**TACSM Abstract**

**Physical Fitness Sex Difference of ROTC Cadets**

TY HILL, ANDREW WOLFE, MATT LAURENT, KAYLA PEAK, and DON BEACH

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

---

**Category:** Masters

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

**ABSTRACT**

Occupational requirements of military personnel necessitate optimal levels of physical fitness; suboptimal levels yield detrimental operations. Consequently, female physical readiness and abilities in comparison to the male soldier fitness level is frequently questioned. Qualitative reports denounce masculine advantages, however, quantitative measures explaining sex differences in physical fitness of military personal remains unclear. **PURPOSE:** Clarifying the physical fitness difference of male and female militants was the purpose of this investigation. **METHODS:** A Freedom of Information Act request provided the researchers with Army Physical Fitness Test (APFT) results (Raw 2-mile run, Raw 2-minute push-ups, Raw 2-minute sit-ups, Standardized 2-mile run, Standardized 2-minute push-ups, and Standardized 2-minute sit-ups), and Leadership Development Assessment Course field physical fitness scores for male (n = 657) and female (n = 178) Reserve Officers' Training Corps (ROTC) cadets from a southwestern ROTC brigade. An independent sample t-test (P<.05) was applied to analyze group means for raw and standardized APFT scores of male and female cadres. **RESULTS:** No statistically significant differences were identified between APFT or field physical fitness scores of male and female cadets: Raw 2-minute push-up $t(833) = .467, .64$; Raw 2-minute sit-up $t(833) = .719, .47$; Raw 2-mile run $t(833) < .000, 1.00$; Standardized 2-minute push-up $t(833) = -.418, < .67$; Standardized 2-minute sit-up $t(833) = .952, .34$; Standardized 2-mile run $t(833) = -.254, .80$; overall APFT $t(833) = -.132, .90$; and field physical fitness $t(833) = -.289, .77$. **CONCLUSION:** Brownson (2014) suggested that sex differences should not interfere with physical fitness or physical occupational performance, and based upon qualitative reports female militants possess adequate, and sometimes superior, leadership, physical, and job performance in comparison to male counterparts. These results compliment qualitative reports and suggest female ROTC cadets possess occupationally sufficient physical abilities.