

In Sickness & In Health: Daily Stressors and Implications of Mild Cognitive Impairment for Care Partners

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Introduction

➤ Mild Cognitive Impairment

- MCI characterized by early decline in memory and abilities to carry out a series of steps in sequence
- Appear to be healthy and able to function normally
- YET show signs of memory loss, confusion, apathy and have some difficulties in daily life tasks
- Compensation strategies are used by MCI patients to carry out daily living tasks and responsibilities
- Physicians cannot predict whether or when MCI might worsen

Introduction

- Why Study Daily Stressors among Care Partners of MCI persons?
 - Spouses defined as “Care Partners” are the first line of support
 - Care partners give up certain pleasures, alter their daily activities and take on the other partners roles to manage MCI (Blieszner et al., 2007; 2009)
 - Show noticeable burden and distress among care partners of persons with MCI (Blieszner et al., 2007; 2009)

Introduction

- Why Study Daily Stressors among Care Partners of MCI persons?
 - Problems appearing early in the care cycle have long-term implications for caregivers' health and well-being and the family's overall quality of life (Gaugler et al., 2000; 2005)
 - Stressors can pile up over time and contribute to negative health outcomes (Pearlin, 1999)

Research Aims

- To document daily symptoms and behaviors of persons with MCI
- To assess how and to what extent MCI-related symptoms, care needs and other stressors influence psychological well-being of care partners and marital relationships
- To examine effects of MCI-related symptoms, care needs and other stressors on spouse care partner's physiological indicators of health

Study Sample

➤ Inclusion Criteria

- 30 care partners of a spouse diagnosed with MCI at a memory clinic in VA
 - Dementia and potential reversible causes of memory loss and confusion (e.g. depression, nutritional deficiencies or health problems) were ruled out
- Persons with MCI with an MMSE score >23

Study Methods & Measures

- 7 consecutive daily diary interviews
 - Revised Memory and Behavior Problem Checklist (RMBPC, Teri et al., 1992)
 - Calibrated for daily reporting (Femia et al., in press; Fauth et al., in press)
 - Items form 6 behavioral categories: ADL-related, restlessness, mood, disruptive, memory-related, and nighttime sleep disturbance
 - RMBPC collected information for four phases of the day
 - Waking - 9:00 am; 9:00 am – 4:00 pm; 4:00 pm – bedtime; Nighttime

