

Background

- Nearly 60 million individuals have dementia worldwide, and their pain is frequently underrecognized and undertreated.
- As cognitive and communication abilities decline, individuals with dementia increasingly rely on family caregivers to identify pain, manage symptoms, and communicate with clinicians.
- Caregiver involvement, including communication and shared decision-making, may directly shape how patient pain is perceived, reported, and managed.
- Understanding these associations can inform the development of targeted interventions that empower caregivers and improve dementia-related pain management.

Purpose

To investigate the associations between family caregiver involvement and pain-related outcomes among individuals with dementia.

Methods

- We performed a cross-sectional analysis of 48 caregivers of patients with dementia enrolled in a digital intervention study (May 2025– May 2026).
- The following scales were used to assess metrics related to pain outcomes in patients and caregiver characteristics, as reported by caregivers on completed surveys:

BPI

- Pain Assessment:** Brief Pain Inventory (BPI) - severity (current, average, worst, least pain in 24 hrs) and pain interference

CES-D

- Caregiver Depression:** Center for Epidemiological Studies Depression Scale (CES-D)

ARMS

- Medication Adherence:** 12-item Adherence to Refills and Medications Scale (ARMS)

MPIC

- Caregiver Involvement:** Modified-Perceived Involvement in Care (MPIC) - communication and shared decision-making domains

- For data analysis, we generated descriptive statistics and Spearman correlations to reveal significant associations.

Results

Participating Dyad - Characteristics

48

Dyads enrolled

66

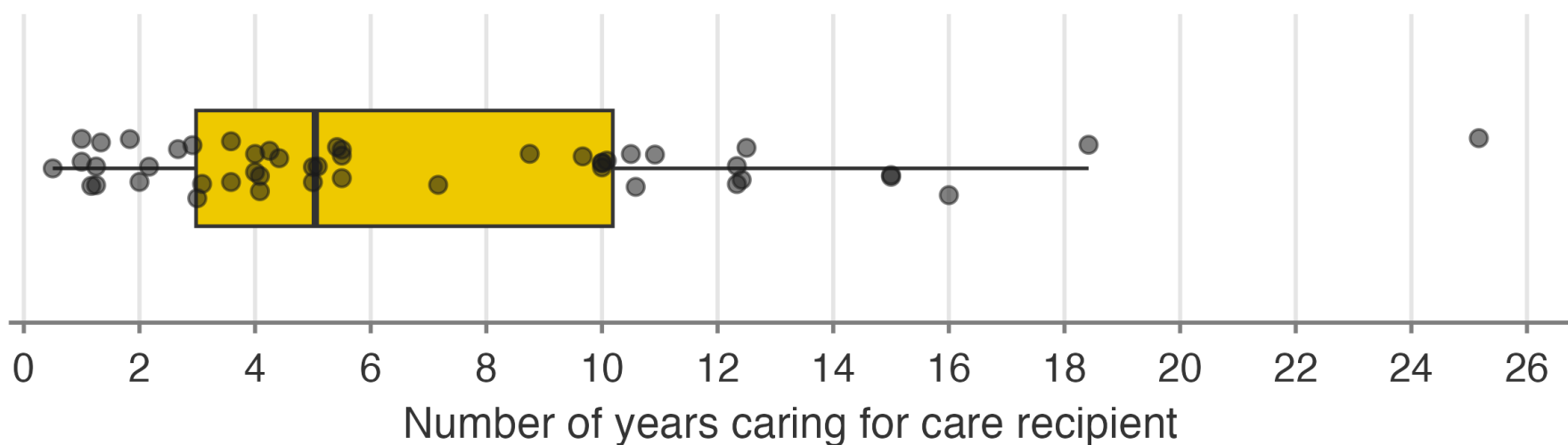
Mean Age
(Caregiver)

77

Mean Age
(Care Recipient)

