measured by an index derived from subjective and objective measurements. Multilevel mixed-effects models showed that better social supports from friends and family members, better financial conditions and education were associated with improved health aging among older Cambodians. Supports from friends had a stronger relationship than supports from family members. As one of the first studies to examine the social determinants of health among older Cambodians, this study adds to the literature by substantiating the important roles of financial conditions and social support in determining their health and well-being. Findings point to the importance of improving living standard and maintaining social support of the older population in the country.

STRESS IS A RISK FACTOR FOR SHINGLES AMONG OLDER ADULTS
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Stress is a risk factor for shingles. Empirical evidence of how stress affects getting shingles is lacking for the older population. This paper examines how chronic stress and stressful events are associated with incident shingles in a nationally representative sample of the population over age 50, the Health and Retirement Study. Using data for 2010-2016, we tracked 12,628 persons aged 50 and older with no history of shingles at 2010 until the first shingles occurrence and linked shingles to chronic stress appraisal and stressful events in the prior period. Chronic stress appraisal was measured in eight life domains: health, spousal/children, finance, work, residence, relationship, alcohol/drug, and caregiving. Adverse life events including spousal loss, involuntary job loss, residential move, negative wealth shock, and spousal onset of disability were included in an index of stressful events. 3.3% of sample members developed new shingles cases. Regression results suggest that having a higher burden of stressful events significantly increased the risk for shingles (OR:1.13, 95% CI=1.05, 1.22), whereas ongoing chronic appraisal was not associated with shingles onset (OR:0.99, 95% CI=0.96, 1.03). Our findings highlight the importance of preventive efforts on stress management in reducing risks for zoster.

THE EFFECT OF NEIGHBORHOOD COHESION ACROSS THE LIFESPAN ON COGNITIVE HEALTH
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Neighborhood environments may serve as protective factors against cognitive impairment and decline. Recent evidence shows that neighborhood cohesion is associated with better cognitive health in adulthood. We extend the current literature by examining how neighborhood cohesion across the lifespan may influence cognitive function in adulthood. We used data from the Health and Retirement Study (HRS) and the HRS Life History Survey. Participants who were 50-89 years old at baseline, completed up to 10 longitudinal waves, and were not cognitively impaired in the last wave were included in the analyses (N=2,057). Early-life neighborhood cohesion was assessed with participants’ retrospective ratings of sense of belonging in their local areas at age 10, when they first had a full-time job, and at age 40. Participants’ assessment of neighborhood cohesion assessed at the final wave was treated as the current indicator of cohesion. Cognitive function was assessed with the full HRS cognitive battery. Preliminary findings from hierarchical mixed models showed an overall decline in cognitive function across time. Current and age 10 neighborhood cohesion were independently associated with better baseline cognitive function, but did not predict cognitive change. Interaction terms involving cohesion at age 10 and current neighborhood cohesion showed that current cohesion buffered the negative effect of low cohesion at age 10. No significant associations were observed for cohesion during the full-time job and age 40 periods. Although effect sizes were small, these results indicate that neighborhood cohesion in older adulthood may offset the detrimental effects of negative childhood environments on cognitive health.

THE EFFECTS OF SEVERE AND FREQUENT BACK PAIN ON MENTAL HEALTH: DOES PERCEIVED SOCIOECONOMIC STATUS MATTER?
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Back pain and mental health are related. The relationship may differ by socioeconomic status (SES); yet, research has not examined the moderating role of perceived SES. We examined if the association between back pain and poor mental health is more pronounced for older men with lower perceived SES. We used a sample of community-dwelling older men (>65 yrs) with back pain from the Osteoporotic Fractures in Men Study (n=4,035). Participants reported their perceived SES in comparison to others in the community and in the nation (1=lowest—10=highest), back pain severity (mild—severe), and frequency (rarely—all of the time). Mental health was assessed with the 12-item Short Form Health Survey. Analyses were adjusted for sociodemographic and health covariates. Greater pain severity and higher pain frequency were associated with poorer mental health (p<.001). Only severe pain was associated with poorer mental health (p=.001). Pain ‘some of the time’ (p=.02), ‘most of the time’ (p=.02), and ‘all of the time’ (p=.001) were associated with poorer mental health. Adverse effects of pain were reduced with greater community SES (p<.001 for severe pain; p=.02 for ‘all of the time’ pain frequency) and greater national SES (p=.01 for severe pain; frequency n.s.). Reports of pain were worse for individuals with lower SES. Adverse associations of severe and high frequency back pain with poor mental health are more apparent in older men with lower perceived SES. Where one ranks oneself within their community or nation can influence the pain and mental health link.

