

feeling authentic in older adults playing pickleball may play an important role in positive psychological functioning.

PREDICTING FUNCTIONAL DECLINE IN OLDER ADULTS: MORE ACTIVITY NOW EQUALS LESS DECLINE LATER

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According to the Function Spiral Model (Whitehead, 2017), aging attitudes influence activity engagement, which impacts functional ability via physical conditioning (or de-conditioning). This study tests the activity \diamond conditioning \diamond function segment of the model using 59 older adults aged 61-92 (Mage = 76 at Time 1) who participated in 2 in-person assessments of physical health, gait, and function, spaced 3 years apart. Participants also completed mail-in questionnaires, reporting engagement in activities (walking, gardening, household chores, social clubs, etc.) at each time point. Hypotheses were 1) a lower activity level at Time 1 would predict greater decline in physical function across the 3-year span, and 2) that this effect would be mediated by changes in physical conditioning. Dependent t-tests revealed that both physical function—as indicated by the timed Get Up and Go test—and physical conditioning—as indicated by peak respiratory flow—declined during the period. The regression model testing the effect of activity engagement at Time 1 on decline in physical function (controlling for age, baseline function, and activity change) supported hypothesis 1 (-0.43, $p = .003$): more activity at Time 1 predicted less decline in physical function over time. Instead of supporting the mediation hypothesis, the model including both activity and conditioning demonstrated the strength of the activity at Time 1 effect, which actually increased in magnitude (-0.48, $p = .001$). Although the hypothesized mediation was not supported, the findings highlight current activity engagement as an important mechanism for slowing the progression of future age-related functional decline.

A PRESCRIPTION FOR WELLNESS: EXERCISE REFERRALS FOR PATIENTS AT A FEDERALLY QUALIFIED HEALTH CENTER

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Physical activity improves quality of life and prevents or delays chronic disease, but most adults in the United States are inactive. Consultation and planning with a health care provider, specifically with an exercise “prescription,” may increase physical activity, but utilization patterns and success of such programs are not well understood. This study assessed the initial 6 months of an exercise prescription program at a large, federally-qualified health center during 2018 whereby adult patients were referred via prescription to personalized health coaching by a fitness advisor. A census of all adults ($n=512$) who received an exercise prescription was combined with attendance data from the on-site exercise facility to classify patients as never attended, 1 to 3 visits, and ≥ 4 visits. Ordinal logistic regression was used to examine patient characteristics from the electronic health record that influenced exercise facility attendance. Only 30.2% of adults (mean age 44.7 years (SD 14.4)) completed ≥ 1 visit and 21.7% completed ≥ 4 visits. We identified no significant

utilization differences by sex, race/ethnicity, body mass index, diabetes, hypertension, or coronary artery disease, but adults aged ≥ 60 years had almost twice the odds of ≥ 4 visits (OR=1.97; 95% CI: 1.18, 3.33; $p=0.01$) compared to younger patients. Many adult patients did not participate in the exercise prescription program, but older adults were more likely to participate. Exercise prescription programs with personalized health coaching may be useful for older adult patients receiving care at a federally-qualified health center. Future work will examine if or how exercise prescriptions impact chronic disease self-management.

EXPLORING FUNCTION OVER TIME IN OLDER ADULTS WITH ADVANCED HEART FAILURE

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Heart failure contributes to functional limitation in older adults, which is associated with rehospitalization and poorer health. However little is known about the trajectory of function after hospitalization in this population or its association with readmission. Objective measurement over time to assess physical function trajectory in older adults with heart failure is needed. Purpose: To explore trajectory of function in older adults with heart failure who have history of hospitalization. Methods: Exploratory longitudinal design. Bi-weekly visits were conducted over 4 months with home-dwelling, ambulatory adults with heart failure (60+ years, NYHA classification III) who had a recent acute hospitalization. Function was assessed by Short Physical Performance Battery (SPPB) test and hand-grip strength (9 time-points). Descriptive analyses across time and groups comparison were performed. Results: Participants ($N=10$) were 75.3 ± 4.6 years (2 female, 5 African American), with EF(%) 39 ± 10 and 8.2 ± 2.9 comorbidities. Half ($n=5$) were re-hospitalized during the study period. Those re-hospitalized scored an average 1.3 points lower on SPPB and had 2.03 kg less hand strength over time than those not re-hospitalized. An SPPB score < 6 was observed across time in 51% of those re-hospitalized, compared to 31% of those remaining at home. Intra-individual function varied but did not decline over this time period. Conclusions: In a sample of older adults with heart failure, physical function ranged from some level of functional disability to functional dependence, with higher levels of disability observed in those re-hospitalized. A longer study period and larger sample may be needed to adequately assess physical function trajectory.