Caregiving duration

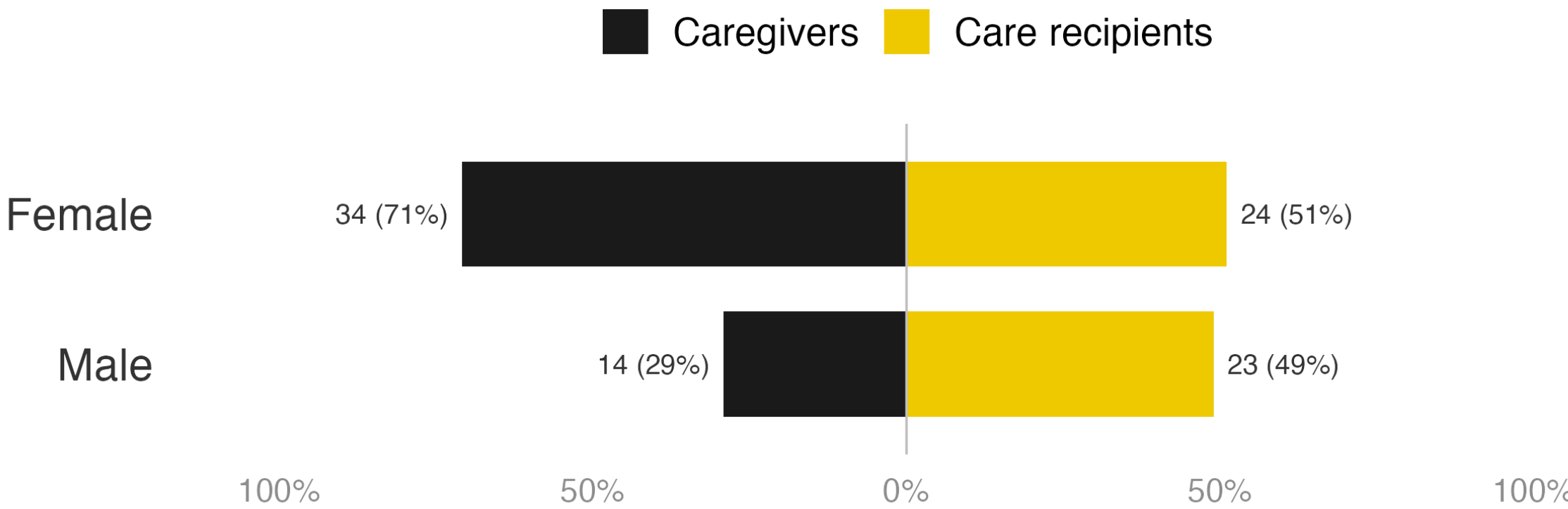
median 5.0 years (IQR 3.0–10.2); n = 48



