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Analysis of backhand service badminton doubles athletes in the championship in Banyumas

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Abstract

The purpose of this study was to analyze the results of the accuracy of targeting the backhand short serve badminton at the Dulongmas Regency Championships in 2022. This research method using a descriptive analysis approach with a survey approach. The population in this study were participants in the Dulongmas Regency Championships 2022. The sample for this study was male beginner doubles athletes aged 13-14 years. The data collection technique in this study used purposive sampling with the following criteria: 1) Male doubles athletes; 2) Age group 13-14 years; 3) Players of equal ability; 4) Video shooting is only 1 set. The data collection technique was carried out by making video observations that had been taken by researchers at the Dulongmas Regency Championship 2022 and then entering them into the table that had been prepared during the match. The data analysis technique used is descriptive statistics. The results of this study were a total of 147 service attempts made, 5 punches (3%) that killed the opponent, 44 punches (30%) that were too high from the net so that athletes lost points easily, 41 punches (28%) served undirected which makes it easier for the opponent to return the return serve, 11 strokes (7%) of the serve are troublesome so that the opponent has difficulty returning it, self-destructive service errors consisting of 13 strokes (9%) of the shuttlecock out of the court area (out), and 14 blows (10%) service violations made by players or so-called (faults), 7 strokes (5%) stuck in the net, and 12 strokes (8%) twitch service or what is often called a flick serve. Backhand service skills can be developed by maximizing training using various drill methods so that players can develop their game strategy on the field.

Keywords: Backhand service, badminton

Introduction

Badminton is a sport that is very popular throughout the world. In fact, badminton in Indonesia has always been a mainstay for achieving achievements by often winning prestigious international titles. Williyanto *et al.*, (2018) ^[21] Badminton can be in demand by various layers of society and age groups, various skill levels, both for recreation and achievement, from men and women.

In Indonesia, this sport has been contested from the age group Pre-Early Age (under 8 years), Early Age (9-10 years, Children (11-12 years), Beginners (13-14 years), Teenagers (15-16 years), Cadets (17-18 years), Adults (over 19 years), and Veterans (elderly). Public interest is very vibrant in exploring badminton matches in Indonesia, tested from every match or event organized by PBSI or private parties the average contestant who takes part in the championship is not less than 200 men and women. The age of children starting to practice badminton on average starts from the age of 6-8 years although some start at the age of 10.

Badminton players/athletes should already know and learn about the basic technique of hitting badminton to make it easier when playing on the field. In badminton games there are 5 types of strokes namely service, lob, drive, drop shot, and smash (Rita, 2018) ^[16]. Aksan (2012) ^[2] service is the initial capital to be able to win the match in badminton game. Every player must have good service accuracy because service can have an effect on getting points and winning matches. Aside from being the game opener, the benefit of the serve is that it will be easier for us to get points from our opponent if our serve is of good quality and directed. Service technique is one of the important techniques in doubles, its impact on results is far greater than in singles (Zhang *et al.*, 2013) ^[23].

But in reality, badminton athletes often make mistakes when serving, especially when doing a short backhand serve. The mistakes that athletes generally make are the shuttlecock not reaching the opponent's side, the shuttlecock being netted, and besides that athletes also often throw the ball high over the net so that the opponent can easily attack (Victory Manurung & Dimiyati, 2018; Zhang *et al.*, 2013) ^[20, 23]. Based on observations made by (Haerun, 2020) ^[10] during routine practice on the field, many players perform short backhand serves which are inaccurate and not in accordance with the correct procedure for short backhand serves, so that many shuttlecocks get caught in the net, not reaching the playing area. Opponent, as well as the shuttlecock that soars high above the net. According to (Ramadhan & Hidasari, 2020) ^[15] many athletes who make mistakes in hitting short backhand serves such as shuttlecocks still often fall into their own field of play or leave the opponent's field area due to a player's lack of accuracy.

