

of loneliness, as measured by the de Jong Gierveld (DJG) scale (range 0-6) and a single-item self-report measure, and isolation, using the six-item Lubben social network scale (range 0-30) from both people with dementia and carers. Loneliness is classified into three groups: not lonely (score 0-2), moderately lonely (3-4) and severely lonely (5+) and isolation into two: not isolated (score of 13+) or isolated (12 or less). Of the 1547 people with dementia and 1283 carers interviewed at baseline we have 1089 dyads who provided complete data on loneliness and 1204 for social isolation. Loneliness ratings are congruent between 43.1% of dyads and for 67.8% for isolation highlighting the subjective evaluative nature of loneliness as compared with more objectively measured isolation.

LIVING ALONE WITH DEMENTIA: FINDINGS FROM THE IDEAL COHORT

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We aimed to better understand the profile of people living alone with mild-to-moderate dementia in the UK and to identify any systematic differences between those living alone and those living with others. We analysed cross-sectional data from 1541 people with mild-to-moderate dementia participating in the IDEAL cohort at the first wave of assessment. There were 285 participants (18.5%) living alone and 1256 (81.5%) living with others, usually a spouse/partner. Among those living alone, 145 (50.9%) had no care partner participating in the study, and 56 (19%) had received no help from a relative or friend in the past week. People living alone were older on average than those living with others, reported fewer functional difficulties, had slightly smaller social networks, engaged in fewer cultural activities, and experienced slightly more loneliness. People living alone had lower satisfaction with life scores, but quality of life scores did not differ between the groups.

PREVALENCE OF LONELINESS AND ISOLATION AMONG PEOPLE WITH DEMENTIA AND THEIR CARERS

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People with dementia and carers may be vulnerable to loneliness and isolation. The IDEAL study includes two loneliness measures: 6 item de Jong Gierveld (DJG) scale (range 0-6) and a single-item self-report measure and the six-item Lubben social network scale (range 0-30). Full data are available for 1533 people with dementia for self-rated loneliness and for 1455 for the DJG scale and 1232 and 1195 carers respectively. For isolation complete data are available for 1489 people with dementia and 1252 carers. The prevalence

of severe loneliness for people with dementia were 10% (self-rated) and 5% (DJG score 5+), approximately the population norm, and 15% and 18% respectively for carers. Most people with dementia or carers did not rate themselves as lonely (79% and 71%) compared with 65% and 39% using the DJG scale. One third, 35%, of people with dementia were at risk of isolation compared with 18% of carers.

SESSION 655 (PAPER)

MEMORY: BIOLOGICAL, PSYCHOSOCIAL, AND GENETIC FACTORS

EXAMINING PSYCHOSOCIAL FACTORS, HEALTH BEHAVIORS, AND WHITE MATTER LESIONS IN OLDER ADULTS

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Prior to the onset of dementia, subclinical indices of brain pathology may reliably predict cognitive decline, even among older adults with high cognitive reserve. Evidence suggests that positive psychosocial experiences and healthy behaviors buffer cognitive decline. However, their relationship with brain outcomes in cognitively intact older adults is not well understood. Therefore, the current study examined the cross-sectional association between perceived social support, generalized anxiety, psychosocial stress, physical activity, sleep quality, and magnetic resonance imaging (MRI)-assessed white matter lesions (WML), among a diverse sample of older adults. We also examined sex and race as effect modifiers. Data were analyzed from 129 participants (mean age=67.40y, 69% female, 43% African American) enrolled in the Healthy Heart & Mind Study. Participants completed psychosocial and health behavior measures and MRI-assessed periventricular and deep WML were ascertained. Multiple regression analyses assessed relations of psychosocial responses and physical activity to WML, adjusting for known covariates. Significant general anxiety x sex interactions on deep WML ($p < .05$), significant physical activity x race interactions on total WML, frontal lobe WML and deep WML, respectively, and total sleep quality x race interactions on deep WML, were observed ($p < .05$). Conditional effects showed greater physical activity and sleep quality were associated with lower WML in African-American women; greater social belonging was associated with lower WML in African-American men; and lower anxiety was associated with lower WML in African-American women and White men. Results suggest positive psychosocial factors and health behaviors may influence subclinical brain pathology via unique pathways.

