The purpose of this study was to assess strength and physiological characteristics in those age 30-34 years and with more years of service. METHODS: A total of 253 Soldiers participated. Individual subject cohorts were created based on age (20-24, 25-29, 30-34, and 35-44 years of service) and years of service (1-5, 6-10, 11-15 years). RESULTS: Soldiers age 30-34 had more body fat than those age 20-24 (p = 0.005) and 25-29 (p = 0.001), 35-39 years of service (p = 0.001), and 40-44 years of service (p = 0.001). Soldiers with 1-5 (p < 0.001) and 6-10 (p < 0.001) years of service had higher %BF than those age 20-24 year olds than 30-34 year olds (p = 0.041), 35-39 year olds (p = 0.047) and 40-44 year olds (p = 0.044). VO2 at LT was higher in those age 20-24 than those age 25-29 years of service (p = 0.003) and VO2 at lactate threshold (VO2 at LT) was significantly greater in those age 20-24 than those age 25-29 years of service (p = 0.003). Significant Results by Age

**RESULTS**

- Body mass index (BMI) was lower in Soldiers with 1-5 years of service than those with 11-15 years of service (p = 0.023).
- Body fat (%BF) was lower in Soldiers with 1-5 (p < 0.001) and 6-10 (p < 0.001) years of service than those with 11-15 years of service.
- Aerobic capacity (VO2max) was higher in Soldiers with 1-5 (p < 0.001) and 6-10 (p < 0.001) years of service than those with 11-15 years of service (p = 0.001).%BF was higher in those age 30-34 than 20-24 (p = 0.005) and 25-29 (p = 0.012).
- VO2 at lactate threshold (VO2 at LT) was higher in Soldiers with 1-5 years of service than those with 11-15 years of service (p = 0.023).
- Heart rate at lactate threshold (HR at LT) was significantly greater in those with 1-5 years of service than those with 11-15 years of service (p = 0.012).
- Left knee flexion/extension (KF:KE) ratio was significantly lower in the 1-5 years of service compared to the 6-10 years of service group. Significance by Age and Years of Service