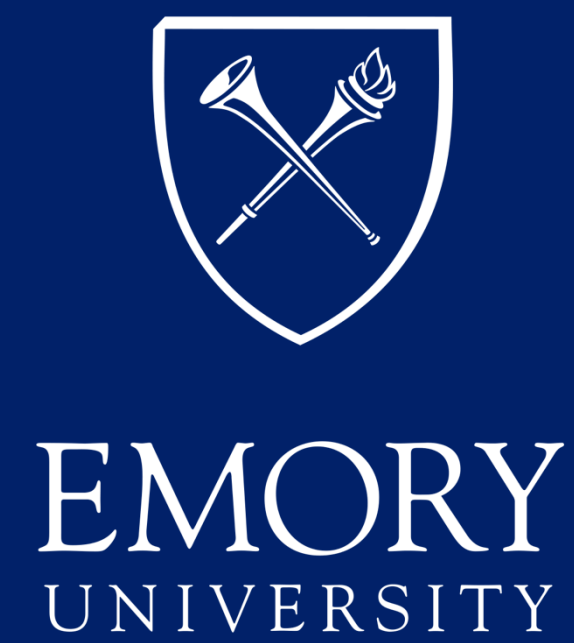
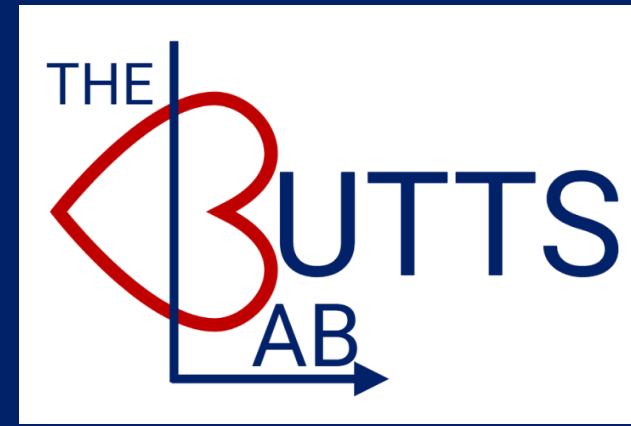




Sleep Quality and Stress Outcomes Following Psychoeducation With and Without Exercise Among Dementia Family Caregivers



