

Conclusions: Digital remote assessments can help overcome barriers by enabling repeated testing in naturalistic conditions, reducing participant burden and expense, and increasing research accessibility for populations currently under-represented. Moreover, the ubiquity of internet-connected devices vastly increases opportunities to remotely monitor other dimensions relevant to cognition using smartphone apps and wearable sensors. In addition to improving access to testing, digitally administered assessments dramatically improve some individual's tolerance to testing with shorter tests that can be administered via computer adaptive testing (CAT). Despite these benefits, some aspects of the cognitive assessment cannot be adequately replicated remotely and thus yield lower correlations to their examiner-administered alternatives. Clinical and research implications are discussed.

Categories:

Assessment/Psychometrics/Methods (Adult)

Keyword 1: cognitive functioning

Keyword 2: assessment

Keyword 3: teleneuropsychology

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Paper Session 17: Aging topics: section 3

9:00 - 10:30am

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Town & Country Ballroom D

Moderated by: Sarah Banks

1 Associations between social determinants of health and 10-year change in everyday functioning within Black and White older adults from the ACTIVE study

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Objective: Social determinants of health (SDoH) are structural elements of our living and working environments that fundamentally shape health risks and outcomes. The Healthy People 2030 campaign delineated SDoH into five distinct categories that include: economic stability, education access/quality, healthcare access, neighborhood and built environment, and social and community contexts. Recent research has demonstrated that minoritized individuals have greater disadvantage across SDoH domains, which has been linked to poorer cognitive performance in older adulthood. However, the independent effects of SDoH on everyday functioning across and within racial groups remains less clear. The current project explored the association between SDoH factors and 10-year change in everyday functioning in a large sample of community-dwelling Black and White older adults.

Participants and Methods: Data from 2,505 participants without dementia enrolled in the Advanced Cognitive Training for Independent and Vital Elderly (ACTIVE) study (age M=73.5; 76% women; 28% Black/African American). Sociodemographic, census, and industry classification data were reduced into five SDoH factors: economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community contexts. The Observed Tasks of Daily Living, a performance-based measure of everyday functioning with tasks involving medication management, finances, and telephone use, was administered at baseline, 1-, 2-, 3-, 5, and 10-year follow up visits. Mixed-effects models with age as the timescale tested (1) racial group differences in OTDL trajectories, (2) race x SDOH interactions on OTDL trajectories, and (3) associations between SDoH and OTDL trajectories stratified within Black and White older adults. Covariates included sex/gender, vocabulary score, Mini-Mental Status Examination, depressive symptoms, visual acuity, general health, training group

status, booster status, testing site, and recruitment wave.

Results: Black older adults had a steeper decline of OTDL performance compared to Whites (linear: $b = -.25$, quadratic $b = -.009$, $ps < .001$). There was a significant race x social and community context interaction on linear OTDL trajectories ($b = .06$, $p = .01$), but no other significant race x SDoH interactions were observed ($bs = -.007-.05$, $ps = .73-.11$). Stratified analyses revealed lower levels of social and community context were associated with steeper age-related linear declines in OTDL performance in Black ($b = .08$, $p = .001$), but not White older adults ($b = .004$, $p = .64$). Additionally, lower levels of economic stability were associated with steeper age-related linear declines in OTDL performance in Black ($b = .07$, $p = .04$), but not White older adults ($b = .01$, $p = .35$). Finally, no significant associations between other SDoH and OTDL trajectories were observed in Black ($bs = -.04-.01$, $ps = .09-.80$) or White ($bs = -.02-.003$, $ps = .07-.96$) older adults.

Conclusions: SDoH, which measure aspects of structural racism, play an important role in accelerating age-related declines in everyday functioning. Lower levels of economic and community-level social resources are two distinct SDoH domains associated with declines in daily functioning that negatively impact Black, but not White, older adults. It is imperative that future efforts focus on both identifying and acting upon upstream drivers of SDoH-related inequities. Within the United States, this will require addressing more than a century of anti-Black sentiment, White supremacy, and unjust systems of power and policies designed to intentionally disadvantage minoritized groups.

Categories: Aging

Keyword 1: activities of daily living

Keyword 2: minority issues

Keyword 3: everyday functioning

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2 The Interactive Effects of Cognitive Activity and Education on Cognitive Functioning in Diverse Middle-Aged to Older Adults

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Objective: Prior work with older adults has shown that participating in a range of physical, social, and cognitive activities provides great benefits, such as improved mood and cognitive functioning. These activities can protect against common cognitive problems associated with aging (e.g., poor working memory and processing speed) and lower the risk of developing dementia, thus supporting the cognitive reserve hypothesis. Cognitive reserve refers to the preservation of an individual's cognitive abilities over time despite changes in the brain that allows them to be resilient in performing daily and complex tasks (Stern, 2012). Historical factors such as education, life experiences, and occupational complexity, as well as current lifestyle behaviors such as cognitive and social activities may serve as proxies for cognitive reserve. It is not clear whether historical proxies of cognitive reserve (e.g., educational attainment) interact with more proximal lifestyle factors (e.g., recent cognitive stimulation) to impact cognitive functioning. In this study, we examined if education, recent cognitive activity, and their interaction predicted enhanced immediate memory and visual and verbal working memory in middle-aged to older adults.

Participants and Methods: Participants were 62 middle-aged to older adults (age 45-93; mean age = 65.9 years; 80.6% female; 70.9% Black; ~75.0% with high school education or higher) recruited from a Louisiana housing facility for seniors with low or fixed incomes and a local community center. Data collection included the CHAMPS Physical Activity Questionnaire for Older Adults, Wechsler Adult Intelligence Scale subtests (Digit Span Forward and Digit Span Backward), and the Size Judgment Span Task. Mixed-effects regression analyses were performed with education (less than high school, high school, college), the CHAMPS cognitive activity composite (Weaver & Jaeggi, 2021), and an education x cognitive activity interaction term as independent variables and cognitive test scores as the outcome variables. All models controlled for age and race/ethnicity.