out the training material given according to what the coach has instructed. Meanwhile, according to the training method, it is a procedure and method that is planned regarding the types of training and preparation based on the level of difficulty, complexity and weight of the load.

In this study the training method used is the individual training method. According to Hadi, A.N. (2022) Individual training here is different from pair training, in which each player does an independent passing exercise. Meanwhile, according to Fadli and Yudi (2019) this exercise is carried out in two ways, namely by cradling the ball as much as possible with variations in ball height training and using a wall to bounce the ball, with variations in receiving the ball's reflection and then catching it, receiving the ball's reflection and then placing it, the ball tries to put it on the wall without falling.

As for the things that affect the lack of student skills in mastering the bottom passing technique in this study, the training methods used by the teacher or coach are less varied and the lack of understanding of students in carrying out the bottom passing movement.

This is also in line with Hadi's statement, A.N. (2022) There are several things that affect students' lower passing abilities in volleyball games which are classified as lacking. The first factor is the performance of the trainer/teacher's training method which is always monotonous with lecture and explanation methods (without movement exercises), only giving assignments (students play alone), and the second is the lack of understanding of student theory or lack of understanding and mastery of skills and the third factor is that students don't really want to practice on their own, because of a lack of understanding which results in difficulties in practicing volleyball.

Meanwhile, according to Hidayat, F., and Rifki, M. S. (2020) Based on the reality on the ground, many factors affect lower passing ability, one of which is balance which can affect the program and training methods applied.

By looking at these factors, the researcher tries to provide references to students, namely by providing training using individual training methods so that they can provide an increase in students' volleyball underhand passing skills.

CONCLUSION

Based on the results of data analysis and discussion, it can be concluded that through individual training methods for volleyball underhand passing skills, extracurricular students at SMP Negeri 5 Pangkalpinang obtained higher scores than before being given treatment. These results were obtained from the average posttest results which were greater than the pretest results, namely the average pretest result was 7.091 and the average posttest result was 8.545. Based on the t-test, namely tcount> ttable then Ho is rejected, and Ha is accepted and if tcount < ttable then H0 is accepted, and Ha is rejected. By looking at the significance of 5% or 0.05 in ttable. From the research results obtained tcount 10.168 and ttable 1.721, it can be concluded that Ha is accepted and there is an influence of individual training methods on the underpassing skills of extracurricular students at SMP Negeri 5 Pangkalpinang.

REFERENCES

Almukhambetov, B. M. T., & Nebessayeva, Z. (2015). The Application Of Figuratif Arts Capabilities In The Art-Pedagogical Activity Of A Teacher". *Journal Procedia Social and Behavioral Science*, *197*, 1525–1529.

Afdi, R. B., Zulman, Z., & Asmi, A. (2019). The Effect of Passing Training Models on the Ability of Lower Passing and Upper Passing in Volleyball Players. Sports Science, 19(1), 33-40.

Atsani, M. R. (2020). Improving the ability to pass under volleyball using the playing method. Edu Sportivo: Indonesian Journal of Physical Education, 1(2), 88-96.

Daya, W. J. (2015). The Influence of Training Methods and Training Motivation on Soccer Skills in SSB Padang Junior. Intelligent Educational Character, 4(1).

Fadli, M., and Yudi, A. A, Individual and Pair Training Affects the Reservice Results of Sepaktakraw Athletes. Patriot Journal, 1(3), 1364-1371.

Gazali, N. (2016). The Contribution of Arm Muscle Strength to the Service Ability of Volleyball Athletes. Journal of Physical Education, Sport, Health and Recreations, 3(1), 1– 6.

Hadi, A. N., & Sudijandoko, A. (2022). The Effect of Pair Passing Exercise, Free Passing on Underpassing Ability in Junior High School Volleyball Children in Dusun Tugu Cerme Gresik. Journal of Sports Health, 10(02), 45-52.

Hidayat, F., & Rifki, M. S. (2020). The effect of drill training on improving the lower passing ability of volleyball players. Journal of Stamina, 3(11), 805-811.

Kresnapati, P. (2020). Differences in paired passing exercises with changes in the height of the net weight of the ball on the lower passing ability. Edu Sportivo: Indonesian Journal of Physical Education, 1(1), 9-15.

Mutohir, T. C. 2012. Volleyball Games (Concepts of Strategy and Modification Techniques). Surabaya: Main Media Library Graha.

Okilanda, A., Dlis, F., Humaid, H., & Putra, D. D. (2020). Differences in the Effect of Training Methods and Training Motivation on the Basic Techniques of Beji Timur U-13 Soccer School Football. Journal of Educatio FKIP UNMA, 6(1), 80-89.

Pardijono, et al. 2011. Volleyball. Surabaya: Unesa.

Putri, O. V. 2018. The Influence of Individual Underpassing and Paired Underpassing Forms on Volleyball Underpassing Ability. Patriot Journal, 206-219.

Rizhardi, R. 2017. Differences in the Effect of Pair Training and Individual Training on Lower Passing Ability in Students of SMPN 18 Kerinci. Lecturer's Journal of Pgri Palembang University.

Rohendi, A. & Suwandar, E., 2018. Volleyball Training and Learning Methods for the Public, Bandung: Alfabeta.

Sari, M. P. W. 2014. Differences in the Effect of Individual and Pair Training on the Lower Passing Ability of Volleyball Students at SMAN 2 Rengat Barat (Doctoral dissertation, Padang State University).

Soniawan, V., & Irawan, R. (2018). The playing method influences the long passing ability of football. Journal of sports performance, 3(01), 42-42.

Suadnyana, I. K., Kanca, I. N., Pasek, M. S., & Ked, S. (2014). Implementation of the TGT Type Cooperative Learning Model to Increase Volleyball Passing Activities and Learning Outcomes. Undiksha Journal of Physical Education, Sports and Health, 2(1), 1-10.

Sugiyono. 2018. Quantitative, Qualitative and R&D Research Methods. Bandung: Alphabet

Sugiyono. 2017. Educational Research Methods (Quantitative, Qualitative Education and R&D. Bandung: Alfabeta.

Sukurno, et al. 2012. Volleyball Sports Branch. Palembang: Unsri Press.

Zainur, & Sulastio, A. (2019). The Contribution of Leg Muscle Strength and Eye-Foot Coordination to Kick Accuracy on Goal. Journal Sports Area, 4(1), 278–284.