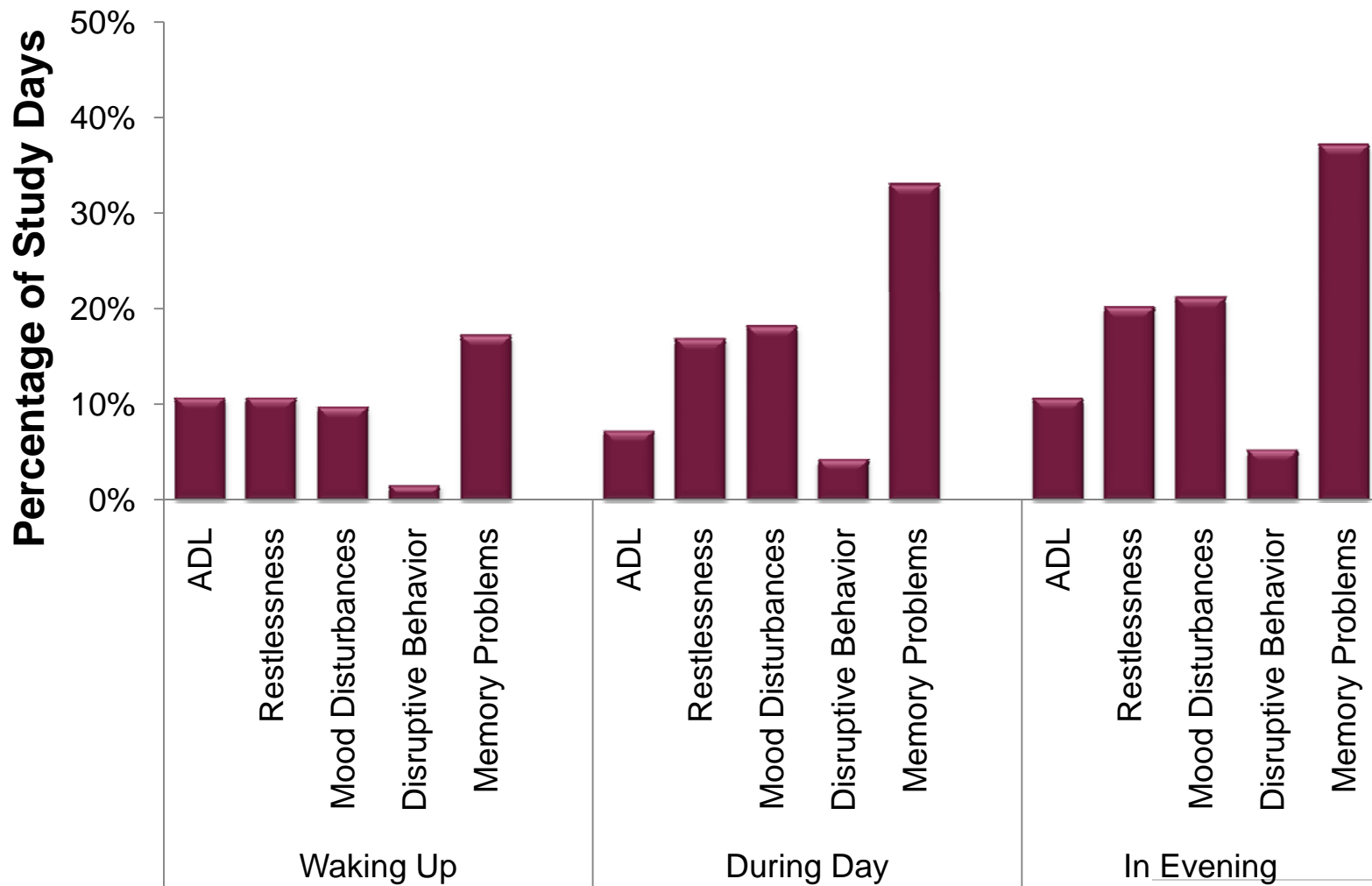
Study Methods & Measures

- Secondary Role Strain
 - How did you spend your day today? Did you.....
 - Go to work
 - Spent time exercising
 - Cutback on work
 - Spent less time with people compared to usual
 - Etc.
- In-depth assessment of Non-Caregiving Stressors
 - Arguments; Avoided Arguments; Stressors with other family members, etc.

