

Differences in Functional Movement Screening Score between College Rodeo Events

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ABSTRACT

The sport of rodeo is recognized as a high velocity/intensity activity, with a wide range of varying dynamic movements occurring across different rodeo events. High velocities and extreme dynamic range of motion movements, compounded with uncooperative livestock, contribute to elevated risk of injury. While these factors generally attribute to rodeo injuries, little is known in regards to movement limitations of rodeo athletes. **PURPOSE:** Therefore, the purpose of the current investigation was to identify movement pattern differences among rodeo events using the Functional Movement Screening (FMS) test. **METHODS:** College rodeo athletes (n = 85) from a mid-size university in the southwest region were selected as participants for this study. Athletes were categorized according to their respected rodeo event: Steer Wrestling (n = 7), Breakaway Roping (n = 28), Goat Tying (n = 11), Barrel Racing (n = 20), Saddle Bronc Riding (n = 9), Tie Down Roping (n = 4), Bull Riding (n = 2), or Team Roping (n = 4). Following, all rodeo athletes completed an FMS test to establish movement efficiencies. A MANOVA was utilized to differentiate FMS scores between rodeo events. **RESULTS:** There was a statistically significant main effect between rodeo event and FMS outcomes of rodeo athletes, $F(56, 382.72) = 1.777$, $p = .001$; Wilk's $\Lambda = .288$, partial $\eta^2 = .163$. LSD Post hoc test revealed significant differences between various events for all dependent variables except the Hurdle Step Test. **CONCLUSION:** These results suggest different rodeo event specific movement pattern may affect FMS test results. Additionally, for the practitioner, these differences may serve as valid precursors to injuries per rodeo event.