

The Relationship between Concentration and The Accuracy of Badminton Long Serve Shots

Hendya Alif Junanda 1

Physical Education Health and Recreation Study Program, STKIP Pasundan, Cimahi City, West Java, Indonesia

Abstract

This study aims to determine the level of long service skills in playing badminton for class X students of SMA Negeri Ngamprah. In doing a service stroke, concentration is needed so that there are no mistakes that result in the loss of points, concentration is something that badminton players must pay attention to. The population used in this study were class X students totaling 52 people. the sampling used was purposive sampling with a sample size of 21 people. The results of the research from the results of simple correlation data analysis obtained the correlation value between concentration and confidence with long service ability (r) is 0.821. This shows that there is a strong relationship between concentration and long service ability. It is concluded that there is a significant relationship between concentration and long service ability in class X students of SMAN 1 Ngamprah.

Keywords: centration, badminton, long serve.

INTRODUCTION

Physical education, sports and health is a comprehensive educational process that uses discussion of materials on health, the environment and sports and physical (Lubis & Nugroho, 2021) activity with games. Therefore, sports and health education programs must be optimized so that students can gain knowledge and understanding of basic human movement, become skilled, creative, and have freshness and healthy living habits. It is not easy to achieve the goals of physical education. This is due to the views of some people towards physical education, who consider it unimportant and only part of the school learning program. This situation occurs at almost all levels of education from elementary school to high school (Setiawan, 2022).

The Physical Education, Sports and Health subjects taught in junior high schools can cover various cognitive, affective, and psychomotor aspects (Iqroni, 2022). Teachers carry out various effort For reach third element those. They try For ensure that all student enjoy learning with good. More and more clear that objectives and benefits from learning sports and education physical education at school influenced by many thing, one of them is ability

Correspondence author: Hendya Alif Junanda, STKIP Pasundan, Indonesia.

Email: hendyaalifjunanda@gmail.com

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students. Evaluation process will done in a way consistent during the learning process. So far, teachers in conducting evaluations have only been oriented towards Basic Competencies (KD) so that from the results of the evaluation, the learning outcomes of each student will be seen during the learning activities, thus teachers can find out how students' learning achievements are in physical education and sports subjects, especially psychomotor aspects (Lubis et al., 2017).

It is expected student in levels School Upper Middle School has very useful skill For adjustment self in life everyday, especially related with method thinking, desire For knowledge, competition, strength, balance, and coordination, as well as useful movement For life everyday. Grade X students are expected to not only understand various types of sports, but also be able to play and master badminton game techniques. Students must take turns to play badminton because learning only uses one court.

Badminton is sport a popular racket, especially in Asia and Europe (Alam et al., 2015)(Alam et al., 2015)(Mangun et al., 2017). The sport appeals to a wide range of age groups, skill levels, and both men and women play the sport indoors or outdoors for recreation as well as competition. shuttlecock badminton No reflected and must played in the air, so that game This is game fast in need motion good reflexes and level high fitness (Limbong, 2021). Badminton is branch sports that require ability excellent physical condition in particular element strength body in a way Overall, if you look closely only from aspect execution of stroke one one by one, but series activity in a way the whole thing that was implemented in One games, Games badminton show characteristic as branch anaerobic-aerobic dominant (Rusli et al., 2021).

badminton player must master include (1) how to hold the racket, which consists of the American grip, English grip, combined grip and backhand grip, (2) wrist movements, (3) foot movements. work, (4) concentration. The hitting techniques include: (1) service, (2) lob, (3) drive, (4) dropshot, (5) service return, (6) smash. (Bimantara, 2021).

The basic techniques in badminton are serving, stepping movements, backhand strokes, forehand strokes and smash strokes. A (Hafid et al., 2020)badminton athlete must master all the basic techniques in it. Because basic techniques are the beginning of a game to achieve success in the game itself. One of the basic techniques in the game of badminton is service. Service is a shot that opens or starts the game (Kadir et al., 2021). Service in badminton is divided into four types. Such as short service, long service, twitch service, and flat service. Service is the first shot (attack) to start the game. In the game of badminton, service skills are absolutely mastered by every player, both short and long service.

