

## ACUTE EFFECTS OF STATIC AND DYNAMIC STRETCHING ON LOWER LIMB ENDURANCE AMONG YOUNG ADULTS

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*(Received March 26, 2017, accepted April 30, 2017)*

### ABSTRACT

*Literature on stretching has shown deficits in concrete evidence of the comparison of the effects of static and dynamic stretching on lower limb endurance. The purpose of the current study was to compare the effects of static and dynamic stretching in the young adults in terms of the endurance of lower limb muscles. Forty male young adults were systematically assigned to static or dynamic stretching groups and performed respective stretches according to their group assignment protocols. Participants were recruited from University Tunku Abdul Rahman, Sungai Long Campus. Lower limb endurance was assessed pre and post stretching for both groups using squat test and wall sit test. Hamstrings, quadriceps, and the calf muscles were stretched. The pre-test and post-test values of squat test in the static stretching group was  $30.1 \pm 5.51$  repetitions and  $32.75 \pm 4.95$  repetitions and for wall sit test, subjects demonstrated  $84.3 \pm 55.68$  and  $83.6 \pm 41.89$  seconds. In the dynamic stretching group, the subjects performed an average number of  $27.15 \pm 6.04$  repetitions and  $31.9 \pm 5.79$  repetitions on squat test. On the other hand, the dynamic stretching group was able to put up a mean of  $71.95 \pm 25.52$  and  $85.7 \pm 33.72$  seconds on wall sit pre and post stretching respectively. Significant effect for dynamic stretching was found in both outcome measures ( $p > 0.05$ ). The findings of the current study support the claim that dynamic stretching may be preferable to static stretching as part of a warm-up designed to prepare for physical activity requiring maximal muscle endurance.*