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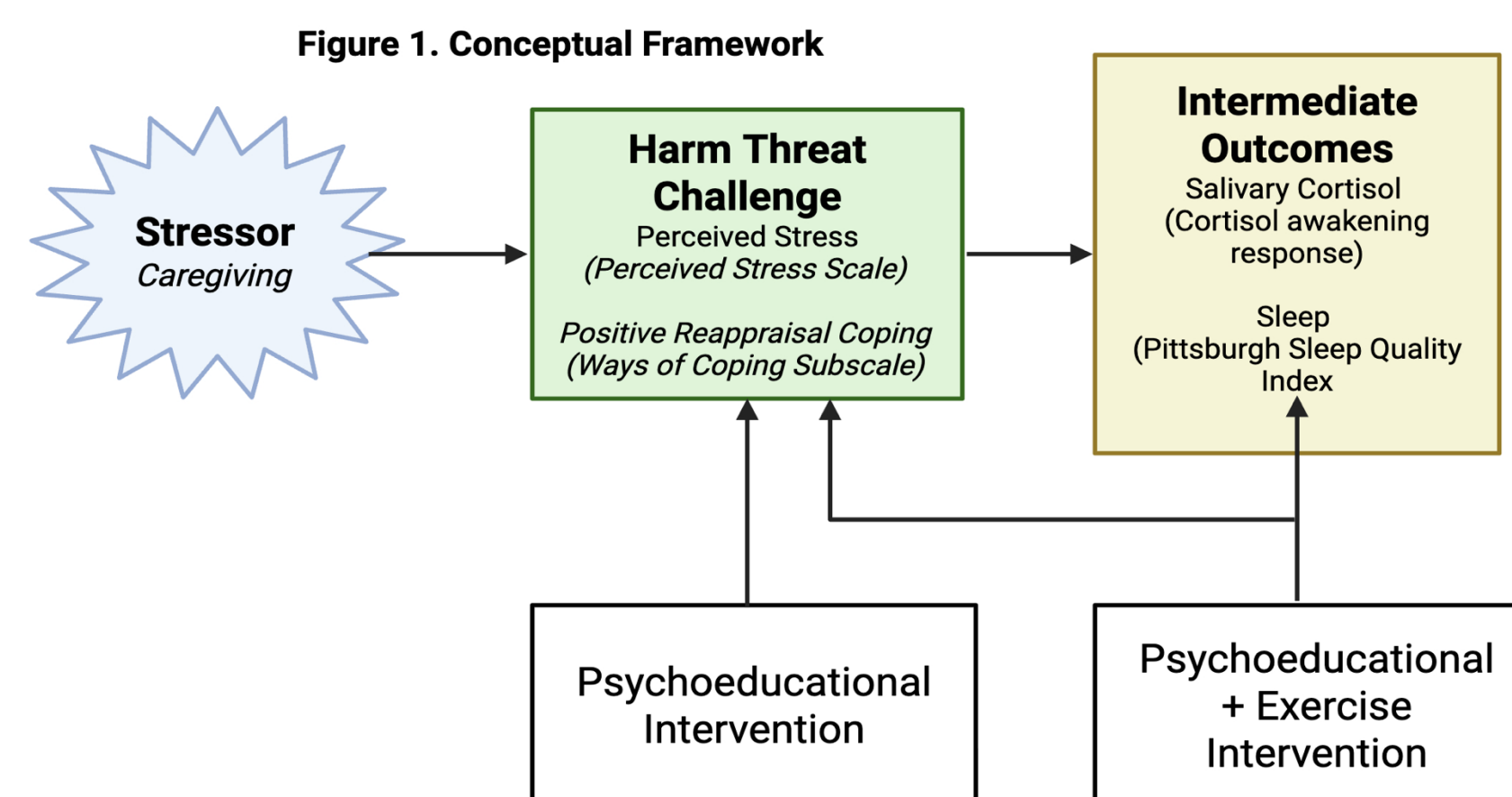
Background

Dementia family caregivers often experience poor sleep and chronic stress, increasing their risk for adverse health outcomes.

This study evaluated whether psychoeducation, with or without exercise, improved sleep quality, perceived stress, and physiological stress among dementia caregivers.

Purpose

This study evaluates the effects of psychoeducation—with or without exercise—on caregiver health and coping.



Methods

Design & Participants: Secondary analysis of approximately 140 dementia family caregivers enrolled in the COOL-AD randomized controlled trial; 90 caregivers had valid salivary cortisol data.

Groups: Usual care, psychoeducation, or psychoeducation plus exercise.

