

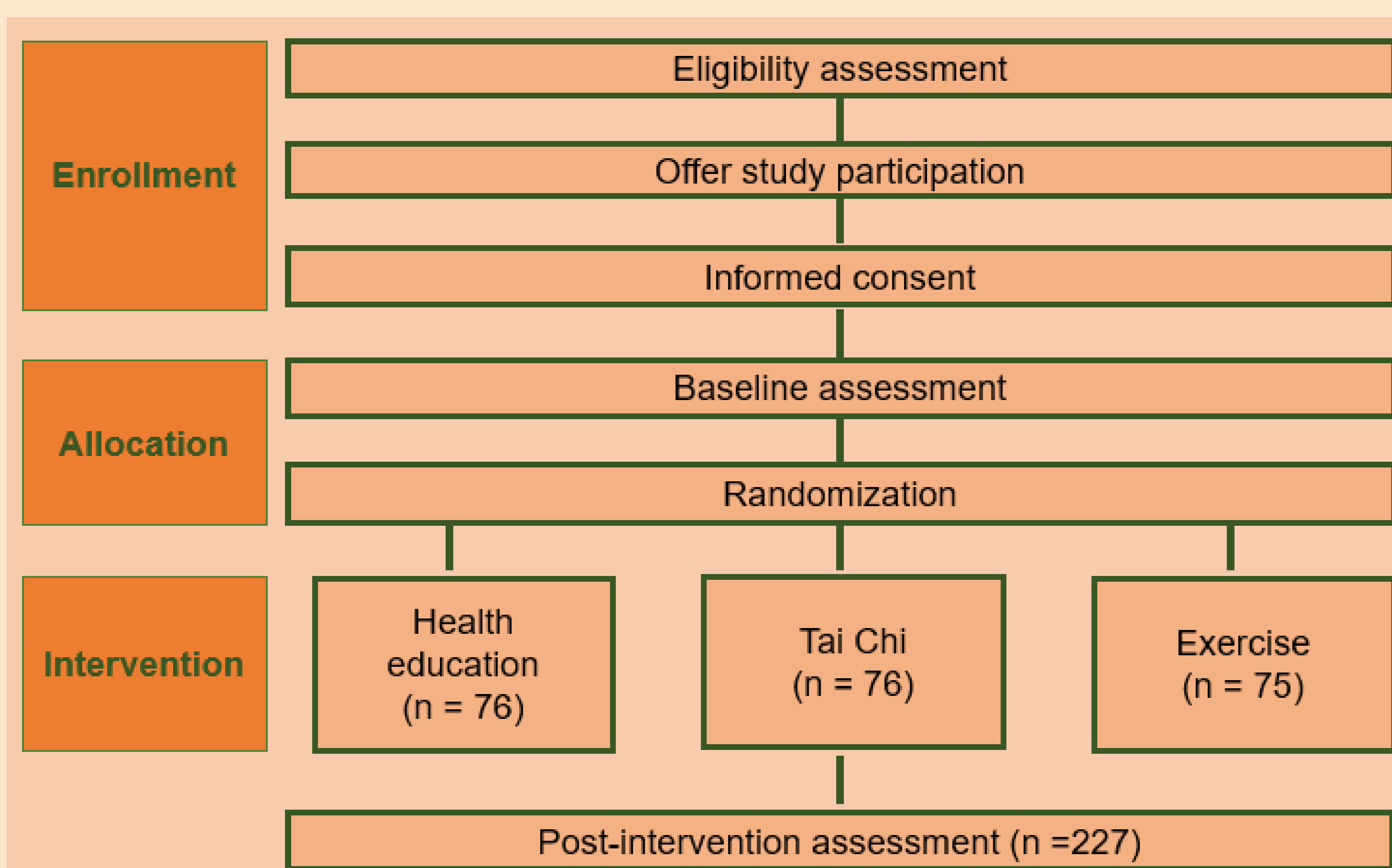
Background

- Insomnia and depression are common mental disorders among older adults.
- Insomnia and depression are highly comorbid, as sleep difficulties can manifest prior to or after the onset of a depressive episode.^{1,2}
- Exercise has been endorsed as an effective treatment for insomnia and depression. However, whether different exercise modalities induce differential responses on sleep and mood remains to be elucidated.

Objectives

- To compare the effects of conventional exercise and Tai Chi versus control on sleep and mood in older adults with chronic insomnia and depressive symptoms.