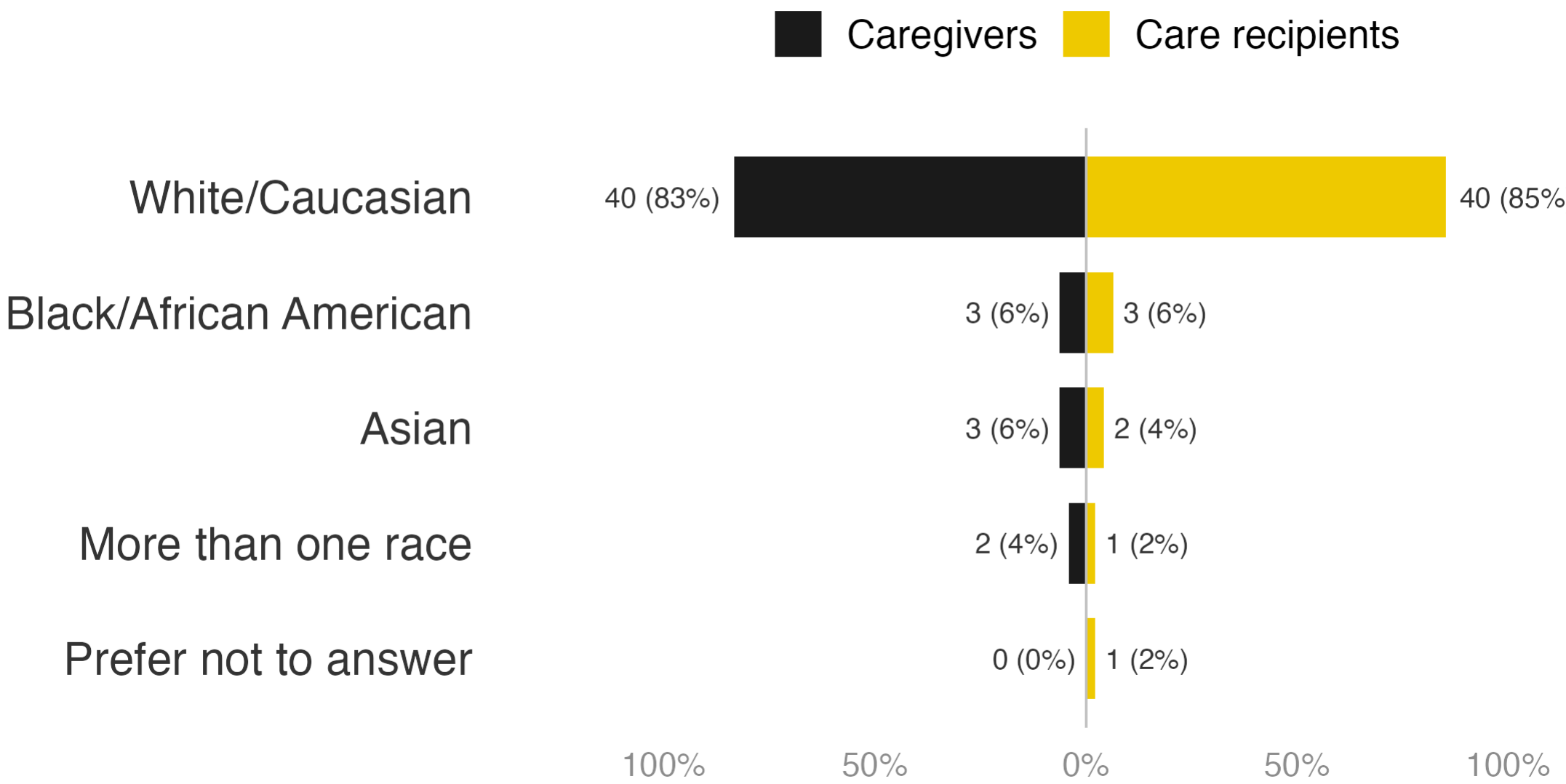
Results

Participating Dyad - Characteristics

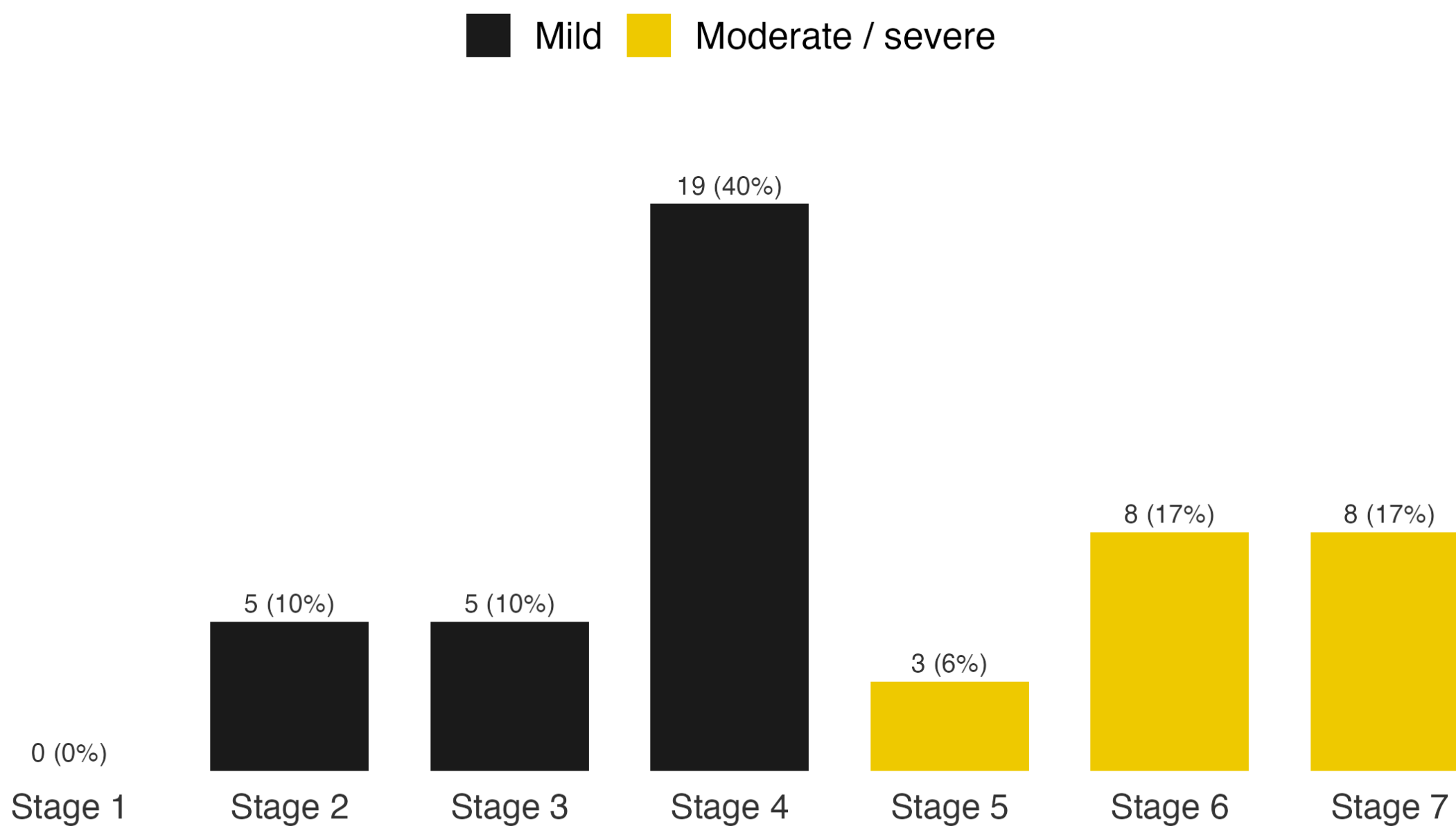