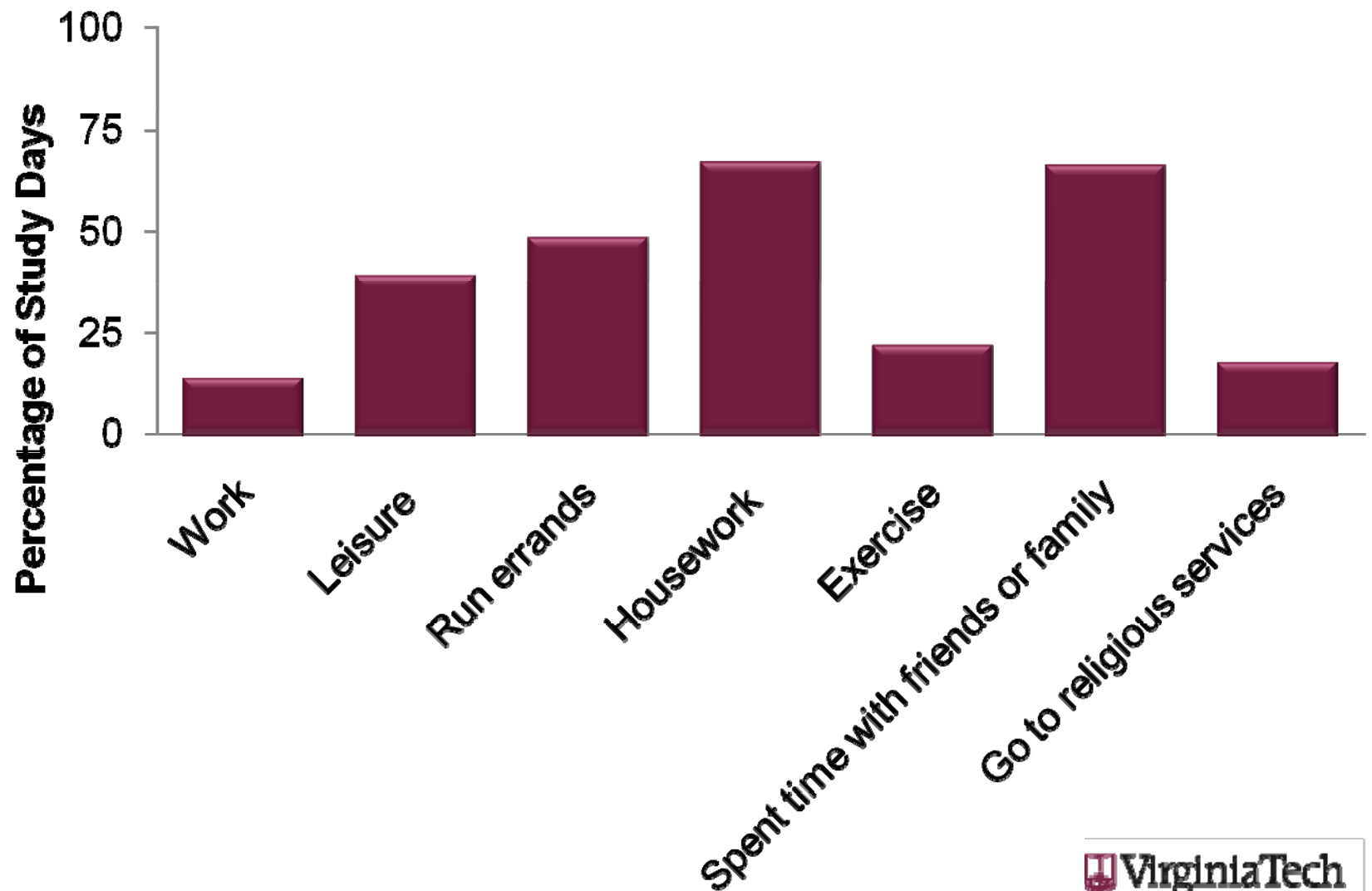
Study Measures

- Daily Psychological Distress
 - Negative & Positive Affect
- Daily Marital Interaction
 - Occurrence of Pleasant and Unpleasant Couple Interactions
- 4 days of Saliva Collection
 - 5 times each day (wake up, 30 mins after waking, lunch, evening and before bed)
 - Salivary Cortisol (HPA Axis)
 - Salivary Alpha-Amylase (SAM Axis)

Primary Stressors



Secondary Role Strain



RQ 1: Psychological Affect

	Positive Affect	Negative Affect
Primary Stressors		
ADL Related Problems in Evening	-9.61 **	5.59 **
Restlessness in Evening	-6.17 **	Ns
Disruptive Behavior in Evening	6.93 *	Ns
Secondary Stressors		
Secondary Role Strains	Ns	-0.58 **
Any cutback of work/task	-4.38 **	1.44 *
Any non-caregiving stressor	Ns	1.88 **

