
Examining the effects of a posterolateral mobilization with movement compared to a posterolateral self-mobilization with movement and dynamic stretching on hip internal rotation limitations: A randomized control trial

2/16/2020

Statistical Analysis

Statistical analysis will be performed using SPSS with a Repeated Measures Analysis of Variance (ANOVA) in order to determine significance between the three groups while also using time as an outcome pre-and-post-test. Significance will be set at $p \leq .05$ which establishes a 95% confidence interval. A one-way ANOVA will be performed first to determine whether the groups are different at baseline, followed by a repeated measure ANOVA with a within factor and a between group factor. This will reveal the main effects of time, group, and a time by group interaction. ANOVA tests are used to determine whether there are significant measures between two or more groups and allows for comparison of multiple sample means to assess whether there is a significant difference between groups and within the same group from pre and post intervention. F values will be calculated using SPSS software to assess for any significant differences. Post-Hoc testing will be conducted if a significant F value is found in order to determine where the differences exist using three Paired t-tests, one for each group. Data will be tested for normal distribution prior to inserting into the ANOVA using the Shapiro-Wilk Test, where significance will be set at >0.05 . Power analysis will be performed with 82% power determined by 15 participants per group at a moderate effect of 0.25.