cognitive reserve components (i.e., education, occupational responsibility, engaged lifestyle, social support, and activity) with cognitive and physical health in very late life. We will summarize and integrate the findings for their theoretical and practical implications and provide future directions.

COGNITIVE RESERVE AND WELL-BEING AMONG CENTENARIANS

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The purpose of this study was to assess cognitive reserve among centenarians and to evaluate whether reserve variables explain significantly more variance in cognitive functioning than education alone. Centenarians from the Georgia Centenarians Study were included. Results indicate that education, activity, social engagement, and engaged lifestyle significantly related to cognitive functioning. After adding cognitive reserve variables, the effect of education on cognitive functioning diminished. The overall model fit well, X2 (df=6) = 12.35, p = .06; CFI = .97, RMSEA = .067. Education indirectly related to cognitive functioning through occupational responsibility and engaged lifestyle. Social engagement directly related to cognitive functioning but also indirectly through activity levels. The four direct predictors (i.e., education, social engagement, activity, and engaged lifestyle) explained 33 percent of the variance in cognitive functioning. The results provide important information for cognitive reserve theories with implications for physical health and interventions that build cognitive reserves.

RISK AND PROTECTIVE FACTORS FOR COGNITIVE RESERVE IN OLDEST-OLD JAPANESE AMERICANS

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3,734 Japanese-American male oldest-old (aged 85+ years), from the Kuakini Honolulu Asia Aging Study, were assessed for prevalent cognitive impairment (CI). CI was defined as scoring <74 on the 100-point Cognitive Abilities Screening Instrument (CASI; 80% sensitivity, 90% specificity for dementia). CASI tests from 1991 (Exam 4) to 2012 (Exam 12) identified 1496 cases of CI (i.e. low cognitive reserve) and 1222 non-CI controls (mean diagnosis age: 85.7 ± 5.3; range 71-100 years). Baseline risk factors were compared between groups, adjusted for age at onset of CI or last CASI. Step-wise conditional logistic regression was used to assess risk for CI. Among other factors, education (0.88; 0.85-0.9, p<0.0001), hand-grip strength (0.98; 0.97-0.99, p=0.03), and height (0.97; 0.96-0.99, p=0.002) had protective effects; whereas APOE4 carriage (1.31; 1.04-1.63, p=0.02) and depression (1.4; 1.06-1.96, p=0.02) were risk factors for CI. The implications of these data for cognitive and physical health will be discussed.

OCCUPATIONAL COMPLEXITY AND LATE-LIFE GLOBAL COGNITION: THE SONIC STUDY

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Studies have reported that work exposure to cognitively demanding environments predicted the level of late-life cognitive abilities. To date, whether or not such a relationship between work complexity and cognitive function is maintained in very old adults remains unknown. In the present study, we examined how the associations between lifetime work's complexity and global cognition vary by age groups (70s, 80s, and 90s). To this end, we used data from 2754 Japanese community-dwelling participants in the SONIC Project. Specifically, we tested multiple group path models comparing the models based on differences in age and gender. The effects of work complexities on global cognition were found for male septuagenarians and octogenarians, having controlled for the variables related to education. The relationships between them were marginally significant for male nonagenarians. Based on the analysis, we discuss the maintenance of cognitive reserve and implications for cognitive and physical health in very old ages.

SESSION 7160 (SYMPOSIUM)

MECHANISMS OF RACIAL AND ETHNIC DIFFERENCES IN COGNITIVE AGING

Chair: Andrea Rosso

Discussant: Jennifer Manly

Racial and ethnic disparities in age-related cognitive function and dementia risk in the US are well recognized. However, the psychosocial drivers of these disparities and underlying mechanisms are less well studied. This symposium will highlight novel research regarding our current understanding of racial/ethnic differences in brain and cognitive aging and the underlying mechanisms of the disparities. Frist, two papers will describe results regarding racial/ethnic differences in cognitive function and brain aging markers. Few studies have assessed racial/ethnic differences in cognitive function across age groups. Indira Turney will utilize data from a multigenerational study to explore how age impacts racial/ethnic differences in cognitive function. Underlying brain mechanisms of racial/ethnic differences in cognitive outcomes are also not well defined. Sara Godina will present a systematic review of racial/ethnic differences in structural markers of brain aging and neuropathology. Second, three papers will explore how various risk factors may explain the racial/ethnic disparities in cognitive outcomes. Melissa Lamar will demonstrate the differential associations of various blood pressure indicators with cognitive change among black older adults. B. Gwen Windham will present data from two studies that illustrate differential effects of common risk factors by race and region, highlighting inherent difficulties in race-place disparity research. Finally, Laura Zahodne will present results on how