DOI: 10.1002/alz.078475

PUBLIC HEALTH

PODIUM PRESENTATION

Alzheimer's & Dementia®
THE JOURNAL OF THE ALZHEIMER'S ASSOCIATION

Life course financial mobility and later-life memory function and decline by gender and race/ethnicity: an intersectional analysis of a multi-ethnic cohort study

Lindsay C Kobayashi[1] | Rachel Peterson[2] | Justina F Avila[3] | Priscilla A Amofa[4] | Clara Vila-Castelar[5] | Erika Meza[6] | C. Elizabeth Shaaban[7,8] | Rachel A. Whitmer[9] | Paola Gilsanz[10] | Elizabeth Rose Mayeda[11]

[1]University of Michigan, Ann Arbor, MI, USA

[2]University of Montana, Missoula, MT, USA

[3]Columbia University Irving Medical Center, New York, NY, USA

[4]University of Florida, Department of Clinical and Health Psychology, Gainesville, FL, USA

[5]Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA

[6]University of California San Francisco, San Francisco, CA, USA

[7]University of Pittsburgh, Pittsburgh, PA, USA

[8]University of Pittsburgh Alzheimer's Disease Research Center (ADRC), Pittsburgh, PA, USA

[9]University of California, Davis, CA, USA

[10]Kaiser Permanente Northern California Division of Research, Oakland, CA, USA

[11]University of California, Los Angeles Fielding School of Public Health, Los Angeles, CA, USA

Correspondence
Lindsay C Kobayashi, University of Michigan, Ann Arbor, MI, USA.
Email: lkob@umich.edu

Abstract

Background: Intersectionality is a theoretical framework capturing joint aspects of social identity (e.g., Black Women experience racism and sexism), which may allow richer understanding of ADRD disparities. We investigated whether life course financial mobility may be differentially associated with later-life memory function and rate of change across intersectional identities defined by gender and race/ethnicity.

Method: Data were from KHANDLE and STAR, harmonized cohorts of integrated healthcare system members in Northern California (n = 2,347). Life course financial mobility was defined using measures of financial capital in childhood and adulthood as "consistently high", "low childhood, high adulthood", "high childhood, low adulthood", and "consistently low". We clustered individuals into 32 strata representing intersectional identities of gender and race/ethnicity across life course financial mobility trajectories. Verbal episodic memory was assessed over three waves using the Spanish and English Neuropsychological Assessment Scales (SENAS). We used mixed-effects linear regression models with individuals nested within intersectional identity strata, adjusted for early-life confounders. Models with and without fixed effects of gender, race/ethnicity, and financial mobility were estimated to evaluate if the random effects of the 32 intersectional identity strata contributed variance to the memory intercepts and slopes beyond these additive fixed effects.

Result: Participant mean baseline age was 73 years; 38% were men, 62% were women; 17% were Asian, 48% were Black, 15% were Latinx, and 21% were White. Consistently high financial capital was positively associated with baseline later-life memory (0.124 SD units; 95% CI: 0.010, 0.238), as was financial mobility from low childhood to high adulthood (0.099 SD units; 95% CI: -0.032, 0.230), albeit non-significantly. Neither was associated with memory decline. In a model without fixed effects of gender, race/ethnicity, and financial mobility, intersectional identities defined by these three factors contributed to 12% of variance in later-life memory. After adding fixed effects to the model, the impact of intersectional identities on memory variance was reduced to 0.2% (Figure 1).

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Conclusion: Consistently high financial capital and upward financial mobility from childhood to adulthood have positive associations with later-life memory at baseline, but not rate of change. These association are similar across intersectional identities defined by gender and race/ethnicity.

