

Cite this as: Leqin FANG, Shixu DU, Hangyi YANG, Xue LUO, Shuqiong ZHENG, Zhiting HUANG, Yuhan ZHAO, Shufei ZENG, Bin ZHANG, 2026. Comparison of workplace impairment and daily activity impairment in acute and chronic insomnia disorder: a study of Chinese adults. *Journal of Zhejiang University-SCIENCE B*, 27(9):1031-1040. <https://doi.org/10.1631/jzus.B2500586>

Comparison of workplace impairment and daily activity impairment in acute and chronic insomnia disorder: a study of Chinese adults

Key words: Insomnia; Workplace impairment; Daily activity impairment; Presenteeism; Absenteeism

Research Summary

This study aims to investigate the associations between different stages of insomnia disorder (AID group vs. CID group) and impairment in both workplace and daily activity.

We additionally explore the roles of daytime sleepiness, depressive and anxiety symptoms. On the basis of prior related studies, we propose the following hypothesis:

Hypothesis 1: Individuals with AID already experience workplace and daily activity impairment.

Hypothesis 2: Related insomnia symptoms of daytime sleepiness, depression and anxiety are significantly associated with workplace and daily activity impairment in both groups.

Hypothesis 3: Related insomnia symptoms of daytime sleepiness, depression and anxiety mediate the relationship between insomnia and impairment in workplace and daily activity, with potential differences between AID and CID.

Research Summary

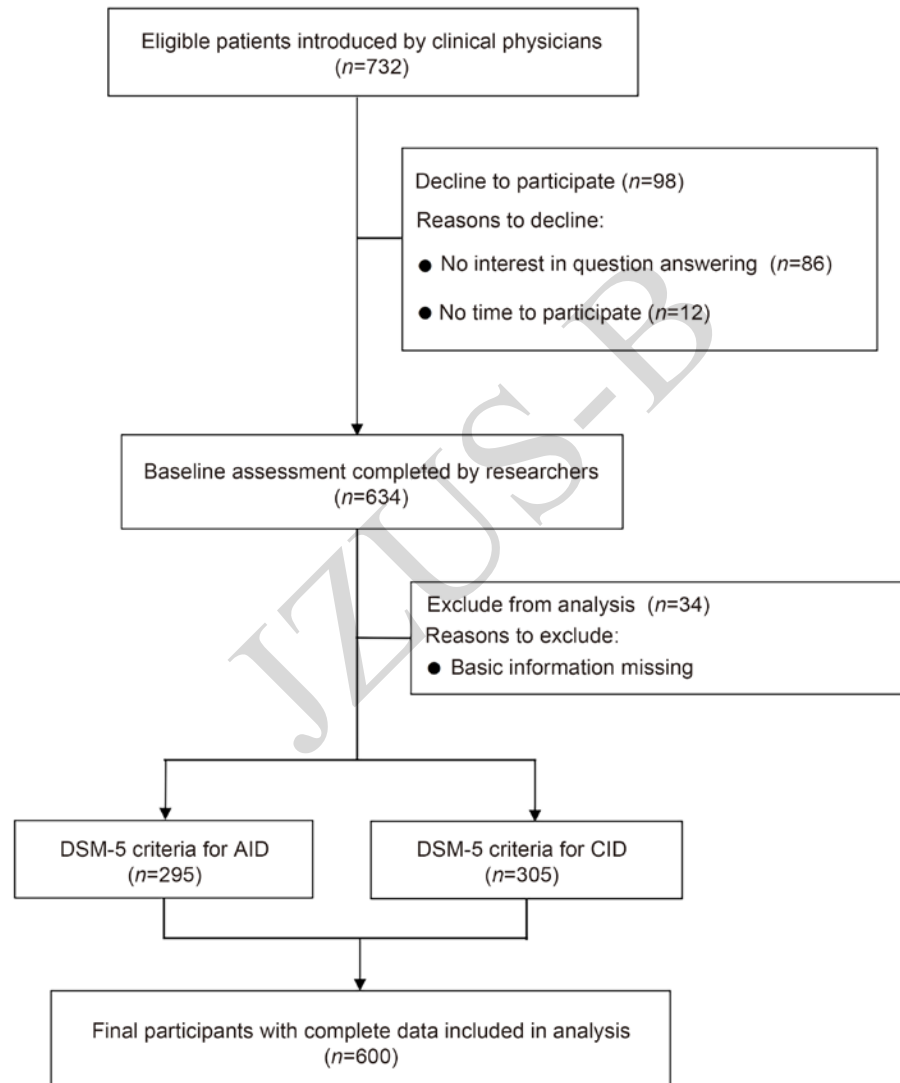


Fig. 1 Flowchart of the study.

Innovation points

- This research is the first to systematically compare workplace impairment (presenteeism and absenteeism), daily activity impairment, and productivity loss costs between acute insomnia disorder (AID) and chronic insomnia disorder (CID).
- The study identifies that depressive symptoms serve as the core mediator between insomnia and absenteeism/daily activity impairment in the AID group (mediation proportions: 37.02% and 28.61%), while anxiety symptoms play a more prominent mediating role in the CID group (mediation proportions: 53.01% and 31.70%).
- Addressing the gap that previous studies on insomnia-related productivity loss have mainly focused on developed countries, this research quantifies productivity loss costs for AID and CID using Chinese population data (\$494.61 and \$578.08 per three months, respectively).