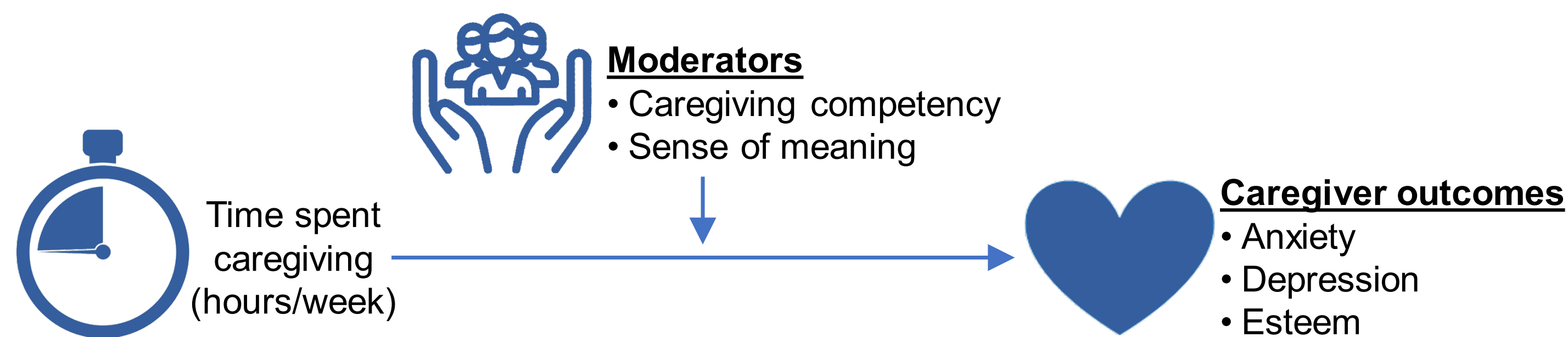


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## AIMS

To examine the buffering role of perceived (1) caregiving competency and (2) sense of meaning on the effect of caregiving hours on caregivers psychological outcomes (anxiety, depression) and esteem.



## BACKGROUND

- Prior studies have documented significant burden on caregivers of advanced cancer patients due to caregiving responsibilities and impact on daily life (Stenberg et al. 2010; Cameron et al. 2002).
- Many of these, such as disrupted personal schedule, loss of contact with other individuals, leisure activity deficits, are directly linked to the amount of time spent caregiving and suggest that caregiving hours is associated with worse psychological outcomes and poor esteem.

## METHODS

The current cross-sectional study utilizes baseline data from the larger ongoing COMPASS research project involving advanced cancer patients and their caregivers in Singapore (Teo et al. 2018).

### Participants:

- 325 primary informal caregivers of patients with a diagnosis of advanced solid cancer (stage IV). Patients were ambulatory and up and about for more than 50% of waking hours (ECOG score  $\leq 2$ ).
- Recruited caregivers were one of the main persons involved in either providing care, ensuring provision of care, or involved in making treatment decisions on behalf of the patients.
- Caregivers who are foreign domestic workers are excluded.

### Outcomes:

A baseline self-report survey was used to assess caregivers on the following outcomes:

- Anxiety and Depression (Hospital Anxiety and Depression Scale)
- Caregiving esteem subscale (Caregiver Reaction Assessment)
- Time spent caregiving (Self-reported average hours spent caregiving per week)
- Sense of Meaning (Meaning subscale, Functional Assessment of Cancer Therapy-Spiritual)
- Competency (Caregiver Competence Scale)

### Analysis:

Linear regression was used to conduct moderator analyses.