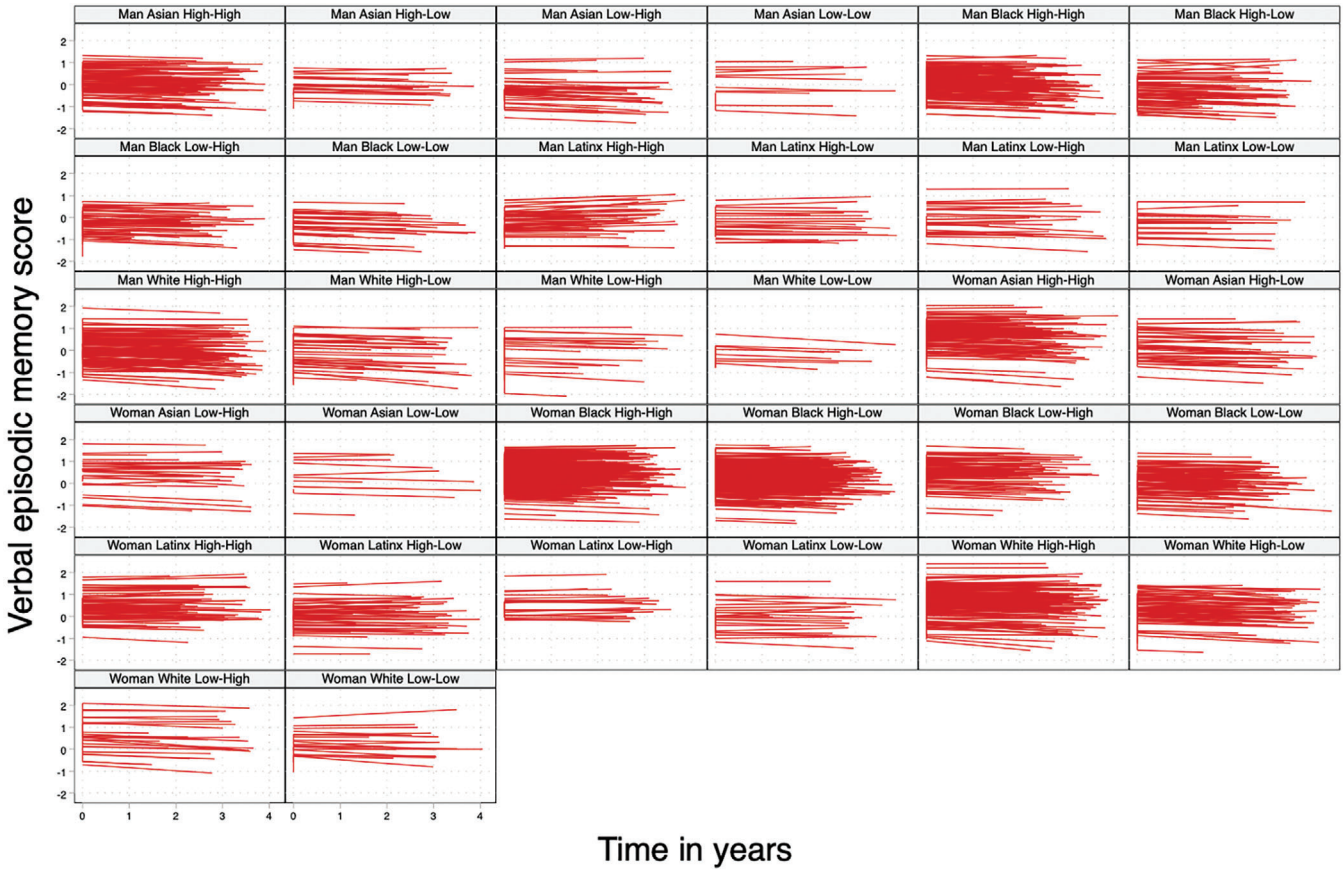


Figure 1. Predicted longitudinal trajectories of verbal episodic memory scores by intersectional identities, defined according to strata of gender, race/ethnicity, and life course financial mobility. The density of trajectories within each sub-plot corresponds to the sample size within each stratum.