
SPORT PSYCHOLOGIST'S DIGEST

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Rx for COPD

This randomized controlled trial examined the effect of exercise and education on 79 older adults (mean age = 66.6 years) with chronic obstructive pulmonary disease (COPD). Participants were randomly assigned to 10 weeks of (a) exercise, education, and stress management (EXESM); (b) education and stress management (ESM); or (c) waiting-list control (WL). Pre- and postintervention assessments were made for physical and cognitive function and perceived well-being. Following the intervention, participants in the EXESM group showed a significant increase in cardiopulmonary endurance (about a 16% improvement in $\dot{V}O_{2max}$), but those in the other two conditions showed no improvement. There was also a significant increase in organized verbal processing for the EXESM group, which supports the notion that exercise may have an effect on executive functions associated with the frontal lobe (i.e., self-control and self-monitoring). The authors noted that study dropouts ($n = 6$) had significantly lower scores on the verbal fluency task than study completers did. Thus, it may be important to include aspects of cognitive function in models of exercise adherence among patients with COPD. With regard to perceived well-being, both the EXESM and the WL groups showed significant reductions in illness-related impairment and depressive symptoms, but only the EXESM group reported a significant decrease in anxiety over time.

Emery, C.F., Schein, R.L., Hauck, E.R., & MacIntyre, N.R. (1998). Psychological and cognitive outcomes of a randomized trial of exercise among patients with chronic obstructive pulmonary disease. *Health Psychology, 17*, 232-240.

Tune In, Turn On, Work Out

Two experiments were conducted to examine the effects of watching a cycling video, while riding a stationary bike, on the quality of exercise performed. In the first study, 12 participants performed three 35-min trials of cycling at 70% $\dot{V}O_{2max}$ while watching either a cycling video, a test pattern displayed on the video monitor, or nothing. $\dot{V}O_{2}$, percent $\dot{V}O_{2max}$, respiratory exchange ratio, and heart rate were recorded continuously throughout the trial, and measures of affect and ratings of perceived exertion (RPE) were recorded at 10-min intervals. There were no effects of video condition on any of the physiologic variables or on RPE, but affect ratings were more positive for the video condition than for the other two conditions after 25 and 35 min of exercise. In the second study, 12 participants performed two 35-min trials of cycling at a self-determined level of intensity while watching a cycling video or no video. Analysis revealed that participants rode at a higher level of intensity and had a greater power output in the video condition than in the no-video condition. There was no effect of video condition on affect. The different patterns of results in Studies 1 and 2 suggest that the effects of visual stimuli might be intensity-dependent. The authors suggest that videos might be

used to motivate inexperienced exercisers to work out at higher levels of intensity, but that they might also cause some individuals to exercise at too high an intensity and place themselves at health risk.

Roberts, R.A., Bereket, S., & Knight, M.A. (1998). Video-assisted cycling alters perception of effort and increases self-selected exercise intensity. *Perceptual and Motor Skills*, **86**, 915-927.

Venus and Mars in the Gym

One hundred women and 78 men undergraduates (mean age = 21.2 years) completed a series of questionnaires that assessed their reasons for exercising, frequency of exercise, and body image satisfaction. Contrary to previous findings, among women, health/fitness management motives but not appearance/weight management motives were associated with exercise frequency. To explain their findings, the authors suggest that the women in their sample might have been more physically active than those in earlier studies and that more frequent exercise might lead to greater concern with health and fitness. Thus, when women exercise regularly, health and fitness motives for exercise could become more salient than motives related to physical appearance. Among men, exercise frequency was not related to any of the study variables. Only one significant gender difference emerged when reasons for exercise were compared. Women endorsed appearance/weight management motives more strongly than men did. There were no differences in the degree to which men and women endorsed health/fitness, socializing, and stress/mood management motives for working out. There were also no gender differences on a measure of body area satisfaction, although women reported greater situational body distress than men did. Thus, it seems that men and women differ on some dimensions of body dissatisfaction but are similar on others.

Smith, B.L., Handley, P., & Eldredge, D.A. (1998). Sex differences in exercise motivation and body-image satisfaction among college students. *Perceptual and Motor Skills*, **86**, 723-732.

A Little Dab'll Do Ya

The purpose of this study was to determine whether short bouts of exercise affect self-efficacy, well-being, and perceived fatigue. College-age, physically active women ($N = 36$) were assigned to one of three treadmill conditions: 10-, 15-, and 20-min exercise duration. Participants manipulated the treadmill speed so that they exercised at a perceived exertion rate of 13. An exercise self-efficacy scale and the Subjective Exercise Experience Scale (SEES) were completed immediately before and 5 min after exercising. In addition, the SEES was administered again 20 min after exercising. An increase in self-efficacy was found for all three exercise durations. Although scores on the SEES did not differ from baseline at the 5-min postexercise testing, positive well-being increased and psychological distress decreased at 20 min postexercise. Correlational analysis indicated that self-efficacy was positively related to postexercise well-being and negatively related to