

## ***Effects of Interinning Dynamic and Static Stretching on Pitching Velocity and Perception in D-III Baseball Players***

Exercise Science

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### **Purpose**

The purpose of this study was to examine the impact of interinning dynamic and static stretching on pitching performance in Division III baseball players.

### **Methods**

Seven Division III pitchers (age =  $21 \pm 1.0$  yrs; height =  $184.0 \pm 5.3$  cm; weight =  $84.5 \pm 6.0$  kg) completed this repeated measure design study. Participants complete two counterbalanced trials of three simulated innings with either dynamic stretching or static stretching between innings. Each simulated inning consisted of 15 pitches in which velocity was assessed. A Repeated Measure ANOVA and a Fisher transformation were used to determine the differences between pitching velocities between innings following each treatment. Additionally, a Cohen's d effect size was calculated.

### **Results**

There were no statistical differences in average or peak velocity at any time point across the simulated innings ( $p > 0.05$ ).

### **Conclusion**

The results of this study demonstrated that there wasn't any statistical difference for mean or peak velocity between static and dynamic stretches in between innings. We conclude that neither dynamic or static stretching has differing effects on pitching performance in between innings. Limitations to our study include: low participants, a lack of controlling participant awareness of velocity by allowing multiple pitchers to throw at the same time, additionally improving practical application by maintaining a game-like procedure could aid ecological validity.

Link: <https://s3.us-east-2.amazonaws.com/lagrangecollegecitations/BragueGarris.pdf>

*Citations Journal of Undergraduate Research*

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