

Sleep Quality and Multidimensional Well-Being in Older Adults: A Serial Mediation Model of Subjective Memory Complaints and Depression

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Objective

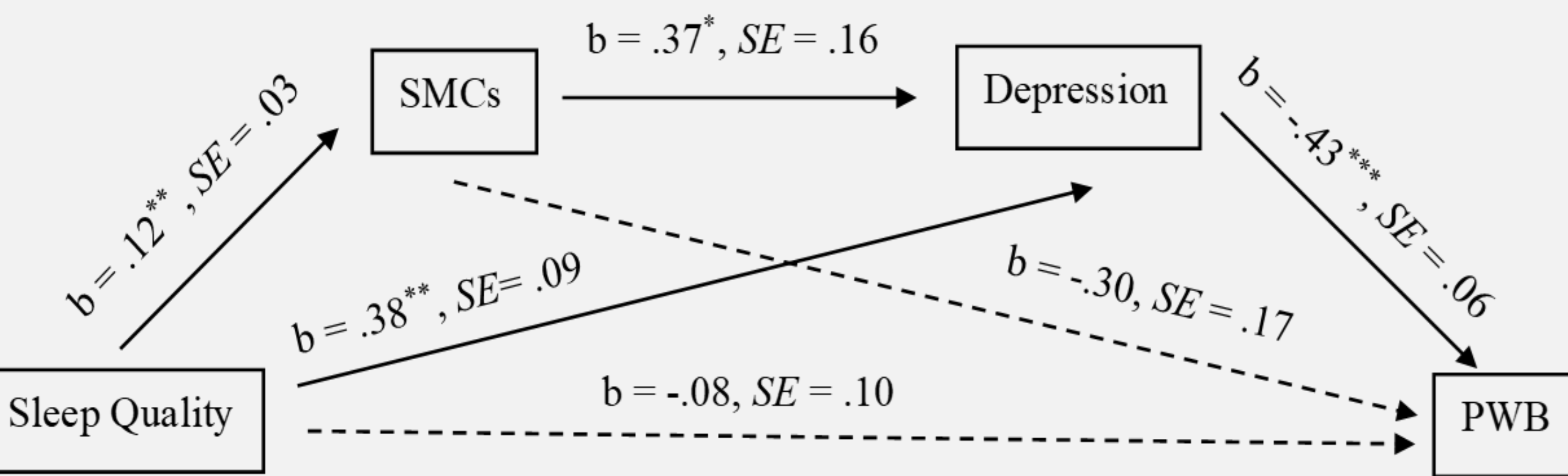
Although sleep quality is widely recognized as a crucial determinant of elderly well-being, its underlying psychological mechanisms remain insufficiently understood. This study examined the serial mediation pathways linking sleep quality to multidimensional well-being—psychological (PWB), social (SWB), and emotional (EWB)—through subjective memory complaints (SMC) and depression.

