

aging. A diverse sample of older adults ($N = 245$; 65% female, 42% Black, 13% Hispanic; mean age = 76.8 years) had blood drawn before and after a two-week measurement burst that included three cognitive tests (6x per day) assessing working spatial memory, perceptual speed, and feature binding. Testosterone, estradiol, estrone, and six basal cytokine concentrations were quantified. Composite scores of basal inflammation were calculated. Multilevel modeling indicated that heightened inflammation related to poorer spatial working memory performance ($B = 0.213$, 95%CI[0.11, 0.414], $p = .040$). In addition, sex hormones moderated the association of cytokine concentration with perceptual speed (e.g., basal cytokines \times testosterone: $B = 0.13$, [-0.24, -0.03], $p = 0.013$; similar effects evident for estrogens). Decomposition these interactions revealed that heightened inflammation predicted poorer performance, but only among individuals with lower sex-hormone concentrations. This study provides evidence of immune and hormonal-by-immune associations with performance in two cognitive domains in older adults. Examining the functional crosstalk between immune and sex hormone functioning will improve understanding of risk and resilience factors related to cognitive performance and help predict cognitive decline in older adults.

IN-HOME ONLINE MUSIC THERAPY FOR PSYCHOLOGICAL HEALTH AMONG CAREGIVERS OF PERSONS WITH DEMENTIA: A PILOT STUDY

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Family caregivers who provide care to persons with dementia (PWD) in a home setting may feel greater stress, depressive symptoms, or struggle to deal with issues in their lives. Indeed, PWD often require 24-hour care that includes ensuring safety, providing emotional support, and assistance with activities of daily living and multiple instrumental activities of daily living. This study examined the short-term effects of an online music intervention on stress, coping, and depression among caregivers of PWD. We included 35 caregivers ($n=24$ [intervention group], $n=11$ [comparison group]) living at home with their family member with dementia. Mann-Whitney U test and Wilcoxon signed-ranked test were performed to examine between- and within-group differences from baseline to eight weeks after the intervention. The coping subscale yielded a significant difference between the groups at post-test ($U=76.50$, $Z = -1.978$, $p=0.048$), indicating the intervention group had better coping than the comparison group at post-test. Significant within-group differences in overall stress ($Z = -2.200$, $p = 0.028$) and coping subscale ($Z = -1.997$, $p=0.046$) in the comparison group at post-test suggest that overall stress and coping were maintained from baseline to post-test in the intervention group, whereas the comparison group had significantly higher overall stress and lower coping at post-test. This home-based online music program showed potential benefits for caregivers of PWD by taking into account participants' musical

preferences and ease of access to the program. A randomized controlled trial with a larger sample size and objective measurements of stress and depressive symptoms (e.g., biomarkers) should be conducted in the future.

INTAKE OF FLAVONOIDS AND ODDS OF FRAILTY ONSET IN ADULTS IN THE FRAMINGHAM OFFSPRING COHORT

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Polyphenols (antioxidants derived from plant-foods) could play a role in inhibition of oxidative stress and frailty reduction, yet data on the polyphenol subclass of dietary flavonoids is limited. This study sought to determine the association between dietary flavonoids and frailty onset in middle-aged and older adults. This prospective cohort study included non-frail individuals from the Framingham Offspring Cohort (FOC) with total flavonoid intake (mg/day; defined as sum flavonols, flavan-3-ols, flavonones, flavones, and anthocyanins via Harvard Food Frequency Questionnaire), frailty (via Fried phenotype), and covariate information measured at baseline (1998-2001). Follow-up frailty was evaluated in 2011-2014. Logistic regression estimated odds ratio (OR) and 95% confidence intervals (95% CI) adjusting for relevant confounders. Participants ($n=1,701$; 55.5% female) had a mean age of 58.4 years ($SD \pm 8.3$). Mean flavonoid intake was 309 mg/d ($SD \pm 266$). After 12.4 years ($SD \pm 0.8$), 224 (13.2%) individuals exhibited frailty. In age and sex adjusted models, every 50 mg/day of higher total flavonoid intake was associated with 3% reduced odds of frailty [OR (95%CI): 0.97 (0.94-1.00), p -value: 0.05]. Further adjustment for smoking, energy and protein intake, and disease indicators did not appreciably change the association, and associations became non-significant (p -value=0.12). Thus, there was no association between flavonoid intake and odds of frailty onset in adults in the FOC. This could be due to participants' higher intake of flavonoids compared to average intake of ~200 mg/d in Americans.

INTERGENERATIONAL CONNECTIONS TO IMPROVE SOCIAL WELL-BEING OF OLDER ADULTS WITH ADRD: A RESEARCH PROTOCOL

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There is growing concern about social isolation, loneliness, and diminished emotional well-being among persons with ADRD who live in the community. Research suggests that reminiscence strategies, especially with the production of a digital story book, combined with an intergenerational approach may yield significant benefits for older adults. Reminiscence approaches are typically implemented by trained professionals. However, the use of trained volunteers is of growing interest due to the costs associated with