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2021

Journal of the International Neuropsychological Society (2021), **27**, 896–904

doi:10.1017/S1355617720001344

The Impact of Memory Change on Everyday Life Among Older Adults: Association with Cognition and Self-Reported Memory

Komal T. Shaikh[1,2,*], Erica L. Tatham[1,2], Susan Vandermorris[2], Theone Paterson[2,3], Kathryn Stokes[2], Morris Freedman[4,5,6], Brian Levine[4,7,8], Jill B. Rich[1,2] and Angela K. Troyer[2,8]

[1]Department of Psychology, York University, Toronto, Canada
[2]Neuropsychology and Cognitive Health Program, Baycrest Health Sciences, Toronto, Canada
[3]Department of Psychology, University of Victoria, Victoria, Canada
[4]Department of Medicine (Neurology), University of Toronto, Toronto, Canada
[5]Department of Medicine (Neurology), Baycrest Health Sciences, Toronto, Canada
[6]Department of Medicine (Neurology), Mt. Sinai Hospital, Toronto, Canada
[7]Rotman Research Institute, Baycrest Health Sciences, Toronto, Canada
[8]Department of Psychology, University of Toronto, Toronto, Canada

(Received June 3, 2020; Final revision December 7, 2020; Accepted December 8, 2020; First Published Online January 14, 2021)

Abstract

Objectives: Many older adults experience memory changes that can have a meaningful impact on their everyday lives, such as restrictions to lifestyle activities and negative emotions. Older adults also report a variety of positive coping responses that help them manage these changes. The purpose of this study was to determine how objective cognitive performance and self-reported memory are related to the everyday impact of memory change. **Methods:** We examined these associations in a sample of 94 older adults (age 60–89, 52% female) along a cognitive ability continuum from normal cognition to mild cognitive impairment. **Results:** Correlational analyses revealed that greater restrictions to lifestyle activities ($|rs| = .36–.66$), more negative emotion associated with memory change ($|rs| = .27–.76$), and an overall greater burden of memory change on everyday living ($|rs| = .28–.61$) were associated with poorer objective memory performance and lower self-reported memory ability and satisfaction. Performance on objective measures of executive attention was unrelated to the impact of memory change. Self-reported strategy use was positively related to positive coping with memory change ($|r| = .26$), but self-reported strategy use was associated with more negative emotions regarding memory change ($|r| = .23$). **Conclusions:** Given the prevalence of memory complaints among older adults, it is important to understand the experience of memory change and its impact on everyday functioning in order to develop services that target the specific needs of this population.

Keywords: Everyday functioning, Lifestyle changes, Emotional response, Coping, Daily life, Patient-reported outcome measures

INTRODUCTION

Many older adults experience mild memory changes as they age, such as tip-of-the-tongue errors, forgetting to take medication, and forgetting information such as recently learned names, locations of items, or why one walked into a room (Farias et al., 2006). Such changes are common in both normal aging and amnestic mild cognitive impairment (aMCI), and although they are insufficient to impair functional independence, they can nonetheless have a detrimental impact on older adults' functional abilities (Lindbergh, Dishman, & Miller, 2016). Functional abilities are commonly measured through brief questionnaires that assess difficulties completing instrumental activities of daily living, such as preparing meals, managing finances, and taking medication. Although the growing literature on functional abilities (as measured through activities of daily living) provides some insight into the everyday experience of memory change, functioning in everyday life is comprised of other more nuanced abilities that may also be impacted by memory change.

Everyday Impact of Memory Changes

Recent qualitative work has characterized the lived experience of memory change and its consequences for daily life,

