

men and women of the same age better health and driving resources contribute to larger life space for elderly men.

EDUCATION, LITERACY, NUMERACY AND HEALTH INFORMATION SEEKING IN LATER LIFE

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Health information plays a critical role for health promotion and maintenance in later life. While health information seeking is primarily driven by need (e.g., health), significantly less is known about the roles of education and health-literacy. Thus, we examine complex pathways that link health information seeking behaviors with education and health literacy (decomposed into general literacy and numeracy), and how these pathways differ by health status among a nationally representative sample of Americans age 50 and older ($n = 2,750$). Data come from the 2012/2014 Program for International Assessment of Adult Competencies. Multi-group structural equation models were used to examine the use of eight health information sources (newspapers, magazines, internet, radio, TV, books, friends/family, and health professionals) by health status (good vs. poor). Findings showed that literacy and numeracy are significant mediators of the relationship between education and health professional as an information source. Additionally, the mediation effects on health professionals by literacy status [indirect-effect (good vs. poor health) = 0.48 vs. 2.13, $p < 0.05$] and numeracy [indirect-effect (good vs. poor health) = -0.47 vs. -1.81, $p < 0.05$] were significantly moderated by health. At the same time, no moderated mediation effect was observed in the use of any other information sources. This study provides some of the first nationally representative evidence regarding how education functions through health literacy components to shape health information seeking behaviors by health status. Explanations and implications for differing effects of education, literacy, and numeracy on health information seeking in later life were evaluated.

RACE, BIOLOGICAL AGE, AND COGNITION: THE SYSTEMATIC ASSESSMENT OF GERIATRIC ELEMENTS IN ATRIAL FIBRILLATION STUDY

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Atrial Fibrillation (AF) is associated with dementia and cognitive decline. AF is less prevalent among Blacks than Whites, although AF-related complications are more common in Blacks. In the general population, all-cause cognitive decline and dementia are more prevalent among Blacks than Whites. Thus, studying diverse populations with AF may advance our understanding of racial disparities in cognitive functioning. We created a measure of multisystem

dysregulation (weathering), which includes but is more encompassing than aging, and examined its association with racial differences in cognition using data from the SAGE-AF study, a prospective cohort of >65-year olds with AF, at high stroke risk, and eligible for anticoagulation. Biological (as opposed to chronological) age among 974 participants was calculated using the Klemera and Doubal method using biomarkers representing physiological functioning, metabolism, and blood pressure. We defined weathering as the difference between biological and chronological age (weathering >0 indicates that biological age is higher than chronological age). We measured the association between weathering and the Montreal Cognitive Assessment (MoCA) score. Mean weathering (SD) was -0.7 (11.5) and 4.3 (12.6) for whites and non-whites, respectively. There was an interaction between race/ethnicity and weathering on cognition ($P=0.004$). In stratified analyses, higher weathering was associated with a lower MoCA score among both Whites and non-Whites but more so among non-whites ($B = -0.09$, 95% CI: -0.17, -0.02) for Whites ($B = -0.03$, 95% CI: -0.06, -0.01) for non-whites. Aging-related multisystem dysregulation is more strongly associated with worse cognition in non-whites than in whites.

THE EDUCATION-HEALTH GRADIENT AND PATHWAYS TO MORTALITY

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Large and widening educational gaps in life expectancy exist in the United States, but the mechanisms behind the education-health gradient are not well understood. We aim to study the different pathways of mortality by education group and decompose the life expectancy gap at age 50 into three components: differences in initial health at age 50, differences in transition rates to poor health states, and differences in mortality rates, given the health state. We use 11 waves of the Health and Retirement Survey and model the evolution of mortality, and health states (measured by self-rated health, limitation on any activity of daily living, and ever diagnosed with a range of health conditions). We estimate Markov models of transitions between health states and mortality over two year periods and use these transition matrices to simulate how a cohort's health changes as they age. We find a 6-year gap in life expectancy between the highest and lowest education groups. Initial health states account for one-third of the gap in life expectancy, primarily from differences in objective health measures. The gap has widened over time, explained by comparatively better health status changes for the higher educated group, compared to the other education groups. The lower education groups have high rates of transition to poor health states, but not differential mortality rates conditional on their health state. These results suggest that educational gaps in life expectancy are due to the onset of ill health at earlier ages, and not different mortality outcomes after disease diagnoses.

ASSOCIATIONS OF GENETICS AND LIFE COURSE CIRCUMSTANCES WITH A NOVEL AGING MEASURE THAT CAPTURES MORTALITY RISK

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