

Increased multivariate association between insomnia and depressive symptomatology after psychotherapy intervention in late-life depression

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INTRODUCTION

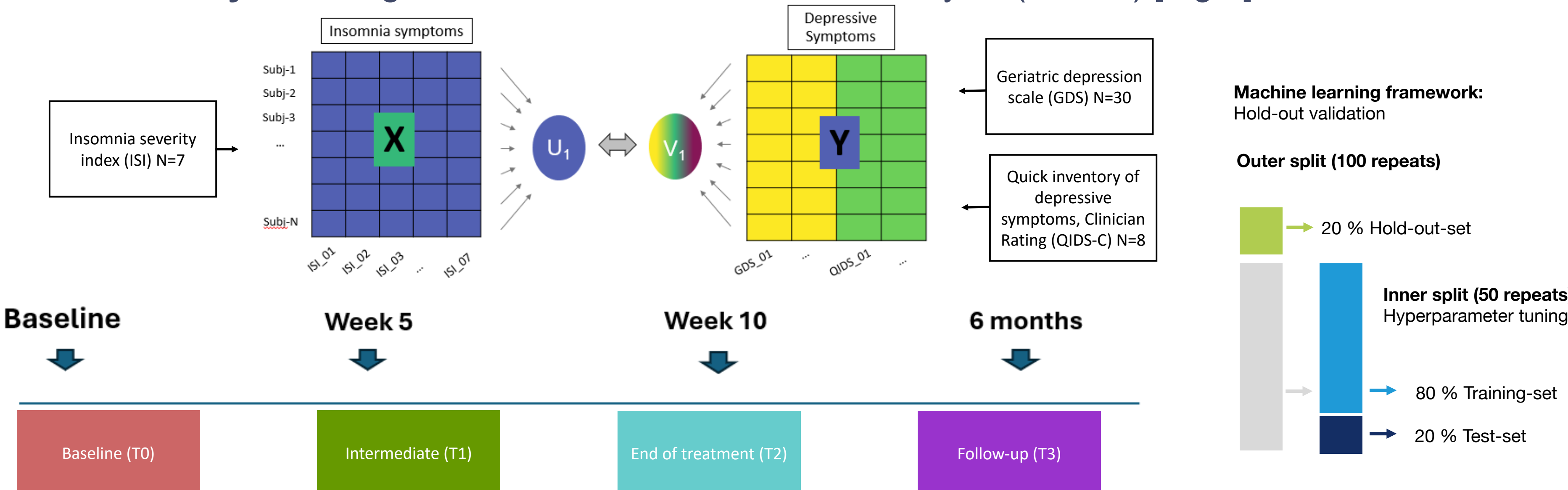
- Insomnia and late life depression (LLD) are highly prevalent in the older population and are related to increased risk for disability, mortality, and suicide¹.
- Around 50% of LLD patients remain symptomatic after treatment and insomnia is still often discounted as a treatment target.²
- The multivariate associations between those symptoms have not yet been well investigated in older adults. Moreover, it is unclear how psychotherapy can influence such association.

AIM

- Identifying multivariate associations between insomnia and depressive symptoms in patients with LLD.
- Exploring impact of psychotherapy intervention on this multivariate associations.

METHOD

- Participants:** moderate to severe LLD (**N=169**, $M_{age} = 69.5$, 65% female) from 7 trial sites in Germany.³
- Interventions:** LLD-specific CBT or supervised unspecified intervention (8 weeks, 15 sessions)
- Main analysis:** 4 regularised canonical correlation analysis (rCCAs) [Fig.1]



