

## ABSTRACT

*Keywords: Half squat training, strength, explosive power and hypertrophy.*

Half squat (HS) training can be employed to increase strength, explosive power and hypertrophy of leg muscle. However, the dose to increase strength, explosive power and hypertrophy has not been elaborated.

This study was conducted at the Faculty of Physical and Health Education, Institute of Teachers Training and Education Science (FPOK IKIP) Ujung Pandang. A total random sample of 150 persons selected from first year male students between 18-22 years of age, were distributed into 4 experimental groups and 1 control group. The experimental groups performed HS training with different loads, i.e. high frequency with 30% maximal load (IC-30), low frequency with 30% maximal load (IL-30), high frequency with 50% maximal load (IC-50), and low frequency with 50% maximal load (IL-50). The control group did not perform any training. The whole experiment was carried out in 12 weeks, and data were collected at the end of the first- and the second sixth week. The collected data were processed statistically using the multivariate analysis.

The result of this study were as follows:

1. HS training IC-50 has the greatest beneficial effect on strength, explosive power, and hypertrophy of leg muscle.
2. HS training IL-50 produce the least increase of strength, explosive power, and hypertrophy of leg muscle.
3. HS training IL-30 predominantly increase muscle hypertrophy than that of strength and explosive power, although the increase is still below that of IC-50.



# DAFTAR ISI