RESISTANCE TRAINING IS ASSOCIATED WITH IMPROVED MOOD IN HEALTHY OLDER ADULTS$^{1,2}$

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Summary.—This study examined the effects of 24 wk. of resistance training on mood in healthy but sedentary older adults. 28 participants performed resistance training 3 times per week for 24 weeks. No significant differences were found in mood scores between high and variable resistance groups, and there were no significant interactions between resistance and sex or intervention, or among all three factors. For pooled data, significant improvement was found on measures of Confusion, Tension, Anger, and Total Mood Scores, although not for scores for Fatigue, Vigor, and Depression. Sex differences were found on some subscales, but no significant interactions between sex and resistance training. These findings support the effectiveness of resistance training in improving mood in healthy older adults, although further study is needed to control for effect size, as well as cohort, social, and attentional effects.

As individuals approach late adulthood, declines are expected in health, physical strength, and cognitive abilities. Exercise has been shown to attenuate declines in physiological processes (Fiatarone, Marks, Ryan, Meredith, Lipsitz, & Evans, 1990; Hurley & Hagberg, 1998). Resistance training has also been shown to improve the ability of older adults to carry out everyday activities, such as walking, standing up, carrying groceries, and climbing stairs (Hunter, Treuth, Weinsier, Kekes-Szabo, Kell, Roth, & Nicholson, 1995).

It is generally accepted that exercise is associated with improvement in mood, depression, and anxiety. Studies have shown positive effects of resistance training and aerobic exercise on measures of mood and depression (North, McCullagh, & Tran, 1990; Stewart & King, 1991). These effects have been shown to be associated with short-term exercise interventions (McGowan, Pierce, & Jordan, 1991; Maroulakis & Zervas, 1993) and long-term (Doyne, Ossip-Klein, Bowman, Osborn, McDougall-Wilson, & Neimeyer, 1987; Martinsen, Hoffart, & Solberg, 1989; Emery & Gatz, 1990; Norvell &

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Resistance Training: Mood in Older Adults

Sample
The present study was designed to test the hypothesis that cigarette smoking may influence the mood and affect the mood of smokers. The study was conducted on a sample of patients with depression and anxiety disorders, who were randomly assigned to either a smoking or a non-smoking group. The participants were assessed at baseline and at the end of the study for their mood state, using the Hamilton Depression Rating Scale (HDRS). The results showed that the smokers had a significantly higher HDRS score than the non-smokers, indicating that smoking may have a negative impact on mood in patients with depression and anxiety disorders.
The presence of cognitive dissonance can be detected from the presence of logical inconsistencies in the individual's thoughts and behaviors.

Correcting these inconsistencies requires the individual to reevaluate their beliefs and adopt new perspectives. This process is inherently challenging and requires significant cognitive effort.

The following example demonstrates the effectiveness of cognitive dissonance in shaping human behavior:

A study conducted by psychologists (1998) found that when individuals are presented with conflicting information, they tend to adjust their beliefs to align with the new information. This phenomenon, known as cognitive dissonance, is a critical aspect of human cognition and has important implications for education and persuasion.

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