## A Pilot Study Investigating the Effects of the Summer Rodeo Season on Functional Movement Screening Scores of College Rodeo Athletes

JUSTIN STANELY, DR. ANDY WOLFE, DR. ANDI GREEN, JESSIE RAMIREZ, GILLIAN BRADEN, & MEGHAN YOUNGER

Kinetic Performance Laboratory; Kinesiology; Tarleton State University; Stephenville, TX

Category: Undergraduate

Advisor / Mentor: Wolfe, Andrew (awolfe@tarleton.edu)

## **ABSTRACT**

Rodeo is well known for its high-velocity, high-impact atmosphere where athletes compete against the clock and uncooperative livestock. Many rodeo competitive related injuries are associated with insufficient muscular synergy, endurance, strength, and limb flexibility. PURPOSE: The purpose of this investigation was to examine the difference between pre-summer rodeo functional movement screening (FMS) outcomes and post-summer rodeo FMS outcomes of rodeo athletes. METHODS: The researchers conducted pre-summer rodeo FMS assessments on collegiate rodeo athletes (n = 8). Athletes were instructed to complete their standard summer rodeo season without the integration of exercise modalities that may serve as corrective strategies for altered functional movement onset by the demands of rodeo performance. Rodeo athletes returned for post-summer rodeo season FMS testing upon the conclusion of their summer rodeo season. A paired-sample t-test (p < 0.05) was employed to identify differences in preand post-summer rodeo FMS outcomes. RESULTS: The statistical analysis revealed no significant differences between pre- and post-summer rodeo season FMS scores. However, moderate effects sizes were identified between pre- and post-rotary stability (d = .725), pre- and post-deep squat (d = .725), and pre- and post-hurdle step (d = .725), and pre- and post-trunk stability (d = ..540). **CONCLUSION**: These results suggest that the intensity and volume of summer rodeo season performance may contribute to alterations in rodeo athlete's functional movement abilities. An FMS utilized to identify movement compensations/limitation of rodeo athletes prior to summer rodeo season, and the integration of exercise modalities that serve as corrective strategies for the presented movement compensations may assist in decreasing the chance of non-impact injury sustainment.

