Forehand and Backhand Tennis Exercises: Study Literature Review

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Abstract

Study purpose. The sport of tennis is one of the most popular branches globally and there are various techniques in hitting tennis. The purpose of this article review is to find out about exercises to improve groundstroke ability in tennis in Indonesia. The research method uses a literature review (Study Literature Review).

Materials and methods. The article selection model is often carried out using the prism flow diagram method. As many as 20 National Journal articles used as references in writing.

Results. Based on the results of the analysis of the data obtained, it states that footwork and tennis court drills can improve the ability of groundstroke forhand and backhand accuracy in court tennis. This research can be categorized as having a very high success rate.

Conclusion. The conclusion of this study is that footwork exercises and tennis court drills can improve groundstroke accuracy forhand and backhand in the very good category, and are also supported by several exercises or other training methods.

Keywords: Groundstrokes, Forehands, Backhands

Introduction

Sport is a form of effort to improve the quality of Indonesian people through the formation of high character, character, discipline and sportsmanship, as well as increasing achievements that can evoke a sense of national pride (Jatra and Raibowo 2021). Sport is an important part of human life (Kurniawan, Mikkey, and Suganda 2021). One of the sports is tennis, tennis is a sport that is very individual in nature, so when an athlete faces a match there is bound to be anxiety and that must be overcome by a player with confidence. Tennis is a sport that is not much of a choice, but in the development of this sport it has become the choice of the upper middle class, both old and young, and even children for just a healthy body or achievement. Tennis is known as an expensive sport by some circles so that in this sport sportsmanship, ethics and courtesy are highly respected so that tennis does not only have an impact on physical health
but also forms quality human beings. Therefore tennis is a compulsory subject in the sports study program. Tennis is one of the compulsory subjects in the Department of Sports Development, Faculty of Sports Science, which students must learn (Masrun, Alnedral, and Damrah 2022). Tennis is a repetitive sprint sport, characterized by intermittent bouts of high-intensity exercise interspersed with periods of rest or low-intensity activity (Fernandez, Mendez-Villanueva, and Pluim 2006). The duration of a tennis match often exceeds 1 hour and in some cases can last more than 5 hours (Kovacs 2006). Players also need a combination of fine and gross motor skills, agility, and strength to carry out sport-specific tasks such as serves, groundstrokes, and volleyball (Munson et al. 2020). Success in tennis depends on many factors such as physical condition, technical skill and tactical strategy (Delgado-García et al. 2019).

One of the factors is the basic technique. The ability to play tennis can be seen from how far the athlete has mastered the basic techniques. The basic technique in playing tennis is one of the keys to achieving achievements. In tennis, there are several basic techniques, including how to hold the racket, leg and body movements, ready position, serve and stroke. The technique of hitting (stroke) is one of the important strokes in the game of tennis (Irawadi 2009). Stroke techniques are divided into several types, namely volley strokes, ground strokes and overhead strokes (Agus 2015). Ground stroke is a blow that occurs when the ball you want to hit has bounced off the ground first (Zulhilmi 1999).

Groundstroke is a hit where the ball to be hit has bounced off the field first (Badruzaman and Saputra 2020). Groundstrokes have several variations including forehands. Forehand groundstrokes are one of the strokes used as a lethal weapon in tennis courts (Masrun et al. 2022). Least of all tennis strokes are forehand” (Brown and Soulier 2013). "A groundstroke is a ball hitting the ball after the ball bounces off the court." Forehand Groundstroke is a punch position that is located or leads to the side of the body. In a match, the use of the average forehand groundstroke reaches 35-45% of the total strokes taken by players during the match. That is, this punch is a technique that is very important for every player to master. This stroke is a motion activity that is continuously carried out by tennis players. (Zulbahri et al. 2022) The nature of motion is very important in increasing understanding of the mechanics of motion and the natural laws that function in moving objects. This groundstroke movement is important in order to get maximum hitting results. If we look at tennis matches, players tend to aim at the opponent's backhand, and rarely aim at the opponent's forehand. Research Reported differences in error magnitudes between forehand and backhand shots suggest that forehand shots are generally more accurate than backhand shots (Landlinger et al. 2012). Forehand and backhand strokes should be strokes that must be mastered by players so they can play properly and correctly. To master it requires programmed and disciplined training, With tennis practice, correct technique can be embedded in muscle memory (Mulya 2020).