ISSN : 2721-9992 (Online) ISSN : 2656-1883 (Print)

A wrong serve is fatal, while excelling in serving is the initial capital for success. Long serve is one component of the underhand stroke technique, especially involving the movement of swinging the racket from bottom to top. Long serve is often used in singles matches, where the shuttlecock is hit hard towards the opponent's court to start a rally (Ayuningrum et al., 2021). This serve directs the ball high and far, and the ball must turn and fall as close to the back boundary line as possible. Thus, the ball is more difficult to predict and hit, making the opponent's take less effective.

Long forehand serve is one of the basic stroke techniques of badminton and will often be used in defense and attack patterns (Mangun et al., 2017). The service stroke is the initial stroke that flies the shuttlecock to the opponent's court diagonally (Sahabuddin, 2023), and aims to start the game. In the rules of badminton, service is the initial capital to get points if you can't serve well. If the shuttlecock falls right at the intersection of the lines, then the service performed by the player will make it difficult for the opponent to return the shuttlecock because the opponent will hesitate when he wants to hit the shuttlecock. (Sahabuddin, 2023). This often happens when the quality of the player's stroke is accurate or right on target. Service in badminton plays a very important role. Because service is the main problem because based on the rules of the game to start the game using a service stroke. Long service strokes determine the pattern of play to win the badminton game. However, various problems will arise if the athlete's concentration during training is disturbed, especially during the match. The problems that often occur due to disturbed concentration in athletes are that they have an impact on reduced accuracy, for example, the service stroke is not directed according to the target.

METHOD

The method in this study uses a quantitative approach and is descriptive correlation. A descriptive method is "a research method to create a picture of a situation or event, so this method is intended to simply accumulate large data". Through this method, researchers provide a picture, explain the relationship and test the hypothesis of the problem to be solved. Through this method, it will also be known what hypotheses are accepted and rejected.

The population used was 52 students of class X of SMAN 1 Ngamprah. The sampling technique used in this study was Purposive Sampling, with samples taking part or representatives of a population being studied [40]. The sample is part of the number in a population. The sample to be used in the study was 21 students.

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Research instruments are the methods used by researchers to use data to make their work easier and the results better, in the sense that they are more accurate, complete, and systematic so that they are easier to process. The research instruments in this study used questionnaire techniques and long service skills tests.

The data collection technique in this study was by questionnaire and long service test. Data collection in this study was by measurement, namely based on the results of the questionnaire and long service test. In addition, the researcher also provided training or trials to the implementing staff in carrying out their duties, this was done to avoid errors in measurement when the skills test was carried out. Likewise, to students, the researcher also provided instructions for implementing the test and collecting data so that it is hoped that the research can run as desired.

Data analysis is a very important part of research. Because with data analysis, the hypothesis that is set can be tested for its truth. In this study, the data obtained was then analyzed and expressed in quantitative form with a percentage. To determine the category using a statistical formula. Data analysis used in this study uses quantitative statistics with a percentage.

RESULTS AND DISCUSSION

Results

This study uses a correlational method and to analyze it using simple correlation analysis. Simple correlation analysis is used to determine the relationship between two variables and to determine the direction of the relationship with the direction of the relationship that occurs. The simple correlation coefficient to determine how much relationship occurs between two variables can be seen from the table below:

Table 1. Correlation Coefficient

Coefficient interval	Relationship Level		
00.00-0.1999	Very Low		
0.20-0.399	Low		
0.40-0.599	Currently		
0.60-0.799	Strong		
0.80-1.000	Very strong		

This research will discuss simple correlation analysis using the Pearson method or it can also be called Product Pearson Moment. The correlation value (r) ranges from 1 to -1, the closer the value is to 1 or -1, the stronger the relationship between the two variables, conversely, if it approaches 0, the weaker the relationship between the two variables. A

ISSN : 2721-9992 (Online) ISSN : 2656-1883 (Print)

positive value indicates a unidirectional relationship (X increases, Y increases) and a negative value indicates an inverse relationship (X increases, Y decreases).

Table 2. Correlation Results
Correlations

		×	Υ
×	Pearson Correlation	1	.821**
	Sig. (2-tailed)		.000
	N	21	21
Υ	Pearson Correlation	.821**	1
	Sig. (2-tailed)	.000	
	Ν	21	21

^{**.} Correlation is significant at the 0.01 level (2-tailed).