*Correspondence and reprint requests to: Komal T. Shaikh, Department of Psychology, York University, 4700 Keele St., Toronto, ON, M3J 1P3 Canada. Email: kshaikh@yorku.ca

with similar themes emerging in both cognitively normal older adults and those with aMCI. De Vriendt et al. (2012) reported that, in addition to functional changes, older adults with aMCI described emotional consequences of memory change (including feelings of discontent and greater uncertainty), activity disruptions due to feeling less capable, and difficulty adapting to memory changes. Our own work has identified an impact of memory change on several life domains including changes in feelings and view of the self, changes in relationships and social interactions, changes in work and leisure activities, and a deliberate increase in compensatory behaviors among cognitively normal older adults and those with aMCI (Parikh et al., 2016). Meilak and colleagues (2016) found that older adults with aMCI reported implementing both practical (e.g., creating lists) and emotional (e.g., normalizing memory changes) strategies to cope with memory change in their daily life. Similarly, Rotenberg, Sternberg, and Maeir (2019) reported negative emotional implications of memory change, including feelings of embarrassment, frustration, anger, and worry, as well as coping responses that focused on both active problem-solving behaviors (e.g., using external memory aids) and the practice of self-acceptance through reframing perceptions of memory problems among older adults seeking medical help for perceived memory problems. Collectively, these studies demonstrate an impact of memory change on lifestyle activities (i.e., social relationships, work, and leisure activities), negative emotions that emerge as a result of memory change (e.g., embarrassment and loss of confidence), and coping behaviors designed to address memory change (i.e., practicing self-acceptance and strategy-use to compensate for memory problems). In this study, we define changes to these nuanced domains of daily life, namely restrictions to lifestyle activities, negative, emotions and positive coping, as the everyday impact of memory changes.

Cognition and Everyday Impact

Few studies have examined the association between objective cognitive performance and the perceived everyday impact of memory change. However, previous research examining the cognitive correlates of functional abilities, as measured through both questionnaires and performance-based measures of activities of daily living, provides some insight into the role of cognitive performance on daily life. In particular, several studies have identified executive abilities and delayed memory as important predictors of functional status among community-dwelling older adults (e.g., Cahn-Weiner, Boyle & Malloy, 2002; Hart & Bean, 2011; Schmitter-Edgecombe & Parsey, 2014). As such, it is possible that these cognitive domains are similarly related to more nuanced aspects of functioning in everyday life.

Self-Reported Memory and Everyday Impact

While few studies have explored the relationship between self-reported memory complaints (SMCs) and impact on everyday life, prior research does demonstrate an association between SMCs and functional abilities (Montejo et al., 2012; Ogata et al., 2015), suggesting that individuals with poorer self-appraisal of memory may face a greater burden of memory changes on daily life. In addition, both SMCs and functional changes to daily life predict later development of dementia (Dardenne et al., 2017; Lau et al., 2015; Rabin et al., 2017), suggesting a possible relationship between self-reported complaints and daily functioning. In this study, we consider multiple aspects of self-reported memory, including self-appraisal of memory ability, satisfaction with one's memory, and self-reported strategy use, to allow for a comprehensive analysis of the subjective experience of memory changes.

Study Aims

Although there is accumulating evidence that there is, indeed, a meaningful impact of memory change on older adults' day-to-day lives, little is known about the correlates of this impact. In the current study, we explore how objective cognitive performance and self-reported memory are related to the everyday impact of memory change. Given that a wealth of research identifies an association between patient-reported outcomes of memory and mood (i.e., depression and anxiety; see Hill et al., 2016, for review), we controlled for affective symptoms in this study. We chose to examine cognition on a continuous scale because healthy aging and MCI can be conceptualized as overlapping categories (Palmer et al., 2003; Petersen et al., 2014). We did not include individuals with non-amnestic MCI (na-MCI) given the focus of this study on the everyday impact of *memory* change. We hypothesized that poorer performance on neuropsychological measures of memory and executive functioning would be associated with a greater negative impact of memory on everyday living. We further hypothesized that poorer self-appraisal of memory ability and less contentment with memory ability would be associated with a greater negative impact of memory on everyday life.

