

## **The Relationship Between Family and Friend Social Support on Balance in Older Adults**

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*Category: Masters*

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### ABSTRACT

Older adults are more likely to have longer hospital stays, health care utilization, increased medical prescriptions, and greater risk of falling as their age increases. Many of the injuries sustained in older adults can be attributed to poor balance; this can be improved with exercise. Despite the clear benefits to exercise many older adults still choose not to participate in exercise programs; or they do not participate in exercise activities on a consistent basis. Social support from family and friends could attribute to the likelihood that individuals will exercise regularly and see overall improvement in fitness. However, the effect of social support on these outcomes has not been well studied. The purpose of this study was to examine the relationship between social support from family and friends on balance improvements in older adults. Thirty-one participants total (age  $75 \pm 4.7$  yrs.) of the Center of Healthy Living and Longevity at UTA met the criteria to participate in this study. Each participant was asked to complete the Social Support Exercise Survey (measures family/friend support and discouragement), Revised Cheek and Buss Shyness Scale (RCBS); along with the Balance Efficiency Survey before the exercise sessions began and ended for the semester. Also, the participants' balance was assessed using Sensory Organization Test (SOT) on the NeuroCom EquiTest before and after the intervention. In addition, the participants completed the Senior Fitness Test; that measures flexibility, agility, strength, and endurance. The exercise sessions were held three times a week for a total of 12 weeks. The exercises involved cardiovascular, balance, strength, and flexibility exercises. During each exercise session the participant's attendance was taken. There was a marginally significant negative relationship between the participants change in shyness and their mean attendance percentage ( $r=0.31$ ,  $p \leq 0.08$ ). There was also a relationship between change in exercise related family punishment and change in performance on the two-minute step test ( $r=-0.49$ ,  $p < 0.01$ ). Also, there was a relationship between the change in friendship reward for exercise and change in visual scores on the SOT ( $r=0.415$ ,  $p < 0.05$ ); as well as for the change in peripheral balance ( $r=0.594$ ,  $p < 0.001$ ). The results of this study indicate that social support from friends and family can affect factors dealing with an individual's overall fitness level. Social factors should be considered when designing group exercise interventions for older adults.

