# The Effect of Skipping Training on Jump Smash Ability in Badminton Games at PB Topaz Palembang

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**Abstract.** Research on stroke in the badminton game of PB topaz Palembang athletes has not been carried out optimally so that the right training method is needed, namely skipping training. The research method uses the pre-experimental design method with the One Group Pretest-Posttest Design research design. Data collection techniques use tests and measurements. The sample in this study amounted to 22 athletes. The data analysis techniques used in this study are normality test, homogeneity test and paired sample t-test. The results of the analysis showed that there was a significant influence of skipping training on jump smash ability in badminton games at PB topaz Palembang with the results of hypothesis testing of the skipping training group proving that Sig. (2-tailed)  $0.000 \le \alpha$  ( $\alpha = 0.025$ ), then H0 was rejected.

Keywords: Skipping Practice; Jump smash Ability; Badminton Game

#### INTRODUCTION

Sports are daily activities carried out by a person to maintain physical and spiritual health. Sports have a very important role in human life, especially in today's modern life humans cannot be separated from sports activities that aim to increase performance and needs in maintaining and maintaining a healthy body condition (Manullang et al., 2022). One sport that is quite popular with the public, ranging from children to adults is badminton. Badminton can be played in doubles or singles and is performed by both men and women. The game of badminton is an attempt to insert the shuttlecock into the opponent's game area, until the shuttlecock cannot be restored. A badminton player must understand and master the basic techniques in playing badminton. Such as service punch techniques, lob punches, dropshots, smash punches and others.

One of the basic techniques that badminton players must master is the smash punch. A smash punch is a blow to kill the opponent's ball and is more effective if accompanied by a jump, this punch is called a jump smash (Hasibuan, 2021, p. 123). By having a good jump smash ability, it can produce harder and faster smash blows because the body swing is released larger so that the shuttlecock falls harder and faster. The ability to jump cannot be separated from the physical ability of altet because the ability to jump is related to power, namely in the leg muscles (Yuliyanto, 2020, p. 89).

The badminton game at PB topaz Palembang Badminton Club Palembang has run

according to the training program that has been made by the coach, but the punches in the badminton game have not been done optimally. It is seen when players play badminton the position of the player's racket grip is still wrong so that the punch misses, movements are not fast, and the player performs a smash punch by jumping right under the ball. This can be seen when players are doing smash punches towards the opponent's area, footsteps are not right so they are not ready to jump when doing smashes because before doing a badminton game, there are still some players who lack jump practice so that players do not have maximum jumping ability when doing jump smash punches. To get the maximum jump, the right training method is needed, namely by using skipping exercises (Manullang et al., 2021). Skipping exercises are strength training to increase leg strength. According to Usman in (Pambudi, 2020, p. 41) states that skipping or jumping rope is an exercise to build endurance, agility, wrist flexibility, strengthen fingers and feet. Skipping practice is part of the game of badminton that supports footwork skills. The elements in doing skipping exercises are jumping, endurance, concentration footsteps, coordination of movements.

#### **METHOD**

#### **Research Methods**

In general, research methods are defined as scientific ways to obtain data with specific

purposes and uses (Sugiyono, 2019, p. 2). The method used in this study is a quantitative method with a type of pseudo-experimental research (One-Group Pretest-Postest Design).

# **Population and Sample**

is a generalization area consisting of: objects / subjects that have certain quantities and characteristics set by researchers to be studied and then drawn conclusions (Sugiyono, 2019, p. 145). The population of this study amounted to 22 prospective athletes.

Samples are part of the number and characteristics possessed by the population (Sugiyono, 2019, p. 146). So, it can be concluded that the sample is part of the total population to be studied. As for the technique

## **Data Collection Techniques**

Data collection techniques according to (Hardani &; et al, 2020, pp. 120-121) are the most strategic steps in research, because the main thing of research is to obtain data. Without knowing data collection techniques, researchers will not get data that meets the data standards set. Data collection techniques in this study used tests and measurements.

### RESULTS AND DISCUSSION

Based on the Pretest and Posttest Results of the Skipping Group, it can be known that the distribution of pretest frequencies is as follows. Table 1 Pretest Cumulative Frequency DistributionSkipping Exercise Group

Pretest							
		Frequency	Percent	Valid	Cumulative		
				Percent	Percent		
Valid	38-	6	54.5	54.5	54.5		
	45						
	46-	4	36.4	36.4	90.9		
	52						
	53-	1	9.1	9.1	100.0		
	61						
	Total	11	100.0	100.0			

Based on table 1 Distribution of cumulative frequency pretest of the skipping training group, it can be seen that the initial test results of vertical jump before using skipping training obtained values from 38-45 with criteria less there were 6 athletes, who obtained scores from 46-52 with sufficient criteria there were 4 athletes, and those who obtained scores 53-61 with good criteria there was 1 alter

The posttest frequency distribution *of* the skipping *exercise group* is as follows.