METHOD

Participants

A sample of 94 older adults was recruited from an ambulatory memory clinic ($n = 30$) and a research participant database ($n = 64$) at a geriatric hospital. Participants were recruited to participate in a larger validation study of a novel online test. Inclusion criteria included age 60 and older and the ability to understand and follow instructions in English. Exclusion criteria included the presence of dementia, history of brain tumor, clinical stroke, seizures, traumatic brain injury, current cancer in treatment, untreated sleep apnea, other neurological disorders, current attention-deficit hyperactivity disorder treatment, major depression, alcohol or drug abuse within the past 6 months, and inability to use computers. An additional exclusion criterion included na-MCI, which was

Table 1. Participant characteristics

Variable	Full Sample ($n = 94$)	Normal Cognition ($n = 40$)	aMCI[a] ($n = 53$)
Age			
Mean ± *SD*	75.1 (6.4)	74.1 (7.0)	75.7 (6.0)
Range	60–89	60–89	64–89
Gender (M:F)	45:49	19:21	26:27
Education			
Mean ± *SD*	15.6 (2.7)	15.8 (2.6)	15.5 (2.9)
Range	10–24	10–22	10–24
IQ			
Mean ± *SD*	124.5 (11.3)	124.8 (11.4)	124.2 (11.5)
Min–Max	84–145	100–145	84–143
Composite scores			
Memory (Mean ± *SD*)	10.7 (2.7)	12.6 (1.7)	9.2 (2.4)
Executive attention (Mean ± *SD*)	11.7 (2.2)	12.2 (1.8)	11.4 (2.5)
Speed (Mean ± *SD*)	11.4 (1.8)	11.8 (1.2)	11.2 (2.0)
Visuospatial (Mean ± *SD*)	11.1 (1.7)	11.3 (1.6)	10.9 (1.8)
Language (Mean ± *SD*)	12.1 (2.1)	12.8 (2.0)	11.5 (2.1)

[a] Amnestic mild cognitive impairment.

established after neuropsychological testing. Participants recruited from the research participant database were provided with compensation of $100 for neuropsychological testing. Participants recruited from the ambulatory memory clinic were approached to participate in the study once they had completed the clinical visit and were asked to complete study questionnaires described subsequently; they were not compensated for completing the questionnaires. As shown in Table 1, participants were well educated with a roughly equal distribution of males and females.

Measures

Everyday impact

The impact of memory change on everyday living was assessed using the Memory Impact Questionnaire (MIQ; Shaikh et al., 2018). This measure consists of 51 items across 3 subscales: the Lifestyle Restrictions subscale ($n = 19$ items), the Positive Coping subscale ($n = 19$ items), and the Negative Emotions subscale ($n = 13$ items). The Lifestyle Restrictions subscale reflects changes in social relationships and work/leisure activities. For example, one item from this subscale states, "Because of my memory changes, I am less likely to get involved in my favourite hobbies." The Positive Coping subscale reflects deliberate increases in compensatory mechanisms and self-acceptance. For example, one item from this subscale states, "When I make memory mistakes, I tell myself, I can use a new strategy to get it next time." The Negative Emotions subscale reflects changes in self-perception and perceived judgment from others. For example, one item from this subscale states, "My memory changes make me feel less capable." A total score was calculated by reverse-coding Positive Coping items and summing all items, such that the final score reflects the overall effect of memory changes on daily life, with higher scores reflecting a greater negative burden of memory changes. This is a psychometrically sound measure with good test–retest reliability (rs = .65–.91) and internal consistency (αs = .87–.93; Shaikh et al., 2018). Response options for this scale ranged from 0 – *Disagree* to 4 – *Agree*, and potential total scores ranged from 0 to 204.

Cognitive performance

A fixed battery of neuropsychological tests included Story B of the Logical Memory I and II subtests of the Wechsler Memory Scale-Revised (Wechsler, 1987); the Digit Symbol and Digit Span subtests of the Wechsler Adult Intelligence Scale-III (Wechsler, 1997); the Word List 1 and 2, Complex Figure 1 and 2, Clocks, Verbal Fluency, and Spatial Location Memory subtests of the Kaplan Baycrest Neurocognitive Assessment (KBNA; Leach, Kaplan, Rewilak, Richards, & Proulx, 2000); Trail Making Test, Forms A and B (Reitan, 1992); Boston Naming Test (split-half; Kaplan, Goodglass, & Weintraub, 1983); the Vocabulary (split-half protocol) and Matrix Reasoning subtests of the Wechsler Abbreviated Scale of Intelligence (Wechsler, 1999); and the Color-Word Interference subtest of the Delis–Kaplan Executive Function System test (Delis, Kaplan, & Kramer, 2001). Participants also underwent a semi-structured clinical interview, and collateral information was collected regarding their abilities to perform individual activities of daily living wherever possible.

