

The Influence of Paired Upper Passing Exercises to the Passing Ability of Volleyball Games at the University of Nusa Cendana Penjaksesrek Women's Team

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ABSTRACT

The formulation of the problem in this study is whether there is an effect of the upper passing practice on the accuracy of the passing of volleyball? This study aims to find out whether with upper passing training in pairs can increase the volleyball's passing ability. This type of research uses a quantitative experiment method. The research will measure the top volleyball passing ability of on the women's team of Penjaksesrek Undana, with a sample of 20 people. The results of data processing for the results of the pretest and posttest showed that the passing practice was very influential in increasing the upper passing ability, with scores obtained from the results of pretest 194 and posttest 307. Based on statistical calculations with calculated values (23,194) > (greater) than the value t table at price t, with df (N-1) = 19 and a significant level of 5% with a confidence level of 95%, then the value of t table is 1.729, and the percentage (%) is 58.237%. The author hopes that this research can be used as learning for volleyball athletes and can be handle for trainers or lecturers.

Keywords: Paired Upper Passing Exercises, Volleyball Passing Ability

1. INTRODUCTION

Sports are forms of physical activity, there are games, competitions and intense physical activities in order to obtain reactions, victories and optimal achievements. To achieve these goals education and sports provided in the form of formal educational curriculums must be able to contribute positively and effectively to the growth of basic human values which are the driving force for the creation of young people as the nation's shoots better, more responsible, more disciplined, more reliable, analogous, stronger in body and soul, more personable and thus more able to fill and foster national and state independence. Sports is an element of fostering the nation and building the nation (Kosasih, 1993:3-4).

To achieve high achievements requires coaching steps, i.e. nursery nurseries that start from an early age, therefore sports nurseries must be done seriously, because through that we can only find athletes seeds whose achievements can be improved. Sports activities can be started from a young age to old age and can be done every day. With the advancement of technology the world makes it easy for all activities to cause a person to be less mobile (hypokinetic), such as the use of remote controls, computers, elevators and walking stairs, without being balanced with physical activities that will cause illness due to lack of movement.

Lately also feels a lot of interest and talent in a person in every sport. This is proven by the increasing number of athletes who excel in both the campus and the general public. This is inseparable from the role of education in human life, for example physical education in universities. Physical education is a process of one's education as individuals and as members of the community carried out consciously and systematically through a variety of physical activities in order to gain increased abilities and physical skills, intelligence growth and character formation (Kosasih, 1993:2).

To achieve the desired goals, the campus usually organizes extracurricular activities, where students can express their thoughts, channel their talents, interests, be able to interact with others and can also add insight to student knowledge. Regular physical fitness activities can improve physical fitness so that the body can function efficiently and optimally to perform daily tasks (Arif, Lukas M. Boleng, et al., 2019). As said in the quote above, it is possible to shape and improve physical fitness of the students by carrying out physical processing activities in extracurricular activities. In the Health and Recreation Physical Education Study Program at the University of Nusa Cendana which also carries out extracurricular activities which are engaged in academics which are of great interest to students, they are also enthusiastic about extracurricular activities in

sports such as futsal, soccer, fighting, and volleyball, from the three extracurricular students can choose according to their interests, talents, and skills. One of the sports that attracts students from the Health and Recreation Education Study Program at the University of Nusa Cendana is volleyball extracurricular, so that in the Study Program there are many volleyball teams, one of them is the Undask Penjaskesrek women's team.

Volleyball game is a game that uses a ball to bounce (in-volley) in the air back and forth on the net (net), with the intention of being able to drop the ball in a plot of the opponent's field in order to find victory (Yusmar, 2017:144). To improve the performance of volleyball, demands an effort in developing volleyball, which involves many people who have mastered the basic techniques of playing volleyball. The basic techniques that must be mastered are service, passing, block, set-up and smash. Passing is the effort or effort of a player by using a certain technique whose goal is to pass the ball that he plays to his teammate to play on his own field (M. Mariyanto, 1995:194).

In the passing technique there are two ways to do it, namely by using the lower hand (passing down) and using the upper hand (passing up). Passing up is an important element in volleyball, passing passes can be done with two hands or one hand. Passing up with one hand should only be done for high balls and near the net where it is very difficult to pass over with two hands (M. Mriyanto, 1995:194). As the above quote can be formulated that passing is a technique in the game of volleyball using two hands with the aim of baiting and giving the ball to a friend as soon as possible to be played in his own field or can also withstand the opponent's attack.

