of low cohesion were more pronounced for females in DunedinPACE (β=0.36, 95%CI=0.13-0.60) and PCPhenoAge (β=0.21, 95%CI=0.07-0.35). No other interaction effects were found for race/ethnicity, living arrangement, and education. Our findings indicate that neighborhood stressors can speed up epigenetic aging, with older females being particularly vulnerable to the effects of low cohesion. This study provides insights into the biological foundations of health disparities rooted in neighborhood environments.