model development and validation studies need to be evaluated for risk of bias to establish the veracity of the prognostic models. This is a critical step before they can be implemented in clinical practice. Multiple systematic reviews have evaluated prognostic models of hospital-induced delirium. However, none of the existing systematic reviews evaluated the validity of models for non-surgical, medical hospitalized older adults. We conducted a scoping review to evaluate the validity of existing prognostic models of hospital-induced delirium in medical older adults. CINAHL, PsycINFO, PubMed, and Web of Science were searched for original studies. The database search yielded 4,312 records. Five studies were included in the qualitative synthesis. All the studies claimed to have developed valid prognostic models. However, the risk of bias assessment revealed that existing prognostic models of hospital-induced delirium in medical older adults are at a high risk of bias. Collectively, the statistical analysis was the greatest source of bias. Notably, while we have seen a proliferation of prognostic models for use in the surgical older adult population, efforts at developing prognostic models in the medical older adult population seem to have declined since the early 1990s. Newer methods of data collection, such as data mining of electronic health records, and statistical analysis, such as machine learning, have shown promise in accurate prediction of hospital-induced delirium while overcoming many challenges associated with manual data collection and traditional statistical analyses.

HOW CAN WE ENCOURAGE OLDER ADULTS TO ADOPT DIGITAL SERVICES?

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Majority of older adults (OA) do not use technology frequently. For example, 84% of Singapore OA own a smartphone, however, only 22% have tried apps like online shopping. Similarly, 42% of US OA own a smartphone, yet one-third of them have never used the internet. Past research indicated poorly designed user interfaces as a barrier to technology use. Based on the Technology Acceptance Model (TAM), we hypothesize that OA-friendly user interfaces can increase perceived usefulness (PU) and perceived ease of use (PEOU) of technology, which would translate into increased digital services adoption rate. Forty healthy participants aged 65 to 86 (6 males, 34 females, mean age = 72.3) were recruited through OA activity centers in Singapore and assigned to either control or experimental groups. Both groups used an online website to perform specific shopping tasks and answered a TAM questionnaire. The control group used a website modeled after current websites while the experimental group used an OA-friendly website designed based on literature review and pre-survey, with features like OA-friendly mode, tutorial and online helpdesk. Data analysis was conducted using an independent sample t-test and bootstrapping. The experimental group showed a significantly higher proficiency in performing tasks (p=0.037), PEOU (p=0.049), and PU (p=0.044) than the control group. This suggests that user interfaces friendlier to OA increases their acceptance of technology, which could translate into a higher digital service adoption rate. Therefore, this research sets the basis for further research on digital services guidelines for older adults, including for telehealth and others.

IMPACT OF RESTRICTED CONTACT BETWEEN GRANDPARENTS AND GRANDCHILDREN DURING THE COVID-19 PANDEMIC

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To combat the COVID-19 pandemic strict contact restrictions have been imposed on institutions for both older and younger people, social structures have been locked down, families have been urged to reduce contact with older relatives, and people over 65 have been temporarily banned from their workplaces and from attending events, both in public and private spaces. These measures are assumed to have a number of psychosocial consequences. For this questionnaire study, 268 pupils (7-to-10 years-old) of nine different schools in Hamburg, Germany, with different social index were asked about how they experienced, perceived, and behaved during the COVID-19 pandemic. 75% of the children reported on restricted contact to their grandparents: While 41% did not meet their grandparents at least for a certain time at the beginning of the pandemic, 34% did not meet their grandparents during the whole first year of the pandemic. Of those who met their grandparents, 25% kept physical distance to them. These contact restrictions were significantly higher in schools with a lower social index, chi2(8)=15.49, p=.05. Those children who never met their grandparents also reported on higher perceived stress, t(220)=-2.37, p=.019, d=-.33, tended to have lower subjective well-being, t(223)=-1.73, p=.09, d=-.24, and had higher risk perceptions concerning COVID-19 infections, t(223)=-2.18, p=.03, d=-.31. Hence social isolation and loneliness is not only an issue for older people themselves, but contact restrictions also potentially increase the stress load and impair the well-being of children who have to do without support and care of their grandparents in sensitive developmental phases.

INFLAMMATORY BIOMARKERS AND SEX HORMONES INTERACT TO PREDICT ECOLOGICALLY-ASSESSED COGNITIVE PERFORMANCE

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Inflammatory biomarkers and sex hormones have been investigated as independent risk and resilience factors for cognitive decline in older adults. Many sex hormones are anti-inflammatory and there is emerging evidence that sex hormones may buffer the risk for cognitive decline associated with higher inflammation. However, few studies have included concurrent examination of inflammation and sex hormones in studies of cognitive performance and cognitive

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 x 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 ± 8.3). Mean flavonoid intake was 309 mg/d (SD ± 266). After 12.4 years (SD ± 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