Besides that, this technique is very important for the Penjaskesrek Undana women's team to support the achievement of the desired achievements because seen from the constraints that the Penjaskesrek Undana women's team has not maximized in passing the top technique, because the training provided so far has not been varied and has not been directed. To achieve the maximum process in volleyball, especially increasing the passing ability, efforts and efforts are needed to improve physical quality through various training methods. the purpose of this sequence is to convert the conversion is referred to as a transition. after you receive your opponent's serve by cushioning it and passing it high to your setter, the setter places the ball in position for the attack, (Viera, L Barbara, 1996 : 53). As the quote above says that when receiving service from an opponent in order to be able to hold it and can continue the pass to a friend then place the position when going to attack or smash.

Exercise is a physical movement or mental activity that is carried out systematically and repeatedly over a long period of time, with loading increasing progressively and individually, which aims to improve the system and physiological and psychological functions of the body so that when performing sports activities can achieve the appearance the optimal (Nala, 2011: 2). One of the exercises used to improve the ability to pass over is ball passing training in pairs. In this exercise, passing up in pairs, the aim of which is to improve the ability of players to pass over (Winarno dkk., 2013:107). Certain training patterns can improve fitness elements and also increase muscle development (Arif, Lukas Maria Boleng, et al., 2019). As it is said that for specific training patterns it can improve various aspects of physical fitness.

The initial attitude of the player holding the ball with two hands facing his partner, and the implementation of the ball is thrown towards his partner, then the ball in passing over to be passed to his partner again. The distance between the two is between 3 meters and 4 meters, so then each of them tries to pass the ball repeatedly. The advantage of this exercise is that players are not easily bored and bored because it resembles playing properly, so there is an element of excitement. The weakness for the direction of the ball is difficult to anticipate if a bad partner will affect the structure of the exercise it will depend on the partner. Based on the description above, the writer will examine: "The Influence Of Paired Upper Passing Exercises To The Passing Ability Of Volleyball Games At The University Of Nusa Cendana Penjaksesrek Women's Team"

Definition of Sports

Sport is a physical activity that uses large muscles in carrying out these activities which have a characteristic and competitive game. These large muscles are muscles that can be used for activities such as running, jumping, throwing, swimming and so on. This is to differentiate from activities that use small muscles such as painting, drawing, and so on, because in these sports activities, the perpetrators exert maximum or almost maximum energy in physical, mental emotional, and social aspects (Ministry of Education and Culture 1999: 5). Sports are forms of physical activity, there are games, competitions and intense physical activities in order to obtain reaction, victory and optimal achievement (Kosasih 1993: 3-4).

To achieve these goals education and sports provided in the form of formal educational curriculums must be able to contribute positively and effectively to the growth of basic human values which are the driving force for the creation of young people as the nation's shoots better, more responsible, more disciplined, more reliable, analogous, stronger in body and soul, more

personable and thus more able to fill and foster national and state independence. Sports is an element of fostering the nation and building the nation. The two opinions above can be concluded that sports are forms of physical activity that use large muscles in carrying out intense activities in order to obtain reactions, victories and optimal achievements.

Volley ball

Definition of volleyball

Volleyball is a sport that is played by two teams in each field separated by a net and which is assisted by a dividing line around the field. The aim of the game is to pass the ball over the net so it can fall to the opponent's floor and to prevent the same effort from the opponent. Each team can play three reflections to return the ball. Volleyball is a game that uses a ball to bounce (in-volley) in the air back and forth on the net (net), with the intent to be able to drop the ball in a plot of the opponent's field in order to find victory (Yusmar, 2017:144). It can be concluded that the volleyball game is a sport played by two teams in each field who use the ball to be reflected (volleyed) in the air back and forth on the net (net), with the aim of being able to drop the ball in the opponent's field area in order to find victory.

Over the years, the rules of volleyball have evolved. The most important modifications were made to increase the attractiveness of the sport, mainly through changes in the way points are counted (Malolepszy, Tomasz, 2013: 1). As the above quote says that during the rules and calculation points in volleyball there are many changes due to volleyball games will be more interesting. Mike Hebert mengatakan dalam *Human Kinetick*, The Cubans also helped me understand that playing volleyball was not just about the perfect execution of a skill. They told me that it was also about using the skill to express yourself (Mike Hebert, 2014:59).

As the above quote says, it is said that playing volleyball is not only about showing perfect skills and abilities, but also about how to use skills to express yourself in order to become a characteristic in the game itself.