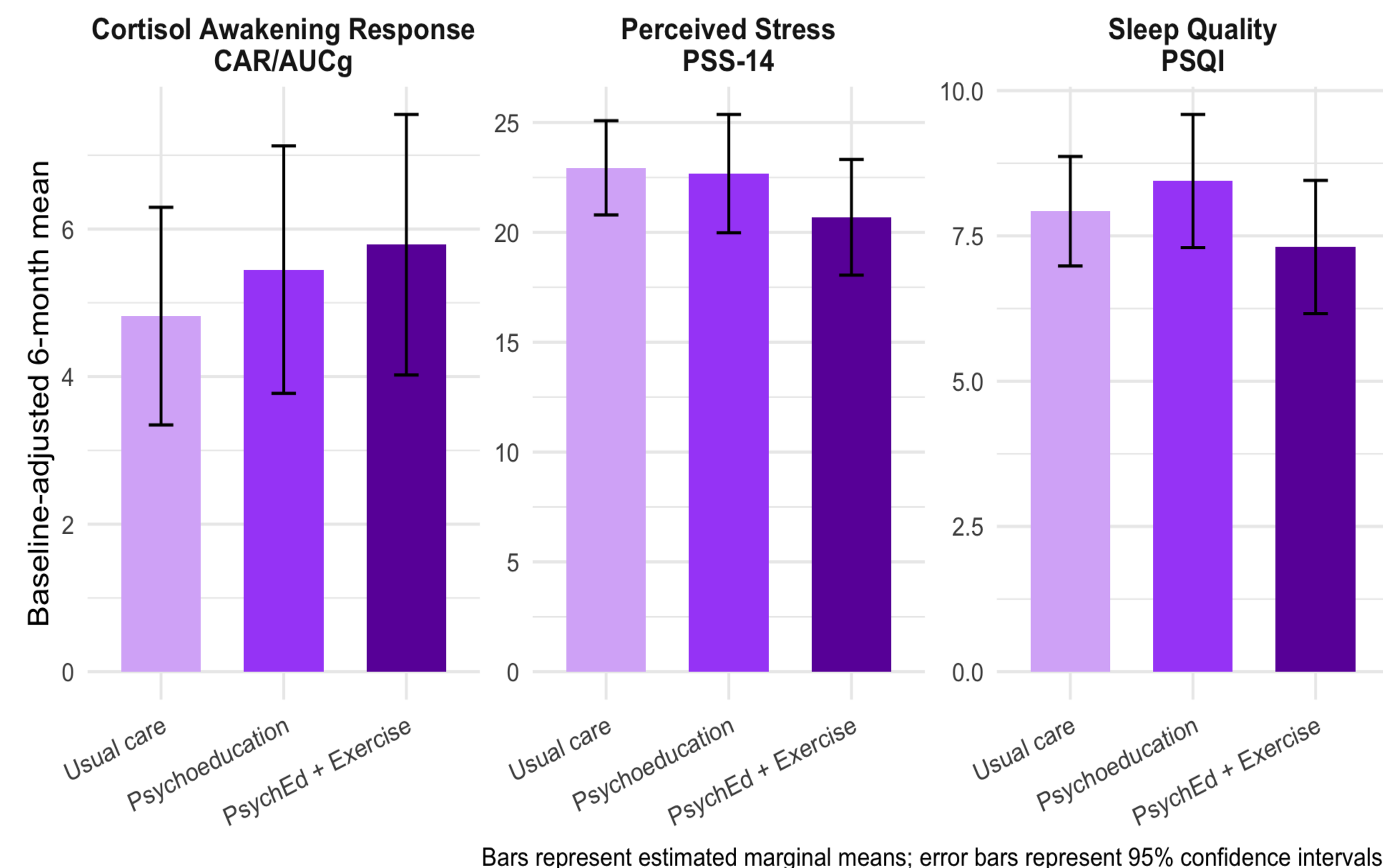
Outcomes (Baseline & 6 Months):

Sleep quality, perceived stress, and cortisol awakening response were measured at baseline and 6 months using the PSQI, PSS, and salivary cortisol.

Analyses: ANCOVA models compared 6-month outcomes across groups, adjusting for baseline values. CAR values were winsorized, and bootstrapped sensitivity analyses were conducted.

Results

Baseline-Adjusted 6-Month Outcomes by Intervention Group



KEY RESULTS

Adjusted 6-month outcomes showed a favorable sleep pattern for the psychoeducation plus exercise group, while perceived stress and CAR were similar across groups.

Table 2. Intervention Outcomes at 6 Months

Outcome	6-Month Finding	p-value
PSQI	Favored psychoeducation + exercise	.10
PSS	No significant group differences	.39
CAR	No significant group differences	.42

Demographics

Table 1. Sociodemographics Mean $\pm$ SD / N (%) (N=142)

Age (years)	55 $\pm$ 10
Female	122 (86%)
Black or African American	142 (100%)
College/Postgraduate	97 (66%)
Relationship to Patient	23 (16%)
- Spouse	56 (39%)
- Child	

Discussion

This secondary analysis suggests that adding exercise to psychoeducation may support caregiver sleep, but larger studies are needed to determine whether these patterns represent meaningful intervention effects.

The absence of significant group differences in perceived and physiological stress highlights the complexity of reducing stress-related outcomes among dementia family caregivers.

Future caregiver intervention studies should consider sleep as a key target while continuing to evaluate biologic markers of stress.

Funding

- Caregiver Opportunities for Optimizing Lifestyles (COOL) NIH, NINR P01 NR011587
- Atlanta Clinical and Translational Science Institute (CTSI), NIH UL1TR000454
- Training in Interventions to Improve Outcomes in Chronic Conditions NIH, NINR T32 NR012715

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