RESULTS

rCCAs models between insomnia and depressive symptoms

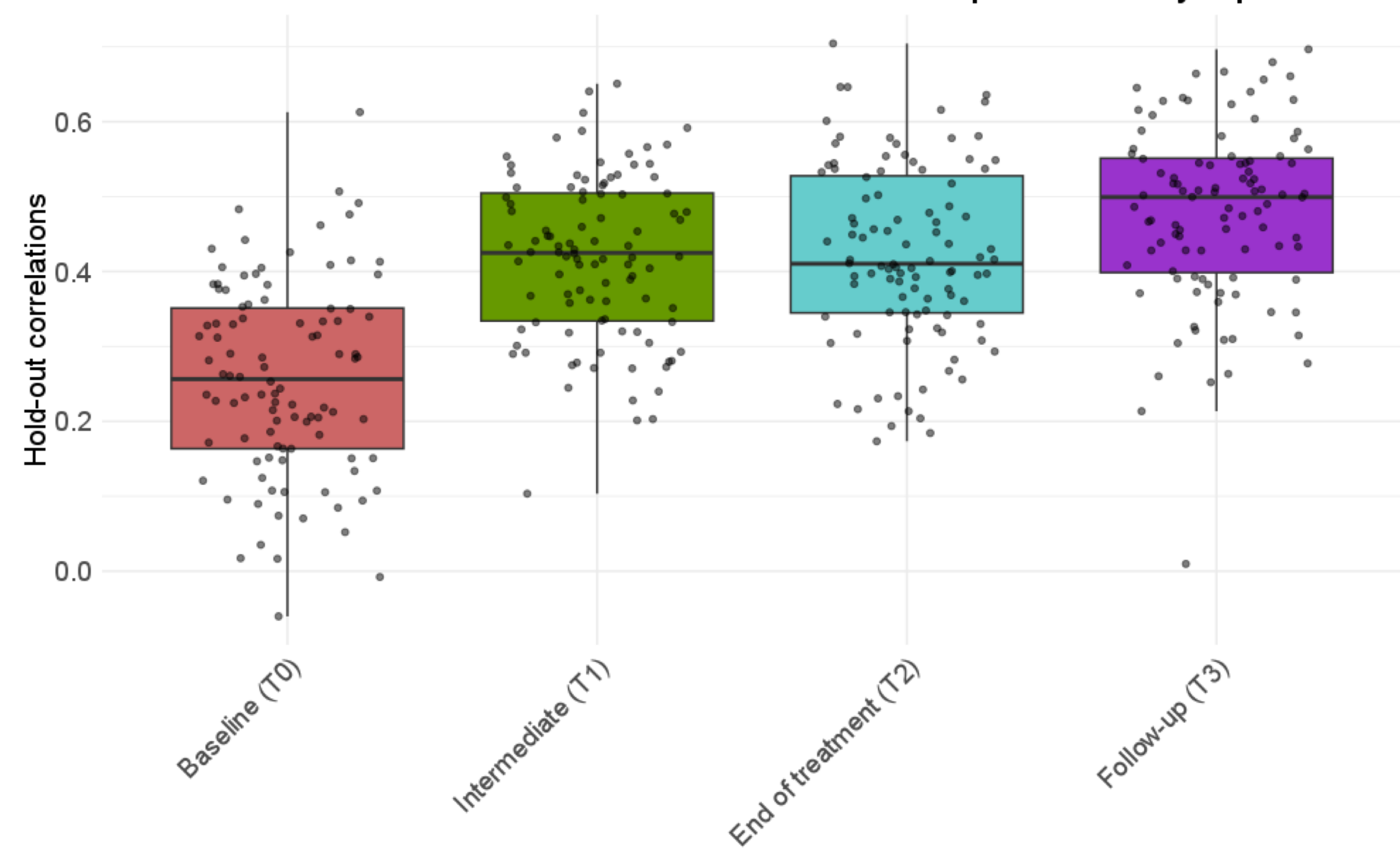
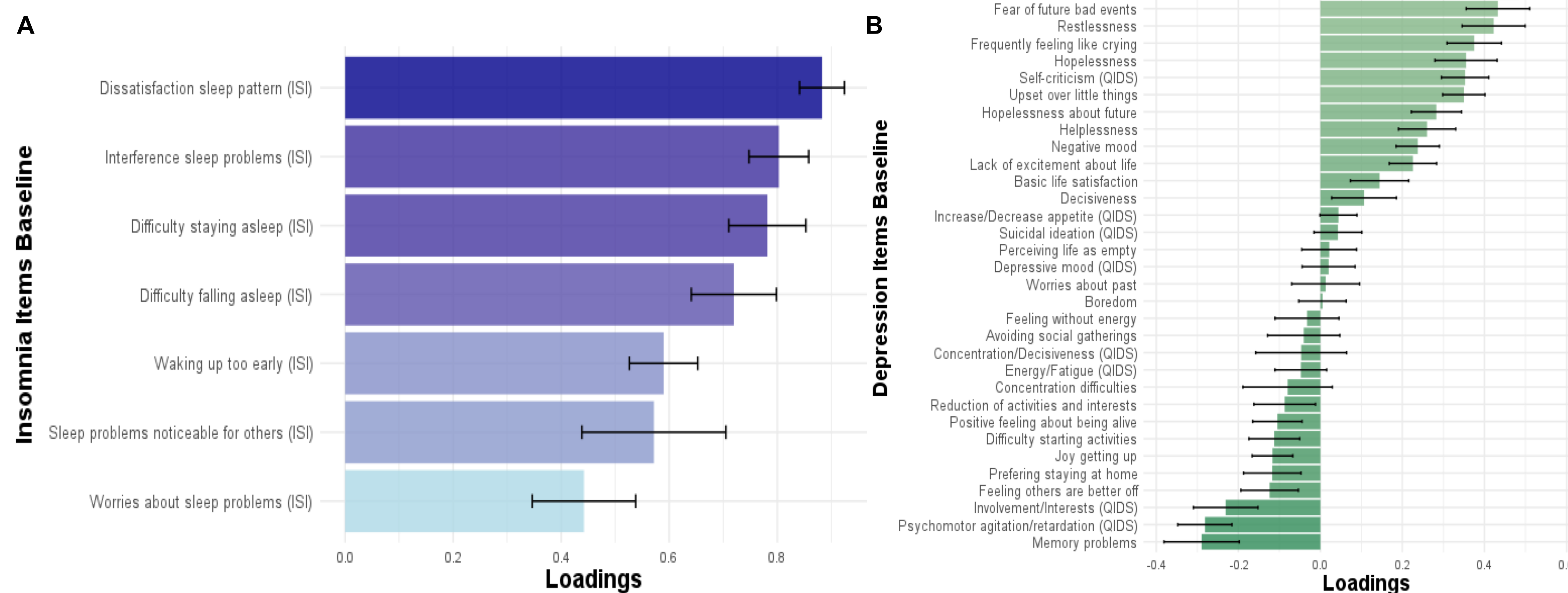


