**TACSM Abstract**

**Physical Fitness Differences between ROTC Ranger Challenge Cadets and Regular ROTC Cadets**

SARAH MATTHEWS, ANDREW WOLFE, MATT LAURENT, ANDI GREEN, and TY HILL

Kinetic Performance Laboratory; Department of Health and Human Performance; Tarleton State University; Stephenville, TX

**Category:** Undergraduate

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

**ABSTRACT**

Physical fitness has proven its worth for military personal, as a whole, and individually. A high physical fitness level serves as an influencing variable to completion of special military operation initiation trainings (i.e. BUD/S Training). Consequently, militant whom possess a higher level of physical fitness may gain greater occupational advancement opportunities/placement. Pre-commissioned military programs requiring rigorous physical activity participation, superior to typical physical training (PT), may yield optimal physical capacity for cadets seeking special military operations commission, and/or alternative military placement involving physically demand responsibilities. The fitness level of cadets enrolled in military programs requiring elevated PT standards compared to cadets in “regular” pre-commission programs necessitates examination.

**PURPOSE:** The purpose of the current research was to examine the physical fitness levels, according to Army Physical Fitness Test (APFT) results, of the Reserve Officer Training Corps (ROTC) Ranger cadets (n = 15) compared to Regular ROTC cadets (n = 78).

**METHODS:** Cadets participated in a 12 week Ranger ROTC training program (undulated resistance training; speed, agility, and quickness training; and high intensity interval ruck training) or 12 weeks of the “regular” ROTC calisthenics (i.e. push-ups, sit-ups, bodyweight squats, long-distance running). Upon completed of the training protocols, an APFT was conducted to identify physical fitness level of cadets. An independent sample t-test (α < .05) analyze the mean difference between raw scores, standardized scores, and overall APFT scores of Ranger and Regular cadets.

**RESULTS:** Significant differences were recognized between Ranger and Regular cadets for all aspects of the APFT: Raw 2-minute push-up t(91)=4.281, <.001; Raw 2-minute sit-up t(91)=3.842, <.001; Raw 2-mile run t(91)=3.993, <.001; Standardized 2-minute push-up t(91)=3.369, <.001; Standardized 2-minute sit-up t(91)=3.668, <.001; Standardized 2-mile run t(91)=3.857, <.001; and overall APFT t(91)=4.130, <.001. **CONCLUSION:** These results illustrate a drastic difference in physical fitness level among cadets and suggest the elevated fitness level of Ranger cadets may serve as an ample foundation to future military placement and operations.