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EFFECT OF PLYOMETRIC TRAINING ON AGILITY PERFORMANCE AMONG UNIVERSITY BADMINTON PLAYERS

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JULY 2019

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ABSTRACT

The purpose of this study was to examine the effect of plyometric training on agility performance among university badminton players. Fourteen (N=14) male badminton players form UiTM Kota Samarahan with age between 18 to 25 years old have been choosen to be participated in this study. Participant were randomly assigned into two groups, treatment group (n=7) and control group (n=7). Treatment group undergoes a 4-weeks of two sessions per week of plyometric training. Meanwhile, control group undergoes their badminton training routines without any plyometric training and trained regularly by their coach. A Mixed between-within subjects analysis of variance (ANOVA) employed to measure the effect of plyometric training on agility performance among the subjects as well as the different between group. Agiltiy performance ($p < .05$) has significantly improved. In comparing the agility performance between groups, there was no significant differences ($p > .05$). The findings indicate that plyometric training and badminton training routines brought benefit to the agility improvement.

Keywords: *Badminton, plyometric training, agility.*

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF STUDY

In badminton, a fast energy are required for the players to performing a fast movement and changing direction (Grice 2008). Badminton has their own specific demands and special pattern of movement. Therefore, agility is important to a successful athletes (Donny et. al, 2015). Badminton has a smaller size of court area compared to another court sports. In this way, badminton player were not enough time to generate their greatest speed while playing. So that in badminton, athletes are suggested to perform an explosive movement to achieve the sport demands (Badminton Australia, 2012).

Agility defined as ability to move, change in direction and body position in the fastest time. Performing this action requires a fast movements pattern, good balance and coordination, also right reaction and speed to changing direction. Agility is prominent not only for court but also field sports. Different sports have different specific demands of agility performance. In badminton, it incorporate additional factor like swinging the racket and controlling a shuttlecock. The point when achieving the shuttle as fastest and little effort as possible with the good footwork combination. To execute shots while keeping up great balance and body control player need an excellent footwork into the best position (Grice, 2008).

CHAPTER 2

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter was divided into two (2) topics presented under the following topics: (1) Plyometric Training effect, (2) Plyometric Training on Agility performance among Badminton players. The end of this chapter presents a brief summarization. In this chapter, the researcher review previous studies that conducted by other researchers. There were study conducted to investigate the plyometric effect on sport performance. However, there is limited study that examine directly the plyometric training effect on agility performance among university badminton players. Thus this chapter will review about previous study regarding the effect of plyometric training on agility performance among badminton players.

2.1 PLYOMETRIC TRAINING

According to Stiff (2004), plyometric training define as training that performed in maximal exertion. Besides, any movement that occur the stretch-shortening cycle is also plyometric exercises (Swanik et. al, 1999). Plyometric portray practices that comprising of bounces, hops, and jumps that the athletes used to improve their performance.

Plyometric training is a famous type of training that can enhance athlete's performance by (Chu, 1983). This exercise includes an eccentric action and directly