## RESULTS

### Caregiver Profile:

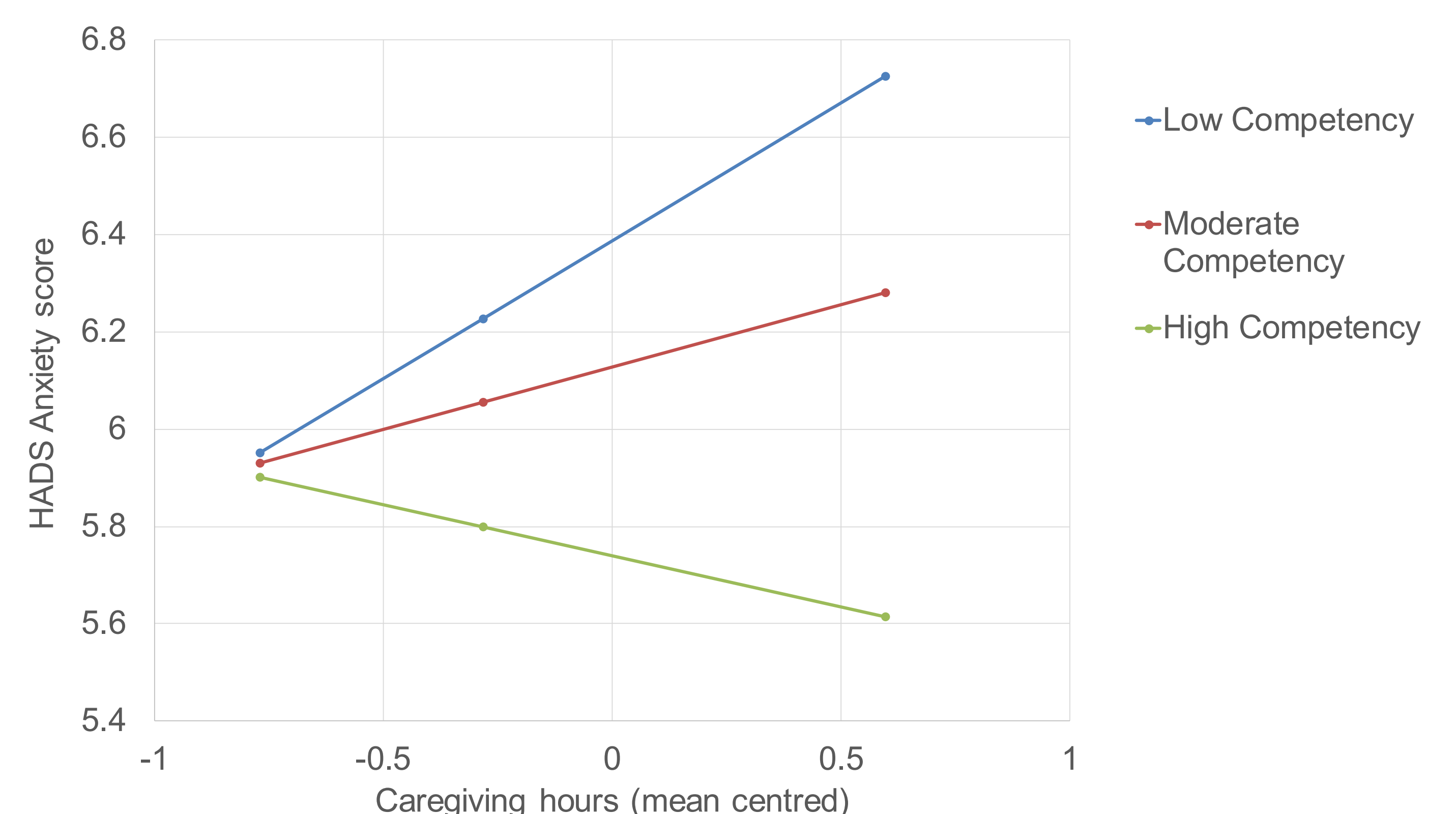
- Median age was 52 years (SD: 13.8) and 65% was female.
- Ethnic composition: Chinese (76%), Malay (15%), Indian (5%), Others (4%).
- Majority were either the spouse (47%) or child/child-in-law (34%) of the patient.
- Employment status: full time (50%), homemaker (17%), not working (12%) and retired (11%).
- Caregiving tasks: basic ADLs (42%), instrumental ADLs (80%), healthcare related tasks (71%). (Note: ADL = Activity of Daily Living)

