Requirements for Badminton Strokes in One Game by Elite Athletes in Single Match Numbers

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Abstract

Badminton is experiencing rapid development both domestically and abroad. The ultimate goal of this game is to try to drop the shuttlecock in the opponent's playing area and try to prevent the opponent from hitting the shuttlecock and dropping it on his own court, if the shuttlecock falls on the floor or gets stuck in the net, the game stops. The purpose of this study was to analyze Requirements for Badminton Strokes in One Game by Elite Athletes in Single Match Numbers. The researchers used a one-shot case study design. This research was carried out by observing badminton match videos that were broadcast on the internet media, namely YouTube. In this study, observers analyzed 4 matches played by single athletes ranked in the top 10 in the world. The data that has been collected is then analyzed, while the technique used is the percentage. Based on the results of the study, it can be concluded that the average results of each badminton Elite Athletes' stroke in Single Match Numbers in One Game, namely: Service 10.20%, Chop 4.86%, Dropshoot 6.37%, Smash 12.21%, Lob 7.59%, Netting 33.08%, Drive 4.98%, Clear Lob 20.72%.The highest percentage is on badminton netting with a percentage result of 33.08%.

Keywords: Badminton, Elite Athletes, Single Match, One Game

INTRODUCTION

Badminton is one of the sports that has succeeded in bringing Indonesia's name to the world (Meiyanto et al., 2018). Indonesian athletes have won many championships, such as the Thomas Cup, Uber Cup, Sea Games, Asian Games, World Championships and even the Olympics. All of this was achieved thanks to good cooperation between athletes, coaches, administrators and other support teams (Aprilia et al., 2018). The achievements achieved require a great struggle, between the government and clubs throughout Indonesia to capture the seeds of excellent athletes (Nugroho et al., 2021). Achievements were achieved because the training was carried out systematically and systematically (Ishak et al., 2020). Systemic means that training is carried out in an integrated manner, there are many elements of training in badminton so that the right method is needed. Systematic means that training is carried out in a programmed manner which is carried out correctly according to the principles of training (Abián et al., 2016). In this case, PBSI (Indonesian Badminton Association) is right in carrying out the training program, it is proven that Indonesia was able to become a champion in the mixed doubles sector at the All England 2020 championship last March before all international championships were temporarily suspended due to the covid-19 pandemic.

The World Championship and World Tour Final are the highest single events at the International level organized by BWF (Badminton World Federation). Championships in the team events include the Thomas Cup (men's team), Uber Cup (women's team), and Sudirman Cup (mixed team). Meanwhile, the badminton championships organized by BWF member countries are divided into several levels, including the World Tour Super 1000: All England, Indonesia Open, China Open; World Tour Super 750 : Denmark Open, Malaysia Open, Fuzhou China Open; World Tour Super 500 : Japan Open, Thailand Open, India Open, Korea Open and so on.

Badminton is one of the mainstay sports in Indonesia (Martila & Sulastio, 2019). Badminton is very popular with all groups from an early age to adults even veterans, both men and women (Saputra et al., 2020). This game uses rackets, shuttlecocks, nets, and courts (Kardani & Rustiawan, 2020). The racket as a bat and the shuttlecock as the object to be hit. Badminton is a sport that uses a racket as a punching tool and a shuttlecock becomes a striking object that requires basic to complex skills (Subarjah & Hidayat, 2007). The scoring system uses guidelines from BWF, namely rally point and two winning set system, with the aim of finding two winning sets (Asbupel et al., 2020). Players are declared victorious when they reach 21 points in each set. If in the game there is a double, then the player is declared to win if the difference is two points, and the maximum point for the double is 30. Therefore, in order to play a good badminton game, mastery of the technique or basic skills of the game is required. The badminton strategy consists of placing the shuttlecock in the right place by crossing the net and falling within the boundaries of the opponent's court and minimizing the time for the opponent's reaction (Cohen et al., 2015).

The badminton game has changed the rules of the game, for example in point counting. In the past, badminton used a ball transfer system (game 15) and now uses a rally point system (game 21). Rally points were officially used in May 2006, this can be seen in the BWF regulations regarding the scoring system (Kardani & Rustiawan, 2020). The characteristics of rally points are reward and punishment, meaning that when we make a mistake, the opponent will get points, but if we win a rally, the points become our rights. The game uses the best of three games system with normal point counting, where the athlete who first gets 21 points wins. However, if there is a 20-20 position, a double will be carried out until one athlete is 2 points ahead of his opponent. If the points are still the same up to 29-29, then the athlete who is able to reach 30 points wins. As a result of changing the scoring system from moving the ball to rally point, it will affect the training program that is run. In the past, endurance was more emphasized, but now speed and power are prioritized.