Analyses controlled for background characteristics

RQ 2: Marital Interactions

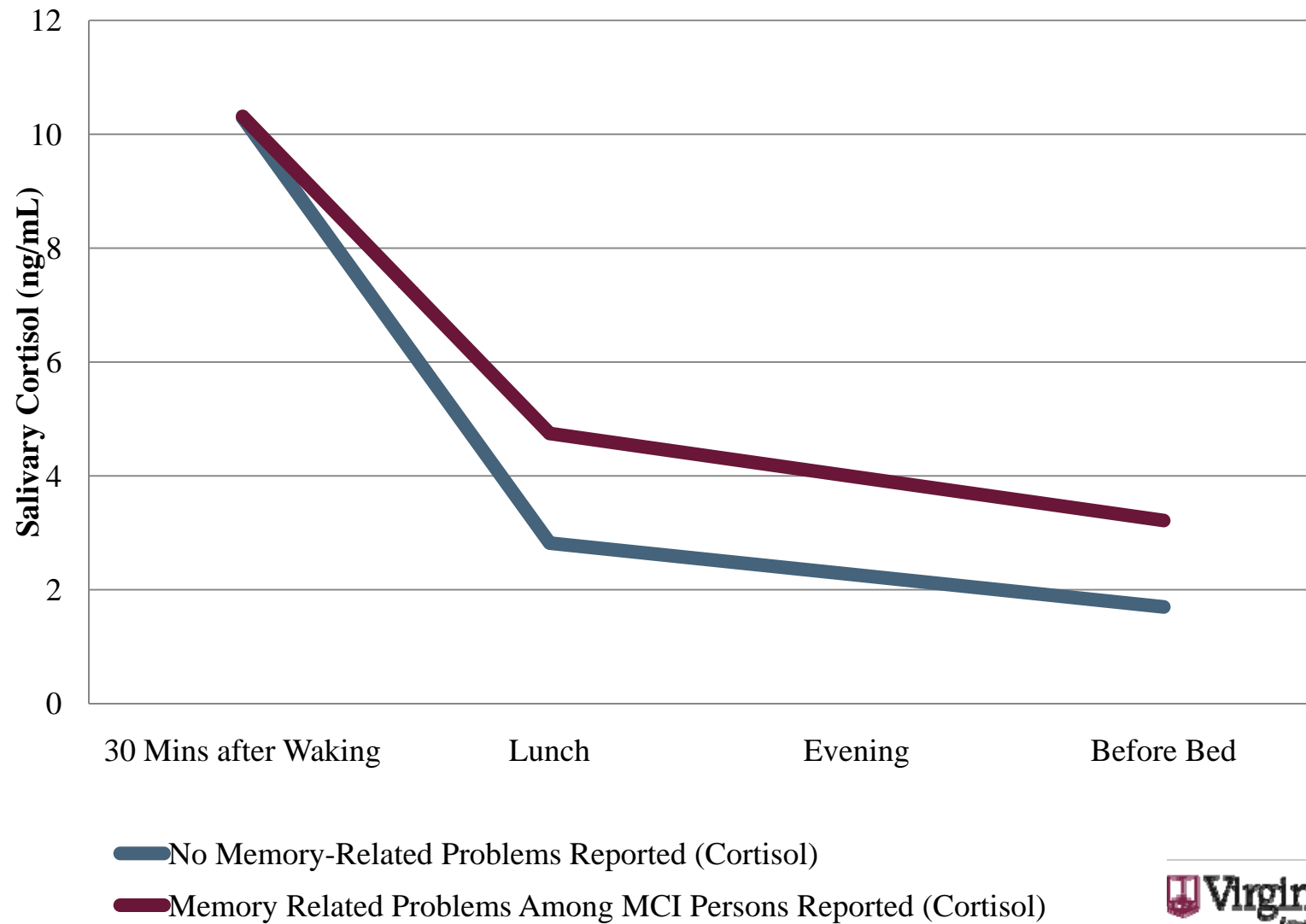
	Unpleasant Marital Interaction
Primary Stressors	
Restlessness during the day	0.81 **
Mood Disturbances during the day	0.51 **
Disruptive Behavior during the day	0.75 *
ADL Related Problems in evening	0.64 **

