

United States, 4. Department of Psychiatry, University of Pittsburgh, Pittsburgh, Pennsylvania, United States, 5. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States

Chronotype has been linked to poor cognitive outcomes and mortality among older adults. Although previous studies indicate an association between personality and sleep, little is known about associations between personality and chronotype in older adults. We examined the association between personality and objective sleep midpoint (a measure of chronotype) in 463 older adults aged  $73.5 \pm 7.7$  from the National Social Life, Health, and Aging Project who completed the Midlife Developmental Inventory Personality scale and three nights of wrist actigraphy, from which we derived participants' average sleep midpoints. After adjusting for demographics, higher conscientiousness was associated with earlier sleep midpoint ( $B=-0.53$ ,  $SE=0.02$ ,  $p<0.01$ ). Associations for other traits were not significant. Findings link conscientiousness to chronotype and raise the possibility that earlier sleep timing may partially account for associations of conscientiousness with health outcomes. Further studies are needed investigating the role of personality in links of sleep and circadian factors with health.

#### HABITUAL SLEEP, SLEEP DURATION DIFFERENTIAL, AND WEIGHT CHANGE AMONG ADULTS

Yin Liu,<sup>1</sup> Mari Palta,<sup>2</sup> Jodi Barnet,<sup>2</sup> Max Roberts,<sup>1</sup> Erika Hagen,<sup>2</sup> Paul Peppard,<sup>2</sup> and Eric Reither,<sup>1</sup> 1. Utah State University, Logan, Utah, United States, 2. University of Wisconsin-Madison, Madison, Wisconsin, United States

We assessed longitudinal associations between diary-measured sleep duration and clinically assessed body mass index (BMI) among 784 men and women enrolled in the Wisconsin Sleep Cohort Study (mean [SD] age = 51.1 [8.0] years at baseline). The outcome was BMI (kg/m<sup>2</sup>). Key predictors were habitual sleep duration (defined as average weekday nighttime sleep duration) and sleep duration differential (defined as the difference between average weekday and average weekend nighttime sleep duration) at each data collection wave. Men with shorter habitual sleep duration on weekdays had higher BMI than men with longer habitual sleep duration on weekdays. Participants with larger differentials between weekday and weekend sleep duration experienced more rapid BMI gain over time for both men and women. Inadequate sleep, characterized as shorter habitual sleep during weekdays and larger weekday-weekend sleep differential, is positively associated with BMI levels and trajectories among men and women in mid-to-late life.

#### EFFECT OF A BIOBEHAVIORAL ENVIRONMENTAL APPROACH ON SLEEP IN LOW-INCOME OLDER ADULTS

Junxin Li,<sup>1</sup> Safiyyah Okoye,<sup>1</sup> Lena Sciaratta,<sup>1</sup> and Sarah Szanton,<sup>2</sup> 1. Johns Hopkins University, Baltimore, Maryland, United States, 2. Johns Hopkins School of Nursing, Baltimore, Maryland, United States

Low socioeconomic status and disability are independent risk factors for disturbed sleep. The CAPABLE intervention used a multidisciplinary team approach of occupational therapist, nurse, and handyworker to reduce functional disability in low-income older adults. The 6-month intervention may

benefit sleep as the intervention addressed multiple individual factors associated with sleep quality, including pain, depression, communication, mobility, strength, and balance. This study examined the effect of the CAPABLE intervention on actigraphy-measured sleep in a sub-sample of 73 older adults from the CAPABLE trial (26 intervention vs. 47 control). The sample was aged  $75.8 \pm 7.45$  years, 86.3% female, and 84.9% African American. No significant group differences in sleep parameters were found at 6-month, controlling for baseline values. The intervention resulted in a 5.56% increase in sleep efficiency (95% CI= [1.39, 9.71], Cohen's  $d=0.54$ ), and 7.39 minutes decrease in sleep onset latency (95% CI= [0.10, 14.5], Cohen's  $d=0.41$ ) within the intervention group at 6-months.

#### ASSOCIATIONS OF HABITUAL SLEEP DURATION AND SLEEP STAGES WITH SPEECH-IN-NOISE PERFORMANCE

Kening Jiang,<sup>1</sup> Adam Spira,<sup>2</sup> Kelsie Full,<sup>3</sup> Emmanuel Garcia,<sup>1</sup> Frank Lin,<sup>4</sup> Nicholas Reed,<sup>2</sup> Pamela Lutsey,<sup>5</sup> and Jennifer Deal,<sup>6</sup> 1. Johns Hopkins Cochlear Center for Hearing and Public Health, Baltimore, Maryland, United States, 2. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States, 3. Division of Epidemiology and Community Health, University of Minnesota, Minneapolis, Minnesota, United States, 4. Johns Hopkins University, Johns Hopkins University, Maryland, United States, 5. School of Public Health, University of Minnesota, Minneapolis, Minnesota, United States, 6. Johns Hopkins University, Baltimore, Maryland, United States

Speech-in-noise performance involves central auditory and cortical processing and is fundamental to communication. We investigated cross-temporal associations of habitual sleep duration and stages (1996-1998) with speech-in-noise performance (2016-2017) in a subset of the Atherosclerosis Risk in Communities Study participated in the Sleep Heart Health Study ( $N=755$ ,  $61 \pm 5$  years, 53% female). Speech-in-noise performance was measured by Quick Speech-in-Noise Test; range:0-30; lower scores=worse performance. Time spent in each stage (stage 1;2;3/4;rapid eye movement (REM)) was measured by polysomnography. Habitual sleep duration was calculated by self-reported duration on weekdays and weekends. In models adjusting for demographic and disease covariates, every 10-minute increase in REM sleep was associated with better speech-in-noise performance (0.10 points, 95% CI:0.00,0.21); every 1-hour increase in habitual sleep duration was associated with worse speech-in-noise performance (-1.28 points, 95% CI:-2.49,-0.08) among participants sleep >8 hours. Long sleep duration might be a risk marker of speech-in-noise performance, but REM sleep might be a protective factor.

#### Session 1135 (Symposium)

##### SOCIAL CONNECTION IN TIMES OF PHYSICAL DISTANCING

Chair: Jeongeun Lee

COVID-19 has been especially devastating to older adults. To prevent the spread of the virus, physical distancing has