There are many kinds of hitting techniques in the game of badminton, one of which is the serve technique. Specifically, serve in badminton is the first point hit and plays a key strategic role because there is no influence from the opponent's actions (Gómez-Ruano *et al.*, 2020) ^[8]. According to (Subarjah & Hidayat, 2007) serving is a very important basic technique in getting points/points consistently to achieve victory. Chiminazzo *et al.*, (2018) ^[5] also stated that in racquet sports (badminton), successful players use different patterns of serving and effective play that make it possible to beat their opponents during rallies and matches. This serve is one of the most used strokes in badminton (Abdullahi & Coetzee, 2017; Chiminazzo *et al.*, 2018) ^[1, 5] which needs to be under full control of the server to potentially gain spatial and temporal advantages (eg, short serve and long) over the receiver during consecutive strokes played at each point (Alcock & Cable, 2009; Pearce, 2002) ^[3, 13].

Championships such as the Kedu, Pekalongan, Banyumas Regency Championships (Kejurkab Se-Dulongmas) are a form of championship that can provide an assessment of the weaknesses and weaknesses of the players, especially in serving shots. The Dulongmas District Championship competition in Purwokerto, attended by the best players from Kedu, Pekalongan, and Banyumas residencies, is an opportunity for coaches to see the skills of their athletes during training that has been carried out in advance to prepare for the championship.

Based on the observations of researchers in several matches on the field, it was found that there were many short backhand serves that were half-hearted, monotonous (not directed), stuck in the net, and violations (faults) committed by athletes, especially in the men's beginner doubles, so that opponents could easily get points. Effortlessly in the field. This is what the trainer should pay attention to correct these deficiencies.

Based on the problems above, the researcher highlights that there are still deficiencies in the backhand short serve technique, because the basic serve technique is very important in badminton. Serving is not only the game opener, but there are various benefits from serving strokes, one of which is that it will be easier for players to get points from the opponent if the serve is quality and directed (Budi *et al.*, 2021) ^[4].

The purpose of this study was to determine the results of the analysis of the accuracy of the target accuracy of the badminton short serve backhand at the 2022 Dulongmas District Training event, assessed from what types of serves were performed by athletes when competing on the field using the category table of short backhand types.

Materials and Methods

This research method uses a descriptive analysis approach, because this study aims to analyze the short serve backhand technique skills in novice athletes (U-14 years) at the Dulongmas District Jurisprudence 2022 in Purwokerto. Maksum (2016) ^[12] descriptive research is research that describes a symptom, phenomenon or event. The population in this study were participants in the Dulongmas Badminton Championships 2022. The sample for this study was male beginner doubles athletes aged 13-14 years. Data collection technique in this study used purposive sampling with the following criteria:

1. Male doubles athletes.
2. Age group 13-14 years.
3. Players of equal ability.
4. Video shooting is only 1 set/game.

The method in this study is document analysis, which means that current research is carried out on information when it is documented in the form of video shows.

1. Research Subjects

Subjects in this study were male doubles athletes (U-14 years old) at the Dulongmas District Championship 2022 match in Purwokerto.

2. Research procedures

Data collection techniques in this study are as follows:

1) Research preparation stage

Some of the initial steps in conducting research preparations include:

- Taking videos in the field using mobile phones or video recording.
- Presenting research instruments.
- Presenting laptops.
- Presenting writing instruments (pens, books, erasers) to write and analyze data.

2) Conducting research stage

- Opening the video that has been taken in the field.
- Starting to analyze the video.

3. Data analysis techniques

1. Data analysis technique used is to record short serve backhand data only into a table that has been prepared.
2. Enter data into the table.
3. Calculating the percentage of short serve backhand strokes, the percentage of shot failures, the percentage of hitting points, and the percentage of effectiveness of hitting each set in the men's beginner doubles match (U-14 years) at the Dulongmas Regency Jurisprudence 2022.
4. In this study using descriptive statistical analysis techniques the number total strokes: $x_1 + x_2 + x_3 + x_4 + \dots + x_n = \text{Total percentage strokes}$.

$$X_1 = \text{amount/total} \times 100\%$$

$$X_2 = \text{amount/total} \times 100\%$$

$$X_3 = \text{amount/total} \times 100\%$$

$$X_4 = \text{amount/total} \times 100\%$$

$$X_N = \text{amount/total} \times 100\%$$

(Hadi, 2017) ^[9]

3. Results & Discussion

Video shooting as the basis for research data was carried out on 15-18 December 2022, located in Gor Satria Purwokerto, Banyumas Regenc and Central Java. The subjects in this study were male beginner doubles athletes (U-14 years).