Upper Passing Ability

Before elaborating on passing above it is necessary to be given an explanation of the meaning of passing up and set-up, this needs to be explained very much because remembering the two terms in volleyball games are often mixed up in their understanding. In volleyball the meaning of passing in volleyball is the effort or effort of a player by using a particular technique whose purpose is to get the ball to a friend as soon as possible to be played in his own field. Set-up is the effort or effort of a player by using a particular technique whose aim is to present the ball being played to a friend

as soon as possible in order to carry out attacks on the opposing team (M. Mariyanto 1995: 120). The above quote is an explanation of the differences regarding passing and set-up, then the next passing technique will be explained.

M. Mriyanto (1995:194), Above passing is one of the important elements in volleyball, passing over can be done with two hands or one hand. Passing up with one hand should only be done for high balls and near the net where it is very difficult to pass over with two hands. The description above can be formulated that passing is a technique in volleyball using two hands with the aim of baiting and giving the ball to a friend as soon as possible to be played in his own field or can also withstand the opponent's attack.

It gives a player more reaction time and can be executed in a wide variety of situations, including serve receive, digging, setting, handling a low ball in a rally, or passing during transition. But the most common situation is during the serve receive, and that's where the focus should begin, (Deborah W Crisfield: 55). In the above quotation, it can be seen that when carrying out a pass to a friend, the attitude of acceptance of the ball and the focus is crucial to the next move.

The principles of passing over according to M. Mariyanto (1995: 194-196), as follows:

a) Early attitude

Taking attitude with a ready normal, in playing volleyball this normal attitude is taking the attitude of the body in such a way that makes it easy to quickly move in the desired direction, as a whole the body must be in a state of unstable balance. As balanced as being unstable, it means that coordination from the body can still be controlled and unstable means that the body can be moved in various directions as desired in a short time. As for the normal attitude is as follows: The player stands with one foot in front of the other foot. It is recommended if left-handed left foot is more in front of the right foot. Knees bent, body leaning slightly forward with both hands in front of the chest. At the time of going to pass, then immediately place yourself under the ball, with both hands raised to the front about as high as the forehead. The fingers of the hand as a whole form a half circle. The fingers are slightly apart from each other and both thumbs form an angle.

b) the current position of the ball

The finger ball is in the first and second segments, especially in the first segment of the thumb. When the fingers are touched on the ball, the fingers are slightly stretched a little and at that moment also followed by wrist movements, the arms up are rather explosive. Furthermore, the push of the ball coupled with the body is extended by stretching the legs.

c) Final Position

After successfully passing the arm must be straight as a follow-up movement followed by the body and foot steps forward so that coordination is maintained properly. The movement of the hands, wrists and legs should be a harmonious movement, while the view is towards the ball.

Definition of exercise

I Gusti Ngurah Nala (2011:2), Exercise is a physical movement or mental activity that is carried out systematically and repeatedly in a long time, with a load that increases progressively and individually, which aims to improve the system and physiological and psychological functions of the body so that when performing sports activities can achieve the appearance the optimal. Training is a process for improving the quality of an athlete to get the maximum achievement target by being given physical, mental, technical and tactical training, regularly, directed, and repeatedly on an ongoing basis.

From the two opinions above it can be concluded that training is a physical movement or mental activity that is carried out systematically and repeatedly for a long time, to achieve maximum performance by being given physical and mental burdens on a regular, directed, gradual, increasing and repetitive basis time after time. One of the characteristics of good practice comes from the words practice, exercise and training is the burden of exercise. Overload is a motor (motion) stimulus that can be regulated and controlled by a coach or athlete to improve the functional quality of various body equipment.

Feedback mechanisms play a role as sports skills are repeatedly practiced and refined; the nervous system stores sensory feedback regarding the appropriate combination and intensity of core muscle activation necessary to create sufficient spinal stability and also enable efficient movement, (Jeffrey M Willardson, 15 : 2014). Which according to the above quotation says that the practice and practice are repeatedly then refined movement techniques, the sensory nervous system mechanism stores feedback so as to enable efficient movement.

Principles of practice

The principles of training are things that must be known by a trainer so that the training objectives can be achieved in accordance with their objectives. If the principles of this training are not done not only does the training not reach the desired target but can lead to the wrong training, the athlete has no improvement in both physical and technical abilities so that it is difficult to achieve, even further is the athlete has an injury (Johansyah Lubis, 2013 : 12). The principle of training is a systematic guideline and regulation, with the burden being increased progressively, which must be obeyed

and implemented in order to achieve the research objectives (I Gusti Ngurah Nala, (2011: 23).