Tabel 2 Cumulative Frequency Distribution of Group Pottest Skipping Exercises

Posttest							
		Frequency	Percent	Valid	Cumulative		
				Percent	Percent		
Valid	38-	2	18.2	18.2	18.2		
	45						
	46-	3	27.3	27.3	45.5		
	52						
	53-	5	45.5	45.5	90.9		
	61						
	62-	1	9.1	9.1	100.0		
	69						
-	Total	11	100.0	100.0			

From table 2 Distribution of cumulative frequency posttest of the skipping training group, it can be seen that the final test results of vertical jump after being treated using skipping exercises obtained values from 38-45 with criteria less there were 2 athletes, who obtained scores from 46-52 with sufficient criteria there were 3 athletes, who obtained scores from 53-61 with good criteria there were 5 athletes, Those who obtained scores from 62-69 with very good criteria there was 1 athlete.

From table 2 Distribution of cumulative frequency posttest of the skipping training group, it can be seen that the final test results of vertical jump after being treated using skipping exercises obtained values from 38-45 with criteria less there were 2 athletes, who obtained scores from 46-52 with sufficient criteria there were 3 athletes, who obtained scores from 53-61 with good criteria there were 5 athletes, Those who obtained scores from 62-69 with very good criteria there was 1 athlete.

Skipping exercises are one type of plyometric exercise. In doing skipping exercises, it begins with the legs jumping up alternately which is done repeatedly using a rope tool with 3 sets of reps for 1-3 minutes. The number of sets and recoveries in doing skipping exercises will increase every meeting when doing skipping exercises. The results of hypothesis testing of the skipping training group proved that Sig. (2-tailed)  $0.000 \le \alpha$  ( $\alpha = 0.025$ ), then H0 was rejected, meaning "There is a significant effect of skipping training on jump smash ability in badminton games at PB topaz Palembang". In the implementation of the field, skipping training does not require a large room and only uses rope aids. With movements that are done repeatedly can increase leg muscle power. This is in line with Solehudin's opinion (2021, p. 17) skipping exercise is a form of physical fitness training that can increase foot strength, ankle, endurance, motion coordination, and help improve the quality of wrist movement

## **CONCLUSION**

Many factors affect success in jumping smash, one of which is limb power. Power concerns the strength and speed of dynamic and explosive muscle contractions and involves the extension of maximum muscle strength in a fast time. Smash is the main blow in attack in an effort to win, one of the right exercises to get a good smash is skipping practice.

#### **REFERENCES**

- Hardani, & dkk. (2020). *Metode Penelitian Kualitatif & Kuantitatif*. Yogyakarta: Pustaka Ilmu.
- Hasibuan, M. H., & Hasibuan, N. M. (2021). Kontribusi Latihan Knee Tuck Jump Dan Wall Push Up Terhadap Jump Smash Bulu Tangkis. *Jurnal Olahraga & Kesehatan Indonesia*, 1 (2), 123.
- Manullang, J. G., Handayani, W., & ... (2022).

  Pengaruh Model Cooperative Learning Tipe
  Stad Terhadap Hasil Pembelajaran Kihon
  Kata Pada Mata Kuliah Karate. *Jurnal* ...,

- 8(2), 443–451. https://ejournal.bbg.ac.id/penjaskesrek/article/view/1895
- Manullang, J. G., Soegiyanto, Sulaiman, & Handayani, O. W. K. (2021). Development of Junior Karate Physical Test Instruments in Kumite Category. *Journal of Hunan University*, *vol.48*(no.6), pp.330-337. http://jonuns.com/index.php/journal/article/view/616/613
- Pambudi, S. (2020). Teknik Latihan Skipping Untuk Meningkatkan Loncatan Smash Dalam Permainan Bulu Tangkis. *Jurnal FKIP Unipa Surabaya*, 29,41.
- Yuliyanto, R. (2020). Pengaruh Metode Latihan Playometric Standing Jump Terhadap Kemampuan Jumping Smash dalam Permainan Bulutangkis Pada Extrakuliker SMK Muhammadiyah 1 Gondangrejo Karanganyar Tahun 2020. *Jurnal Ilmiah SPIRIT*, 20 (2), 89.
- Sugiyono. (2019). *Metode Penelitian Pendidikan*. Bandung: Alfabeta.
- Solehudin, D. (2021). Pengaruh Latihan *Skipping*Terhadap Hasil Loncatan Siswa Putra Pada
  Peserta Ektrakulikuler Permainan Bola Voli. *Jurnal Fakultas Keguruan & Ilmu Pendidikan*, 2 (1), 17.