Self-reported memory

Several aspects of self-reported memory were measured using the Multifactorial Memory Questionnaire (MMQ; Troyer & Rich, 2002). A recent meta-analysis of the measurement

properties of these scales revealed strong convergent validity (*r*s = .52–.72), test–retest reliability (*r*s = .88–.92), and internal consistency (αs = .86–.92; Troyer, Leach, Vandermorris & Rich, 2019). Self-appraisal of memory function was assessed using the Ability scale of the MMQ. This 20-item scale asks respondents to indicate how often they have made common memory mistakes in the last 2 weeks. For example, one item asks respondents how frequently they "forget to pay a bill on time." Response options range from 0 – *All the Time* to 4 – *Never*, and potential scores range from 0 to 80.

Contentment with memory ability was assessed using the 18-item Satisfaction scale of the MMQ. For example, one item states, "I am generally pleased with my memory ability." This 18-item scale includes both positive and negative items, with response options ranging from 4 – *Strongly Agree* to 0 – *Strongly Disagree* for positive items. Negative items are reverse scored, and potential scores range from 0 to 72.

Self-reported strategy use was assessed using the Strategy scale of the MMQ (Troyer & Rich, 2002). In this 19-item scale, respondents are asked to indicate how frequently they use a given strategy. For example, one item asks respondents how frequently they "use a timer or alarm to remind you when to do something." Response options range from 4 – *All the Time* to 0 – *Never*, and potential scores range from 0 to 76.

Affective symptoms

The Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer & Williams, 2001) was used as a measure of depression severity. This 9-item questionnaire is based on the Diagnostic and Statistical Manual of Mental Disorders (4th ed.; DSM-IV; American Psychological Association, 2000) diagnostic criteria for major depressive disorder. The measure has good internal consistency ($\alpha = .89$) and test–retest reliability ($r = .84$). A recent meta-analysis of the psychometric properties of this measure found adequate sensitivity (.50–1.0) and specificity (.67–.95) among older adults (>60 years of age; Levis, Benedetti, Thombs, & DEPRESSD Collaboration, 2019). The Generalized Anxiety Disorder Questionnaire Scale-7 (GAD-7; Spitzer, Kroenke, Williams & Lowe, 2006) was used to measure anxiety. This 7-item questionnaire is based on the DSM-IV diagnostic criteria for generalized anxiety disorder. Previous research suggests strong internal consistency ($\alpha = .92$) and test–retest reliability ($r = .83$) among an adult population (Spitzer et al., 2006).

Procedure

A total of 301 participants were contacted for the study, of which 124 expressed interest and met initial criteria. Of these 124 participants, 30 were excluded for failing to meet study criteria (e.g., mood or medical criteria and the presence of na-MCI), for a final sample of 94 participants. All participants underwent a semi-structured clinical interview, full neuropsychological assessment, questionnaires, and other testing (described below) which together lasted approximately 4 h. The administration order was as follows: neuropsychological measures of cognitive performance, measures of affective symptoms (i.e., PHQ-9 and GAD-7), self-reported memory as measured by the MMQ, and impact of memory changes as measured by the MIQ. In addition to these tests, participants completed a brief screening measure (Montreal Cognitive Assessment; Nasreddine et al., 2005), an abbreviated assessment tool (the Toronto Cognitive Assessment; Freedman et al., 2018a, 2018b), and an online test battery (Cogniciti's Brain Health Assessment; Troyer et al., 2014) as part of the larger validation study either before or after the neuropsychological assessment. These additional measures not described in this study took approximately 45 min to complete.

Consensus decisions regarding the presence of MCI were made by three neuropsychologists based on clinical information (e.g., estimated premorbid level) and performance on the complete neuropsychological assessments, as suggested by previously established criteria (Jak et al., 2009).