It can be concluded that the principle of training is systematic instructions and rules that must be known by a trainer by being given progressively increased load so that the training objectives can be achieved in accordance with their objectives. Basic knowledge of the training principles is the first step in developing an optimal training program, where the principles will be effective if applied.

Paired Passing Exercises

This exercise is passing up in pairs, the aim of which is to increase the ability of players to pass over (Winarno dkk., 2013:107). The initial attitude of the player holding the ball with two hands facing his partner, and the implementation of the ball is thrown towards his partner, then the ball in passing over to be passed to his partner again. The distance between the two is between 3 meters and 4 meters, so then each of them tries to pass the ball repeatedly. The advantage of this exercise is that players are not easily bored because it resembles playing real, so there is an element of fun. The weakness of the direction of the ball is difficult to avoid if the tandem is ugly will obviously affect the exercise so it depends on the partner.

This pair of passing exercises is done in a real field. This means that students, practice seriously the passing technique on it in the field that has been installed net or net. It's just that the game area is simplified as the length of the field is the limit of the attack line, while the width of the field is 3 meters. This exercise begins with the throwing of a ball or hull by one party, then the other party accepts, controls, and returns the ball using the passing over as well as the party who originally started by bouncing the ball, turn receives, controls, and returns the ball using the passing technique over (M. Mariyanto 1995:83).

Winarno., (2013:107), how to do passing exercises in pairs as follows:

1. Players pair up and face each other a distance of 3 meters.
2. The player passes over with his partner.
3. Do it repeatedly.
4. Furthermore the distance can be added further according to the ability of the player.

2. RESEARCH AND METHODS

1. Methodology Research

The method used in this study is a quantitative method, called quantitative because the research data in the form of numbers and analysis using statistics, where this method can be described the initial ability and final ability with the improvement made.

2. Type of Research

This type of research used in this study is experimental research, in which a study is carried out strictly to determine the causal relationship between variables. One of the main characteristics of experimental research is the treatment given in the research subject. The research design used in this study is One Group Pres-test-Post-test Design.

3. Research Instruments

Research instruments are tools or facilities used by researchers in collecting data so that their work is easier and the results are better (Sugiyono, 2012: 136 quoted from Rahmansyah Putra, 2017:36). The collection of data in this study is the measurement test used for initial measurements (pre-test) and final measurements (post-test) using a vertical jump test.

4. Data collection procedure

a. Preliminary test

Passing on volleyball

b. Treatment

Winarno., (2013:107), how to do passing exercises in pairs.

Tabel I. Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Pretest	20	9.7000	1.68897	7.00	12.00
Posttest	20	15.3500	2.00722	12.00	20.00

Tabel II. One-Sample Kolmogorov-Smirnov Test

		Pretest	Posttest
N		20	
Normal Parameters ^a	Mean	9.7000	15.3500
	Std. Deviation	1.68897	2.00722
Most Extreme Differences	Absolute	.170	.131
	Positive	.130	.129
	Negative	-.170	-.131
Kolmogorov-Smirnov Z	.762	.585	
Asymp. Sig. (2-tailed)	.606	.884	
a. Test distribution is Normal.			

2. Homogeneity Test

Herhyanto dkk., (2014:8.21-8.22), Homogeneity test commonly used is the F test with the help of an application SPSS-

Tabel III. ANOVA

		Sum of Squares	Df	Mean Square	F	Sig.
pretest	Between Groups	8.968	4	2.242	.743	.577
	Within Groups	45.232	15	3.015		
	Total	54.200	19			
posttest	Between Groups	31.318	4	7.829	2.596	.079

c. Final Test

The final test is to retest after conducting the initial test of samples about passing exercises in pairs

5. Data Analysis

To draw a right conclusion must go through a data analysis. Data analysis is a method obtained from tests and data collection. In a study, the data obtained must be scientific, reliable, accurate, relevant, and concerning what this research is about. Before testing the hypothesis, it is necessary to do a prerequisite test. Testing of measurement data relating to the results of the study aims to help in terms of analysis for better.

3. RESULTS AND DISCUSSION

1. Normality Test

Normality test is a test to see whether the research data obtained has a normal distribution or distribution or not. For testing this normality is using the Kolmogorof-Smirnov test with the help of the SPSS-16 application.

	Within Groups	45.232	15	3.015		
	Total	76.550	19			

3. Hypothesis Test

Data analysis in this study was carried out by the Maximum t test (2012:176).

