SCAHPERD 2016 Poster Abstract

Project Title (Include authors and affiliation): *Is dynamic stretching more beneficial to female high school athlete's speed and agility than static stretching? by Mikel Rider and Dr. Joni Boyd; Winthrop University, Department of Physical Education, Sports & Human Performance*

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Background of Project (Introduction): There is consensus in the literature that dynamic stretching; 'controlled movement through the active range of motion for each joint' is preferable to static stretching during the warm-up to prepare for physical activity. (Behm & Chaouachi, 2011). However, static stretching is also intended to improve the range of motion of a joint to allow maximal force production. (Amiri-Khorasani et al., 2012).

Purpose/Methods: The purpose of this literature review is to determine what type of stretching is more beneficial to female high school athletes in the warm-up period for purposes of speed and agility.

Results: It is important to note that some studies showed improvements in speed and agility after short durations of static stretching. However, there are more studies that show dynamic stretching as the superior stretch to static stretching for speed and agility purposes. There is also support for a mix of both static and dynamic stretching to be performed in the warm-up period.

Conclusions (Implications for policy, delivery, or practice): Regarding speed, one group that performed a static stretch in their warm up had a slower time in a 20-meter sprint than a group that had dynamic stretching as it's warm up. This was the same result for an agility test. In other studies, one's finding was that static stretching did not produce a decrement to agility performance. The biggest concern of the review of studies is the lack of explicitly defining what is happening during dynamic stretches. Some dynamic stretches listed within the literature are actually ballistic in nature (more fast, and explosive). Future research should focus on specific delineation of types of stretches in the warm-up for optimal performance.

Keywords (at least 3): dynamic stretching, female high school athletes, static stretching

Practical Applications: While dynamic stretching is probably most effective compared to static stretching or no stretching, static stretching does have its benefits if used appropriately (i.e., short durations).

Acknowledgements:

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