

Caregiving Exposure and Cognition: A Propensity-Matched, 10-Year Follow-Up

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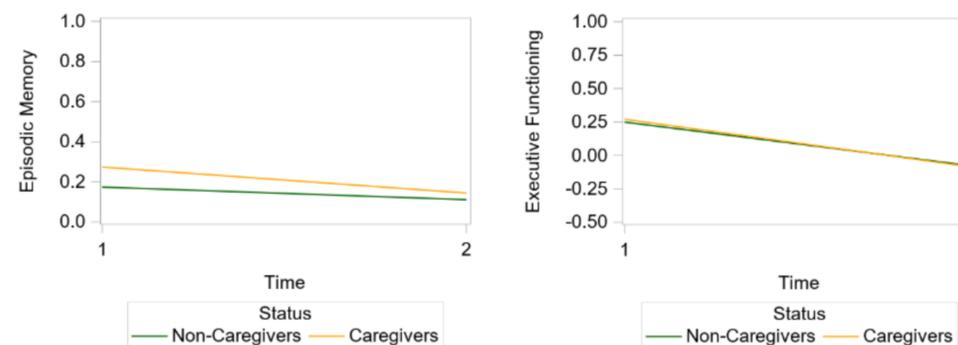
BACKGROUND

- Executive function (EF) and episodic memory (EM) are fundamental to planning and carrying out complex tasks such as those involved in caregiving
- Caregiving may benefit (stimulation) or harm (stress) cognition over many years

METHODS

- Participants:** 290 adults with caregiving exposure (CGs) and 580 propensity matched adults with no caregiving exposure (non-CGs) from the Midlife in the United States Study (MIDUS) Waves 2 and 3
- Matching variables:** age, sex, education, race, marital status, self-rated physical health
- Between groups:** mixed effects models comparing CGs and non-CGs on change in EF and EM over 10 years
- Within groups:** mixed effects models exploring relationship between degree of caregiving exposure and EF and EM over 10 years

Caregivers and matched non-caregivers experienced comparable change in executive functioning and episodic memory over 10 years.



While moderate amounts of ADL assistance may be beneficial for episodic memory, caring for more hours may be linked with greater decline in episodic memory over time.

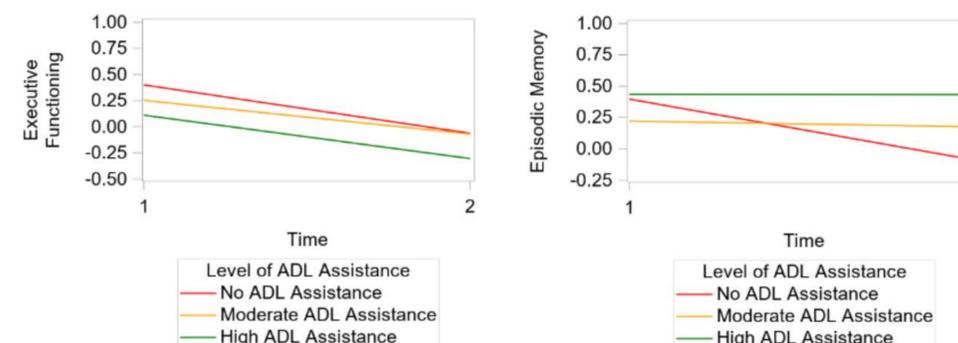


Table 1. Estimates of the between-group mixed effects model

Parameter	Episodic Memory		Executive Functioning	
	β	p	β	p
Caregiver Time	0.19	.11	0.06	.40
Caregiver*Time	-0.06	.11	-0.33	<.0001
Caregiver*Time	-0.07	.32	-0.03	.47
Covariates				
Age	-0.02	<.0001	-0.03	<.0001
Sex: Female (Male Ref)	0.56	<.0001	-0.13	.006
Marital status: Not married (Married Ref)	-0.07	.25	-0.11	.02
Physical health (Good Ref)				
Excellent	0.04	.64	-0.008	.91
Very good	0.04	.54	-0.02	.78
Fair/Poor	-0.30	<.01	-0.41	<.0001
Mental health (Good Ref)				
Excellent	0.11	.16	0.24	<.01
Very good	-0.002	.98	0.14	.02
Fair/Poor	0.12	.42	0.08	.52
Education: High School or Less vs. \geq Some College	-0.24	<.0001	-0.40	<.0001
Depression	-0.03	.07	0.02	.24
Anxiety	0.02	.60	-0.03	.40

Table 2. Estimates of the within-caregiver group mixed effects model

Parameter	Episodic Memory		Executive Functioning	
	β	p	β	p
Time	-0.68	<.01	-0.47	<.01
No ADL Assistance	-	-	-	-
Moderate ADL Assistance	-0.70	<.01	-.22	.17
High ADL Assistance	-0.27	.61	-0.02	.96
Hours per year	.0002	.09	-0.0001	.04
No ADL Assistance*Time	-	-	-	-
Moderate ADL Assistance*Time	0.49	<.001	0.13	.11
High ADL Assistance*Time	0.50	0.11	0.07	.71
Hours per year*Time	-0.0001	.01	0.00004	.19

Note. ADL = activities of daily living, moderate ADL assistance = help with 1 or 2 of 4 ADL groups, high ADL assistance = help with 3 or 4 of 4 ADL groups

DISCUSSION

- Moderate levels of ADL assistance may provide stimulation that helps protect episodic memory over time
- Age, education, and poorer self-rated physical health were consistently linked to lower cognitive decline and may account for most variance between CGs and non-CGs
- Results suggest cognitive resilience in the face of stress

