

UCLA, Los Angeles, California, United States, 2. VA Greater Los Angeles Healthcare System, Los Angeles, California, United States, 3. Virginia Commonwealth University, Richmond, Virginia, United States, 4. VA Greater Los Angeles Healthcare System, North Hills, California, United States

Cognitive behavioral therapy for insomnia (CBTI) is recommended as first-line treatment in older adults. Changing dysfunctional beliefs and attitudes about sleep is an important component of CBTI, but the long-term impact of these changes are unknown, particularly in older adults. Methods involved secondary analyses of data from a large randomized controlled trial comparing CBTI (provided in 5 weekly sessions) to sleep education control, among older veterans with insomnia (N=159, mean age 72.2 years, 97% male, 79% non-Hispanic white). The purpose was to examine whether changes in a validated scale of Dysfunctional Beliefs and Attitudes about Sleep (DBAS) with CBTI treatment (baseline to post-treatment) was associated with later changes in self-reported sleep (post-treatment to 6 months follow-up). Sleep measures included Pittsburgh Sleep Quality Index (PSQI), Insomnia Severity Index (ISI), Epworth Sleepiness Scale (ESS) and 7-day sleep diary measures. Analyses compared the slope of change in DBAS (baseline to post-treatment) between CBTI and control with respect to the slope of change in sleep outcomes (post-treatment to 6-months). Compared to controls, the CBTI group had stronger associations between DBAS improvement (baseline to post-treatment) and subsequent PSQI improvement (post-treatment to 6-months) (difference in slopes=1.3, 95% CI=[.52,2.1], p=0.001). This pattern of significant results was also found for ISI (difference in slopes=1.8, 95% CI=[.58,3.0], p=0.004) and ESS (difference in slopes=1.0, 95% CI=[.25,1.7], p=0.009). Slopes were not different for sleep diary measures. These findings suggest that changing dysfunctional beliefs and attitudes may continue to confer sleep benefits well after completion of CBTI in older adults.

#### RELIGIOUS ATTENDANCE AND SLEEP DISTURBANCE IN OLDER MEXICAN AMERICANS

Terrence D. Hill,<sup>1</sup> Christopher Ellison,<sup>2</sup> and Lauren Hale<sup>3</sup>,  
1. University of Arizona, Tucson, Arizona, United States,  
2. University of Texas at San Antonio, San Antonio, Texas, United States, 3. Stony Brook University, Stony Brook, New York, United States

Although numerous studies have shown that religious involvement is associated with better health across the life course, researchers have virtually ignored possible links between religious involvement and sleep-related outcomes. Building on previous work, we tested whether religious attendance was inversely associated with sleep disturbance among older Mexican Americans. We also assessed whether depressive symptoms could mediate or explain any of the inverse association between religious attendance and sleep disturbance. Relevant hypotheses were tested using ordinary least squares regression and conditional process mediation analysis of cross-sectional data collected from the original cohort of the Hispanic Established Population for the Epidemiologic Study of the Elderly (H-EPESE). The baseline H-EPESE (1993-1994) included a probability sample of 3,050 Mexican Americans ages 65 and older. Due to missing

data on our focal variables, our final analytic sample included 2,323 respondents. Regression models show that religious attendance is inversely associated with depressive symptoms and sleep disturbance, even with adjustments for smoking, drinking, body mass, chronic disease, mobility, marital status, living arrangements, family engagement, secular group participation, social support, age, gender, immigrant status, language proficiency, education, household income, and religious affiliation. Mediation analyses also indicate that depressive symptoms fully mediate the association between religious attendance and sleep disturbance. These findings contribute to previous work by showing that regular religious attendance may protect against sleep disturbance by promoting mental health in an understudied population of older Mexican Americans. The importance of religious involvement is supported by the fact that secular group participation was unrelated to sleep disturbance.

