

**THE RELATIONSHIP BETWEEN LEG LENGTH AND CRESCENT KICK SPEED IN
PENCAK SILAT SPORT**

***Pomatahu Aisah, R.**

Faculty of Sports and Health, Universitas Negeri Gorontalo, **INDONESIA.**

Email: aisahpomatahu@gmail.com

(Received January 06, 2018, accepted April 04, 2018)

ABSTRACT

Pencak Silat is an Indonesian martial art that contains four elements, including elements of sports, artistic elements, martial and spiritual elements. The elements of martial arts are to defend themselves against an opponent by using martial arts punches and kicks. Crescent kick is a kick done by trajectory curved like a scythe/sickle. The focus is on the back foot. These kicks can be executed in the position of the feet in the front or at the back can also vary with the leaps. Based on the findings in the variable X represents the average score of 100.68. While the score of the variance of 19.71 and a standard deviation of 4.44. While, the results of studies on variable Y represents the average score of 19.65, while the variance of 11.11 and a standard deviation of 3.33. To test the homogeneity of data between the research variables X and Y have a population variance is homogeneous and has a population that is normally distributed. F calculate price obtained for linearity test of 0.73 and F count to the significance of 2.21. Based on the testing criteria for the linearity test set out above that F_{table} obtained from the $F < F_{(1-\alpha)(k-2, n-k)}$. If used real level of significance $\alpha=0,01$ then $F_{(1-0,01)}(16-2, 40-16) = 3,18$. Turns price F_{count} is smaller than f_{table} ($0,73 < 3,18$). Therefore we can conclude the regression equation. Furthermore, to test the significance predetermined test criteria that may obtainable F_{table} of $F_{count} > F_{table}$ $(1-\alpha)(1, n-2) =$ if used level of significance $\alpha=0,01$ then $F_{(1-0,01)}(1, 40-2) = 4,41$. The price of F_{count} is larger than F_{table} ($2,21 > 4,41$). It can be concluded that the linear regression equation is significance (mean). While the simple linear regression test showed similarities variable X and variable Y contains meaning that any chance (decrease or increase) by one unit in the variable X, it will be followed by chance (decrease or increase) the average 0,18 units of variable Y. Testing the correlation between variables X and Y indicated that there is the degree of relationship between variables X and Y or it means that the variable X can explain the variations which occur in the variable Y. It can be concluded that there is a relationship with the speed of leg length in a crescent kick sports of Pencak Silat, but the relationship is still quite weak.