



Improving Player Performance in Five Event Sepaktakraw Through Physical Training

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Article History	Abstract
Received: 06 June 2023 Revised: 05 Sept 2023 Accepted: 02 Nov 2023	<i>Physical exercise is necessary as a sepak takraw athlete. Athletes in order to play optimally, regular physical training is needed. This study aimed to investigate the influence of physical training on the performance of athletes competing in the sepak takraw five events. The research method uses an experimental type of research. The study design used one group pretest-posttest. The data analysis technique uses a paired sample test. The results showed that physical exercise improves the athlete's service, smash, and block ability. Athletes have better performance than before being given physical training and after being given physical exercise.</i>
CC License CC-BY-NC-SA 4.0	Keywords: Physical Exercise, Performance, Five Events

1. Introduction

Sepaktakraw is one of the sports branches of the Indonesian nation's cultural heritage that needs to be preserved by the nation's children (Hermanto, 2017). This game is unique because it has acrobatic movements displayed by players or athletes so that it looks beautiful when played (Firdaus, 2015). The sepak takraw starts the first time the ball is served or crossed over the net to the opponent's field (Saputro et al., 2017). Service is the first attack against the opposing team, so players must have good service skills.

The characters of the old takraw game only tried to: 1) Keep the ball from dying/falling to the ground, 2) Show each other's skills with variations in ball games, and 3) Return the ball correctly and with direction. For players to be able to play, they must master basic techniques and special skills such as serving, baiting, smashing, and blocking (holding). Hanif (2016) Service is a game that starts with a ball made of rattan or fiber tossed by the left or right flank directed at the Mekong. Tekong must be ready to do the kick, which is aimed at the opponent's area through the top of the net, touching the lip of the net or directly toward the opponent's field.

When the opponent serves, the main task of all players is to receive the first ball or defend (Syarifuddin, 2017). Defending is also the first step before players counterattack via Smesh (Aji, 2018). A player's success as a Mekong or a player who serves is significant because points are earned by serving well, accurately, and hard and producing points for the team (Hanafi, 2020).

Athletes, in order to improve their abilities and skills in achieving the achievement of sepak takraw sports, really need good physical and technical conditions (Mahandra, 2019). The elements of physical condition are strength, endurance, speed, flexibility, agility, coordination, balance and accuracy, reaction speed, and explosive muscle power (Rusli et al., 2022). Physical condition plays an essential role in the game of sepak takraw (Zarei & Ramkissoon, 2021). Physical condition program training must be well-planned and systematic to increase physical fitness (Maselena et al., 2016). Functional abilities and body systems must also be trained with a planned program (Irawan et al., 2021). Physical

factors increase self-confidence and can reduce the risk of injury to sepak takraw players (Taufik & Abdi Alam, 2021).

Fostering athlete achievement includes nursery, talent scouting, coaching, and coach systems. Thus, intensive breeding and coaching are needed to produce quality sepak takraw athletes (Arya Wisnu Murti et al., 2021). Sepaktakraw athletes are required to have excellent physical conditions (Kharisma & Sudarmono, 2021). The physical conditions include speed, strength, flexibility, explosive power, balance, and coordination (Sahabuddin, 2020). In addition to the need for motor components, the sport of takraw is no less important in supporting achievement, namely the selection of forms of fundamental skill training that significantly influence the ability to play in takraw. (Sahabuddin, 2022).

Research result (Taufik & Abdi Alam, 2021) Physical condition significantly affects the serviceability of a sepak takraw player. Research results (Jufrianis, 2019) show a relationship between eye-foot coordination, flexibility, and balance that influences accuracy in the PPLP (Center for Student Sports Education and Training) students' sepak takraw game. **This research aims to** provide physical training on serving, smashing, and blocking players in the five-event Sepaktakraw game.

2. Materials And Methods

This research method uses the type of experimental research. The research design used was the one-group pretest-posttest design. The population in this study was 20 Jepara Club sepak takraw-athletes. Data collection techniques use assessment of serviceability, smashes, and blocks which add points. The assessment uses data when playing the five-event Sepaktakraw. The data analysis technique used the pair sample t-test.

3. Results and Discussion

The results obtained from assessing the ability to serve, smash, and block at the pretest and posttest stages are as follows.

Table 1 Description of Performance

Performance	Pretest average	Posttest average
Servis	3,45	6,43
Smash	4,53	6,85
Block	3,62	5,63

The averages differ based on the assessment results of the ability to serve, smash, and block before and after physical training. Serviceability which adds points at the pretest stage obtained an average value of 3.45 points. The ability to smash, which adds points at the pretest stage, obtained an average value of 4.53 points. The ability to block, which adds points at the pretest stage, obtained an average value of 3.62 points.

The ability to serve, smash, and block, which adds points after being given physical training, has all increased. Serviceability which adds points at the posttest stage obtained a value of 6.43 points. The ability to smash, which adds points at the posttest stage, obtained an average value of 6.85 points. The ability to block, which adds points at the posttest stage, obtained an average value of 5.63 points.

The hypothesis in this study is to prove the effectiveness of physical exercise on the performance of five-event speaks takeaway athletes; a paired sample t-test is used. This test is used to determine the significance. The test results can be seen as follows.

Table 2 Hypothesis Testing

Performance	Average difference	t _{hitung}	Sig
Servis	2,98	5,64	0,000
Smash	2,32	4,98	0,015
Block	2,21	4,54	0,023

Based on Table 2, the hypothesis test results showed that for serviceability, the average value before and after physical exercise is a difference of 2.98. The test results obtained a tcount value of 5.64 with a probability of 0.000. The probability value is lower than 0.05 (sig <0.05), so the effectiveness of physical training improves the athlete's serving ability in the five-event Sepaktakraw game.

The smash ability of the athletes in the five events of sepak takraw games before and after physical training obtained a difference of 2.32. The hypothesis test results obtained a tcount of 4.98 with a probability of 0.015. The probability value is lower than 0.05 (sig <0.05), so physical training can improve smash ability in five-event sepak takraw athletes.

Its ability to block the athletes in the five-event Sepaktakraw game before and after obtained an average difference of 2.21. The hypothesis test results obtained a tcount of 4.54 with a probability value of 0.023. The probability value is lower than 0.05 (sig <0.05), meaning that physical exercise effectively increases the ability to block the athlete's kicks in five events.

Smash is all efforts to direct the ball toward the opponent to find points. A smash attack is complete when the ball crosses over the net or enters and touches the opposing player. Back-row players may attack/smash. A smash ball attack into the opponent's area passes under the net. Defenders attack/smash over the line of attack (2 meters) in front of the net. During repulsion, one of the legs enters the opponent's area before and after carrying out the smash attack.

The player doing the block is an action by blocking the ball from the opponent by doing a higher reach with limbs such as (legs, back/body). Players may block with two or three front players. Hits on ball blocks do not count so each team may play three touches. The first touch after the block can be made by any player, including the player who touched the ball during the block. Back-row players who block. The limbs or legs that pass over the net when doing the block (over the net). The limbs, when blocking, hit the net.

4. Conclusion

The purpose of this research is to results of research conducted (Jufrianis, 2019) that physical exercise in athletes can improve the ability of athletes to play sepaktakraw. Athletes who maintain physical exercise and diet have better abilities than athletes who practice less physical exercise. Research result (Taufik & Abdi Alam, 2021) also shows that the length of physical exercise carried out by athletes influences the athlete's readiness to play takraw. Athletes with enough practice hours will be more prepared when playing sepak takraw than athletes who lack physical training.

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