



## ABSTRACT

SKRIPSI, August 2017

Ngimron Rosadi

Program Study Bachelor Degree of Physiotherapy

Faculty of Physiotherapy

Esa Unggul University

### **THE RELATIONSHIP OF STRENGTH LOWER EXTREMITY, CORE STABILITY AND BALANCE OF AGILITY IN 17-18 YEARS OLD BADMINTON PLAYERS**

Consist of Chapter VI, 104 pages, 16 tables, 21 Pictures, 3 Schemes, 7 attachments

**Objective :** Determine correlation between lower extremity strength, core stability and balance on agility badminton players aged 17-18 years. **Methods :** This study is a non-experimental research in the form of correlation studies to analyze the relationships between variables. Sample consisted of 35 badminton players aged 17-18 years in PB. Djarum Super in Grogol Petamburan. Samples are given a series of tests consisting of leg press, prone plank, one leg standing on top of wobble board and t-run agility test. **Results :** Results from leg press mean  $\pm$  SD =  $74.14 \pm 6.12$ , prone plank test mean  $\pm$  SD =  $95.00 \pm 7.69$ , one leg standing on top of wobble board test mean  $\pm$  SD =  $37.40 \pm 8.18$  and the t-run agility test mean  $\pm$  SD =  $9.48 \pm .58$ . Results of normal distribution data obtained in the balance and distribution is not normal in the lower extremity, core stability, agility. Results of the correlation obtained for lower extremity-agility  $r = -.381$ , core stability-agility  $r = .693$  and balance-agility's  $r = .510$ . **Conclusion :** There is a relationship between lower extremity strength, core stability and balance on agility badminton players aged 17-18 years.

**Keywords :** lower extremity strength, core stability, balance, agility, badminton player.