Pre-activity stretching is commonly performed by active individuals as part of their warm-up routine. However, previous studies have been mixed on the effect of both static and dynamic stretching on anaerobic exercise performance. **PURPOSE:** To determine whether 3 weeks of either static or dynamic hamstring stretching affects range of motion (ROM), sprint, vertical jump, and horizontal jump performances in active individuals. **METHODS:** Twenty-two healthy college-aged students were randomly divided into a static (n=9), dynamic (n=8), or no-stretch control group (n=5). All subjects warmed up with a 5 minute walk before a hamstring stretching protocol. The stretching protocols consisted of four repetitions performed for 30 seconds, 3 days per week for both the hamstring and quadriceps muscles. Three variables of hamstring ROM (sit and reach test, active knee extension test (AKET) using a goniometer and an inclinometer) and three variables of anaerobic exercise performance (50 meter sprint, vertical jump, and horizontal jump) were analyzed using repeated-measures ANOVA. **RESULTS:** No significant differences (P<0.05) were found between groups for the 50 meter sprint (P=0.899), vertical jump (P=0.983), or horizontal jump (P=0.261). Furthermore, three weeks of either static or dynamic hamstring stretching did not improve ROM in our active subjects. **CONCLUSION:** It does not seem that static stretching has a negative impact on anaerobic exercise performance, while dynamic stretching may not be as beneficial to exercise performance as previously thought.

Supported by College of Health Sciences Faculty/Student Research Award, West Chester University