According to (Harsono, 2015) exercise is a systematic process of practicing or working, which is carried out repeatedly, with more and more increasing the burden of training or work. Systematic means planning, according to a schedule, according to certain patterns and systems, methodical, from easy to difficult, regular practice, from simple to more complex (De França Bahia Loureiro et al., 2017). The intention is to repeatedly make movements that were originally difficult to do become easier, automatic, and reflective in their implementation so that they save more energy (Nadzalan et al., 2018).

With the importance of the training program, it is necessary to analyze every badminton stroke movement. Therefore The purpose of this study was to analyze Requirements for Badminton Strokes in One Game by Elite Athletes in Single Match Numbers.

METHOD

This research was carried out by observing badminton match videos that were broadcast on the internet media, namely YouTube. In this study, observers analyzed 4 matches played by single athletes ranked in the top 10 in the world. The matches that will be observed are as follows:

1. Chou Tien Chen (Taiwan) vs Viktor Axelsen (Denmark)
2. Anthony Sinisuka Ginting (Indonesia) vs Lee Zii Jia (Malaysia)
3. Tai Tzu Ying (Taiwan) vs Chen Yufei (China)
4. Ratchanok Intanon (Thailand) vs Akane Yamaguchi (Japan)

The data collection was carried out in three stages, namely: the preparation stage, the video capture stage, and the video analysis stage.

1. Preparation stage:
   a. Setting up the laptop
   b. Connect with wifi
2. Video capture stage:
   a. Download match videos
   b. Save videos on laptop
3. Video analysis stage:
   a. Playing match videos
   b. Record data, repeat the video several times to get valid results

The data that has been collected is then analyzed, while the technique used is the percentage. Descriptive research has a variety of research designs (Sugiyono, 2019). The use of research design is adjusted to the research aspect and the main problem to be studied (Sugiyono, 2016). Based on this, the researchers used a one-shot case study design.

RESULT AND DISCUSSION

The frequency and percentage of component requirements the need for strokes in one game can be seen in the following table:

Table 1. Requirements for badminton strokes in one game

Number	Badminton Strokes	Amount	%
1	*Servis*	344	10.20
2	*Chop*	164	4.86
3	*Dropshoot*	215	6.37
4	*Smash*	412	12.21
5	*Lob*	256	7.59
6	*Netting*	1116	33.08
7	*Drive*	168	4.98
8	*Clear Lob*	699	20.72
	Jumlah	3374	100.00

From the results of the study, it can be obtained the average result of every badminton Elite Athletes' stroke in Single Match Numbers in One Game, namely: Service 10.20%, Chop 4.86%, Dropshoot 6.37%, Smash 12.21%, Lob 7.59%, Netting 33.08%, Drive 4.98%, Clear Lob 20.72%.

Badminton is experiencing rapid development both domestically and abroad, badminton is in great demand by people of various skill levels, from men and women and from children to adults (Williyanto et al., 2018). The ultimate goal of this game is to try to drop the shuttlecock in the opponent's playing area and try to prevent the opponent from hitting the shuttlecock and dropping it on his own court, if the shuttlecock falls on the floor or gets stuck in the net, the game stops (Budiwanto et al., 2016).

Therefore, to master movement skills/techniques in badminton, athletes must practice and have a planned training program (Arganata, 2016). Athletes must master badminton techniques as follows: (1) stance (stance), (2) racket holding technique, racket holding technique is divided into three, namely: forehand grip, backhand grip, american grip (thump mattress), shakehand grip , frying pan grip, combination grip (mixture), (3) Footwork, (4) shuttlecock hitting technique (strokes), (5) serve, the service is divided into four, including long serve, serve short, shock serve, flat serve, (6) return service, (7) smash, (8) dropshot, (9) drive, (10) netting (11) round the head, (12) underhand. By knowing the percentage of strokes that occur in each one game so that it can be used by the coach to develop a training program.

The training process is an unavoidable necessity to adhere to certain laws and principles which have been empirically and scientifically proven and clearly tested along with the development of coaching science (Iwandana et al., 2022). Therefore, the results of the exercise are not always positive and optimal if the load is not given with the correct training principles (Falaahudin et al., 2020). Some of the training principles are as follows: overload, reversibility, specificity, pedagogic, individual, active involvement, and variety. If the training carried out includes these principles, the peak of achievement will be obtained (Wibowo et al., 2019).

CONCLUSION

Based on the results of the study, it can be concluded that the average results of each badminton Elite Athletes' stroke in Single Match Numbers in One Game, namely: Service 10.20%, Chop 4.86%, Dropshoot 6.37%, Smash 12.21%, Lob 7.59%, Netting 33.08%, Drive 4.98%, Clear Lob 20.72%.The highest percentage is on badminton netting with a percentage

result of 33.08%.

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