

Effects of Pre- Exercise Massage on Muscle Soreness

ALEXANDRIA DEININGER, HANNAH SANDMANN, VALERIA ROMO and JOHN D. SMITH

Health and Human Performance Lab; Department of Counseling, Health, & Kinesiology;
Texas A&M University-San Antonio; San Antonio, TX

Category: Undergraduate

Advisor / Mentor: Smith, John (jsmith@tamusa.edu)

ABSTRACT

Muscle soreness is common after intense exercise and alternative therapies are always being investigated. Some have indicated possible benefits of massage therapy but this needs to be explored further.

PURPOSE: To determine if a pre-workout massage will help reduce muscle soreness. **METHODS:**

Twenty participants (age=30.3±6.3 yrs, ht.=167.6±11.4 cm, wt.=82.5±15.5 kg) were provided five minutes of massage on the right anterior leg and five minutes of massage on the right posterior leg. After completion of the massage, participants performed two sets of squats to a chair, first with an 8lb weight (males) or a 5 lb weight (females) to a metronome that was set to 60 beats per minute. All participants were then instructed to fill out a pain scale over a 24-hour and 48-hour period. Repeated measures ANOVA was used to determine differences in soreness with alpha set at .05. **RESULTS:** There was no interaction between legs among time points, $F_{(3,17)} = 2.52, p = .092$. There was however, a main effect the massaged leg when time was combined, with a lower soreness rating in the massaged leg (5.0±2.4 units) compared to the non-massaged leg (5.8±2.1 units), $p = .024$. **CONCLUSION:** There is potential of reduced soreness after strenuous exercise if massage is obtained prior to activity. Future research should also look at the interactive effect of performance when receiving massage before exercise with intent on reducing soreness.