

## Biophilia article

### Urban Greenspace and Mental health

"Would You Be Happier Living in a Greener Urban Area? A Fixed-Effects Analysis of Panel Data" published in Psychological Science. April 2013. White et al. Exeter University

<http://www.ecehh.org/publication/would-you-be-happier-living-greener-urban-area>

New research published in the journal Psychological Science has found that people living in urban areas with more green space tend to report greater wellbeing than city dwellers that don't have parks, gardens, or other green space nearby.

This study draws on 18 years of panel data from over 10,000 participants to explore the self-reported psychological health of individuals over time and the relationship between urban green space, wellbeing and mental distress. Findings show that urban green space can deliver significant benefits for mental wellbeing.

The impact of green space was examined through a positive, evaluative measure of wellbeing – life satisfaction – as well a more experiential marker of psychological ill-health – the General Health Questionnaire (GHQ) scale. By using a fixed effects analytic approach more common in economic analyses, the green space effect was estimated without being biased by the personalities of the survey respondents.

Data was derived from the British Household Panel Survey, a nationally representative longitudinal survey of households in the UK that ran annually from 1991-2008, containing over 5,000 households and 10,000 individual adults.

Local area green space was derived from the Generalised Land Use Database, which classifies land use at high geographical resolution across England, and has been applied to 32,482 Lower-layer Super Output Areas (LSOAs) – a standard geographic unit used to report small area statistics.

Our analyses suggest that people are happier when living in urban areas with greater amounts of green space. Compared to instances when they live in areas with less green space they show significantly lower mental distress (GHQ scores) and significantly higher wellbeing (life satisfaction).

The analysis also made it possible to compare the beneficial effects of green space with other factors which influence wellbeing. In comparative terms, living in an area with higher levels of green space was associated with improvements in our wellbeing indicators roughly equal to a third of that gained from being married, or a tenth as large as being employed vs. unemployed.

These effects emerge controlling for other differences at the different time points such as income, employment status, marital status, health, housing type and local area level variables, such as crime rates.

Urbanisation is considered a potential threat to mental health and wellbeing and although effects at the individual level are small, this study demonstrates that the potential benefit at a population level should be an important consideration in policies aiming to protect and promote urban green spaces for wellbeing.