

Moderation of Fatigue and Stress in the Carry-over of Self-Regulation and Self-Efficacy for Exercise to Self-Regulation and Self-Efficacy for Managed Eating

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ABSTRACT

Behavioral treatments for morbid obesity have not been effective, possibly because of a poor understanding of the relations of psychosocial factors and exercise and eating behaviors. Recent research suggests that exercise program-induced improvements in self-efficacy and self-regulatory skills use may carry-over to self-efficacy and self-regulation for controlled eating. However, for individuals with morbid obesity, fatigue and anxiety may moderate these relationships. The purpose of this research was to evaluate this moderation. Adults with Grade 3 obesity (MBMI = 46.0 kg/m²) participated in 26 weeks of cognitive-behaviorally supported exercise paired with 12 weeks of either nutrition education (n = 95) or a cognitive-behavioral nutrition component (n = 109). There were significant improvements in self-regulation and self-efficacy for exercise, and self-regulation and self-efficacy for controlled eating, which did not differ by treatment condition. Bivariate relationships between changes in self-regulation for exercise and self-regulation for controlled eating ($\beta = .63$), and changes in exercise self-efficacy and self-efficacy for controlled eating ($\beta = .51$), were strong. Moderation of these relationships by fatigue and anxiety was either significant or marginally significant ($ps < .01$ and $ps < .08$, respectively). Both changes in self-regulation for controlled eating and self-efficacy for controlled eating significantly contributed to the explained variance in BMI change ($R^2 = .30$). Implications of the findings for behavioral weight-loss treatment for those with morbid obesity were discussed.

KEYWORDS

Self-Regulation, Self-Efficacy, Exercise, Obesity, Nutrition

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