averaged into four composite scores: Structured-Verbal Memory (SVM), Unstructured-Verbal Memory (UVM), Attention/Processing Speed (APS), and Language (LNG). Linear mixed effects models (LMM), survival analysis, and cox regression corrected for multiple comparisons ($p \leq 0.013$) were used for the analysis. Significance threshold for follow-up analyses was set to $p \leq 0.05$. **Results:** MCI-no-CA participants performed significantly worse relative to MCI-CA on UVM (p=0.010$)$ tasks. Decline was present in learning (p=0.009$)$, delayed memory (p=0.022$)$, and recognition (p=0.008$)$. Relative to MCI-CA participants, MCI-no-CA participants converted to AD at a significantly younger age (p=0.005$)$ and were 1.6 times more likely to convert to AD. NC participants did not differ significantly in any cognitive domains or in conversion to MCI/AD regardless of cancer history. NC-NMSC and MCI-NMSC participants did not differ significantly from respective cancer-free comparison groups. **Conclusions:** Persistent symptoms of CRCI have been document as long as 20-years after cancer diagnosis and treatment. Our results suggest that a percentage of MCI-CA participants enrolled in memory research may be experiencing long-term CRCI as a source of cognitive impairment rather than preclinical AD. Future research in MCI/AD should consider invasive cancer-history as a possible marker for MCI that is slower progressing and less likely to convert to AD.

P4-617　　　WORKING MEMORY MAINTENANCE
ACCURACY IN ELDERLY ADULTS WITH
EXTRAORDINARY EPISODIC MEMORY

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Background: SuperAgers are adults over age 80 who perform at least as well as average middle-age adults on episodic memory tests and provide an opportunity to investigate factors contributing to superior episodic memory in advanced age. Previous work suggests that a region of the left anterior cingulate cortex (ACC ROI) may distinguish SuperAgers from cognitively average-for-age peers. This study investigates working memory maintenance functions (i.e., how information is stored and retained in working memory) as potential mediators of SuperAgers' superior episodic memory as working memory is associated with the ACC, hypothesized to play a role in episodic memory, and vulnerable to age-related decline. **Methods:** SuperAgers, cognitively average-for-age elderly controls, and cognitively average-for-age middle-age controls completed magnetic resonance imaging and an adapted Sternberg paradigm, which measured working memory maintenance accuracy over conditions of parametrically increasing cognitive load (i.e., amount of information to be maintained in working memory) and delay duration. ANOVAs were used to assess group differences in d', a signal detection parameter that reflects the ability to differentiate signal from noise while maintaining information in working memory, and measures of ACC ROI integrity. Partial correlations controlling for estimated premorbid intelligence were used to assess relationships between d' and ACC ROI integrity. **Results:**

There was a significant effect of group on d' over increasing cognitive load (d' slope; F(2,44)=4.29, p=0.02$)$. Post-hoc analyses revealed that SuperAgers demonstrated significantly less decrement in d' in response to increasing load compared to middle-age controls. Across participants, change in d' over increasing load (d' slope) was positively correlated with left ACC ROI thickness such that greater thickness was associated with smaller rate of decline in d' as load increased (r=.35, p=0.04$)$. **Conclusions:** This study suggests that in both cognitively average-for-age adults and SuperAgers, there is a significant relationship between signal detection while maintaining information in working memory in response to increasing load and left ACC ROI volume. However, SuperAgers demonstrate better maintenance of signal detection in response to increasing load compared to middle-age adults who share similar levels of episodic memory ability. Such maintenance may provide a mechanism for better-than-average episodic memory in advanced age.

P4-618　　　"DEMENTITUDE" FROM THE VOICE OF
DEMENTIA: PROMOTING PROPER
CARING ATTITUDE TO THE PERSON
WITH DEMENTIA IN CHINESE SOCIETY

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Project description: Aging population is one of the worldwide issues to be addressed and there is a rapid growth of senior citizens in Hong Kong. The prevalence of dementia is increased from 6.1% to 9.3% of the elderly aged 70 years old or above. The occurrence of dementia doubles for every five years' increase in age after the age of 60 (Chiu et al., 1998), from 1.2% among those aged 60 to 64 to 32.1% among those aged 85 and above. It was extremely vital to explore the proper caring attitude and training model through understanding the self-perception of people with dementia. Indeed, the self-perception of people with dementia would be affected by the surrounding environment and the interpretations or interactions

Research Framework