## RESULTS (contd.)

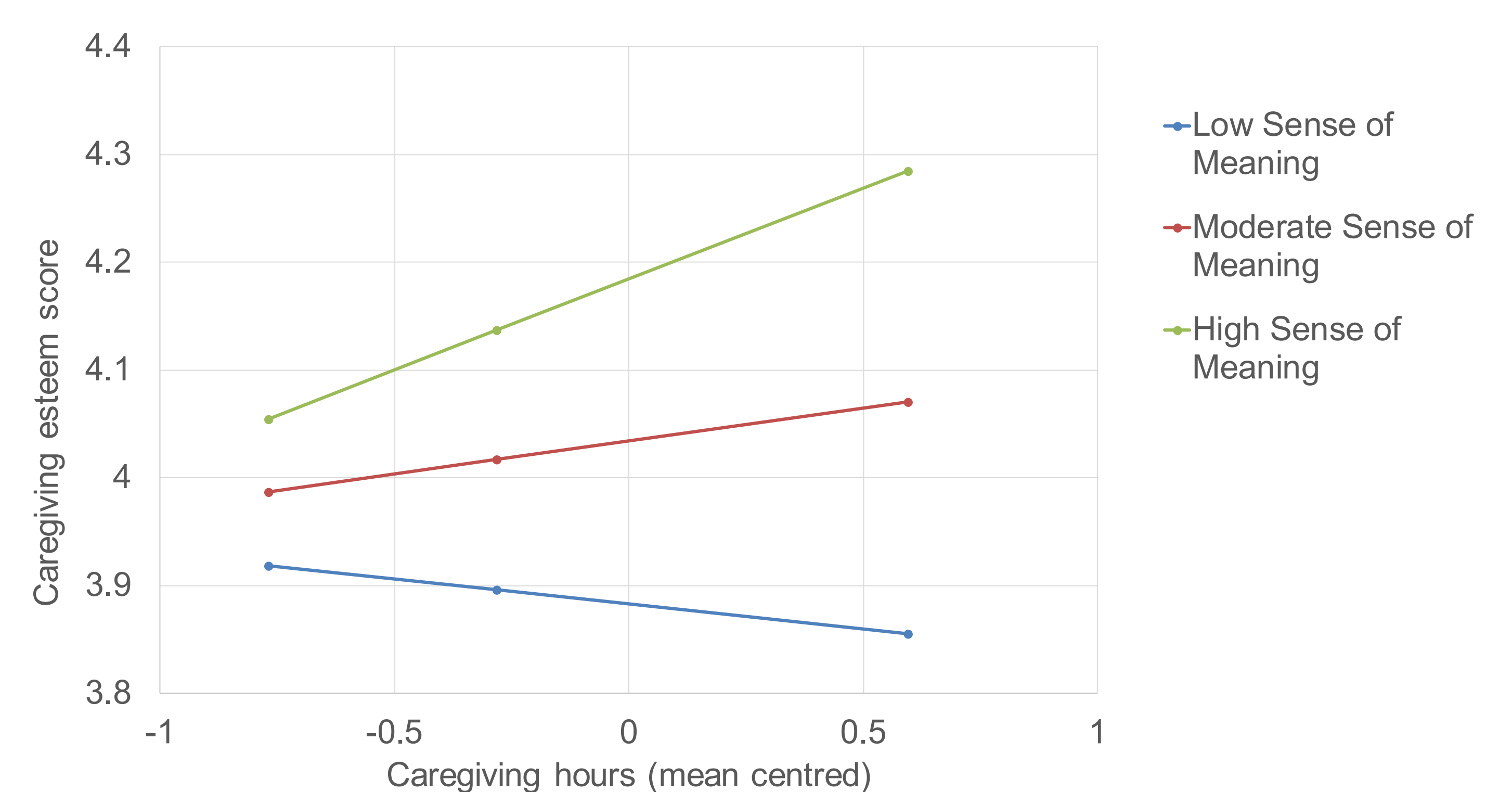
**Table 1. Caregiving Characteristics**

Time spent caregiving/ week	M = 18 hours (SD = 19)
Caregiver anxiety, depression	
HADS Anxiety (Score range: 0-21)	M = 6 (SD = 4.4)
HADS Depression (Score range: 0-21)	M = 6 (SD = 2.9)
Total HADS score (Score range: 0-42)	M = 12 (SD = 6.7)
Caregiver esteem (Score range: 1-5)	M = 4 (SD = 0.6)
Higher the score, less the burden	

**Figure 1. Moderating Effect of Perceived Competency**



**Figure 2. Moderating Effect of Sense of Meaning**



Note: For illustration purposes, the 16<sup>th</sup> (low), 50<sup>th</sup> (moderate), and 84<sup>th</sup> (high) percentile of caregiving competency (Fig. 1) and sense of meaning (Fig. 2) are shown.

Moderator analysis indicated competency and sense of meaning significantly buffered the effect of caregiving hours on caregivers anxiety and esteem respectively ( $p < 0.05$ ).

## CONCLUSIONS

- Increased time spent caregiving does not necessarily lead to adverse psychological distress outcomes and poor caregiving esteem. Rather, it varies with caregiver's ability to make meaning and their perceived competency of caregiving.
- An important clinical implication is to consider ways to help caregivers of advanced cancer patients improve their self-perceived competency and ability to make meaning of their caregiving situation in order to improve their well-being.