Methods

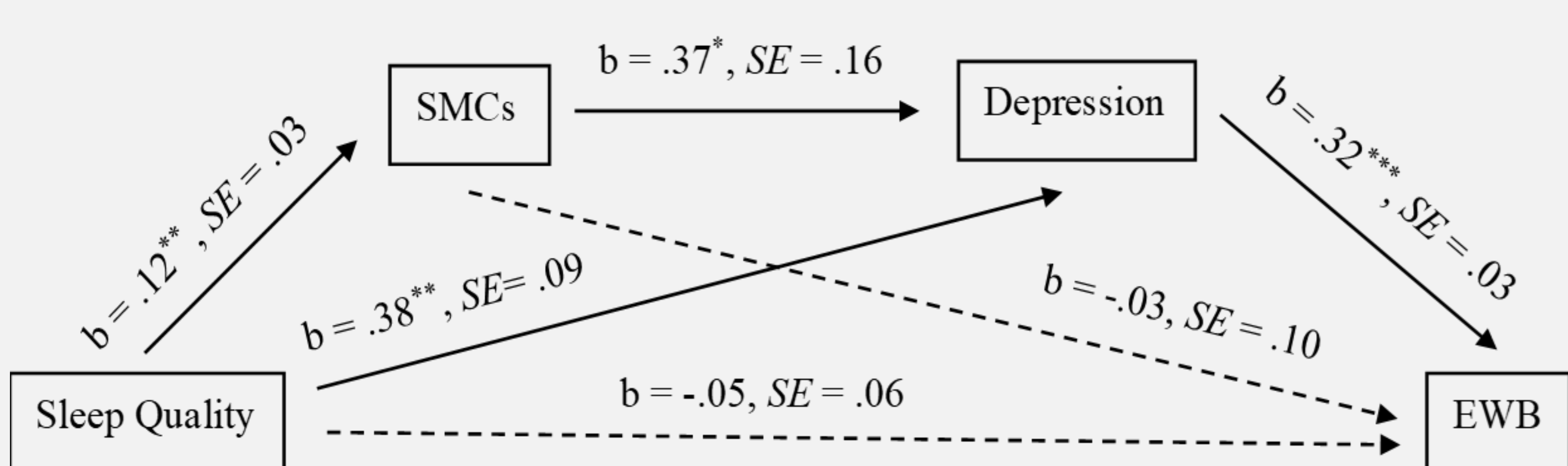
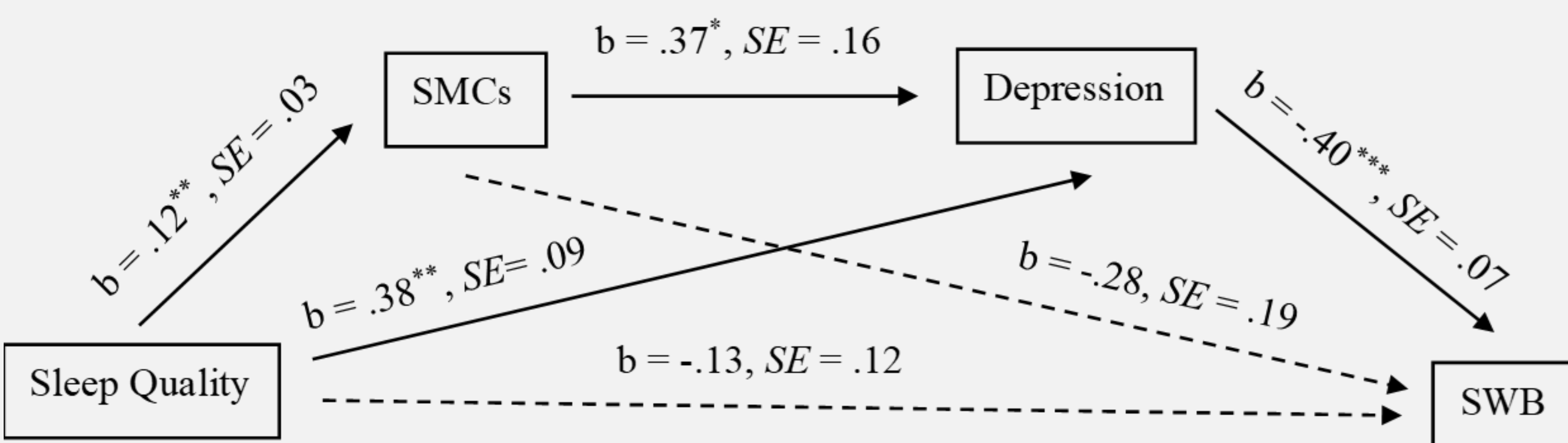
A cross-sectional design was employed with community-dwelling adults aged 55 and older. Measures included the Pittsburgh Sleep Quality Index, Subjective Memory Complaints scale, Center for Epidemiologic Studies Depression Scale, and assessments of PWB, SWB, and EWB. Serial mediation analyses were performed using Hayes’ (2017) SPSS PROCESS macro (Model 6), with indirect effects tested via bootstrapping (5,000 resamples) and 95% confidence intervals (CI); mediation was considered significant when the CI excluded zero.

Results

Depression significantly mediated the link between sleep quality and all well-being domains (e.g., PWB: $b = -.16$, 95 CI [-0.28, -0.06]), whereas the independent indirect effects of SMC were non-significant. Notably, the direct effect of sleep quality on well-being became non-significant after entering mediators, indicating a fully mediated pattern. Crucially, significant serial mediation effects (Sleep quality → SMC → Depression → Well-being) were observed for PWB ($b = -.01$, $SE = .009$, Bootstrap 95% CI [-.04, -.003]), SWB ($b = -.01$, $SE = .009$, Bootstrap 95% CI [-.03, -.003]), and EWB ($b = -.01$, $SE = .007$, Bootstrap 95% CI [-.03, -.002]).



Results



Discussion

Among older adults, the relationship between sleep quality and distinct dimensions of well-being appears to be closely intertwined with perceived memory decline and emotional distress. Prior research has suggested that poor sleep quality exerts a significant adverse effect on older adults’ perceptions of their cognitive functioning (Hu et al., 2023). Persistent concerns about declining cognition, together with fears of developing dementia, may further precipitate or exacerbate depressive symptoms (Pacifco et al., 2022), thereby diminishing well-being. Nevertheless, given that the present study was conducted in a non-clinical sample, the generalizability of these findings remains limited. Future research should include more diverse populations to examine the external validity of the present findings. Clinically, interventions for elders with poor sleep quality should prioritize reducing depressive symptoms while also improving sleep and addressing distress related to subjective memory complaints. Such integrated care may help protect multiple domains of well-being in later life.

Reference

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Disclosure of conflict of interest name of first author:
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I have no COI with regard to the presentation