INVESTIGATING MODERATORS OF THE RELATIONSHIP BETWEEN SUBJECTIVE AND OBJECTIVE MEMORY

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Subjective memory complaints (SMC) among older adults have been explored as an indicator of decline in objective

memory functioning. While some research has found that SMC may be predictive of future cognitive impairment and dementia (Glodzik-Sobanska et al., 2007; Wang et al., 2004), others have suggested that SMC are common among healthy older adults (Cooper et al., 2011) and are not strongly related to objective memory performance. Researchers suggest that SMC may be more strongly related to affective factors (e.g., depression and anxiety; Rowell, Green, Teachman, & Salthouse, 2015). The current study examined the relationship between SMC, objective episodic memory performance (OEMP), along with depression and anxiety in a sample of 18-99 year olds (N = 5,430) from the Virginia Cognitive Aging Project (VCAP). Structural equation modeling with full information maximum likelihood estimation was used to investigate whether clinically-relevant depression and anxiety levels moderated the relationship between SMC and OEMP, controlling for age, education, gender, and health. OEMP was represented as a latent construct while the remaining variables were observed. Although depression and anxiety are significantly related to SMC (r 's = .29, .17, respectively), they are not correlated with OEMP. Furthermore, depression, but not anxiety, moderated the relationship between SMC and OEMP, such that those at risk for depression had a stronger relationship between SMC and OEMP (-.07, $p < .05$) compared to those not at risk (-.02, $p = .31$). This suggests that SMC may not be a valid indicator of OEMP as it may reflect variance from other sources, such as depression.

MEDIATORS OF GENETIC AND ENVIRONMENTAL MECHANISMS ON SELF-RATED HEALTH

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Self-rated health (SRH), an individual's assessment of their own health status, is associated with older adults' chronic and acute health conditions, as well as mortality. Assessments of SRH indicate individual's global health is likely multifaceted. Level of education, particularly amount of post-secondary schooling, is associated with better SRH. Other indices of socioeconomic status (SES) such as income and wealth, have varying associations with SRH partly dependent on relative deprivation (e.g. Gini Index). The current study utilized data from 2,500 members of the Project Talent Twin and Sibling (PTTS) Study interviewed as adolescents in 1960 and followed up 54 years later. In 2014, participants were, on average, 70 years of age. Women comprised about 54% of the sample. We examined rearing family wealth, years of education, and functional independence as mediators of variance in SRH. Mean-level results indicated small positive associations between SES and SRH. Activities of Daily Living (ADL) accounted for about a quarter of variance in SRH, with higher functional independence predicting better SRH. Biometric analyses indicated that family wealth had small mediation effects on SRH via familial-environment (S) influences. Education mediated individual-specific (E) environmental influences. Functional independence (measured by ADL) mediated SRH via both additive genetic (A) and E influences. After adjusting for overall effects of sex, age, and specified mediators, a large portion of remaining variation

in SRH was due to individual-specific (E) environmental influences. Current results suggest complex underlying genetic and environmental mechanisms contributing to an older adult's assessment of their own health.

REDUCED ENDOTHELIAL FUNCTION IS ASSOCIATED WITH DEEP WHITE MATTER LESION VOLUMES AMONG HEALTHY OLDER ADULTS

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Reduced endothelial function (EF) is a subclinical cardiovascular disease (CVD) risk factor and precursor to hypertension and atherosclerosis. Among older adults with CVD, reduced EF has been associated with poorer outcomes in a number of cognitive domains, partly explained by the presence of white matter lesion volumes (WMLV) detectable on brain magnetic resonance imaging (MRI). The role of EF as a key, early predictor of brain decrements among older adults without CVD, however, is not well understood. Therefore, the objective of the study was to examine associations between endothelial function and WMLV among cognitively intact older adults free of CVD. A diverse sample of 138 community-based older adults (30.4% male; mean age=68.54y) enrolled in the Healthy Heart & Mind Study underwent cognitive and psychosocial assessment, vascular testing, and brain MRI. Multiple regressions were run to examine associations between endothelial function, as measured by % change in brachial artery flow-mediated dilation (FMD), and MRI-assessed WMLV in brain regions of interest, after controlling for age, sex, race, education, depression, mean arterial pressure, total cholesterol, and hypertension medication use. Results showed a significant inverse association between % FMD change and deep WMLV ($p < .05$), but no other regions of interest. Results suggest that reduced EF is associated with greater deep WMLV, an outcome variable attributable to small vessel disease and linked to Alzheimer's disease in previous studies. The implications of this finding for predicting risk for cognitive impairment among healthy older adults will be discussed.

SHRINKING AND GROWING SOCIAL NETWORKS IN THE SYDNEY MEMORY AND AGEING STUDY

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Gerontological research suggests that shrinking social networks are characteristic of older age. Socioemotional selectivity theory suggests that older adults proactively reduce their networks over time. Core relationship networks consist of friends and family who are contacted at least monthly. Studies of perceived social support indicate that shrinking networks increase risk of isolation, loneliness, and associated ill health effects. Our research aimed to investigate change in size of older adults' core relationship network over time, and to explore associations between network size and participant characteristics, using data from the first four waves of the Sydney Memory and Ageing Study. Participants completed: