

## ABSTRACT

**KHANIF AROSYID. Relationship of Leg Muscle Explosion Power and Running Speed Against Leap Distance in West Jakarta Parkour Community. Faculty of Sport Science, Jakarta State University. August 2019.**

This study aims to obtain information about the Relationship between Leg Muscle Explosion Power with Leap Distance, Relationship between Running Speed and Leap Distance, and the Relationship of Leg Muscle Explosion and Running Speed with Leap Distance.

Data collection was carried out in the Park in the Round Field of West Jakarta. On July 27, 2019. This study used a survey method with correlation technique, the sample used was the entire population of the West Jakarta Parkour Community, as many as 15 people. Hypothesis testing techniques are carried out using simple correlation statistical analysis techniques and multiple correlation followed by t-test at a significant level  $\alpha = 0.05$ .

The results showed: first, there was a significant relationship between Leg Muscle Explosion Power with Leap Distance, with linear regression equation  $\check{Y} = 1.125 + 0.042X_1$ , correlation coefficient  $(r_{X1Y}) = 0.550$  and coefficient of determination  $(r_{X1Y^2}) = 0.3025$ . which means the variable Leg Muscle Power contributes to the jump distance of 33.27%. Second, there is a significant relationship between running speed and jump distance, with the linear regression line equation  $\check{Y} = 2.042 + 0.147X_2$ , the correlation coefficient  $(r_{X2Y}) = 0.196$  and the coefficient of determination  $(r_{X2Y^2}) = 0.0384$ , which means running speed variable contributed to the jump distance of 3.84%. Third, there is a significant relationship between leg muscle explosive power and running speed with jumping distance, with a double linear regression equation  $\check{Y} = 0.554 + 0.046X_1 + 0.067X_2$ , multiple correlation coefficient  $(r_{y1-2}) = 0.553$ , and the coefficient of determination  $(r_{y1-2^2}) = 0.0039$  which means that the variable leg power and running speed variables contributed to the jump distance of 0.39%.

**Keywords:** Leg Muscle Explosion Power, Running Speed and Jumping Distance