Of the 94 participants, 40 were considered cognitively normal and 53 were classified as aMCI; one individual could not be confidently classified to either group and therefore was excluded from the group-based descriptive summary, though she was included in the correlational analysis. Of the 53 participants with aMCI, most had a single-domain aMCI ($n = 39$). All participants were functionally independent (based on clinical interview and collateral information) and therefore did not meet the criteria for dementia. All participants reported at least one memory complaint during the clinical interview.

All study procedures were approved by the Research Ethics Boards at Baycrest Health Sciences (#09-02) and York University (#e2019-326).

Statistical Analyses

Composite scores were calculated by averaging tests belonging to the same cognitive domain. Tests were determined to belong to a given cognitive domain based on consensus by three neuropsychologists. We chose this theoretical approach for determining cognitive domains for several reasons, including consistency with prior research examining the relationship between cognitive performance and functioning, and consistency with the cognitive domains used when determining MCI status in this study. The memory composite score was calculated by averaging the scaled scores of tests that measured delayed memory including the Word List delayed recall score, the Complex Figure delayed recall score, and the Logical Memory Retention score. The executive attention composite score was calculated by averaging the scaled scores of the Color-Word Interference Inhibition score and Trail Making Test, Part B. In addition to these composite scores that were analyzed in line with study aims, we also created composite scores for other cognitive domains for descriptive purposes. The speed composite score was calculated by averaging the scaled scores of the Trail Making Test, Part A, Digit Symbol, and Color Naming and Word Reading

scores of the Color-Word Interference test. The visuospatial composite score was the Visuospatial scaled score of the KBNA, which combines performance on the Clocks and Complex Figure subtests. The language composite score was calculated by averaging the scaled scores of semantic fluency, phonemic fluency, and the Boston Naming Test. Descriptive statistics of the neuropsychological profile of participants are displayed in Table 1.

We used partial correlation coefficients (i.e., adjusted Pearson product-moment correlations) that controlled for affective symptoms in all of our primary correlational analyses. In addition, bivariate correlations were calculated in order to determine differences in the relationship between correlates when affective symptoms were not controlled (see Supplementary Tables S1 and S2).

RESULTS

Cognitive Performance and Everyday Impact

Correlations between performance on memory and executive attention composite scores, and the three subscales of the MIQ are shown in Table 2. A very small (nonsignificant) negative correlation was observed between the memory composite score and the Positive Coping subscale of the MIQ. Small-to-moderate significant negative correlations were observed between the memory composite score and the Lifestyle Restrictions and Negative Emotions subscales of the MIQ, indicating that individuals with better memory reported fewer lifestyle restrictions and fewer negative emotions due to memory changes. A small, significant, negative correlation was observed between the memory composite score and the total score of the MIQ, indicating that participants with poorer memory reported a greater burden of memory changes on everyday living. Very small (nonsignificant) correlations were observed between the executive attention composite score and the MIQ subscale scores. The relationship between cognitive performance and the everyday impact of memory change was largely unchanged when affective symptoms were not controlled (see Supplementary Table S1).

Self-Reported Memory and Everyday Impact

Moderate-to-large, significant, negative correlations were observed between the MMQ Ability scale and the MIQ Lifestyle Restrictions subscale, the Negative Emotions subscale, and the MIQ total score (Table 3). This demonstrates that participants with poorer self-reported memory ability reported greater restrictions to their lifestyle activities, greater negative emotions, and a greater overall burden of memory changes.

Similarly, large significant negative correlations were observed between the MMQ Satisfaction scale and the MIQ Lifestyle Restrictions subscale, the Negative Emotions subscale, and the MIQ total score. In other words, participants who expressed less satisfaction with their memory reported greater restrictions to their lifestyle, greater negative emotions, and a higher burden of memory change. A small significant negative correlation was observed between the MMQ Satisfaction scale and the Positive Coping subscale, showing that participants who expressed greater satisfaction with their memory reported utilizing fewer coping strategies to address memory change.

A small significant positive correlation was observed between the MMQ Strategy scale and the MIQ Positive Coping subscale, indicating that individuals who reported greater strategy use reported greater positive coping with memory change. A small significant positive correlation was observed between the MMQ Strategy scale and the MIQ Negative Emotions subscale. This demonstrates that participants who reported utilizing more strategies reported more negative emotions due to memory change.

