

Self-generated thought as link between brain aging and emotional well-being

Abstract:

Emotional well-being (EWB) is higher on average in older adults, but with significant heterogeneity that interacts with atypical brain aging, as occurs in dementia. There is a need to uncover mechanistic links between brain aging and dissociable experienced vs evaluative components of EWB. We recently developed a framework emphasizing the role of self-generated thought (SGT), the process by which individuals shift focus from the external world to engage with internally generated mental content, in relating brain aging and everyday function. We here propose to use this framework to examine whether SGT frequency (how often someone engages in SGT episodes) and emotional valence (whether the contents of EGT episodes are positive or negative) can act as pathways linking brain aging and experienced vs. evaluative EWB. In this pilot project, we will use two complementary datasets with measures of SGT in older adults: one existing large-scale community sample with high-quality resting state fMRI data and one to-be-collected ecological momentary assessment, to examine 1) the neural basis for age-related differences in SGT frequency and emotional valence and 2) the outcomes of SGT frequency and emotional valence on experienced vs. evaluative EWB in older adults. These findings will provide the basis for a subsequent K01 aimed at collecting a single dataset to understand both the neural basis and functional outcomes of real-world SGT in older adults at-risk for dementia.

Keywords: Emotional well-being; self-generated thought; brain aging