Table 1: Short service backhand data collection results

Type of Assessment		Athlete																Total Service
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
		Result of Service Assessment																
Kill Enemy		1	0	0	0	1	0	1	0	0	0	0	0	2	0	0	0	5
Too High		1	4	3	2	2	4	3	3	3	5	0	4	3	0	6	1	44
Undirected		3	4	2	1	3	3	2	0	5	1	5	3	3	3	3	0	41
Directed		1	2	0	1	2	0	0	1	1	0	1	0	1	1	0	0	11
Dead Shuttle	Fault	1	0	1	1	0	1	1	0	1	1	0	0	1	3	1	1	13
	Out	0	1	1	2	2	0	1	1	0	1	1	2	1	0	1	0	14
	Stuck	1	0	0	1	1	0	0	0	0	1	0	0	0	2	0	1	7
Flick Serve		1	1	1	0	0	2	1	1	0	2	2	0	1	0	0	0	12
Total Serves Per Athlete		9	12	8	8	11	10	9	6	10	11	9	9	12	9	11	3	147
Result Per Game		21		16		21		15		21		18		21		14		

Description

Too High: The shuttlecock flies too high above the net, making it easier for the opponent to attack.

Kill enemy: Points earned by players for serving in a good direction so that the enemy is tricked and cannot return the service return.

Undirected: The player only serves without being directed, making it easier for the opponent to return the shuttlecock (return serve).

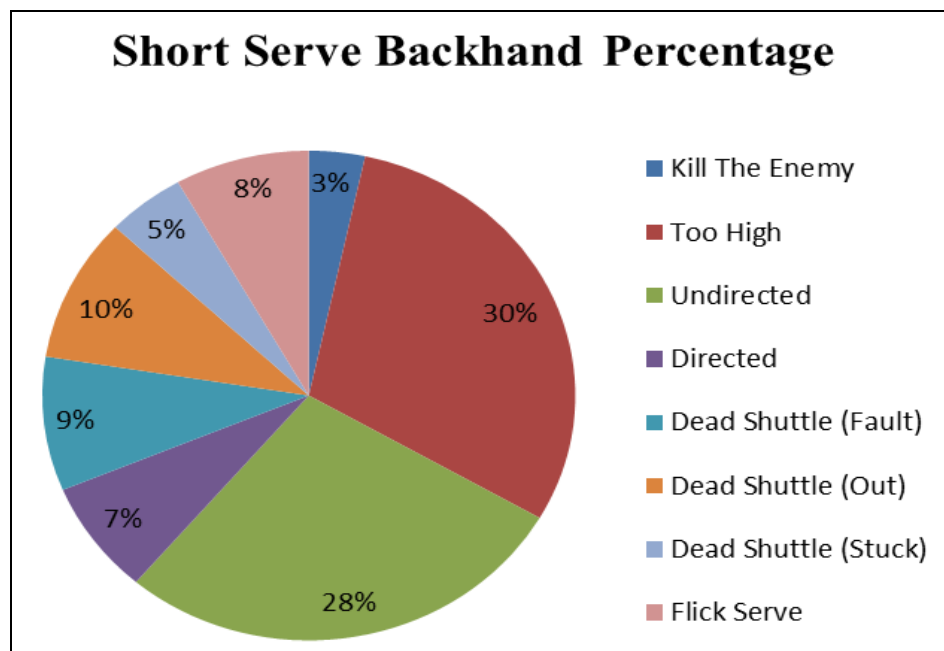
Directed: The player serves in a directed manner so that it makes it difficult for the opponent to return the shuttlecock (return serve).

Dead shuttle: A player makes a service error on the field which makes the opponent get points for free, such as the shuttlecock leaving the playing area, the player committing a service violation, and the shuttlecock getting stuck in the net.

Flick serve: A player serves a twitch to the back of the

opponent's game with the aim of outwitting.

