

The NIA's Butler-Williams Scholars Program and GSA's Emerging Scholars and Professional Organization are united in providing career development opportunities for early career scholars in a manner that promotes leadership, diversity, and inclusivity. This provides a foundation to develop a network of next generation of scientists, clinicians, and policy makers capable of shaping health in aging. Among the chief concerns of our aging population are disparities in health associated with race/ethnicity, experience, sociocultural and socioeconomic factors, as well as access to and communications regarding health care. GSA's early career professionals and alumni of the prestigious NIA Butler-Williams Scholars Program have tackled these issues directly and the scientific scholarship that results is astounding in its breadth and depth. Dr. Glenna Brewster (Butler-Williams class of 2018) will discuss new findings from a study of African American caregivers of persons living with dementia. Dr. Candace Brown, Ph.D. (Butler-Williams class of 2017), will present on overcoming social and environmental barriers to exercise among older adults. Dr. Joseph Saenz (Butler-Williams class of 2017), will present current work disparities in cognition function in the older Mexican population. The final speaker, Dr. Sarah Forrester (Butler-Williams class of 2019) will explore new perspectives on health equity in physiological dysregulation and aging. In sum, the featured talks by rising stars in aging research deepen our understanding of the influence of race, ethnicity, and overcoming barriers to understand 'why aging matters' across our diverse aging populations.

#### HEALTH-RELATED QUALITY OF LIFE FACTORS IN AFRICAN AMERICAN CAREGIVERS OF PERSONS WITH DEMENTIA

Glenna Brewster, *Emory University, Atlanta, Georgia, United States*

African American caregivers of persons living with dementia have a high prevalence of caregiving compared to other caregiving groups. The goal of this study was to explore health-related quality of life factors in a sample (n=25) of African American caregivers with a body mass index of more than Caregivers were female (87%). Caregivers were an average age of 63.2 ( $\pm 6$ ) years, had 16.6 ( $\pm 2$ ) years of education, and were providing care for 4.3 ( $\pm 4$ ) years. Care-recipients were on average 79.1 ( $\pm 11$ ) years and mothers (52.2%). 74% of the caregivers reported good-to-excellent quality of life. Caregivers reported low anxiety and depression but high perceived stress and strain. Higher anxiety and depression were correlated with greater strain and lower quality of life. Healthcare providers need to examine specific situational caregiving factors that can affect African American caregiver outcomes; since, their stress and strain may not reflect in their response to psychological questionnaires.

#### LONG-TERM ADHERENCE TO PHYSICAL ACTIVITY AMONG OLDER VETERANS

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The benefits of physical activity (PA) are well-established and it is recommended that older adults achieve at least 150 to 300 minutes of moderate intensity PA and strengthening activities weekly. However, only 54.0% and 23.2% of older adults achieve these recommendations

for endurance and strengthening (respectively), and 48% dropout within the first 6-months. Most PA research focuses on the 6-month initiation phase leaving a gap regarding long-term adherence. We explored predictors of long-term adherence (>2-years) to PA from 97 participants at 6-month follow-up and yearly surveys. Variables examined included age, race, gender, body mass index (BMI), and self-reported comorbidities, symptoms, physical function, and barrier-specific self-efficacy scale ( $\alpha$ -level 0.05). Lower BMI (29.1 $\pm$ 5.1 versus 31.6 $\pm$ 6.5,  $p=0.047$ ) and higher self-efficacy to overcome environmental barriers ( $p=0.016$ ) and social isolation ( $p=0.05$ ) were associated with long-term adherence. Self-efficacy to overcome environmental and social barriers should be addressed to promote long-term adherence to exercise among older adults

#### LITERACY AND COGNITIVE FUNCTION IN THE CONTEXT OF MARRIAGE: A STUDY OF OLDER MEXICAN COUPLES

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Many studies have reported that literacy is associated with favorable cognitive outcomes in late-life. Few have evaluated whether the cognitive benefits of literacy extend to a spouse's cognitive ability. Among married husband-wife dyads from the 2012 Mexican Health and Aging Study (n=4,078 dyads), literacy was assessed as self-reported ability to read and write. General cognitive ability was assessed using performance across several cognitive domains. Approximately 11% and 15% of husbands and wives, respectively, could not read or write. For both husbands and wives, both own literacy, and having a spouse who could read and write were independently associated with better cognitive ability even after accounting for both partners' education. Literacy may represent an important form of capital that may be beneficial to preserve cognitive function among older adults. Benefits of spousal literacy may operate by facilitating access to resources such as information and cognitive stimulation.

#### PHYSIOLOGICAL DYSREGULATION AND AGING: IMPLICATIONS FOR HEALTH EQUITY

Sarah Forrester,<sup>1</sup> Catarina Kiefe,<sup>1</sup> and Roland Thorpe, Jr.,<sup>2</sup>  
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Social determinants of health (SDOH) are a major public health issue that affect the magnitude and prognosis of many diseases in the U.S., including cardiovascular disease and cognitive disorders of aging. These associations are especially deleterious among minority persons in the US due to consistently unfavorable social determinants in this population including socioeconomic position, residential segregation, and quality of education. Physiological dysregulation measures the "true global state" of an individual that includes, but goes beyond, chronological age, reflects the health burden produced, in part, by SDOH, and is associated with the development and prognosis of disease. A better understanding of how and when physiological dysregulation occurs may allow us to prevent or reverse dysregulation among the most vulnerable aging populations leading to improved health equity in cardiovascular and cognitive outcomes.