

**Does a Purposeful Life Mean a Healthy Life? Evaluating Longitudinal Associations between
Sense of Purpose, Cognition, and Health**

By

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Abstract

Sense of purpose in life, or the view that one's life has direction and is guided by overarching life aims, has been found to predict better health outcomes across the adult lifespan, including better cognitive functioning and dementia risk, physical health, and improved longevity. This research is based on multi-study replications of large longitudinal datasets, as well as intensive measurement design to examine short-term (e.g., within-day, day-to-day) and long-term (years) associations between sense of purpose and markers of cognition and health. The first project used multistate survival modeling to evaluate the role of sense of purpose on transitions across cognitive states and death and was based on two large longitudinal datasets – the Rush Memory and Aging Project (MAP) and the Health and Retirement Study (HRS). More purposeful older adults were found to have lower prospective risk of developing mild cognitive impairment (and equivalent classification in HRS), later onset of impairment, and increased likelihood of improvement in cognitive functioning following MCI classification. These results were replicated across two independent longitudinal studies with disparate samples and measurement procedures. The second project examined longitudinal associations between sense of purpose in life and allostatic load in two nationally representative samples of American (Health and Retirement Study; HRS) and English (English Longitudinal Study of Ageing; ELSA) adults over age 50. Blood-based biomarkers of cardiovascular, metabolic, immune, and renal function, as well as anthropometric and physical markers such as lung function were used to compute overall scores representing allostatic burden. Sense of purpose in life was associated with lower overall level of allostatic load across measurement occasions in the two samples but did not predict rate of change or within-person fluctuations in allostatic burden across time. The third study investigated daily variations in sense of

purpose and associations with daily cognitive performance using an ecological momentary assessment design. Multilevel models examined within- and between-person associations between end of day sense of purpose ratings and performance on five indices of cognitive functioning. Results showed no associations between daily ratings of purposefulness and performance on five cognitive tasks across a two-week period. Taken together, these findings advance existing theory and highlight important directions for the field moving forward.