

Recent Research on Urbanisation Green Spaces and Well-Being of City Dwellers

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1. New research explores the ways to relieve the negative effects of urbanisation by introducing more green space to urban areas.

Trend of Urbanisation

In a recent article, *The New York Times* reported that China is pushing ahead with a sweeping plan to move 250 million rural residents into newly constructed towns and cities over the next dozen years. This large scale of brand-new Chinese city dwellers will approach the total urban population of the United States—in a country already bursting with megacities.

And globally, according to the projections of the United Nations Population Division, by 2030, in the developing world more people will live in urban than rural areas; by 2050, two-thirds of its population is likely to be urban.

Urbanisation brings about changes in social organisation and affects the mental health of city dwellers, due to the presence of increased stressors and factors, such as an overcrowded and polluted environment, high levels of violence, and reduced social support.¹

Reducing the Negative Effects of Urbanisation

As the world rapidly moves towards urbanisation, researchers and policymakers are hurriedly conducting studies to explore the ways of mitigating its negative effects.

Recent research, for example, has found that people living in urban areas with more green space tend to report greater well-being than city dwellers that do not reside near parks, gardens, or other green spaces. The paper was published in the journal *Psychological Science* by Association for Psychological Science, which is a highly ranked empirical journal in psychology. *CITYGREEN* looks into the details of this research, led by Dr. Mathew White from the University of Exeter Medical School, Cornwall, England.²

Methodology

The impact of green space was examined through a positive, evaluative measure of well-being, life satisfaction, as well as a more

experiential marker of psychological ill-health, the General Health Questionnaire (GHQ) scale. By using a fixed-effects analytic approach that is more common in economic analyses, the effect of green space was estimated without bias from 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 to 2008, comprising data collected from over 5,000 households and 10,000 adult individuals.

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

Results

The analyses suggest that people are happier when living in urban areas with greater amounts of green space. In these cases, they show significantly less mental distress (GHQ scores) and significantly higher well-being (life satisfaction), compared to instances when they are living in areas with less green space.

The analysis also made it possible to compare the beneficial effects of green space with other factors that influence well-being. In comparative terms, living in an area with higher levels of green space was associated with improvements in other known indicators of well-being. For example, it is roughly equal to a third of the well-being that is gained from being married, or a tenth as large as the difference in well-being between being employed and unemployed.

Dr. White and his colleagues were surprised by the scale of the effects of living in a greener area: “We’ve found that living in an urban area with relatively high levels of green space can

have a significantly positive impact on well-being, especially when compared to ‘big hitting’ life events, such as marriage.”

The results show that, even when stacked up against other factors that contribute to life satisfaction, living in a greener area has a significant effect.

Application

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

“These kinds of comparisons are important for policymakers when trying to decide how to invest scarce public resources, such as for park development or upkeep, and figuring out what ‘bang’ they’ll get for their buck,” says Dr. White.

Findings from previous studies have suggested a correlation between green space and well-being, but those studies were unable to rule out the possibility that people with higher levels of well-being simply moved to greener areas. Dr. White and colleagues were able to solve that problem by using longitudinal data, which was gathered from the repeated observation of participants over time, from the national survey.

The new research does not prove that moving to a greener area will necessarily cause increased happiness, but it does fit with findings from experimental studies showing that short bouts of time in a green space can improve people’s mood and cognitive functioning.

“This research could be important for psychologists, public health officials, and



2. Dr. Ben Wheeler and Dr. Rebecca Lovell talking to a participant wearing a GPS tracker and accelerometer about their green space research.

urban planners who are interested in learning about the effects that urbanisation and city planning can have on population health and well-being,” concludes Dr. White. His coauthors on this research paper include Dr. Ian Alcock, Dr. Benedict Wheeler, and Professor Michael Depledge of the European Centre for Environment and Human Health.

The Next Step

Through corresponding with the team of researchers, *CITYGREEN* finds out that it has commenced related research to understand how natural environments may support good health and well-being.

Though explanatory theories for the positive effects exist, the evidence is mixed. Positive effects include the provisions of locations and motivation for physical activity and of opportunities for “restoration” from the stresses of daily life. The new project aims to improve the understanding of relationships between natural environments and health by addressing the question: do different types and qualities of natural environment have varying relationships with human health and well-being, and do these relationships differ according to one’s rural or urban context and socio-economic status?

The expected outcomes of the project include advances in knowledge of direct relevance to environmental and health policy, developments in methodology and theory, and increased research capacity.

The outcomes will be of interest to academic and other public or private research end-users. The evidence produced will allow Natural England, Forestry Commission of Great Britain, the local authorities, and other organisations that manage the natural environment for human benefit to develop nationally and locally appropriate context-relevant responses to policies. This research will facilitate the effective allocation of resources and development of targeted interventions and programmes resulting in maximised benefit to the environment, society, and individual.

1 Srivastava, Kalpana. 2009. “Urbanization and mental health.” *Industrial Psychiatry Journal* 18: 75–76.

2 White, Mathew P., Ian Alcock, Benedict W. Wheeler, and Michael H. Depledge. 2013. “Would You Be Happier Living in a Greener Urban Area? A Fixed-Effects Analysis of Panel Data.” *Psychological Science* 6: 920–8.