Gender



Race



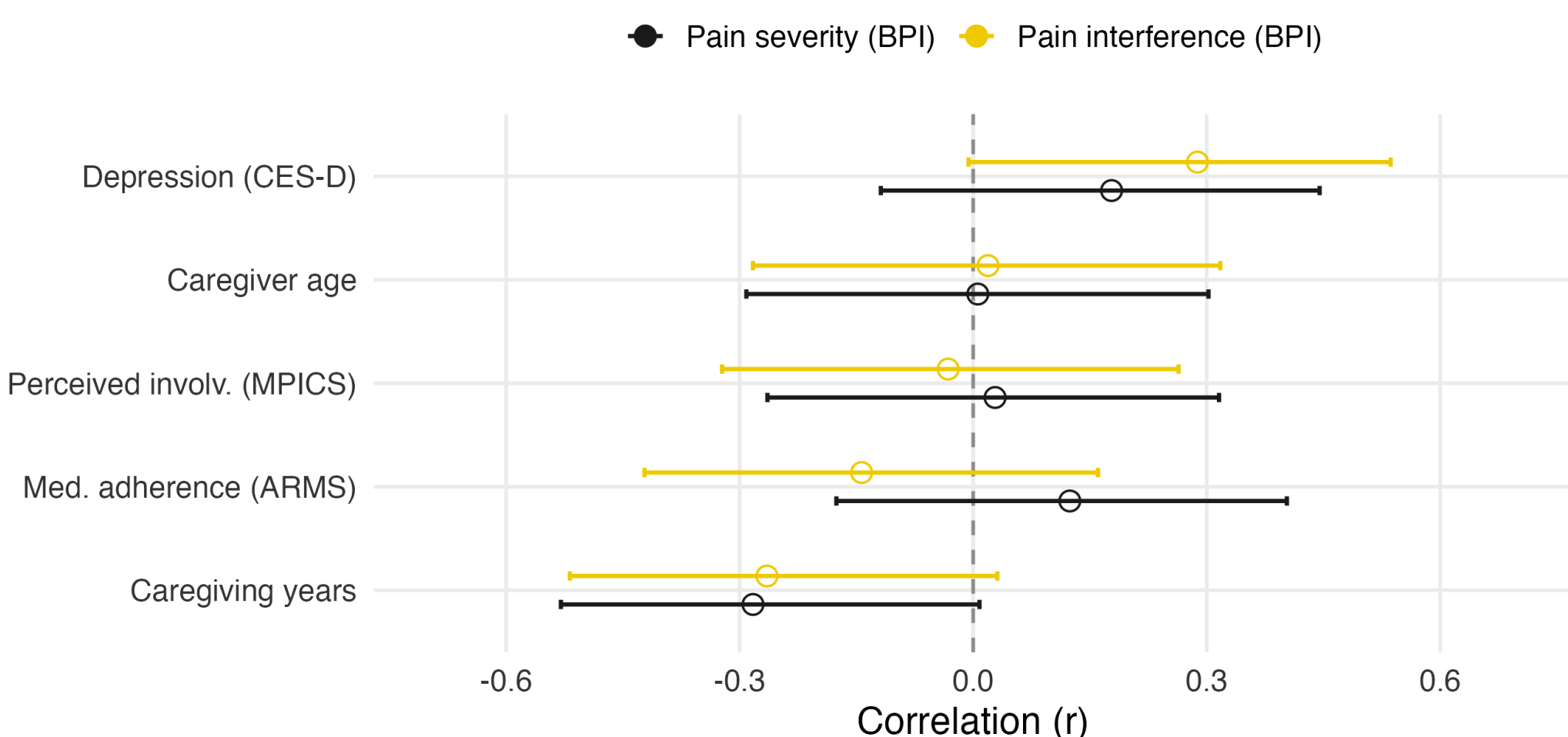
Care recipient dementia stage (FAST)