EXAMINING SEX DIFFERENCES WITHIN THE RELATIONSHIP BETWEEN PHYSICAL ACTIVITY AND EXECUTIVE FUNCTION IN OLDER ADULTS

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Research has demonstrated sex-associated differences in physical activity and its benefits on cognition in older adults. The present study explored differential associations between moderate-to-vigorous physical activity (MVPA) and executive function, which is known to decline with aging. $N = 53$ older adults without cognitive impairment ($M = 73.19$ years,

SD = 6.53) wore accelerometers (Actigraph GT3X+) during 7 consecutive days. Activity intensity was categorized as light, moderate, or vigorous based on Freedson Adult Vector Magnitude cutpoints. Participants completed a battery of executive function tests: Digit Symbol Substitution Test, Verbal Fluency, Trail Making Test, and Stroop Color-Word Test. A cognitive composite score was created using confirmatory factor analysis. Women had a higher mean MVPA (4.57%) than men (2.64%, $t(19.04) = -2.49$, $p = .022$). However, executive function performance did not differ by sex ($t(26.20) = 1.67$, $p = .107$). The interaction between sex and time in MVPA did not predict performance on executive function, adjusting for age and education. Older age was the only significant predictor of poorer executive function ($\beta = -0.038$, $p = .003$). The current sample had limited engagement in MVPA (range 0.18-10.87%). These findings suggest that the amount of engagement in MVPA in a free-living environment may not be sufficient to demonstrate sex-associated differences in executive function performance. Future studies should explore executive function performance with other intensity levels and examine other areas of cognition.

ACTIVITIES OF DAILY LIVING DIFFICULTIES AND TOILETING AMONG OLDER GHANAIS: AN APPLICATION OF WHO-ICF FRAMEWORK

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The aim of the study was to analyze the prevalence of activities of daily living (ADL) difficulties among older Ghanaians and specifically how one ADL, toileting difficulty, predicts care and supports needs using the World Health Organization International Classification of Disability and Health framework (WHO-ICF). Toileting difficulty requiring upper extremity strength is among ADLs that can lead to functional loss of independence among older people globally. A sample of $n=5,096$ adults aged 50 years and older from the WHO Study on global AGEing and adult health (SAGE) Ghana Wave 1 was used to analyze difficulties with ADLs and toileting. Level of difficulty was assessed against 22 other functioning items from the interview. Out of the 22 functioning items, climbing one flight of stairs without resting was the most difficult activity to be completed by older Ghanaians, and difficulty eating being the least endorsed item. Toileting was ranked the 16th in terms of reported difficulty and was related to other ADLs. Logistics multivariate regression was used to analyze data. Including significant variables from the univariate analysis in parsimonious model based on WHO-ICF framework, age, self-report health, memory, bodily pain, short distance vision,

stroke, neighborhood trust, toilet facility type, and religious meeting attendance, were significantly independently associated with toileting difficulty. Gender was significant at the univariate level but became insignificant after adjusting for body function and structural variables. Toileting difficulty was associated with factors across different components in the WHO-ICF making the WHO-ICF an appropriate tool for understanding health and disability.

FACTORS ASSOCIATED WITH LIFE-SPACE CONSTRICTION IN LATER LIFE: EVIDENCE FROM THE HEALTH AND RETIREMENT STUDY

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This study aimed to examine factors associated with life-space constriction, using the data from the Health and Retirement Study, a nationally representative sample. We limited our analysis to those who were 65 years and older and answered to the 2012 experimental module on life-space ($N=895$; mean age=75.3; 59.4% women). Life-space was assessed with the modified version of the UAB Study of Aging Life-Space Assessment, ranging nine zones: room, home, own property, immediate neighborhood, town, community, county, state, and region. A series of logistic regression models were used to estimate odds ratios for life-space constriction by sociodemographic and health characteristics. The results showed that 3.0% and 6.7% of older adults reported that they had never been to places beyond their home and own property/apartment building for the past four weeks, i.e. the critical boundaries in terms of social isolation. The significant factor associated with the life-space constriction within home, immediate neighborhood, and town was physical mobility limitation (OR: 1.18, 1.09, 1.11, respectively), while the constriction within county was associated with education level (OR: 0.91). Driving a car was negatively associated with the life-space constriction within own property/apartment building and home (OR: 0.48 and 0.22, respectively). Policy makers need to pay more attention to social and environmental factors influencing social isolation among older adults such as transportation options and social class disparity.

ACTIGRAPH'S LOW-FREQUENCY EXTENSION FILTER FOR ESTIMATING WRIST-WORN PHYSICAL ACTIVITY IN OLDER ADULTS

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Advancements in body-worn activity devices make them valuable for objective physical activity measurement. Research-grade monitors utilize software algorithms developed with younger populations using waist-worn devices. ActiGraph offers the low frequency extension (LFE) filter which reduces the movement threshold to capture low acceleration activity that is more common in older adults. It is unclear how this filter changes activity variable calculations in older adults. We investigated the effects of the LFE filter on wrist-worn activity estimates in this population. Participants were 21 older adults who wore the GT9X on