proxy. This is an under estimation of the role that education and structural racism play in WMH burden due to our positively selected sample and crude measure of education. However, these methods can help researchers quantify the contribution of SDH to disparities in older adulthood and provide targets for policy change.

Categories:
Assessment/Psychometrics/Methods (Adult)
Keyword 1: minority issues
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2 Vigilant Coping Moderates the Relationship between Discrimination and Memory among Black and Latinx Adults

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Objective: In the U.S, Black and Latinx individuals disproportionately experience daily acts of discrimination. To counteract the psychological distress, many individuals develop coping mechanisms, like vigilant coping, where behaviors are modified to attempt to prevent discriminatory experiences. Researchers have investigated how coping mechanisms moderate the relationship between discrimination and psychological stress, but not their role in the relationship between discrimination and cognitive function. Prior research has shown a link between discrimination and poor episodic memory. The current study examined vigilant coping as a potential moderator in the relationship between discrimination and memory among Black and Latinx people.
Participants and Methods: We partnered with 1317 non-Latinx Black (n= 291) and Latinx (n= 1026) individuals who participated in the Offspring Study of Racial and Ethnic Disparities in Alzheimer's Disease. Participants were assessed in English or Spanish, according to their preference. Experiences of discrimination were measured on two scales: Major (civil rights violations) and Everyday (daily hassles), and were coded according to yearly chronicity. Vigilance was measured among people with at least one reported experience of discrimination on either scale, using a 5-item survey which was dichotomized as low and high vigilant coping. The Selective Reminding Test, a 12-item word list task with 6 learning trials and a delayed recall trial, yielded scores for total immediate recall and delayed memory. Linear regression models were used to assess if vigilance moderated the relationship between discrimination and memory, with years of education and age as covariates.
Results: Participants ranged in age from 27 to 91, with a mean age of 56.5 (SD=11.0) years, a mean education of 12.7 (SD=3.7) years, and were 67% women. High vigilant coping was associated with more experiences of major (b = 1.7, 95% CI = 0.9,2.5) and everyday (b = 90.3, 95% CI=66.2,114.3) discrimination. Memory was not associated with reported everyday discrimination, but lower delayed recall was observed among people who reported more experiences of major discrimination (b= -0.04, 95% CI = -0.07,-0.01). This relationship was moderated by vigilance, such that among people with low vigilant coping, major experiences of discrimination predicted lower memory (b= -0.06, 95% CI = -0.12,-0.01), but the association between discrimination and memory was weakened among people with high use of vigilant coping (b= -0.02, 95% CI = -0.05,0.01).
Conclusions: This study builds on Black researchers' work that laid the foundations for examination of stress and coping in marginalized populations. Future studies on discrimination and cognitive health should consider coping mechanisms as key aspects of pathways linking structural racism and inequalities to cognitive health among Black and Latinx individuals.

Categories: Cross Cultural Neuropsychology/ Clinical Cultural Neuroscience
Keyword 1: cross-cultural issues
Keyword 2: aging (normal)
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3 Area Deprivation Index Interacts with Sex to Predict Atrophy and Cognitive Trajectory Over a 5-Year Follow-Up Period