Several previous researchers in improving forehand and backhand skills in tennis have been quite a lot in Indonesia. However, this is still related to one study, so there is no one to compare these studies. Where is the most research done and what are the effective and efficient ways to improve groundstroke abilities. So that with this literature review, it will be an update in this article because by reading this one article, the following researchers will immediately find exercises to improve groundstroke ability. Especially in Indonesia.

Groundstrokes are the most important technique in the game of tennis because groundstrokes are the strokes most often used, groundstrokes are also one of the weapons in winning matches. This punch is often used as a blow to attack. For beginner players, one type of stroke that must be mastered is the ground stroke. This is because, Groundstrokes are very important that must be mastered by players, because in playing games or matches Groundstrokes are the most commonly practiced.
Materials and Methods

Study participants
The search was initiated using the Google Scholar database. Google Scholar is a service within Google which is very useful in making scientific work because it provides scientific literature from various disciplines in the form of books, abstracts, and articles (Tiara, Rahardja, and Rosalinda 2016).

Study Organization
Some of its features support researchers in the process of disseminating published research results. In addition, Google Scholar helps researchers evaluate and see who is citing their articles (Rostiany and Tjandra 2022). The database is considered the leading indexing system for citations.

Statistical Analysis
The search strategy includes a combination of keyword variations ("Practice" AND “forehand tennis”/backhand tennis"). The search was carried out following the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) guidelines (Shaffril et al. 2019). In addition, PRISMA emphasizes review reports evaluating randomized trials which can also be used as a basis in reporting systematic reviews for other types of research (Moher et al. 2009).

Results
The results of the research that have been analyzed are used to answer the objectives of the study, finding the results of the effect of footwork and drill training on tennis playing in the Forehand and Backhand Groundstroke techniques from secondary data or previous research journal articles. The data is presented from several articles as follows.

Table 1. Overview of Research

<table>
<thead>
<tr>
<th>No.</th>
<th>Source</th>
<th>Research methods</th>
<th>Interversion (keyword)</th>
<th>The findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>SPORTIF Journal: Learning Research Journal Vol. 6 No. 1, April 2020, pp. 132-144 (Budi et al. 2020)</td>
<td>Pseudo Experiments</td>
<td>Training Methods, Forehand, Backhand, Court Tennis</td>
<td>the random practice method has a better effect than the block practice method to improve the forehand and backhand groundstrokes of tennis in college students</td>
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<td>2.</td>
<td>Patriots Journal (Azmi and Ridwan 2018)</td>
<td>Pseudo Experiments</td>
<td>Training Methods, Playing Methods, Agility</td>
<td>Forms of Exercise and Play Methods for Increasing the Agility of UNP Field Tennis Training Athletes</td>
</tr>
<tr>
<td>3.</td>
<td>Journal of Physical Activity and Sports</td>
<td>Quasi Experiments</td>
<td>Feeding Practice, Punch, Court Tennis</td>
<td>Feeding exercises affect the forehand drive and backhand</td>
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<tr>
<td>Volume 3, Nomor 1, April 2022, 1-8 (Prastawa, Hadi, and Pradipta 2022)</td>
<td>( \text{drive beating techniques} )</td>
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<td>4. The Scientific Journal of STOCK Bina Guna Medan Volume 8 no 1; October 2020 (Sinulingga and Nova 2021)</td>
<td>Pseudo Experiments Footwork, Forehand groundstroke, accuracy Effective Footwork Exercises Against Forehand Groundstroke Accuracy</td>
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<td>7. JURNAL PENJAKORA Volume 7 No 2, September 2020 Edition (Gunarto and Adnyana 2020)</td>
<td>Pseudo Experiments drill, alley rally, groundstrokes. Drilling is a better method to increase the accuracy of groundstrokes and both methods have a significant effect on increasing the accuracy of forehand and backhand groundstrokes.</td>
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10. Sport Science and Health, 4(2), 2022, 112–118 ISSN: 2715-3886 (online) (Irjaba, Supriatna, and Sulistyorini 2022)

Pretest And Posttest Experiments ketepatan; drill ; forehand groundstroke

There is a significant effect of the training program using the Fixed Target Drill Method on the Consistent Improvement of Forehand Groundstrokes.