THE IMPACT OF CONSCIENTIOUSNESS ON PARTICIPANT DROP-OUT: A NOVEL METHOD FOR ESTIMATING MISSINGNESS
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Individuals low in conscientiousness are typically characterized by higher rates of dropout in longitudinal studies compared to individuals high in conscientiousness. Given that low conscientiousness is associated with increased risk of mortality and several adverse health behaviors and outcomes, attrition of individuals low in conscientiousness may result in systematic bias particularly relevant to developmental research focused on morbidity and mortality in older adulthood. Further, methods commonly used to estimate missing data require monotone coding patterns and untestable assumptions (e.g., MAR), and do not typically account for death as a competing risk factor. This project analyzed data drawn from the Memory and Aging Project (N=1156; Mage=79.2 years; 76.1% female) using multistate survival models to estimate the impact of conscientiousness on transitions between study wave participation over time (i.e., response, non-response), and death. With conscientiousness measured at baseline and death status determined by death records, complete state data are available for each study wave, unlike methods commonly used to model and estimate missingness. Adjusting for age, sex, and education, analyses revealed that higher levels of conscientiousness are associated with decreased likelihood of transitioning to nonresponse (HR= 0.97, CI's 0.95, 0.99) and death (HR=0.96, CI's 0.93, 0.99). These results suggest that over-sampling individuals low in conscientiousness during study recruitment may be important to better represent the general population, particularly when data are collected over several years or decades. Discussion will focus on how systematic bias introduced by higher response rates of individuals high in conscientiousness may impact health-related research based on longitudinal data.

SESSION 2954 (POSTER)

HEALTH BEHAVIORS

A TIME-, GENDER-, AND DISEASE-STATE INVARIANT MODEL OF FITNESS ACROSS THE ADULT LIFESPAN
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In studies of community-based health behavior interventions (diet and physical activity) one goal in analysis is to show expected relationships between measures of intervention and clinically relevant outcomes. Many programs fail to show such clear links for many reasons beyond lack of intervention effectiveness. These secondary analyses were undertaken to assess if the measurement properties (stability and responsiveness) of intervention measures could have contributed to study findings. A feasibility study of lifestyle treatment of metabolic syndrome (n=293; mean age = 59yrs) had achieved 19% reversal over one year, yet neither diet quality nor fitness were associated with cardiovascular disease risk. Confirmatory factor analysis was used to examine fit of measurement models and factorial invariance was tested across three time points (baseline, 3-month, 12-month), gender (male/female), and disease status (diabetes) for the Healthy Eating Index (HEI) (Canada 2005) and several fitness measures (VO2max, flexibility, curl-ups, push-ups). The model fit for HEI was poor and could account for the lack of association seen in the original study. More development of diet quality measures is needed. The model for fitness, however, demonstrated excellent fit and displayed measurement equivalence across time, gender, and disease state. A higher degree of confidence exists when measurement equivalence/invariance is demonstrated, allowing for reliable tests of differences in comparison groups. The use of a multiple measure of fitness, including cardiorespiratory fitness, flexibility, and strength, helps eliminate limitations of using measures from a single domain or self-reported data is promising and should be considered in future work.

AGING WITH AUTISM SPECTRUM DISORDER: AN EXPLORATION OF PHYSICAL ACTIVITY ENGAGEMENT
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Adults with Autism Spectrum Disorder (ASD) participate in physical activity (PA) infrequently compared to adults in the general population. This is problematic as individuals with ASD suffer from disproportionate physical and mental health co-morbidities as well as diminished life expectancy, but do not reap the physical and mental health benefits of PA. This study used data from the National Core Indicators-In Person Consumer Survey (n=4,370; age: 18-78) to analyze factors associated with both aerobic PA and muscle strengthening (MS) activity in adults with ASD receiving state Developmental Disability Services. This research used multilevel logistic regression modeling, with mediation and moderation analyses to explore personal and environmental factors associated with PA/MS in this population. Findings indicated the following significant associations between community engagement and PA and MS: community contact (OR=1.17; p<0.001; OR=1.07; p<0.001), community group participation (OR=1.83; p<0.001; OR=1.91; p<0.001), and employment/day program participation (OR=1.32; p<0.05; OR=1.32; p<0.001). Additionally, at older ages, participants were less likely to engage in PA and MS three or more times a week (OR=0.99; p<0.05; OR=0.99; p<0.05). These findings indicate that increasing age is associated with decreased PA and MS activity in this group, while community engagement may facilitate their PA and MS activity. While much remains unknown about the population aging with ASD, it is evident that they suffer from poorer health than the general population and have experienced lifelong difficulties with socialization and communication. Greater access to community engagement opportunities may promote this population’s healthy aging, as well as support their unique social needs.