

Gender Differences in Health-Related Physical Fitness Among College Students

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PURPOSE: To analyze health-related physical fitness in college students and examine gender differences. **METHODS:** Between 2012 and 2014, a convenient sample of 170 college students (37% females, 63% males, mean age of 22.74 ± 5.04 years) underwent a series of standardized health-related physical fitness tests. Tests included Jackson-Pollock 3 site skinfolds, the Cooper 12-minute run/walk, push-up, abdominal curl-up, and YMCA sit-and-reach. We used mean and standard deviation to describe health-related physical fitness levels of participants and independent sample t-test to examine gender differences. A Mann-Whitney U test was performed to determine if there were differences in body fat categories between males and females. **RESULTS:** The sample mean estimated VO₂max value was $38.93 \text{ mL} \cdot \text{kg}^{-1} \cdot \text{min}^{-1} \pm 11.32 \text{ mL} \cdot \text{kg}^{-1} \cdot \text{min}^{-1}$. Participants performed 22.55 ± 10.66 and 31.29 ± 19.31 push-ups and curl-ups respectively. Males completed significantly more push-ups than females. However, females showed significantly greater flexibility values compared to their male counterparts. There was a statistically significant difference in mean body fat percentage between males and females, with females scoring higher than males. However, body fat categories were not statistically significantly different between males and females. **CONCLUSION:** Despite participants meeting average standards for most of the fitness components, it is clear that there is opportunity for improvement. In order to delay potential declines in health-related physical fitness, colleges should consider developing comprehensive programs targeting psychosocial as well as environmental factors that enhance behaviors, curriculum, opportunities and policies.

	% body fat	VO ₂ max (ml/kg/min)	Push-ups	Curl-ups	YMCA sit-and-reach (inches)
Males	12.19** ±5.00	40.04 ±10.56	25.81 ± 10.00**	33.17 ±18.79	16.71** ± 3.91
Females	23.78** ± 5.99	37.00 ±11.64	16.89 ± 9.39**	28.01 ±19.43	19.43** ± 4.11

** Significant difference $p < 0.01$