The results of the simple correlation analysis (r) obtained a correlation between concentration and self-confidence with long serve ability (r) of 0.821. This shows that there is a strong relationship between concentration and students' long serve ability. The correlation coefficient significance test is used to test whether the relationship that occurs applies to the population (can be generalized). The test uses a two-sided test with a significance level of a = 5%. (the test is carried out 2 sides because to find out whether or not there is a significant relationship, if 1 side is used to find out the relationship is smaller or larger). The level of significance in this case means that we take the risk of being wrong in making a decision to reject the correct hypothesis as much as 5% (significance of 5% or 0.05 is a standard measure often used in research). The significance value in this study (0.00 < 0.05) means that there is a significant relationship between concentration and long serve ability in students. Because the correlation coefficient is positive, it means that self-concentration is positive. So it can be concluded that the relationship between concentration and long service ability has a correlation of 0.821 and is included in the very strong correlation level, as can be seen in the table above.

Discussion

The service stroke is the first stroke that starts in a badminton game. The service plays a very important role, because the service has a good influence on getting points and winning a match. A long service stroke is done by hitting the shuttlecock as hard as possible to the back of the opponent's field. This stroke is often done by singles players or is often called deep single serve. In singles play, it is very important to hit a high and deep forehand long serve, especially for singles play.

The results of the study on the concentration that falls into the very high category are 14.3%, the high category is 33.3%, the medium category is 23.3%, the low category is 23.3% and for the very low category is 16.7%. From the graph above it can be concluded that the student's concentration is "High". While the results of the study on the ability of

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long service that falls into the very high category are 23.8%, the high category is 38.3%, the medium category is 14.2%, the low category is 9.5% and for the very low category is 14.2%. From the graph above it can be concluded that the student's concentration is "High ".

Students who are in the low category in the implementation of the long service skill test need special attention to further improve their training in order to achieve good skills. Long service training needs to be given more to students in the low category in order to improve their skills. With increased service skills, it is hoped that the badminton game will also improve. While students in the very high category need to improve their training in order to achieve even better skills.

Students are able to do long serves well if they can concentrate and believe in their abilities. When a student loses concentration even for a moment, it can affect their performance and affect the test results. This is because focus significantly affects performance. When students feel confident in their abilities, the athlete feels calm, relaxed and the athlete can interpret their anxiety levels in a more positive direction.

Long serve is included in the underhand stroke type, namely the stroke is done by swinging the racket from bottom to top. Long serve is often used in singles games, with the speed of the shuttlecock bouncing towards the opponent's court so that the game will have a rally (Aryanti et al., 2021). Also with that it can be used as a foundation to further improve the basic technical skills of playing badminton, namely service. Because service is the most basic technique to be able to determine how the rhythm of the game is in playing badminton. (Ichsanudin & Aguss, 2022).

CONCLUSION

From the research results, it is known that the contribution of concentration and self-confidence to long badminton service is 33.3%. While the service ability test is 38.3%. Based on the results of simple correlation data analysis, the correlation value is obtained between concentration and self-confidence with long service ability (r) 0.821. This shows a strong relationship between concentration and long service ability of class X students and the significance value shows a result of 0.00 <0.05, meaning that there is a significant relationship between concentration and long service ability.

ISSN : 2721-9992 (Online) ISSN : 2656-1883 (Print)

