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UNDERSTANDING SUBJECTIVE MEMORY COMPLAINTS IN AGEING

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Abstract

Everyday memory difficulties are a common experience with age, and cause considerable distress for many people when they are interpreted as potential indicators of age-related disease. However, research literature examining the relationship between these difficulties (known as *subjective memory complaints*; SMCs) and actual memory performance on neuropsychological tests has shown mixed results, suggesting that SMCs are not a pure reflection of memory ability, but instead that their aetiology is complicated and not fully understood. Both psychological and methodological factors are also implicated, although no research has yet comprehensively examined how a combination of these factors might predict SMCs.

The current research aimed to test a new aetiological model of SMCs that incorporated a range of potential confounds. It was hypothesised that SMCs would be predicted by measures of processing speed and executive functioning, and that this relationship would be moderated by measures of anxiety and depression.

First, a meta-analysis and systematic review of existing research on the relationship between subjective and objective memory was conducted as a platform to inform subsequent analyses. Then, Study A addressed current variation in assessment methods by describing differences in SMCs when assessed with both an open-ended measure and a prescriptive questionnaire. Study B examined how these differences in subjective reports related to objective memory performance. Finally, Study C tested the proposed aetiological model of SMCs.

Study A showed that different measures of SMCs garnered non-overlapping reports. SMCs gathered via the open-ended measure were fewer in number, but rated as more distressing, than those endorsed on the questionnaire. Spontaneous reports appeared to be more ecologically valid reflections of SMCs, although questionnaire assessments

were by their nature more robust to a “catch 22” situation whereby some endorsed SMCs were not reported spontaneously (perhaps due to memory failures in themselves). Study B found that neither method of assessing SMCs produced reports that were significantly convergent with objective measures of memory functioning. Study C found partial support for the hypothesised aetiological model. SMCs (as assessed by the questionnaire) were inversely related to processing speed, but only when depressive symptoms were relatively high. Collectively, results offer important insights into the interaction of cognitive and psychological factors in explaining SMCs, and highlight the previously undelineated context in which processing speed contributes to SMCs.

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List of Abbreviations

BDI-II	Beck Depression Inventory (2 nd edition)
CAMDEX	Cambridge Mental Disorders of the Elderly Examination
CES-D	Center for Epidemiological Studies Depression scale
CI	Cognitive Impairment
CRT	Coin Rotation Task
GDS	Geriatric Depression Scale
ICC	Intraclass Correlation Coefficient
IQ	Intelligence Quotient
M	Mean
MAC-Q	Memory Complaint Questionnaire
MCI	Mild Cognitive Impairment
MMQ-A	Meta-Memory Questionnaire (Ability subscale)
MMSE	Mini Mental State Examination
N	Number of participants
NART	National Adult Reading Test
NR	Not Reported
NS	No Screen used
RAVLT	Rey Auditory Verbal Learning Test
RCFT	Rey Complex Figure Test
SCC	Subjective Cognitive Complaint
SD	Standard Deviation
SMC	Subjective Memory Complaint
SMCQ	Subjective Memory Complaints Questionnaire
SPSS	Statistical Package for the Social Sciences
STAI	State-Trait Anxiety Inventory
TMT	Trail Making Test
WAIS-IV	Wechsler Adult Intelligence Scale (4 th edition)

