



of the American Alliance for Health, Physical Education, Recreation and Dance

## **AAHPERD RESEARCH GRANT PROGRAM AWARD 1999**

### **A Home-based Intervention to Improve Gait, Balance, and Self-Confidence in Older Women**

**INVESTIGATORS** Kathleen Williams & Karen Mustian, University of North Carolina – Greensboro  
Christopher Kovacs, University of Mississippi

**CATEGORY** Established Investigator Grant

#### **ABSTRACT**

Nearly half of the changes in physical functioning observed with aging have been attributed to disuse or inactivity (O'Brien-Cousins, 1998). A myriad of reasons are cited by older adults for this lack of physical activity (O'Brien-Cousins & Janzen, 1998), including health concerns, social concerns, and psychological concerns. These barriers to physical activity and exercise are often modulated by positive aspects, such as feeling and looking better, and delaying the onset of particular diseases.

Self-efficacy (an individual's belief in his/her ability to perform necessary courses of action to meet situational demands) is the central component of the Social Cognitive Theory, which posits that humans are active agents in their lives with the power to choose their own behavior. Also, self-efficacy is theorized to influence choice of activity, effort expenditure, persistence, and the individual's exercise experience. However, the impact of a broad array of self-efficacy feedback (involving verbal, emotional, and mastery information) on exercise compliance and adherence in older adults is unclear.

The purpose of this study was to examine effects of a low- to moderate intensity balance program on older adults, emphasizing self-efficacy information. Participants were assigned to an exercise group with a self-efficacy intervention or as exercise-only controls. Efficacy information focused on mastery experiences and social persuasion. Older adults were both pre-tested and post-tested before a 16-week, self-paced program.

Post-testing revealed that adherence was higher for the efficacy intervention group. No significant main or interaction effects occurred for balance and mobility measures ( $p > .05$ ). The efficacy intervention in this investigation resulted in greater adherence to activity, without concomitant improvements in balance and mobility. Results suggested that mastery information given to participants was not sufficiently salient to result in balance improvements. Given this, further study is necessary to determine whether the nature of the efficacy information was insufficient to bring about change, specifically with regard to outcome expectations. Additionally, the low intensity of the activities used should be further explored, with particular attention to providing an optimal challenge for participants.