The relationship between self-reported memory and the everyday impact of memory change was largely unchanged when affective symptoms were not controlled (Supplementary Table S2).

Table 2. Partial correlations between cognitive performance and everyday impact controlling for affective symptoms

	Composite scores of cognitive performance	
	Memory	Executive attention
Lifestyle restrictions	−.36***	−.18
Positive coping	−.11	−.08
Negative emotions	−.27*	−.11
MIQ[a] total score	−.28**	−.12

[a] Memory Impact Questionnaire.*$p < .05$, **$p < .01$, ***$p < .001$.

Table 3. Partial correlations between self-reported memory and everyday impact controlling for affective symptoms

	MMQ[a] – ability	MMQ[a] – satisfaction	MMQ[a] – strategy
Lifestyle restrictions	−.46***	−.66***	.13
Positive coping	−.13	−.27**	.26*
Negative emotions	−.50***	−.76***	.23*
MIQ[b] total score	−.44***	−.61***	−.02

[a] Multifactorial Memory Questionnaire.
[b] Memory Impact Questionnaire.*$p < .05$, ** $p < .01$, ***$p < .001$.

DISCUSSION

In this study, we describe how objective cognitive performance and self-reported memory are related to the everyday impact of memory change, along a cognitive ability continuum from normal cognition to aMCI. As hypothesized, we found that a poorer memory performance, lower self-reported memory abilities, and less satisfaction with one's memory are associated with a greater burden of memory change on everyday living.

Specifically, older adults with poorer memory performance and lower self-appraisal of memory ability reported greater restrictions to lifestyle activities (e.g., involvement in social relationships, hobbies and past time, volunteer and work activities) as a result of memory change. These findings are corroborated by previous research that identifies an association between community activities, including volunteer work, paid work and hobbies, and memory deficits (as measured through a screening checklist; Okura et al., 2017). Similarly, Kuiper et al. (2017) reported a lower incidence of participation in social activities and social relationships in individuals with greater subjective memory complaints. Older adults with poorer memory performance and poorer self-reported memory ability also reported greater negative emotions as a result of memory change. It makes sense that older adults with poorer memory would make more memory mistakes and therefore may have more instances of feeling less capable or dejected by such mistakes. In addition, the Negative Emotions subscale measures perceived judgments from others, suggesting that older adults with poorer memory perceive greater judgments from their peers. This is supported by previous research that demonstrates that older adults who experience subjective memory problems perceive reduced support from their friends as compared to older adults without subjective memory problems (Jung-Hwa & Manacy, 2018). These results may be important in identifying individuals at risk for developing dementia. That is, participation in lifestyle activities (including cognitive, social, and physical activities) is associated with decreased risk of dementia in later life (Tortosa-Martinez et al., 2011), so it is crucial that barriers are identified and minimized to improve future outcomes. Similarly, identifying and mitigating negative emotions associated with memory change may have a positive impact on cognitive and emotional health as depressive symptoms in the later life increase the risk of dementia (Singh-Manoux et al., 2017).

Furthermore, our findings suggest that older adults who are less satisfied with their memory report a greater overall burden of memory change on everyday life. A recent qualitative study found that older adults identify everyday functioning as a crucial outcome of interest when considering potential treatments for memory problems (Watson et al., 2019). Given the emphasis older adults place on functioning in daily life, it makes sense that those who report a greater negative impact of memory changes on life domains express less satisfaction with their memory. In addition, older adults who expressed less satisfaction with their memory and greater frequency of strategy use reported more positive coping behaviors to address memory change. Older adults who are less content with their memory performance may be more motivated to employ coping strategies in a bid to reduce the negative impact of memory change. Similarly, an association between strategy use and positive coping is intuitive as compensatory strategy use is one practical way to cope with age-related memory change.

