

Unraveling the Burden of Insomnia: The Mediating Role of Depression and Subjective Memory Complaints in the Psychological Well-being of Older Adults – A Pilot Study

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Objective

Previous studies have yielded inconsistent findings on the relationship between insomnia and psychological well-being (PWB) in older adults, suggesting the presence of underlying mechanisms that remain unclear. This study aims to examine the mediating roles of depression and subjective memory complaints (SMCs) in the link between insomnia and psychological well-being, providing insights into the potential pathways through which insomnia affects psychological well-being in older adults.

Methods

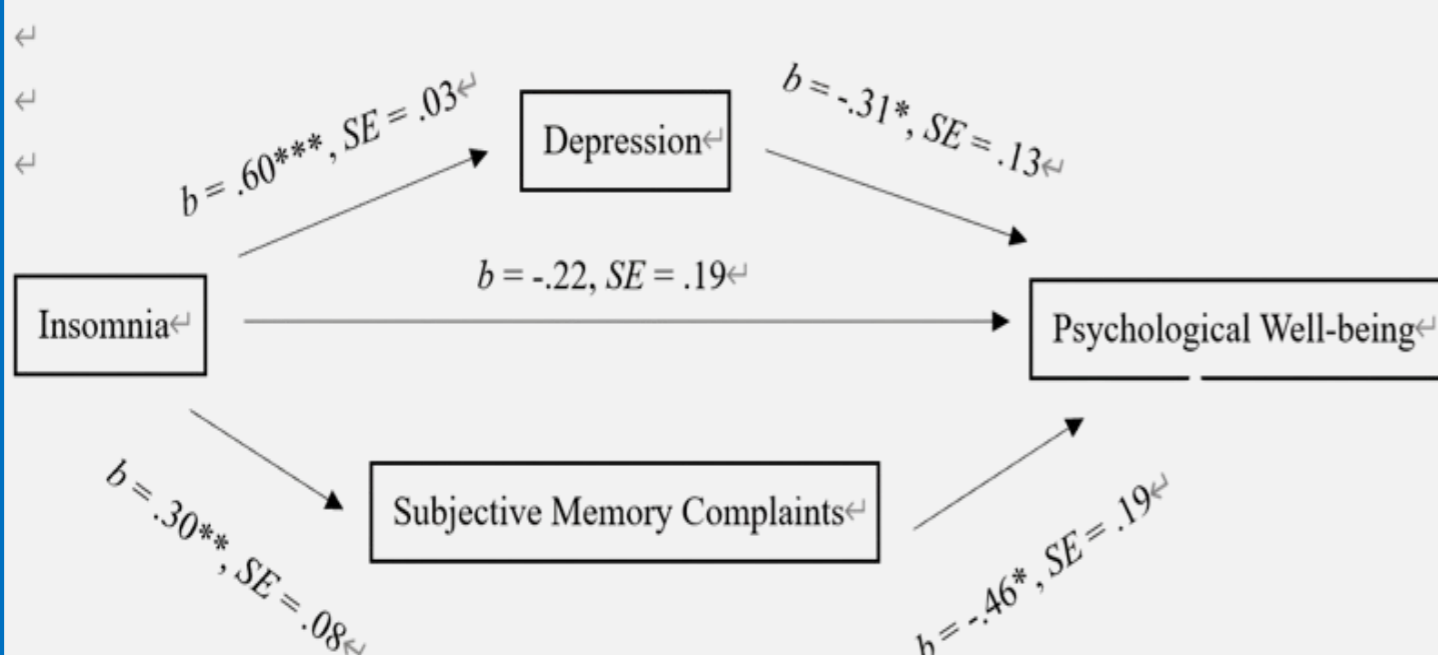
This study recruited community-dwelling adults aged 55 and older. Measures included the Insomnia Severity Index, Subjective Memory Complaints Scale (SMCs), Center for Epidemiologic Studies Depression Scale, Psychological Well-being Scale (PWB), and the Mini-Mental Status Examination-Chinese version (MMSE-C).

Participants with cognitive impairment, identified based on education-adjusted MMSE-C scores, were excluded. A dual-mediation model was analyzed using Model 4 of Hayes' (2017) SPSS PROCESS macro software. The bootstrap method with 5,000 resamples was employed to generate 95% confidence intervals (CIs).

Results

A total of 117 valid responses were analyzed (35 men, 30%; 82 women, 70%; mean age = 68.78, SD = 8.53). Insomnia was positively correlated with SMCs, $r(117) = .32, p < .01$ and depression, $r(117) = .45, p < .01$ and negatively correlated with PWB, $r(117) = -.28, p < .01$.

The dual mediation analysis indicated that the indirect effects of depression ($b = -.18, SE = .08, \text{Bootstrap } 95\% \text{ CI } [-.35, -.03]$) and subjective memory complaints ($b = -.14, SE = .05, \text{Bootstrap } 95\% \text{ CI } [-.26, -.03]$) were significant, demonstrating full mediation.



Results

Effects of depression and SMCs between insomnia and PWB

	Insomnia
Total effect	-.35 (-.54 ~ -.15)
Direct effect	-.22
Indirect effects	
Insomnia → Depression → PWB	-.18 (-.35 ~ -.03)
Insomnia → SMCs → PWB	-.14 (-.26 ~ -.03)
Insomnia → SMCs → Depression → PWB	-.02 (-.05 ~ .00)
	Full mediation

Note: The values in the table are b values, and the numbers in brackets are 95% confidence intervals

Discussion

This study suggests that the relationship between insomnia and psychological well-being in older adults may be better explained through a mediation model, wherein insomnia leads to reduced well-being by increasing depressive symptoms and subjective memory complaints.

Prior research indicates a bidirectional link between insomnia and depression (Zhou et al., 2021), and both depression (Haigh et al., 2018) and memory complaints (Zhao et al., 2022) are associated with lower psychological well-being. Our findings offer preliminary evidence for the interplay among insomnia, depression, and memory complaints in community-dwelling older adults.

However, the generalizability is limited due to the non-clinical nature of the sample. Future studies with larger, more diverse populations are warranted. Clinically, interventions targeting depression and memory complaints may serve as clinical strategies to mitigate insomnia-related declines in psychological well-being.

Reference

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I have no COI with regard to the presentation