#### RUMINATION, DEPRESSIVE SYMPTOMS, AND SLEEP QUALITY: SOCIAL SUPPORT AS A BUFFER

Christina M. Marini,<sup>1</sup> Stephanie J. Wilson,<sup>2</sup> and Lynn Martire<sup>3</sup>,  
1. The Center for Healthy Aging at The Pennsylvania State University, University Park, Pennsylvania, United States, 2. The Ohio State University College of Medicine, Columbus, Ohio, United States, 3. The Pennsylvania State University, University Park, Pennsylvania, United States

Rumination, the act of dwelling on negative, unwanted thoughts, can stoke depression and disrupt sleep, both of which may threaten older adults' well-being. In line with a support buffering hypothesis, a previous study of younger and middle-aged adults found that social support mitigated the positive association between rumination and negative mood. To extend this research, we distinguished between spousal and family/friend support as moderators of rumination's links both to depressive symptoms and sleep quality among older adults. Data came from a sample of 128 adults who were, on average, 77 years old at study onset. Rumination was measured via the Rumination-Reflection Questionnaire. Perceived support was measured by items utilized in multiple nationally representative studies of older adults. Depressive symptoms were measured via the NIH PROMIS measure, and sleep quality was measured via items from the Pittsburgh Sleep Quality Index. Results indicated that support from family/friends (but not spouses) buffered the positive association between rumination and depressive symptoms, even after controlling for depressive symptoms six months prior. Conversely, when sleep quality served as the outcome, support from spouses (but not family/friends) buffered the negative association between rumination and sleep quality, even after controlling for sleep quality six months prior. Findings highlight the potential for specific sources of social support to buffer different consequences of rumination on older adults' health and well-being.

#### OBJECTIVE AND SUBJECTIVE SLEEP DURATION AND ACTIVITY LEVEL IN OLDER ADULTS WITH MILD DEMENTIA

Miranda V. McPhillips,<sup>1</sup> Jinyoung Kim,<sup>1</sup>  
Darina V. Petrovsky,<sup>1</sup> Junxin Li,<sup>2</sup> Sonia Talwar,<sup>1</sup>  
Laurel Caffé,<sup>3</sup> and Nancy Hodgson<sup>1</sup>,  
1. University of

Pennsylvania, Philadelphia, Pennsylvania, United States, 2. John Hopkins University, Baltimore, Maryland, United States, 3. University of Pennsylvania, Philadelphia, United States

Little is known about the relationship between sleep duration and activities of daily living (ADLs) in those with mild dementia. We sought to examine the independent relationship between objective and subjective sleep duration and ADLs in community-dwelling older adults with mild dementia. Analyses were conducted on baseline data from participants enrolled in the Healthy Patterns Clinical Trial (Hodgson; R01NR015226). Measures included 24-hour wrist actigraphy for objective sleep duration, proxy-reported Pittsburgh Sleep Quality Index (sleep duration subscale) for subjective sleep duration and the Barthel Index for performance of ADLs. We used Spearman's correlation and multivariate linear regression. A total of 30 individuals (56.7% male) aged 74.6 (SD 7.4) with mean Clinical Dementia Rating (CDR) scores of 1 (SD 0.5) were enrolled. Objective sleep duration ranged from 2.7 to 11.5 with mean 6.7 (SD 2.4) hours; subjective sleep duration ranged from 4 to 13.5 with mean 7.9 (SD 2.4) hours. Longer objective and subjective sleep duration were significantly associated with worse ADL scores ( $r = -0.48, p = 0.03$ ;  $r = -0.59, p = 0.007$ , respectively) in bivariate analyses. After controlling for age, CDR, and depression, subjective sleep duration was independently associated with ADLs ( $\beta = -1.90, p = 0.03$ ) and objective sleep duration trended toward significance ( $\beta = -1.47, p = 0.10$ ). These preliminary results suggest self-reported longer sleep could be indicative of declines in ADLs in older adults with mild dementia. Further prospective studies are necessary to determine the independent association between objectively assessed sleep duration and ADLs in patients with mild dementia.