Figure 1
rCCAs between insomnia and depressive symptoms at each time point

Baseline



End of treatment

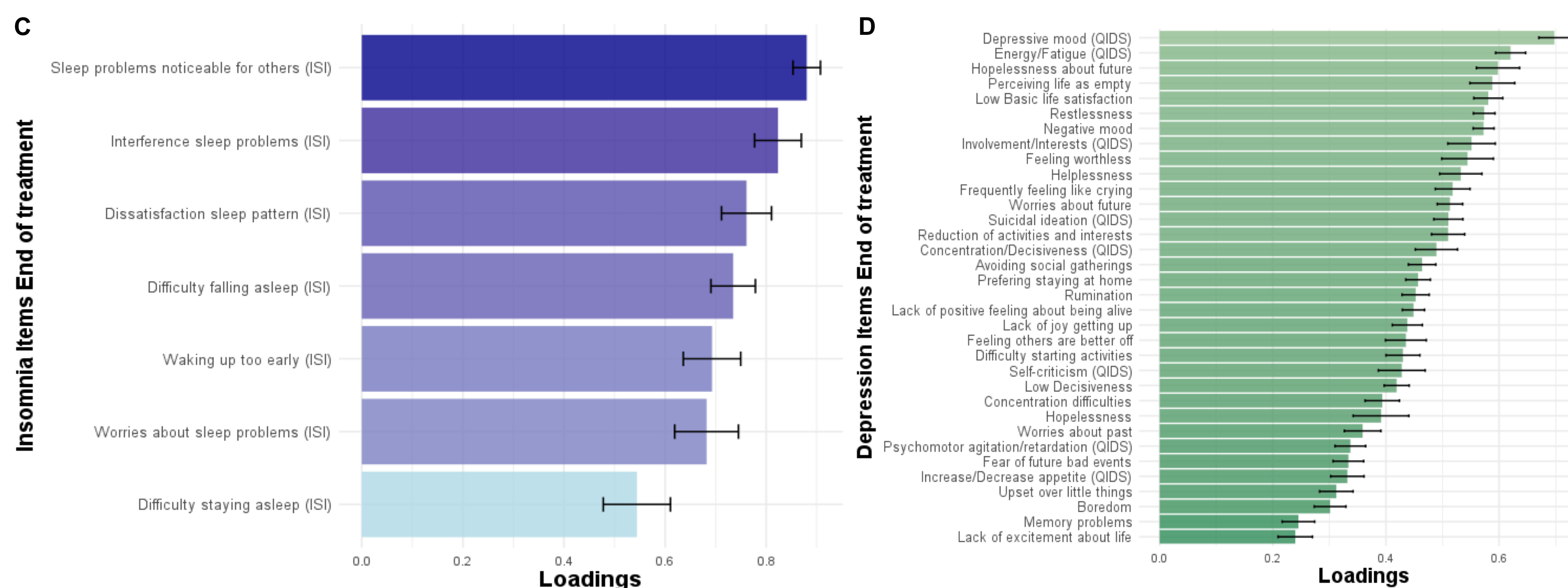


Figure 2
A. Item loadings for insomnia symptoms at baseline. B. Item loadings for depressive symptoms at baseline (anxiety related symptoms and negative thought patterns show highest loadings) C. Item loadings for insomnia symptoms at end of treatment. D. Item loadings for depressive symptoms at End of treatment (somatic related symptoms and negative thought patterns show highest loadings)

CONCLUSIONS

- Robust correlations between insomnia and depressive symptoms, that are **higher at end of treatment and follow-up**.
- Anxiety related symptoms and negative thought patterns show highest loadings at baseline and change the least after treatment.
- Importance of **exploration of individual symptoms** rather than total scores and higher incentive for clinicians to **consider importance of insomnia-specific assessment and treatment in LLD**.
- Increased association could reflect underlying neurobiological processes that link sleep regulation and mood.

REFERENCES

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