The meaning of the numerical values in the table above is the number of athletes performing each type of service category. Based on the data obtained, the results obtained were not good from the analysis of the success of the short serve backhand to get points. There were a total of 147 service attempts made, 5 punches (3%) that killed the opponent, 44 punches (30%) that were too high from the net so that athletes lost points easily, 41 punches (28%) that were not directed. makes it easier for the opponent to return the return serve, 11 strokes (7%) are troublesome serves so that the opponent has difficulty returning it, service errors die alone consisting of 13 strokes (9%) the shuttlecock is out of the court area (out), and 14 strokes (10%)) service violations by players or so-called (faults), 7 strokes (5%) stuck in the net, and 12 strokes (8%) twitch serve or what is often called a flick serve. This shows that serving cannot be used as a weapon to gain points and develop game strategies on the court, so that the serve needs to be of particular concern to coaches so that athletes can improve their serving abilities. The data can be seen in the following diagram:

**Fig 1:** Short Serve Backhand Percentage**Discussion**

The service shot is a very important hitting technique in badminton game because if a player cannot serve properly and correctly then the game of the player serving will

certainly not be able to develop and the opponent will easily get points from the serve which is not good. Budi *et al.* (2021) ^[4] serving is not only the game opener, but there are various benefits from serving shots, one of which is that it kill be

easier for players to get points from opponents if the serve is quality and directed. SM Vial (2016) ^[19]. The purpose of the short serve is to force the opponent to hit the shuttlecock up at a steep angle inward to clear the net, allowing the serving player to hit the shuttlecock from a high point above the net from where it is easier to score points.

This research on the analysis of the backhand service in male beginner doubles athletes (U-14 years) shows that there are still many mistakes and shortcomings of the athletes when making service shots. A serve that should be a weapon to strategize going forward so that the game can develop and even earn points if the serve is directed and of good quality, however becomes a weakness that is easily exploited by opponents to gain value/points. Short serve in badminton (most often using serve in doubles discipline) requires a high level of accuracy so that the shuttlecock has a downward trajectory when it passes over the top of the net, which forces the opponent to hit the shuttlecock back over the net at a high trajectory angle (Duncan *et al.*, 2017; Edwards *et al.*, 2007) ^[6, 7], will not land right past the service line if the shuttlecock is not returned. This makes it easier for servers to take offensive shots and score points (S. Vial *et al.*, 2020) ^[18].

Judging from the data taken by the researchers, many athletes perform a half serve, making it easier for the opponent because the shuttlecock is not directional, then followed by the player's own mistakes such as going out, breaching the service (fault), and getting stuck in the net. This causes many athletes to give points for free to their opponents from services that are half-hearted, aimless, and self-destructive by players. In the modern badminton era, when athletes serve as much as possible, they must be able to trouble the opponent so that game strategies can develop, especially with the rally point system in badminton games where if a player makes a mistake himself, the points will increase for the opponent and this is very detrimental for the athlete himself.

Prabasmara *et al.*, (2022) ^[14] things that cause inaccurate serves can be caused by lack of concentration, haste, and inappropriate movements. If the ability to serve is still relatively low, it is feared that the players will have difficulty serving properly, and if the players can serve, it will be easier for the opponent to anticipate (Zarwan *et al.*, 2018) ^[22]. Based on research by Ramadhan & Hidasari (2020) ^[15] there are several factors needed to support the accuracy of direction in performing short serves, namely calmness, motor control, focus, concentration, and accuracy. In addition, according to the results of research Hamzah (2022) ^[11] a teaching or training style is needed as material to provide training material so that players/athletes can better master and understand service movement techniques with a good implementation phase.

Conclusions

Based on the results of the study it can be concluded that the backhand serve in male beginner doubles athletes (U-14 years) is still too high above the net and not directed, so the weakness of this serve can be easily exploited by the enemy to get points, as well as own mistakes made by players which result in opponents getting points for free.

This research is expected to provide input and recommendations to coaches and athletes to pay attention to the serves that are performed, so that the weaknesses in this serve must be corrected gradually. Backhand service skills can be developed by maximizing training using various drill methods so that players can develop their game strategy on the field.

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