TACSM Abstract

The Effects of a Resisted Push or Pull on Acceleration Sprint Time

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ABSTRACT

Resistive sprinting is among many of the techniques used to aid in improving running mechanics. Proper running mechanics can aid in speeding up the acceleration phase. The acceleration phase involves the first 10-15 meters of a run before hitting the top speed phase. The resistive equipment used by coaches and trainers varies, ranging from parachutes to sleds. For this study the sled was the technique being investigated. The sled can be used to improve running techniqe both through pushing and pulling. **PURPOSE**: The purpose of the study was to determine which resistive running method, sled push or sled pull, would be most beneficial for improving acceleration phase of sprints. **METHODS**: Fourteen Texas Lutheran athletes participated in the study. Each test day involved timed sprints for baseline, followed by one of the two resistive techniques (push or pull) and ending with another set of timed sprints to determine any improvements. **RESULTS**: All subjects improved their time in the acceleration phase of sprinting. The two different warm-up methods were compared to see if one had a greater improvement using a repeated measure within subjects t-test. A p-value of 0.46 was found indicating that there was not a statistically significant difference between the two methods. **CONCLUSION**:. While both techniques, the sled pull and the sled push, aided in improving acceleration phase sprint times, there was no difference between groups. This is important for coaches and trainers to know that either method can be used to help aid in the improvements of the acceleration phase.