#### COHORT DIFFERENCES IN SLEEP ENVIRONMENT, BEHAVIORS, AND CONCERNS: DESCRIPTIVE ANALYSES USING MY SLEEP SCRIPT APP

Christina Pierpaoli Parker,<sup>1</sup> Rachel Salas,<sup>2</sup> Charlene Gamaldo,<sup>3</sup> Alyssa Gamaldo,<sup>4</sup> and Peter Dzedzic,<sup>5</sup>  
1. University of Alabama, Birmingham, Alabama, United States, 2. Johns Hopkins Medicine, Baltimore, Maryland, United States, 3. Johns Hopkins Medicine, Johns Hopkins Sleep Disorders Center, Maryland, United States, 4. Penn State College of Health & Human Development, Assistant Professor, Human Development and Family Studies, Penn State, Pennsylvania, United States, 5. Johns Hopkins University School of Medicine, Director of The Center of mHealth and Innovations, United States

Behavioral and environmental factors influence sleep outcomes. However, we understand little about how enviro-behavioral sleep hygiene practices and related sleep concerns vary across age cohorts. Using data from My Sleep Script, an app-based diagnostic checklist for identifying at risk patients, we described cohort differences in sleep hygiene and new sleep disturbances. 323 adults (46.6% female, 63.9% Caucasian) reported basic demographic, health, sleep, as well as enviro-behavioral data using the Epworth Sleepiness Scale (ESS), Pittsburgh Sleep Quality Index (PSQI), and the Johns Hopkins Sleep Environment Instrument. We partitioned participants

into four cohorts corresponding to birth year: The Silent Generation (N = 48, 14.9%), Baby Boomers (N = 124, 38.4%), Generation Xers (n = 109, 33.7%), and Millennials (N = 42, 13.0%). Spearman correlations described linkages among environment, behaviors, and sleep outcomes; a chi-square analysis, cohort differences in new sleep concerns. Having weapons, music players, lights, pets, and a disruptive sleep surface in the environment correlated with worse sleep quality. Eating, exercising, working, and sexual activity one hour before bed also correlated with worse sleep quality. Sleeping with pets, electronics, and on a disruptive surface correlated with lower sleep duration. Regarding cohort, we observed significant generational differences in new snoring and sleepiness complaints. Results confirm associations of suboptimal sleep hygiene with poor sleep outcomes and provide insights into their generational differences, warranting additional investigation.

#### SESSION 2425 (POSTER)

##### SOCIAL ISOLATION AND LONELINESS

#### THE ISOLATION OF OLDER ADULTS: A COMPARISON OF JAPANESE GENDERS AND HOUSEHOLDS

Keiko Katagiri<sup>1</sup>, 1. Kobe University, Kobe, Hyogo, Japan

As the aging population increases, large changes have occurred among household structures in Japan. Half of older adults lived with their children's families in 1980. Now around 60 percent of them live by themselves: 27% in single households and 31% as older couples alone. Older adults in single households are said to be at higher risk of social isolation. A Japanese white paper reported that they had scanty of social interactions compared to other types of households. This study examines differences in the social relationships and health statuses among household types by gender and explores the risk factors of social isolation. Nationally representative 2012 Japanese Social Survey data were used for analyses; a subsample comprised participants aged 60 to 74 years. A series of ANCOVAs were conducted. The distribution of the gender and household types were single male 105 (10.0%), married male 387 (36.8%), single female 180 (17.1%), and married female 381 (36.2%); the main effects were being female and married. An interaction effect between them (single males were less happy than married males) was observed. Neighborhood relationships were better among females and married participants. Married participants were more active in community meetings, social participation, and volunteering. However, no difference was observed in social network size. Thus, network size alone was not related to social isolation, but being active in social relationships and the quality of relationships influenced social isolation and well-being. Being married and female may facilitate higher quality relationships and may lead to activity and buffer social isolation.

#### IMPACT OF SOCIALIZATION IN LOW-INCOME URBAN ELDERLY COMMUNITIES

Taylor Wilkerson,<sup>1</sup> Schanea Ward,<sup>2</sup> Amy Popovich,<sup>2</sup> Pamela Parsons,<sup>1</sup> and Faika A. Zanjani<sup>1</sup>, 1. Virginia