RESULTS: Mean (SD) for dependent variables and % change are shown. * indicates significant changes across time.

		VO_2max ml.kg.min^{-1}	TT time (s)	PPO (W)	MPO (W)
	Pre	39.2 (8.8)	496.3 (68)	668.1 (168)	437.5 (149)
Plyo (n=15)	Post	42.0 (7.8)*	479.5 (62)	742.0 (182)*	490.9 (157)*
	%Change	7.1	3.4	11.0	12.2
Endo (n=14)	Pre	39.2 (8.2)	500.3 (99)	673.2 (225)	454.4 (177)
	Post	42.7 (7.1)*	449.3 (72)*	783.1 (240)*	542.1 (186)*
	%Change	8.9	10.2	16.0	19.3

There were no differences between groups before and after training for any variable. Even though the magnitude of change for each variable was larger with cycle training, plyometric training did improve VO_2 max by 7.1%, and PPO and MPO by 11 and 12%, respectively. Further, the 3.4% change in TT performance following plyometric training was nearly significant (p=0.063).
CONCLUSION: Plyometric training is an effective means by which to enhance indices of aerobic and anaerobic fitness.

---

952 Board #367 May 28, 2:00 PM - 3:30 PM

The Influence of Yoga and Stress Management Intervention on Physical Activity and Function among College Students

Ji Yeon Jung[1], Hyungyu Suh[2], Courtney Jensen[2], Tosca D. Braun[2], Kristen E. Riley[2], Crystal L. Park[2], Lind S. Pescatello, FACSM[2]. [1]*University of Connecticut, Vernon, CT.* [2]*University of Connecticut, Storrs, CT.*
(No relationships reported)

PURPOSE: We investigated the effects of yoga and a cognitive behavioral stress management (CBSM) program on physical activity (PA) and function among first-year college women.
METHODS: 25 women (X±SEM, 18.0±0yr, 21.9±3.8kg•m-2) were randomized into YOGA (n=7) or CBSM (n=5), or assigned to wait-list control (n=13). The Paffenbarger PA Questionnaire, waist circumference, and measures of physical function were obtained at pre- and post-2mo intervention and 4mo follow-up. Multivariable ANCOVA tested differences among groups adjusted for waist circumference.
RESULTS: Post-intervention, YOGA increased hand grip strength (2.2±0.8kg, p=0.028) and reduced balance with the error scoring system (BESS) (-4.9±1.3, p=0.008); control improved floor transfer time (-0.2±0.1sec, p=0.032). YOGA increased kcal•wk-1 in walking (1024.0±357.1, p=0.029) and walking+stair climbing (1104.0±338.7, p=0.017), and decreased hr•d-1 in sitting (-1.5±0.5, p=0.018); CBSM increased hr•d-1 in moderate intensity PA (0.8±0.2, p=0.033) and total PA (2.7±0.9, p=0.039); control decreased hr•d-1 in moderate intensity PA (-1.2±0.5, p=0.033). Greater improvements occurred in YOGA than CBSM in kcal•wk-1 in stair climbing (257.0±92.0, p=0.033); and control in walking (1255.0±444.2, p=0.030) and walking+stair climbing (1336.8±433.8, p=0.017). At 4mo follow-up, YOGA reduced BESS (-5.5±2.0, p=0.039); CBSM increased hand grip strength (3.3±0.1kg, p=0.001). YOGA increased kcal•wk-1 in walking (756.0±159.5, p=0.005) and walking+stair climbing (707.0±169.2, p=0.009); CBSM increased total kcal•wk-1 (2,098.0±332.6, p=0.024) and bouts•wk-1 of PA (2.8±0.2, p=0.008); control reduced kcal•wk-1 in total PA (3,028.6±892.4, p=0.015) and kcal•wk-1 in sports & recreation (2,928.6±946.0, p=0.021). Greater improvements occurred in CBSM than control in kcal•wk-1 in walking (1,569.6±478.7, p=0.020) and walking+stair climbing (1,363.9±455.2, p=0.033), and hr•d-1 in moderate intensity PA (1.7±0.6, p=0.035) and total PA (4.3±1.5, p=0.039).
CONCLUSIONS: : In this pilot study, YOGA and CBSM improved physical function and activity, with the greatest PA benefits conferred by YOGA compared to CBSM and control. At 4mo follow-up, CBSM continued to increase PA, while YOGA maintained PA improvements.

---

953 Board #368 May 28, 2:00 PM - 3:30 PM

The Effect Of An Eccentrically-biased Hamstring Strengthening Home Program On Knee Flexor Strength And The Length-tension Relationship

Karl F. Orishimo, Malachy P. McHugh, FACSM. *Nicholas Institue of Sports Medicine and Athletic Trauma, Lenox Hill Hospital, New York, NY.*
(No relationships reported)

Rehabilitation emphasizing eccentrically-biased exercises requiring no equipment have been shown to result in a more rapid return to sports after hamstring strains. However, the actual training stimulus for such exercises and their effect on the length-tension relationship has not been established.
PURPOSE: To assess the effects of a 4-week, home-based, eccentric hamstring strengthening program on knee flexion strength and the length-tension relationship. We hypothesized that this protocol would improve strength and produce a rightward-shift in knee flexor length-tension relationship.
METHODS: 10 healthy, uninjured subjects (8M, 2F) participated in this study. Baseline isometric strength was assessed with subjects seated in a dynamometer with the hip flexed to 50 degrees from horizontal. Knee flexion strength was measured at 90, 70, 50 and 30 degrees of knee flexion. Hamstring flexibility was also measured as the angle of maximum knee extension tolerated in this position. Following the baseline test, subjects were given a progressive training program of four exercises to be performed three times per week for 4 weeks. The 4 exercises were (1) standing hip extension with elastic resistance, (2) standing trunk flexion (The Diver), (3) standing split (The Glider), and (4) supine eccentric bridge (The Slider). Following completion of the training program, strength and flexibility tests were repeated. A Training (pre to post) by Angle repeated-measures ANOVA was used to assess the effects of the training program on knee flexion strength and the length-tension relationship.