Experiment Backhand drive groundstrokes

backhand drive groundstroke training using the Modified Two On One method and the Rhythm Drill method for men's tennis players from the Phapros Club in 2016. The modified two on one method is better


Experimental study backhand; Target Training Effectiveness; Court Tennis.

Backhand training with the aim of increasing the Backhand ability of UMS Field Tennis UKM Students.


Experiment Tenis, groundstroke forehand, method latihan elements

Elementary training is effective in increasing the accuracy of ground stroke forehand in tennis games for students of the Sports and Health Education Study Program, FKIP, Jambi University.


It's like a design experiment Latihan, Horizontal Swing, Side Lateral Raise, Forehand Drive, Tennis

Horizontal swing exercises can significantly improve forehand abilities and side lateral raise exercises can significantly improve abilities for hand drive
Based on the above it is clear that there are several exercises in mastering groundstrokes including random practice methods, block practice methods, Methods of Exercise and Play, Feeding exercises, Footwork Exercises, Training Models Using Wall Media Using Throwing
Machines, Variations of Forehand & Backhand Groundstroke Exercises In the form of Games, drill exercises, Part Method exercises, Exercises Using Fixed Target Drill Methods, Modified Two On One methods and Rhythm Drill methods, Backhand exercises with targets, elementary exercises, Horizontal swing exercises. To get maximum forehand accuracy, it can be improved by practicing various footwork variations to get precise and effective steps. This can be seen from the results obtained that using footwork exercises will affect the accuracy of court tennis forehand strokes.

The drill training method is a form of training that is carried out by providing a program that is planned and systematically arranged which is carried out repeatedly or continuously, in the form of movements to adjust the ready position and the distance to hit according to the direction the ball is coming from. This movement is carried out in the form of stepping or running close to the ball or shifting to adjust the distance to hit by moving forward, backward, right, left, oblique and so on. This movement is a movement that is carried out with a sprint movement to go forward or obliquely forward, step steps to the right, left, and backward movements to go backwards and obliquely backwards. Thus, if training using the drill method is carried out seriously and according to instructions, it will be able to improve groundstroke abilities for the better, so that during games and matches it will make an advantage for scoring points.

Discussion

Basically training using a drill is very appropriate to be applied to get athlete skills, but the development of a variety of models with a drill will be more effective to improve the athlete's groundstrokes. Previous research has found that there is a significant effect of providing groundstroke training models in tennis by testing the effectiveness of groundstroke training in tennis with a focus on athletes aged 14-16 years (Amni, 2019). The development of training models must always be carried out by coaches so that they always increase the interest and skills of an athlete. The method factor does indeed greatly affect the athlete's skills, the findings of research that has been carried out on the drill method that has been applied have indeed increased the players' groundstroke skills, but the players' interest in doing the exercises has decreased slightly because the exercises are very monotonous, providing interesting and fun exercises can be an option, such as pair training which can increase groundstrokes in Unsil Field Tennis UKM participants (Anon 2013). So in essence the research that has been carried out is in line with previous research on the drill method can improve the groundstroke ability of tennis athletes, but the development of various training methods and training models also needs to be considered to create exercises that are not monotonous so that it makes athletes feel bored, the coach must improve athlete performance in ways according to existing training principles.

Conclusions

Based on the results it can be concluded that there are several exercises in mastering groundstrokes including Methods of Forms of Exercise and Play, Feeding exercises, Footwork Exercises, Training Models Using Wall Media Using Throwing Machines, Variations of Groundstroke Forehand & Backhand Exercises in the Form of Games, drill exercises, exercises Part Method, Exercise Using Fixed Target Drill Method, Modified Two On One method and Rhythm Drill method, Backhand exercises with targets, elementary exercises, Horizontal swing exercises

The effect of footwork and drill training methods on increasing groundstroke ability on the tennis court has become an exercise that has been extensively researched by researchers and has produced good results. In accordance with the conclusions of the research results, it can be recommended to 1) Trainers and teams to do footwork and drill exercises with regular
variations to get accuracy forehand and backhand shots which is good, 2) between the results of the exercise obtained, after doing the footwork skill exercise, to get accuracy blow which is good, especially for students majoring in sports education, and 3) To the next researcher, so that they can carry out further research using a larger sample and a longer time.

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**Conflict of Interest**

All authors declare that there is no conflict of interest whatsoever in this research.

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