

**WEIGHT TRAINING IN OLDER ADULTS: AN INTERVENTION FOR
PSYCHOLOGICAL EMPOWERMENT**

By

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DEDICATION

This thesis is dedicated to my wonderful parents, Neill and Laura, who have raised me to be the person I am today. You have been with me every step of the way, through good times and bad. Thank you for all the unconditional love, guidance, and support that you have always given me, helping me to succeed and instilling in me the confidence that I am capable of doing anything I put my mind to. Thank you for everything. I love you!

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ABSTRACT

WEIGHT TRAINING IN OLDER ADULTS: AN INTERVENTION FOR PSYCHOLOGICAL EMPOWERMENT

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This thesis is under the direction of W. Jack Rejeski, Ph.D.,
Professor of Health and Exercise Science, Wake Forest University.

The purpose of the present study was to evaluate the benefits of adding a psychological empowerment intervention to traditional strength training on social cognitive variables in community-dwelling older adults [mean age (yrs) \pm SD = 70.50 \pm 5.32]. Thirty-eight participants, 12 men and 26 women, were randomly assigned to either a psychological empowerment intervention or a traditional strength training intervention for 6 weeks. Prior to random assignment and upon completion of training, all participants completed measures of self-efficacy for upper and lower body strength as well as the desire to be able to lift specific amounts of weight. In addition, participants completed performance testing on a lifting/carrying task. Both the empowerment and traditional strength training conditions involved 2 sessions/week of center-based training and 1 session/week of home-based training, consisting of one set of 8-12 repetitions for 12 exercises. In addition, the empowerment condition included a group-mediated intervention that was designed to enhance self-efficacy towards strength training and to increase the desire for upper and lower body strength.

General linear models on difference scores covarying for pretest values and gender revealed that the two groups experienced differential gains in the desire for upper body strength ($p = 0.023$, $ES = 0.79$) and were marginally different in gains for upper

body strength self-efficacy ($p = 0.065$, $ES = 0.63$). On a 4-point scale, the adjusted mean ($\pm SE$) differences for the empowerment group on the desire for upper body strength was 0.71 (± 0.12) as compared to 0.27 (± 0.13) for the traditional strength training group (scale ranged from 0-4), whereas the empowerment group's improvement in self-efficacy for upper body strength was 25.70 (± 3.02) as compared to 17.18 (± 3.19) for the traditional strength training group. Due to low statistical power, other outcomes were in the expected direction but did not reach statistical significance.

This study provides evidence that empowerment interventions have strong potential in assisting older adults to generalize training effects to functional tasks of their daily lives. There is a need to rethink the structure and content of physical activity programs for older adults in order to promote a more meaningful experience for them, and this empowerment study appears to be a step in the positive direction.