

*Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States*

African American men experience extremely high levels of social and psychological stress from unfavorable social and economic circumstances emerging from institutional discrimination and unfair treatment. Stress has been linked to disproportionate risks for illness, disease and premature mortality among this population. But, few studies have examined how African American men manage or cope with stress, and even fewer have assessed how their coping responses have implications for their health. Faith has been considered a stress coping strategy and a growing number of studies explore how religiosity and spirituality have implications for health outcomes. No studies to our knowledge have examined how faith impacts stress and its influence on the health among African American men. The purpose of this chapter is to demonstrate how faith has implications for socio-biologic interactions associated with elevated risk for disease and premature death among this marginalized population.

#### THE HEALTH OF MALE VETERANS IN LATER LIFE

Janet M. Wilmoth,<sup>1</sup> Scott D. Landes,<sup>1</sup> and Andrew S. London<sup>1</sup>, 1. *Syracuse University, Syracuse, New York, United States*

Veterans have the opportunity to accrue health-promoting “military capital,” but they are also at risk of experiencing a “military hazard” effect that undermines later-life health and mortality outcomes. Given these possibly competing effects, there is substantial heterogeneity in physical and mental health among older male veterans. The health and mortality outcomes of older veterans who were not substantially harmed during military service appear to be just as good as, if not better than, those of nonveterans. However, older veterans who served in-theater, were exposed to combat or hazardous chemicals, and/or were physically or psychologically harmed during service tend to have worse health and higher mortality than non-veterans. Some older veterans with these experiences struggle with life-long or late-onset PTSD, while others exhibit resilience and posttraumatic growth. Additional population-level, life-course research is needed on specific war-era cohorts to identify the mechanisms that shape veteran status differences in late-life health and mortality.

#### SESSION 1150 (PAPER)

##### BENEFITS OF SOCIAL AND PHYSICAL ACTIVITY IN LATER LIFE

##### ACTIVITIES ACROSS AMERICA: EVALUATING GEOGRAPHIC DIFFERENCES IN ACTIVITY ENGAGEMENT

Brittany P. Trubenstein,<sup>1</sup> Robin Corley,<sup>2</sup> Kyle D. Gebelin,<sup>1</sup> Sergio Rey,<sup>1</sup> Sally Wadsworth,<sup>2</sup> and Chandra A. Reynolds<sup>1</sup>, 1. *University of California - Riverside, Riverside, California, United States*, 2. *University of Colorado - Boulder, Boulder, Colorado, United States*

Rurality is associated with cognitive health disparities. We investigated proximal and distal indices of rurality, activity engagement and cognitive performance in the ongoing Colorado Adoption/Twin Study of Lifespan behavioral development and cognitive aging (CATSLife; N = 979; 47% female). The Index of Relative Rurality (IRR) (0 = Urban to 1 =

Rural) was calculated using population density, population, percent urban, and remoteness at the census tract (IRRtract; M=0.40, SD=.05) and county levels (IRRcounty; M=0.53, SD=.09), which were moderately correlated ( $r = .21$ ,  $p = .000$ ). Individuals reported weekly-hours of engagement in 19 activities, classified into social (M=6.85, SD=4.03), physical (M=6.53, SD=4.76), family (M=10.76, SD=7.06), sedentary (M=11.84, SD=5.83), or cognitive (M=4.63, SD=3.74) domains. Social activities correlated with IRRcounty ( $r=0.091$ ,  $p = .005$ ) but not with IRRtract ( $r=-0.004$ ). WAIS-III IQ scores were available. Social activities modestly correlated with IQ, particularly Verbal-IQ ( $r = .063$ ,  $p = .049$ ). Cognitive activities correlated with all IQ measures ( $r$ 's = .17 to .25,  $p < .000$ ). While IRRcounty correlated positively with IQ ( $r$ 's=0.057 to 0.094,  $p$ 's = .079 to .000), IRRtract correlated negatively but not significantly with IQ ( $r$ 's=-0.053 to -0.062,  $p$ 's = .104 - .054). Analyses accounting for family nesting, sex, and age suggested compensatory associations between IRRcounty versus IRRtract and Full-Scale-IQ ( $p < .019$ ), with similar patterns for Verbal-IQ and Performance-IQ. Social activities did not uniquely contribute. Further investigation is warranted to better understand the complex relationships between proximal and distal rurality and the implications that these relationships have on activity engagement and cognitive performance.

##### COGNITIVE TRAINING ATTENUATES AGE-RELATED DECLINE IN PHYSICAL FUNCTION ACROSS 10 YEARS

Briana N. Sprague,<sup>1</sup> Christine B. Phillips,<sup>2</sup> and Lesley A. Ross<sup>1</sup>, 1. *The Pennsylvania State University, University Park, Pennsylvania, United States*, 2. *Arizona State University, Arizona State University, United States*

Poor physical function is associated with negative health and cognitive outcomes. Although nine studies demonstrate that cognitive training reduces age-related declines in physical function, only one has examined effects beyond immediate posttest changes. The current study assessed the impact of three cognitive training programs on physical function measures across 10 years. Using data from the Advanced Cognitive Training for Independent and Vital Elderly (ACTIVE) trial, older adults randomized to a no-contact control condition ( $n = 698$ ) were compared to those randomized to processing speed ( $n = 702$ ), memory ( $n = 703$ ), or reasoning ( $n = 694$ ) training. Intention-to-treat and treatment-received analyses were conducted for grip strength, Digit Symbol Copy, and Turn 360. There were no significant effects of being assigned to processing speed, memory, or reasoning training to any physical function outcome ( $p > .05$ ). Treatment-received models indicated that processing speed training attenuated age-related declines in Digit Symbol Copy ( $b = -.005$ ,  $p < .01$ ) and Turn 360 ( $b = -.011$ ,  $p < .001$ ), memory training attenuated age-related declines in Digit Symbol Copy ( $b = -.009$ ,  $p < .001$ ) and Turn 360 ( $b = -.011$ ,  $p < .001$ ), and reasoning training attenuated age-related declines in Digit Symbol Copy ( $b = -.012$ ,  $p < .001$ ) and Turn 360 ( $b = -.012$ ,  $p < .001$ ). There was no significant transfer to grip strength. This is the first study to demonstrate beneficial effects of cognitive training to some physical functions across 10 years. Future work should examine moderators and mediators of transfer effects.