Analyses controlled for secondary stressors and background characteristics

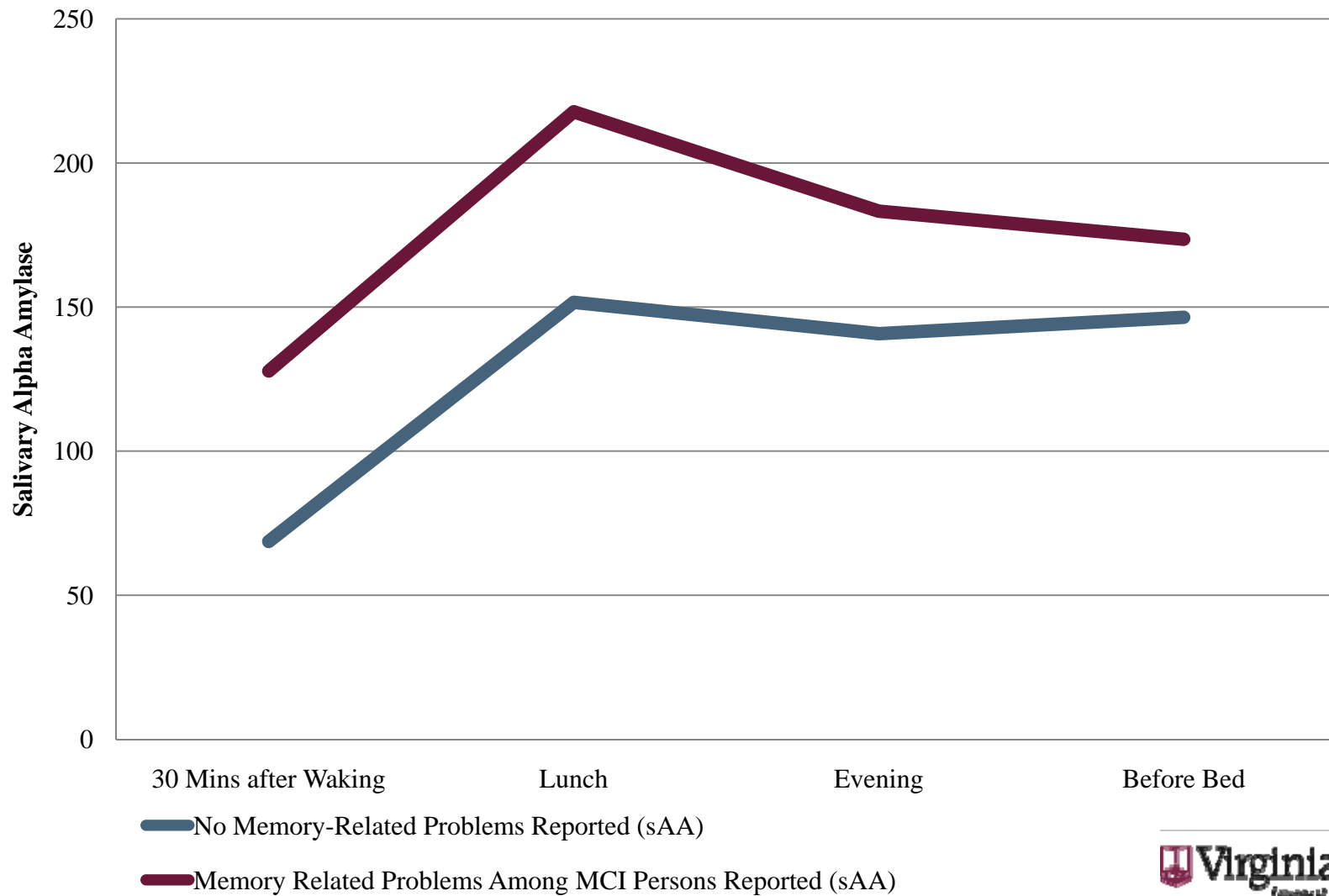
RQ 3: Biomarkers

- Daily curves for Cortisol and AA were estimated using SEM, and the calculated factor scores were used as dependent variable for analyses
- On days memory-related problems were reported, significantly higher levels of cortisol and AA were found

Salivary Cortisol Among Care Partners Reporting Memory Related Problems



Salivary Alpha-Amylase Among Care Partners Reporting Memory Related Problems



Discussion

- Support for care partners is needed even at the early stages of impaired cognitive functioning
- Elevated levels of cortisol and AA signal high levels of stress, and chronic activation of the HPA and SAM axis could be a precursor of worsening health for Care Partner
- Guidance and support related to effective techniques for mitigating the harmful effects of stress are warranted