Contrary to study hypotheses, there were no significant relationships between performance on executive aspects of attention and everyday impact. There are several potential explanations for this. First, it may be that memory and executive functions contribute to distinct components of everyday deficits. Indeed, the Omission-Commission Model of everyday action impairment suggests that while memory deficits result in failures to complete task steps (omission errors), executive deficits result in inaccurate performance of task steps (commission errors; Giovannetti et al., 2008; Seligman et al., 2014). Therefore, it is possible that omission errors, such as failing to attend a social event, more so than commission errors, such as arriving late for an event, result in a greater burden on everyday life. It makes sense that an individual who fails to complete tasks (due to poor memory abilities) may end up self-isolating and as a result may experience restrictions to their lifestyle activities and experience greater negative emotions. Incorrect performance of task steps may not have the same self-isolating effect or the downstream consequences as it does not preclude task completion.

Another explanation is that this finding was due to the restricted variability in the executive attention domain observed in our sample, as most participants scored in the average range. This restricted variability was likely due to our decision to exclude individuals with aMCI. Indeed, prior research suggests that older adults with memory impairments report different types of functional difficulties compared to those with executive impairments (Bangen et al., 2010). It will be interesting for future research to explore whether the more nuanced aspects of everyday life explored in this study also differ between those with memory impairments as compared to executive impairments.

A final possible explanation for the lack of relationship between executive attention and everyday impact is that our questionnaire queried about the impact of *memory* change on everyday life. We explored associations between executive abilities and this everyday impact of memory change because executive difficulties may nevertheless manifest as changes in memory performance given the highly related nature of these constructs (Duff et al., 2005) and the fact that functioning in daily life is associated with executive abilities. However, it is possible that our questionnaire is too specific to the impact of memory change and as a result is not sensitive to the impact of executive changes on everyday life.

One limitation of our study is that our sample combined individuals with a single- and multiple-domain aMCI. It is possible that the everyday impact of memory changes is influenced by the other cognitive abilities that are impaired (e.g., processing speed). It would be interesting in future research to explore differences in these two diagnostic categories with respect to the impact of memory changes, as individuals with multiple-domain aMCI are thought to represent a more advanced prodromal stage of Alzheimer's disease (Backman et al., 2004) and to have greater functional impairments than single-domain aMCI (Aretouli & Brandt, 2010). An additional limitation is that self-report instruments were used to assess the constructs under examination. As such, it is possible that the observed relationship between memory impact and self-reported memory may be partially

attributable to response bias or a greater propensity to endorse symptoms. Another limitation of this work is that although all our participants reported at least one memory complaint at the time of the clinical interview, we did not apply formal criteria for subjective cognitive decline (SCD) and as such our sample did not differentiate between older adults with and without SCD. Given that our research identifies a relationship between self-reported memory and the everyday impact of memory change, the presence of SCD is likely related to this impact, and this should be examined using rigorous criteria. A final limitation of this work is that participants completed study questionnaires after a full neuropsychological assessment, which may have induced fatigue. It is possible that fatigue influenced participants' responses on study questionnaires. However, examiners monitored participants for signs of fatigue and encouraged them to take breaks, which may have counteracted such effects.

Conclusions

Although several studies have investigated functional abilities in older adults with and without aMCI, this is the first quantitative examination of nuanced aspects of the everyday impact of memory change, including restrictions to lifestyle activities, emotional reactions to memory change, and coping responses to this change. As such, our research captures broader implications of memory change beyond activities of daily living, and taken with earlier research on functional abilities, this study provides a more comprehensive understanding of everyday functioning among older adults. Our findings indicate that older adults with poorer objective memory abilities, poorer self-appraisal of memory, and less satisfaction with their memory report a greater burden of memory change on everyday life. This information may be useful in identifying individuals who would benefit from support in improving everyday functioning, perhaps through memory interventions aimed at improving quality of life, functional ability, and coping with memory change. Given that functional outcomes predict later progression to dementia (Lau et al., 2015), better identifying and supporting individuals who are adversely impacted by memory change may help in improving not only present well-being among these individuals but also future clinical outcomes.

FINANCIAL SUPPORT

This work was supported by the Saul A. Silverman Family Foundation as part of the Canada International Scientific Exchange Program; the Morris Kerzner Memorial Fund; and the Centre for Aging and Brain Health Innovation.

CONFLICT OF INTEREST

The authors have nothing to disclose.

SUPPLEMENTARY MATERIAL

To view supplementary material for this article, please visit https://doi.org/10.1017/S1355617720001344

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