

Exploring the Relationship Between Urban Greenness and Mental Health in China: Residential Neighborhoods and Workplaces

One in eight individuals worldwide suffers from mental health disorders, with prevalence rates potentially higher in low- and middle-income countries. A significant body of research has explored the relationship between exposure to greenery—such as trees, forests, and grasslands—and mental health outcomes. However, there has been less focus on the heterogeneous effects of greenness exposure on mental health across social groups with varying employment statuses. Depending on how much time they spend in diverse urban environments, individuals may experience different mental health benefits from their surrounding greenery. This study investigates the associations between mental health and greenness in residential and workplace contexts. Specifically, we compare the experiences of working and non-working groups concerning the association between residential neighborhood greenness and mental health. We further examine the predictors of mental health among the working group. We use data from the 2017 Shanghai Urban Neighborhood Survey (SUNS) and Normalized Difference Vegetation Index (NDVI) remote sensing data. Our findings are simple: while non-working individuals benefit more from greenery in their residential communities, individuals in the workforce gain mental health benefits from greenery in their workplaces. The results indicate that the association between greenness and mental health depends on how much time different groups spend in the locality. Potential mechanisms are proposed to explain these associations. This study aims to enhance the existing literature by emphasizing the importance of equitable resource distribution and addressing the specific needs of different social groups within particular contexts.