

with worsening gait speed. A modest association between both later sleep and wake times and increased sleep duration with worsening grip strength outcomes was observed (-1.11 [-1.90, -0.32] kg). Specific daily activity patterns may serve as predictive biomarkers for changing physical function in aging populations.

MULTIDIMENSIONAL SLEEP HEALTH: CONCEPTS, ADVANCES, AND IMPLICATIONS FOR RESEARCH AND INTERVENTION

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Sleep is a complex process, sensitive to aging, with theoretical and evidentiary basis for influence on multiple health outcomes. Recent scholarship has argued for a 'multidimensional' approach to sleep health, that is, a recognition that healthy sleep consists of more than its quantity (duration) and is more than the absence of sleep disorders. This new conception of sleep health acknowledges sleep's complexity yet presents challenges for methodological treatment. How do we operationalize/analyze multiple dimensions of sleep, some of which are correlated due to physiological reasons, common measurement tools, or sensitivity to common stressors? Is it sensible to talk about 'sleep health' as a single, composite entity with multiple components, akin to a dietary pattern rather than a collection of individual nutrients? Exemplar data from a racial-ethnic disparities project in aging adults suggest the utility of a composite approach, and the value of considering inter-correlations among sleep metrics.

FINDING A COMPOSITE MEASURE FOR DATA FROM WRIST ACTIGRAPHY IN BIPOLAR DISORDER

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Actigraphy can objectively measure sleep in studies on Bipolar Disorder (BD) where subjective sleep ratings might be influenced by affect. Actigraphy data are complex necessitating data reduction approaches. We created a composite score of actigraphy sleep metrics (total sleep time [TST], wake after sleep onset [WASO], and percent sleep [PS]) in BD. We computed z-scores of sleep measures for n=51 BD vs. n=80 healthy subjects and averaged scores. We examined associations with participant characteristics and used LASSO to identify metrics best explaining composite variability. Higher composite scores (better sleep) were seen in employed vs. unemployed ($t=2.40$, $df=34$, $p=0.02$), and correlated with higher medication load ($r=0.41$, $p=0.004$),

lower mania symptomatology ($r=-0.33$, $p=0.04$) and lower interleukin (IL)-6 levels ($r=-0.32$, $p=0.02$). TST best explained variability in medication load and PS best explained employment, mania symptoms and IL-6. Given observed specificity of associations, selecting theory-driven sleep metrics may be more appropriate than a composite.

Session 3300 (Symposium)

PHYSICAL ACTIVITY AND SEDENTARY BEHAVIOR PATTERNS PRIOR TO AND DURING THE COVID-19 PANDEMIC

Chair: Nancy Gell

Co-Chair: Dori Rosenberg

Discussant: Andrea LaCroix

Understanding patterns in the types of activities older adults engage in during physical activity and sedentary time could help shape intervention designs. Few studies have adequately described the physical activity and sedentary pursuits older adults undertake, including during the COVID-19 pandemic. To answer these questions, this symposium uses data from three recent studies: Adult Changes in Thought (ACT), an epidemiologic study with self-reported and device-based measures of physical activity and sedentary time including time spent in various domains of activity; Objective Physical Activity and Cardiovascular Disease Health in Older Women (OPACH), an epidemiologic study with device and self-report measures of sedentary behavior; and an ongoing clinical trial, the Healthy Aging Resources to Thrive (HART) study with device and self-reported data on sitting time and patterns as well as physical activity. The first session in this symposium will present a description of the rates of meeting the aerobic, strength, and balance recommendations among older adults in the ACT study. Next, we will have a presentation describing sedentary activities in older adults by age, sex and device-based sitting patterns in the ACT study. In the third presentation we will use OPACH data to examine patterns and context of sedentary in relation to aging-related outcomes. Finally, we will describe changes in physical activity and sedentary time in the HART trial in the cohort enrolled prior to the COVID-19 pandemic vs. those enrolled during the pandemic. Our Discussant will provide new insights on the roles of sedentary behavior and physical activity in aging and health.

DEVICE-MEASURED SEDENTARY PATTERNS AND PHYSICAL ACTIVITY BEFORE AND DURING THE COVID-19 PANDEMIC

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Little is known about objective levels of sitting time (ST), patterns of ST, and physical activity (PA) among older adults before compared to during the COVID-19 pandemic. We used data from the Healthy Aging Resources to Thrive Trial to examine differences in activPAL-assessed ST, standing time, breaks from sitting, and steps in study enrollees prior to