Tabel IV. Paired Samples Test

Paired Differences				F	Df	Sig. (2-tailed)
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
			Lower	Upper		
5.65000	1.08942	.24360	5.14013	6.15987	23.194	19
						.000

Interpretasi Data

The results of the research and data processing of the preliminary test and the final test show that passing training in pairs has a positive effect (good) on the ability to pass on volleyball. This is evidenced by the statistical calculation of tcount 23.194 and the ttable value with df N-1 = 14 and a significant level of 5% with a confidence level of 95%, the table value is 1.729. With this comparison, the tcount > (greater) than ttable.

4. CONCLUSION AND SUGGESTIONS

Based on the results of research that has been carried out, it can be concluded that passing training over pairs can improve the passing ability of volleyball on the Undana Penjaskesrek women's team. With the results of research and data processing preliminary tests and final tests show that passing exercises over pairs have a positive (good) effect on the ability to pass volleyball, with an average pre-test of 26.95 increasing after doing plyometric jump to box exercises to be flat the average post-test was 39.5. seen from the pre test and post test there is an increase that occurs. This improvement is of course also through a planning, implementation of systematic training in accordance with planning, observation, tests and measurements as well as documentation.

REFERENCES

[1] Arif, Y., Boleng, Lukas M., *et al.* (2019) *PENGARUH KESEIMBANGAN, DAYA LEDAK OTOT TUNGKAI, DAN MOTIVASI BERPRESTASI DENGAN KEMAMPUAN TENDANGAN MONTHONG DOLIOCHAGI*. doi: <http://dx.doi.org/10.23887/ijerr.v2i3.21091.g13182>

[2] Arif, Y., Boleng, Lukas Maria, *et al.* (2019) 'The Effect of Weight Training Using Inner-Load Outer-Load on the Process of Developing Chest

Muscles in Fitness Members in the City of Kupang', *International Journal of Innovation, Creativity and Change*, 5(3), pp. 478–491. Available at: https://www.ijicc.net/images/Vol_5_Iss_3/28_Neolaka_P478_2019R.pdf.

[3] Crisfield, Deborah W. Crisfield-Winning. (2009). *Volleyball for Girls*. New York : Chelsea House (2009).

[4] Departemen Pendidikan dan Kebudayaan. (1999). *Buku I Materi Pelatihan Guru Pendidikan Jasmani Dan Kesehatan SD/Pelatih Klub Olahraga Usia Dini SD*. Jakarta: Departemen Pendidikan dan Kebudayaan.

[5] Herhyanto, Nar dkk. (2014). *Statistika Pendidikan*. Tangerang Selatan: Universitas Terbuka.

[6] Hebert, Mike. (2014). *Thinking volleyball*. United States of America : Human Kinetics.

[7] Kosasih, Engkos. (1993). *Olahraga Teknik Dan Program Latihan*. Jakarta: Akademika Pressindo.

[8] Lubis, Johansyah. (2013). *Panduan Praktis Penyusunan Program Latihan*. Jakarta: PT Rajagrafindo Persada.

[9] Mariyanto dkk. (1995). *Materi Pokok Permainan Besar II Bola Voli*. Jakarta: Universitas Terbuka.

[10] Malolepszy, Tomasz (2013). *European Volleyball Championship Results Since 1948*. United Kingdom: Scarecrow Press.

[11] Maksum, Ali. (2012). *Metodologi Penelitian*. Surabaya: Universitas Negeri Surabaya.

[12] Ngurah Nala, I Gusti. (2011). *Prinsip Pelatihan Fisik Olahraga*. Denpasar: Universitas Udayana.

[13] Sugiyono. (2011). *Statistika Untuk Penelitian*. Bandung: Alfabeta.

[14] Viera, L Barbara, Bonnie Jill Ferguson ed (1996), *Volleyball Steps to success*. United States of America : Human Kinetics.

[15] Winarno dkk. (2013). *Teknik Dasar Bermain Bola Voli*. Malang: Universitas Negeri Malang.

- [16] Yusmar, Ali. (2017). “Upaya Peningkatan Teknik Permainan Bola Voli Melalui Modifikasi Permainan Siswa Kelas X SMA Negeri 2 Kampar” dalam *Jurnal Pendidikan Dan Pengajaran*, No.1/Tahun ke-1/Juli 2017.
- [17] Willardson, Jeffrey M. (2014) *National Strength Conditioning Association. United States : Human Kinetics.*