



The Effect of Wrist Flexion Exercise on Backhand Drive Ability in Table Tennis Games in PKL FIK UNIMA Students

Bacilius Sukadana^(✉)

Department of Coaching Education, Faculty of Sports Science and Public Health,
Universitas Negeri Manado, Tondano, Indonesia
baciliussukadana@unima.ac.id

Abstract. The purpose of the study is to determine the effect of wrist flexibility exercises on backhand drive skills in table tennis games for PKL FIK UNIMA students. The method used is the Experimental Method and the treatment in the form of wrist flexibility exercises is given for eight weeks. Estimated observations using the backboard test, research dissertation found the impact of wrist flexibility exercises on backhand drive ability in table tennis games in PKL FIK UNIMA students. Testing the hypothesis using t-test statistical analysis calculations, where the results $t_{\text{observation}} = 3.806 > t_{\text{table}} = 2.101$ so that H_0 is rejected and H_a accepts which states that the average back hand drive ability in the experimental group given the wrist flexibility exercise program is greater than the average the average back hand drive ability in the control group. The experimental intuition has the effect of wrist flexibility exercises on improving backhand drive skills in table tennis for PKL FIK UNIMA students.

Keywords: Wrist flexibility exercises · backhand drive skills

1 Introduction

In the ongoing development of the nation, development in the field of sports is an improvement of human beings in an effort to improve the development of the current quality of Indonesian human beings which is shown in increasing the physical fitness of the whole community, character building, discipline and sportsmanship as well as achievement development. In this case, there are several sports that can be developed in Indonesia, especially in North Sulawesi Province, and one of the most popular sports is table tennis which is loved by all people. Both among children, teenagers, adults and parents, both men and women, the game of table tennis is a game played by two players face to face where the game requires fast movement and requires control, precise movement, reaction and action. Punch accuracy. In order to excel in this field, you are required to master the strokes or basic techniques in the game of table tennis. And the basic techniques that must be mastered are bat holding techniques, posture or body position, footwork, serve, attack, defense, punches, and push punches. From these basic techniques, the most important thing to master is the drive technique, which consists of

a forehand drive and a backhand drive. One of the most efficient strokes is the backhand drive. If you look at the abilities and skills of PKL FIK UNIMA students, there are still students who have not been able to master the backhand drive well and only rely on the forehand drive. Therefore, to develop a backhand drive, every player needs to have the physical components of a physical condition that support the implementation. And the most dominant component of the physical condition that supports the movement is the wrist flexibility component. If the player relies on the use of the wrist, the ball produced from the blow mostly slides down in front of the net and produces an efficient and effective motion that does not require a lot of energy.

2 Method

This study aims to determine the magnitude of the effect of wrist flexibility exercises on backhand drive ability. The research method used is the experimental method. The population is made up of male fourth-semester students, as many as 20 people, then divided into 2 groups of 5 students each for the control group of 10 people and the experimental group of 10 people. The research design used randomized control groups pre-test and post-test design. To measure the ability of the backhand drive, a test back board instrument is used.

3 Results and Discussion

From the measurement results on the backhand drive ability variable in table tennis games for students in the PKL FIK Unima, both the experimental group and the control group, which can be seen Table 1.

Furthermore, the results of measuring the ability of backhand drives in table tennis games and the difference in the control group imposed on students of the PKL FIK Unima Department are as follows.

Table 1. Experimental Group Backhand Drive Ability Test

Number	Pre-test (Y_1)	Post-test (Y_2)	Difference
1	7	10	3
2	7	9	2
3	8	10	2
4	6	9	3
5	6	9	3
6	7	10	3
7	6	9	3
8	6	8	2
9	7	10	3
10	8	10	2

Table 2. The Experimental Group's Backhand Drive Ability

<i>Number</i>	<i>Pre-test (Y_1)</i>	<i>Post-test (Y_2)</i>	<i>Difference</i>
1	8	10	2
2	7	8	1
3	7	9	2
4	6	8	2
5	6	8	2
6	7	8	1
7	6	8	2
8	8	10	2
9	7	9	2
10	6	8	2

4 Conclusion

Based on the findings from hypothesis testing, the average backhand drive ability of the experimental group is greater than the average of the control group, meaning that the increase in backhand drive ability is really the result of the wrist flexibility exercise treatment given. Therefore, it can be concluded that there is an effect of wrist flexibility training on the backhand drive ability in table tennis games for PKL FIK UNIMA students.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

