

(CVLT) and National Institute Health Toolbox-Cognition (NIH-C). 2x2 (Time\*Group) Mixed ANOVA revealed significant time\*group interactions for 6MWT ( $p=0.05$ ), STGS ( $p=0.02$ ), DTGS ( $p=0.01$ ), CVLT ( $p=0.01$ ), and NIH-C Fluid Cognition ( $p=0.06$ ) had a trend towards significance. Post-hoc t-tests demonstrated that INT significantly improved their pre-to-post 6MWT, STGS, DTGS, CVLT, and NIH-C Fluid. CON had no significant pre-to-post intervention changes. Participants in the 12-week golf training program improved gait and cognitive performance, compared to CON. These results provide evidence that golf, as a cognitively-challenging physical activity, may improve physical and cognitive function, leading to attenuated risk for poor health outcomes, maintaining independence and improved quality of life.

#### TIME SPENT IN SEDENTARY BEHAVIOR DOMAINS AND PHYSICAL FUNCTION IN U.S. OLDER ADULTS

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Previous studies have reported associations of sedentary time with worse health outcomes in older adults. Yet, little is known about the relationships between the contexts of sedentary time and health outcomes. The purpose of this study was to examine associations of physical function with time spent in a variety of sedentary behavior domains. We analyzed data from the 2016 National Health and Aging Trends Study, a nationally representative sample of community-dwelling Medicare beneficiaries. Estimated time being sedentary by domains (e.g., TV watching, computer use, resting/napping, eating, transportation, socializing, sitting and doing hobbies) were collected from a subset of the sample population ( $N=2157$ ). The Short Physical Performance Battery (SPPB) measured physical function. Linear regression models were conducted adjusting for sociodemographics, health conditions, pain, and dementia. More time watching TV and resting/napping was significantly associated total SPPB scores ( $p < 0.01$ ). In adjusted models, lower SPPB scores were significantly associated with more time/day spent sitting and watching television or resting ( $\beta = -0.16$  hours; 95% Confidence Interval (CI):  $-0.24, -0.08$  for TV watching and  $\beta = -0.63$  hours; 95% CI:  $-0.80, -0.46$  for resting). Average time in computer use, eating, transportation, hobbies, or social activities did not differ by physical function level. Associations between physical function and sedentary time vary by the context. Social or engaging sedentary activities do not appear to be associated with physical function limitations in the same way as passive sedentary domains like television viewing and resting. Context should be considered in evaluating relationships of sedentary time with health outcomes.

#### AN MHEALTH BEHAVIORAL INTERVENTION FOR PROMOTING PHYSICAL ACTIVITY AND SLEEP IN COMMUNITY-DWELLING OLDER ADULTS

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Evidence suggests physical activity (PA) improves sleep in older adults. This study examined the preliminary effect of a personalized mHealth behavioral intervention on PA and sleep in older adults. We conducted a randomized controlled pilot trial in 21 community-dwelling older adults with sleep complaints. The 24-week mHealth behavioral intervention included a 2-hour in person training session, personalized exercise prescription, real time PA self-monitoring, interactive prompts, phone consultation, and weekly financial incentives. PA and sleep were measured objectively using Actiwatch 2.0 and subjectively using questionnaires. Peripheral blood was drawn for measuring Plasma Inflammatory biomarkers [interleukin 1 $\beta$ , 6, 8, Tumor Necrosis Factor- $\alpha$  (TNF- $\alpha$ ), and c-reactive protein (CRP)]. Data were collected at baseline, 8-week, 16-week, and post intervention. Repeated measures ANOVA (time\*group) was used to examine differences of PA and sleep across times between the two groups. Majority of participants are women (71.4%) with mean age of 73.7 (SD = 6.9). Repeated measure ANOVA showed significant ( $p < 0.05$ ) improvement of objective and subjective PA, objective nocturnal sleep duration, self-report sleep quality (measured by Pittsburgh Sleep Quality Index and Insomnia Severity Index) and decreasing of sedentary time over times in the intervention group ( $n=11$ ), compared to the control group. The intervention group showed significant reduction of plasma TNF- $\alpha$  and CRP levels at 16-week and post intervention. Interventions combining personalized PA and mHealth strategies may positively affect physical activity and sleep in older adults. A larger study is needed to test the efficacy of this intervention and the mechanisms associated with it.

#### EARLY INPATIENT REHABILITATION IN GERIATRIC PATIENTS: A SYSTEMATIC REVIEW OF OUTCOME MEASURES

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Selecting appropriate outcome measures for multimorbid, acutely hospitalized geriatric patients poses specific challenges, which may have caused inconsistent findings of previous intervention trials on early inpatient rehabilitation. The objective of this review was to describe primary outcome measures used in randomized controlled trials (RCTs) on early rehabilitation in older hospital patients, to analyze their matching to intervention programs, and to evaluate the effects of matching on the main findings of these RCTs. A systematic literature search was conducted in PubMed, Cochrane CENTRAL, CINAHL, and PEDro databases. Inclusion criteria were: RCT, patients aged  $\geq 65$  years, admission to hospital, physical exercise intervention, and primary outcome measure during hospitalization. Two independent reviewers extracted the data, assessed the methodological quality, and analyzed the matching of primary outcome measures to the intervention, study sample, and