

Matters, was completed with 16 older adults (mean age =76, range 63-87, SD = 8.6), 69% African American, 94% female. Older adults with moderate fall risk were recruited from community centers and participated in a 3-month program where they were paired with physical therapy students for pre- and post-intervention assessment. Participants were randomly assigned to a health literacy intervention group (HLG) (n=9) and received teach back and ask me 3 intervention twice a month for three months. The control group (n=7) received the same program of balance exercises/walking program and after 3 months was given the health literacy intervention. Groups were not significantly different on age, gender and REALM scores. Assessment measures included: timed up and go, 30 second chair rise, 4 stage step test, 6 minute walk test, and activity balance confidence scale (ABC). Paired t-test analysis revealed mean significant differences on the measures of four stage balance test ( $p = .008$ ), six-minute walk test ( $p = .026$ ) and approached significance on ABC ( $p = .054$ ). No significant differences were found for the non-health literacy group on all measures. The results suggest that health literacy intervention may improve outcomes for health education interventions with balance and aerobic exercise.

#### MOTOR AND PHYSICAL FUNCTION IMPAIRMENTS IN MIDDLE-AGED AND OLDER ADULTS IN THE BALTIMORE LONGITUDINAL STUDY OF AGING

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Older adults experience motor function decline early in the disablement process, impacting daily activities and contributing to adverse health outcomes. Few studies have comprehensively examined the interrelationships among motor and functional impairments and investigated whether their contributions to mobility difficulty vary in well-functioning older adults. We examined direct and indirect associations of motor and physical function impairments with slow gait speed (<1.0m/s) and mobility difficulty using structural equation modeling (SEM) among 858 participants aged  $\geq 50$  years in the BLSA (mean age = 74.1  $\pm$  10.6, 55% women). Motor and physical function tests included grip strength, knee extension strength, proprioception, finger tapping, standing balance (semi-, full-tandem, single-leg), repeated chair stands, and usual gait speed. Mobility difficulty was defined as self-reported difficulty in walking  $\frac{1}{4}$  mile or climbing stairs. Motor and physical function impairments increased linearly with age, with 27.6% of participants having slow gait speed and 10.4% having mobility difficulty. Age-adjusted SEMs identified chair stands pace as the strongest predictor of slow gait speed, followed by latent factors of upper and lower extremity muscle strength and standing balance. Chair stands pace was the strongest predictor of mobility difficulty, followed by gait speed. Latent factors of muscle strength, proprioception, finger tapping, and standing balance were indirectly associated with mobility difficulty via gait speed. All models showed good model fit (RMSEA < 0.05, CFI > 0.95). These findings suggest components of strength and balance

are among the most important contributors to poorer functional performance in mid-to-late life. Future longitudinal studies gauging the effect of change in these factors are warranted.

#### MOTOR AND PULMONARY FUNCTION AND MOBILITY DISABILITY AMONG BLACK AND WHITE OLDER ADULTS WITH AND WITHOUT HIV

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Black-White disparities in gait speed have been observed in studies of adults reporting HIV, consistent with work among older adults without HIV. However, it is unknown if racial differences exist among adults with HIV for other mobility-related factors. We aimed to determine if racial differences exist in mobility disability among older adults with and without HIV and assess if pulmonary and motor function contribute to mobility disability. We examined older adults age 50+ with HIV (N=177; 72% Black) and without HIV (N=191; 68% Black). Motor function summarized 10 motor performances including gait speed; pulmonary function summarized 3 measures assessed using hand-held spirometry. Mobility disability was based on self-report. In regression models adjusted for age, sex, medical conditions, and smoking, neither race nor HIV status were associated with mobility-related factors. However, in models stratified by HIV status, Blacks with HIV had worse motor ( $\beta = -4.3$ ,  $p = 0.04$ ) and pulmonary function ( $\beta = -50.5$ ,  $< 0.001$ ) and higher odds of mobility disability (odds ratio [OR] = 2.9, 95% confidence interval [CI] = 1.01-8.2) compared to Whites with HIV. Racial differences were not apparent among uninfected participants in motor function, pulmonary function, or mobility disability. In subsequent models, racial differences in mobility disability were attenuated and no longer significant in HIV when adjusting for motor function (OR = 0.88 per/% higher motor composite, 95% CI = 0.84-0.93). Racial differences in mobility disability in HIV were unaffected when controlling for pulmonary function. Results suggest that Blacks with HIV have greater mobility disability compared to Whites with HIV, and these differences are due to differences in motor function.

#### REGIONAL ASSOCIATIONS OF CORTICAL THICKNESS WITH GAIT VARIABILITY: THE TASMANIAN STUDY OF COGNITION AND GAIT

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Gait variability is a marker of cognitive decline. However, there is limited understanding of the cortical regions associated with gait variability. We examined associations between regional cortical thickness and gait variability in a