

Title: Associations of adverse child experiences and positive childhood experiences with self-reported sleep disturbances in the West Philadelphia Promise Neighborhood

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Background: Sleep disturbances are prevalent among adults in the United States and are associated with adverse childhood experiences (ACEs). Although less explored, positive childhood experiences (PCEs) may promote future good health—including better sleep—or counteract negative impacts of ACEs on health.

Objective: This study aimed to understand the associations of both ACE and PCEs with self-reported sleep disturbances among caregivers of children living in West Philadelphia. We hypothesized that ACEs would be associated with more sleep disturbance while PCEs would be associated with less sleep disturbance.

Methods: In this cross-sectional analysis, we used data from the 2019 second wave of the West Philadelphia Promise Neighborhood neighborhood survey, a population-representative survey of caregivers in a defined geographic area in West Philadelphia. ACEs and PCEs were assessed using validated scales and dichotomized as high vs. low using predetermined cutoffs. We used demographics-adjusted binary logistic regression models to analyze associations of ACEs, PCEs, and their interaction with sleep disturbance (yes/no, based on a single question).

Results: In adjusted models, caregivers reporting high ACEs had 63% higher odds (aOR=1.63, 95% CI: 1.09-2.43) of reporting sleep disturbances compared to those with low ACEs. Caregivers with high PCEs had 67% lower odds (aOR=0.33, 95% CI: 0.18-0.61) of reporting sleep disturbances compared to those with low PCEs. There was no evidence of interaction between ACEs and PCEs (interaction $p=0.93$).

Conclusion: Our results suggest that PCEs may be a fruitful area of asset-focused research for identifying health-promoting life-course factors. In contrast to ACEs, active promotion of PCEs may be a promising avenue for supporting children's future health including sleep outcomes in adulthood.