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UNDERSTANDING SUBJECTIVE MEMORY COMPLAINTS IN AGEING

A thesis presented in partial fulfilment of the requirements for the degree of

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in
Psychology

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Bridget R. Burmester

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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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Table of Contents

Abstract iii
Acknowledgements v
Table of Contents vii
List of Tables xi
List of Figures xii
List of Abbreviations xiii
Preface 1
Thesis Overview 5

CHAPTER 1
SUBJECTIVE COGNITIVE COMPLAINTS AND OBJECTIVE COGNITIVE FUNCTION IN AGEING: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RECENT CROSS-SECTIONAL FINDINGS 7

Abstract 8
Introduction 9
Early Reviews
Jonker and colleagues (2000) 10
Reid and MacLullich (2006) 11
Recent Reviews
Crumley, Stetler, and Horhota (2014) 12
Mendonça, Alves, and Bugalho (2016) 13
Current Review 14
Method 15
Notes on Terminology 16
Statistical Analysis 18
Results 19
Meta-analysis 19
Subsidiary Analysis
Evidence for a link with objective performance 27
Evidence for the influence of depression 28
Evidence against the influence of depression 29
Other confounds 31
Absence of evidence for a link with objective performance 33
Summary 34
Discussion 35
Suggestions for Future Research 40
Clinical Implications 41
Limitations 42
Conclusions 43
References 45

CHAPTER 2
THEORIES OF COGNITIVE AGEING 58

Introduction 59
Patterns of Cognitive Ageing 59
Memory 59
Theories of Cognitive Ageing 63
Processing Speed Theory 64
Executive Function Theory 66
Combining Theories of Cognitive Ageing 69
Subjective Cognitive Complaints and Theories of Cognitive Ageing 70
Summary 72
CHAPTER 3
SUBJECTIVE COGNITIVE COMPLAINTS AND PSYCHOLOGICAL, DEMOGRAPHIC AND ASSESSMENT FACTORS

Introduction 75
Psychological Variables 75
  Depression 75
  Anxiety 77
  Personality 78
  Other Psychological Variables 80
  Summary 83
Demographic Variables 83
Assessment Variables 84
Conclusion 85

CHAPTER 4
RESEARCH FORMULATION 88

Overview 89
Summary of Background Literature 89
  Note on Terminology 90
Current Research 91
  Aims 91
  Constructs Included 92
  Research Questions and Hypotheses 93
General Method 94
  Participants 94
  Materials 96
    Survey 96
      Demographic and general information 96
      Spontaneously reported memory difficulties 96
      Memory difficulties questionnaire 97
    Neuropsychological testing 98
      Rey Auditory Verbal Learning Test: Immediate Recall 99
      Rey Complex Figure Test: Copy 100
      Stroop 100
      Rey Complex Figure Test: Immediate Recall 101
      Symbol Search 101
      Coding 101
      Rey Auditory Verbal Learning Test: Delayed Recall 102
      Beck Depression Inventory 102
      State-Trait Anxiety Inventory 102
      Rey Complex Figure Test: Delayed Recall 103
      Trail Making Test 103
      Coin Rotation Task 103
      Verbal Fluency Test 104
      National Adult Reading Test 104
    Procedure 104
      Survey 104
      Neuropsychological testing 105
  Test Scoring and Norms 107
    Survey 107
      Qualitative data 107
      Quantitative data 107
    Neuropsychological Testing 108
Preliminary Analyses 109
  Survey 109
  Neuropsychological Testing 110
    Missing data 110
List of Tables

Table 1. Characteristics of Included Studies .................................................................................. 20

Table 2. Results of Subgroup Meta-Analyses .................................................................................... 27

Table 3. Descriptive Statistics of Sample by Age Group ..................................................................... 118

Table 4. Coding Categories and Descriptive Statistics of Spontaneously Reported Memory Difficulties .............................................................................................................................. 124

Table 5. Comparisons of Distress Ratings for Matched Questionnaire Items and Spontaneously Reported Memory Difficulties .............................................................................................. 128

Table 6. Percentage of Participants in Each Demographic Category .................................................... 148

Table 7. Sources of Norms for Neuropsychological Measures ............................................................. 168

Table 8. Test Score Descriptive Statistics (z-scores for sample) ........................................................... 170

Table 9. Test Score Correlations ........................................................................................................... 172

Table H1. Content Analysis of Existing Questionnaires ..................................................................... 261

Table H2. Frequencies and Questionnaire Inclusion Decisions for Categories of Spontaneously Reported Subjective Memory Complaints ................................................................. 271

Table N1. Test Score Descriptive Statistics (z-scores for sample) ........................................................... 289

Table N2. Test Score Correlations ........................................................................................................... 290
List of Figures

Figure 1. Relationships between chapters in the thesis. ................................................................. 5
Figure 2. Selection process for study inclusion. ............................................................................. 17
Figure 3. Forest plot of individual and mean weighted effect sizes. .................................................. 25
Figure 4. Funnel plot of observed studies’ effect sizes and corrections for potential publication bias. 26
Figure 5. Patterns of age-related change in different types of memory........................................... 60
Figure 6. Number of potential participants at each stage of the research........................................ 94
Figure 7. Proposed aetiological model of subjective memory complaints....................................... 165
Figure 8. Moderation of the effect of processing speed on subjective memory complaints by depressive symptoms. ........................................................................................................ 175
Figure N1. Example of approximate pattern of normed scores for one participant. ....................... 284
List of Abbreviations

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