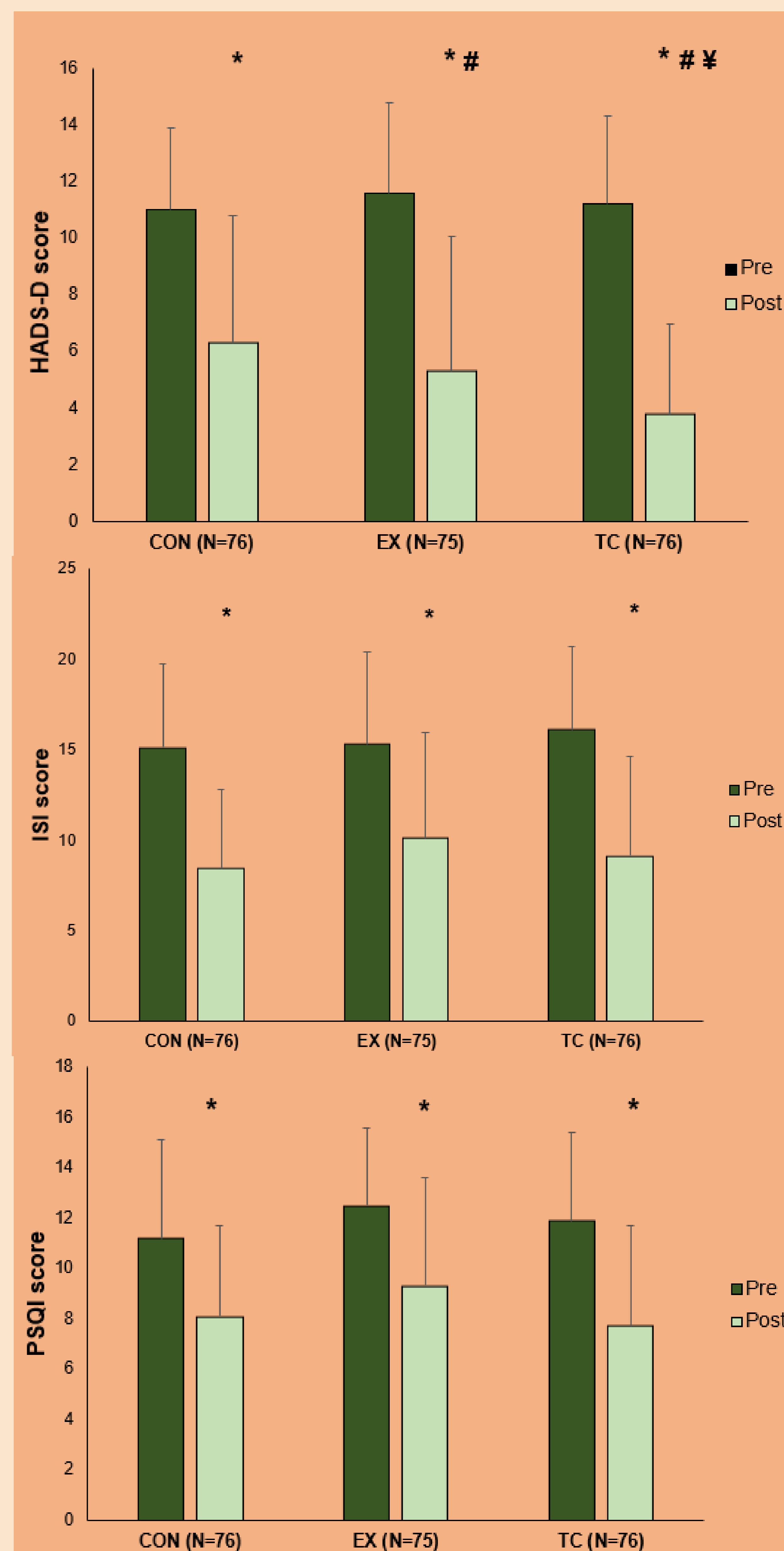
Methods



- In this prospective, three-arm, parallel group, randomized controlled trial, 227 older adults ($67.0 \pm 5.1y$) with a diagnosis of chronic insomnia and depressive symptoms were randomly assigned to a conventional exercise intervention consisting of aerobic and strength training (EX), a Tai Chi intervention (TC), or a Health Education control (HE). Participants in all groups followed a 3-month intervention program consisting of two 1.5-hour weekly sessions.
- The primary outcome was the depression score of the Hospital Anxiety and Depression Scale (HADS-D). Secondary outcomes included insomnia severity through the Insomnia Severity Index (ISI) and sleep quality through the Pittsburgh Sleep Quality Index (PSQI).
- Generalized estimating equations were used to compare the changes in mood and sleep parameters from baseline among groups, where a P value <0.05 was considered statistically significant. Data are presented as means \pm SD.



Results



- *: significant improvement compared to baseline of the same group
- #: significant improvement compared to control
- ¥: significant improvement compared to exercise

Conclusion

- The preliminary findings of this randomized controlled trial suggest that Tai Chi is superior to exercise and health education control in improving depressive symptoms in older adults with chronic insomnia and depressive symptoms.
- Similar improvements in sleep outcomes were observed for all groups.

References

1. Nutt D, Wilson S, Paterson L. Sleep disorders as core symptoms of depression. *Dialogues Clin Neurosci*. 2008;10(3):329-36. doi:10.31887/DCNS.2008.10.3/dnutt
2. Roberts RE, Shema SJ, Kaplan GA, Strawbridge WJ. Sleep complaints and depression in an aging cohort: A prospective perspective. *The American journal of psychiatry*. 2000;157(1):81-8. doi:10.1176/ajp.157.1.81

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