BIBLIOGRAPHY

- Alam, F., Nutakom, C., & Chowdhury, H. (2015). Effect of porosity of badminton shuttlecock on aerodynamic drag. *Procedia Engineering*, 112, 430–435. https://doi.org/10.1016/j.proeng.2015.07.220
- Aryanti, S., Victorian, A. R., Solahuddin, S., Studi, P., Jasmani, P., Kesehatan, D., Keguruan, F., & Pendidikan, I. (2021). Video Pembelajaran pada Materi Teknik Dasar Footwork Bulutangkis. *Jurnal Patriot*, *3*, 329–333. https://doi.org/10.24036/patriot.v%vi%i.805
- Ayuningrum, A. D., Dwi Pradipta, G., & Prastiwi, B. K. (2021). Pengaruh Penggunaan Target Net dan Target Bawah Terhadap Ketepatan Servis Panjang Forehand Bulutangkis Pada Anak Usia 11-13 Tahun di PB CPLUSco Semarang. *Online*) *Journal of Physical Activity and Sports*, 2(1), 21–28.
- Bimantara. (2021). ANALISIS KETERAMPILAN DASAR BULUTANGKIS PB GEMILANG MATARAM TAHUN 2021. *Jurnal Pendidikan Olahraga Dan Kesehatan IKIP Mataram*, 8. http://e-journal.undikma.ac.id/index.php/gelora
- Hafid, M., Oni, H., Januarto, B., & Tomi, A. (2020). Meningkatkan Backhand Overhead Clear Bulutangkis Dengan Metode Drill. *Sport Science and Health*, *2*(4), 2020. http://journal2.um.ac.id/index.php/jfik/indexhttp://fik.um.ac.id/
- Ichsanudin, & Aguss, R. M. (2022). PENERAPAN METODE DRILL UNTUK MENGETAHUI TINGKAT KETERAMPILAN SERVIS PANJANG BULUTANGKIS PADA ANGGOTA CLUB PB MACAN TUNGGAL. *JOURNAL OF ARTS AND EDUCATION*, 2, 16.
- Iqroni, D. (2022). MEDIA SHOOTING MULTIGUNA OLAHRAGA BOLA BASKET UNTUK PEMBELAJARAN MAHASISWA Keterangan. *Jurnal Olahraga Dan Kesehatan Indonesia (JOKI)*, 2(2), 77–82. https://jurnal.stokbinaguna.ac.id/index.php/jok
- Kadir, S. A., Aimang, H., & Nur, A. (2021). HUBUNGAN KOORDINASI MATA TANGAN TERHADAP KETERAMPILAN SERVIS PENDEK BULUTANGKIS MAHASISWA PENJASKESREK UNIVERSITAS MUHAMMADIYAH LUWUK. Babasal Sport Education Journal, 2, 65–71. http://doi.org/
- Limbong, D. M. (2021). Pengaruh Latihan dengan Lampu Reaksi dan Shuttlerun Terhadap Kelincahan Gerak Kaki (Footwork) Atlet Bulutangkis PB. Tj Prestasi Tebo Effect of Training with Reaction Lights and Shuttlerun On Footwork of PB Badminton Athletes Tj Prestasi Tebo DONI MARGANDA LIMBONG Program studi kepelatihan olahraga, FKIP, Universitas Jambi, Indonesia. *Indonesian Journal of Sport Science and Coaching*, 03(02), 68–74. https://onlinejournal.unja.ac.id/IJSSC/index
- Lubis, A. E., & Nugroho, A. (2021). First Aid Training Model for Physical Education Teachers. *TEGAR: Journal of Teaching Physical Education in Elementary School*, 4(2), 73–80. https://doi.org/10.17509/tegar.v4i2.33614
- Lubis, A. E., Ramadan, & Lestari, P. (2017). PENERAPAN PENDEKATAN BERMAIN PADA DRIBBLING BOLA BASKET SISWA KELAS VII SMP. *Jurnal Ilmiah STOK Bina Guna Medan*, *5*(2), 62–69.
- Mangun, F. A., Budiningsih, M., & Sugianto, A. (2017). MODEL LATIHAN SMASH PADA CABANG OLAHRAGA BULUTANGKIS UNTUK ATLET GANDA. *GLADI JURNAL ILMU KEOLAHRAGAAN*, 8(2), 78–89. https://doi.org/10.21009/gjik.082.01
- Rusli, M., Jumareng, H., Maruka, A., Pendidikan, J., Kesehatan, J., & Rekreasi, D. (2021). HUBUNGAN POWER OTOT LENGAN DENGAN KEMAMPUAN MELAKUKAN SERVIS PANJANG PADA PERMAINAN BULUTANGKIS PADA SISWA PUTRA KELAS VIII SMPN 1 WANGI-WANGI. *Jurnal Olympic*, *1*(1).

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Sahabuddin. (2023). The Effect of Hand Reaction Speed and Wrist Flexion on Short-Service Ability in Badminton Games. *Journal RESPECS (Research Physical Education and Sport*, 5(1), 232–245. https://doi.org/10.31949/respecs.v5i1.5614

Setiawan, D. (2022). PERSEPSI SISWA TERHADAP PENCEGAHAN DAN PERAWATAN CEDERA DALAM PEMBELAJARAN PENDIDIKAN JASMANI. *Jurnal Olahraga Dan Kesehatan Indonesia (JOKI)*, 2(2), 137–142. https://jurnal.stokbinaguna.ac.id/index.php/jok