Association Analysis

Caregiver factors vs care-recipient pain

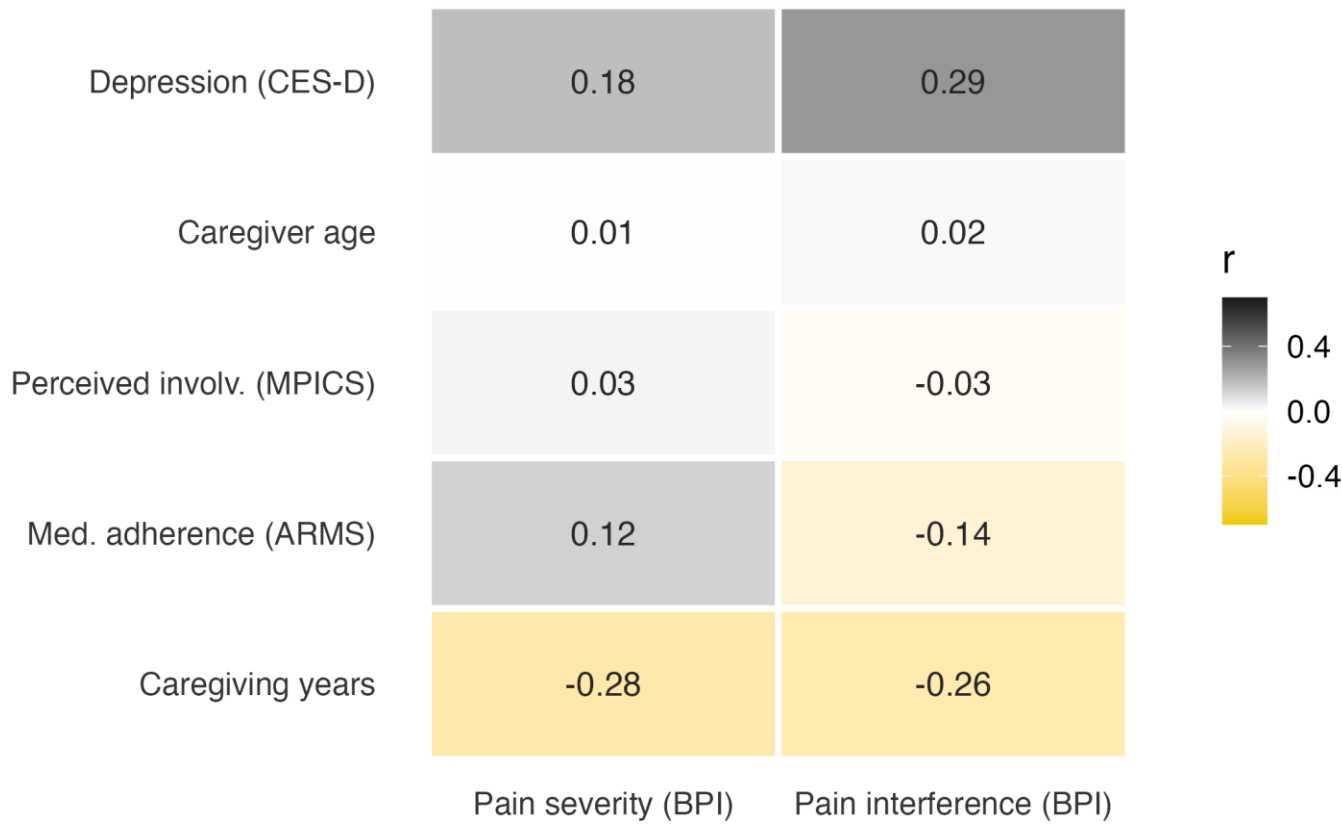
Spearman r with 95% CI · CI crossing 0 = no reliable association