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Objective: Area Deprivation Index (ADI) is a measurement of neighborhood disadvantage. Evidence suggests that living in a disadvantaged neighborhood has a negative impact on health outcomes independent of socioeconomic status, including increased risk for Alzheimer's disease (AD). However, less is known about the biological mechanisms that drive these associations. We examined how ADI influences structural imaging variables and cognitive performance in community-dwelling older adults. We hypothesized that greater neighborhood disadvantage would predict atrophy and worse cognitive trajectory over time.
Participants and Methods: Participants included the legacy cohort from the Vanderbilt Memory and Aging Project (n=295, 73±7 years of age, 16±3 years of education, 42% female, 85% non-Hispanic White) who lived in the state of Tennessee. T1-weighted and T2-weighted fluid-attenuated inversion recovery brain MRIs and a comprehensive neuropsychological assessment were acquired at baseline, 18-month, 3-year, 5-year and 7-year follow-up time (mean follow-up time=5.2 years). Annual change scores were calculated for all neuropsychological and structural MRI outcome variables. Baseline state ADI was calculated using the University of Wisconsin School of Medicine and Public Health Neighborhood Atlas (Kind & Buckingham, 2018) and was based on deciles where 1 represents the least deprived area and 10 represents the most. Mixed effects regression models related baseline ADI to longitudinal brain structure (volume, thickness, white matter hyperintensities) and neuropsychological trajectory (one test per model). Analyses adjusted for age, sex, race/ethnicity, education, Framingham Stroke Risk Profile score, (apolipoprotein) APOE-e4 status, cognitive status, and intracranial volume (for MRI outcomes). Models were repeated testing interactions with APOE-e4 status, sex, and cognitive status. A false discovery rate (FDR) correction for multiple comparisons was performed.
Results: On average, the sample was from relatively less disadvantaged neighborhoods in Tennessee (ADI state decile=2.4±1.8). Greater neighborhood disadvantage at study entry predicted more thinning of an AD-signature composite over time (β=-0.002, p=0.005, pFDR=0.06); however, all other models testing MRI and neuropsychological outcomes were null (p-values>0.05, pFDR-values>0.51). Baseline ADI interacted with sex on longitudinal cortical thinning captured on the AD-signature composite (β=0.004, p=0.006, pFDR=0.08) as well as several longitudinal cognitive outcomes including an executive function composite score (β=0.033, p<0.001, pFDR=0.01), naming (β=0.10, p=0.01, pFDR=0.12), visuospatial functioning (β=0.083, p=0.02, pFDR=0.09), and an episodic memory composite score (β=0.021, p=0.02, pFDR=0.07). In stratified models by sex, greater ADI predicted greater cortical thinning over time and worse longitudinal neuropsychological performance among men only. All stratified models in women were null except for executive function composite score, which did not survive correction for multiple comparisons (β=-0.013, p=0.03, pFDR=0.61). Interactions by APOE-e4 and cognitive status were null (p-values>0.06, pFDR-values>0.61).
Conclusions: Among community-dwelling older adults, greater neighborhood disadvantage predicted greater cortical thinning over the mean 5-year follow-up in anatomical regions susceptible to AD-related neurodegeneration. Neighborhood disadvantage also interacted with sex on cortical thickness and several cognitive domains, with stronger effects found among men versus women. By contrast, there were no interactions between neighborhood disadvantage and genetic risk for AD or cognitive status. This study provides valuable evidence for sociobiological mechanisms that may underlie health disparities in aging adults whereby neighborhood deprivation is linked with neurodegeneration over time.

Categories: Inclusion and Diversity/Multiculturalism
Keyword 1: aging disorders
Keyword 2: diversity
Keyword 3: neuroimaging: structural
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4 Norm Selection and Application in Socially Responsible Neuropsychological Practice

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Objective: In the wake of the national controversy over demographically corrected normative comparisons used in neuropsychological assessment, the field finds itself in need of adopting better practices and providing stronger instruction in norm selection and application when assessing underrepresented populations. Neuropsychologists must employ critical thinking within their clinical decision-making that takes into account patient demographics, analysis of the measures themselves, normative samples, and statistical adjustments employed in normative studies. Not doing so may result in erroneous diagnostic conclusions, exposing underserved patient populations to poor or harmful clinical care and even misdiagnosis. The following case series presents several demographic considerations illustrating how selection and application of different (at times, ill-fitting) normative reference groups can affect treatment outcomes in the Latinx community. We examined the performance of various published norms when applied to monolingual and bilingual Spanish speakers.
Participants and Methods: This study samples three demographically diverse (i.e., education, age, and sex) clinical cases and applies regression-based and stratified norms to raw scores to demonstrate the possible differential outcomes when using different reference groups. One example is Ms. Congeniality, a 69-year-old, Spanish and English bilingual woman with 12 years of education who presented for a third revaluation at our clinic due to progressive memory loss. Her prior Spanish language profiles demonstrated impaired confrontation naming and steadily decreasing letter fluency over the past 10 years.
Results: Her performance on semantic fluency (i.e., animal naming) showed relative stability based on her raw scores (10 in 2012, 11 in 2016, and 12 in 2022). Using the Neuropsi A&M norms, which stratify performance across nine age ranges between ages 6-85 and three education ranges between 0-10+ years, her performance over the past 10 years ranged between the less than 1st percentile to the 9th percentile (1%, 1%, and 9%, respectively). However, using the NP-NUMBRS norms, which use regression-based continuous age (19-60) and education (0-20) predictors of test performance, her scores corresponded to steadily improved performance (8%, 28%, and 86%). Thus, this qualitative comparison demonstrates a likely overcorrection for individuals of advanced age when using norms based on samples that are a poor fit because they lack representation of older adults, as in NP-NUMBRS, and a possible undercorrection when using norms with overly broad education stratifications (e.g., 10-22 years, as in Neuropsi).
Conclusions: Application of ill-fitting normative standards can have far-reaching implications for interpretation of neuropsychological test results. Moreover, this case series exemplifies the need for higher-order instruction in norm selection, specifically for underserved communities who run the risk of being misdiagnosed. Through case examples, this study underscores the importance of understanding the unique effects of different demographic corrections in the context of limited available normative reference groups. This abstract is the first illustration in a series of papers aimed at facilitating the decision-making process within the framework of socially responsible neuropsychological practice.

Categories: Inclusion and Diversity/Multiculturalism
Keyword 1: normative data
Keyword 2: assessment
Keyword 3: bilingualism/multilingualism
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