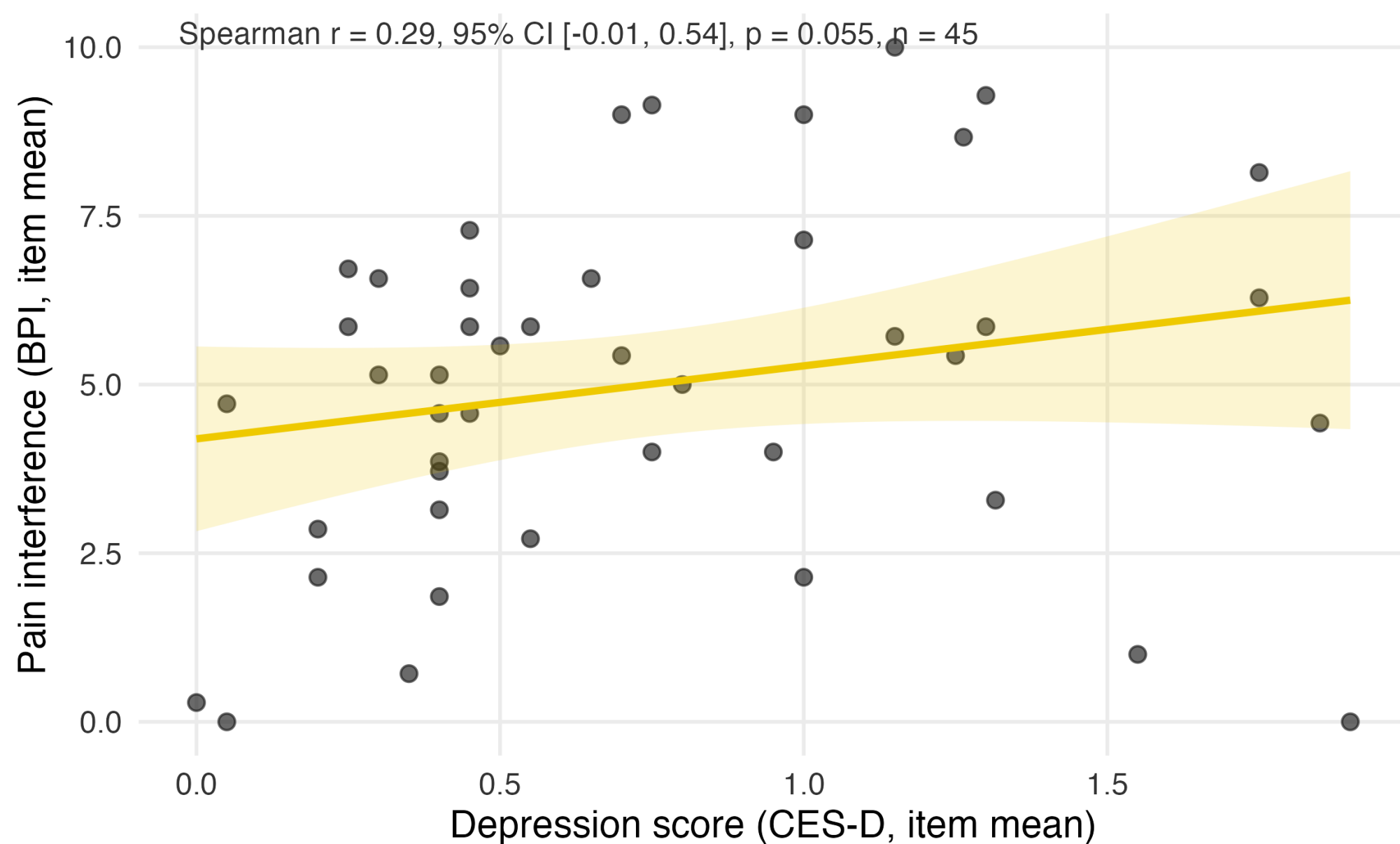
Results

Association Analysis

Caregiver factors × pain outcomes



Caregiver depression vs care-recipient pain interference



Conclusions

- Caregiver involvement and depressive symptoms were not shown to be significantly associated with pain-related outcomes among individuals with dementia.
- Caregiver Well-Being:** Caregiver factors were not significantly associated with care-recipient pain outcomes in this sample, though caregiver depressive symptoms showed a borderline positive association with pain interference ($r_s = 0.29$, $p = .055$).
- Future Directions:** Increasing the sample size may increase the study's power and render more insight into associations between caregiver characteristics and pain-related outcomes.

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