

Green Space, equality, and fairness



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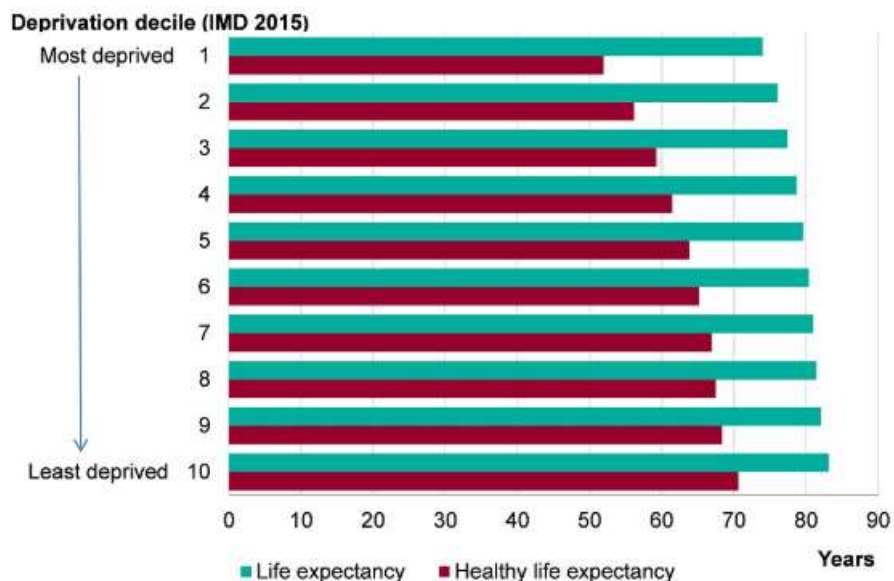
What is meant by Green Space?

- **Functional green space:** Any green space that has a specific function in its use for example, public parks or gardens, playing fields, golf courses, allotments and so on.
- **Publicly accessible green space:** A subset of functional green space, it removes green spaces expected to have restriction to entry for example, golf courses.
- **Blue space:** All inland water bodies for example, rivers, lakes, ponds, canals and so on.

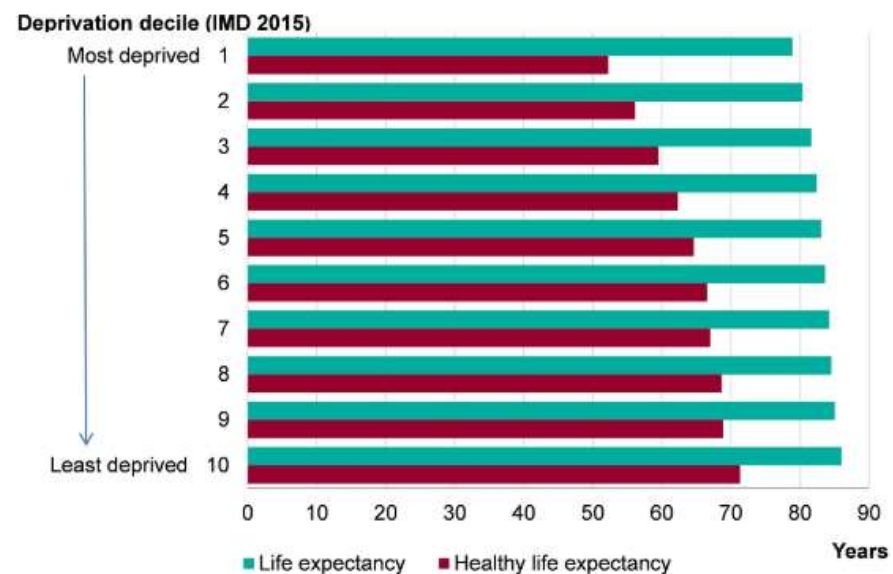


Ref: Office of National Statistics (2018) UK natural capital: ecosystem accounts for urban areas

Health Inequalities – a reminder



Male life expectancy and healthy life expectancy at birth by deprivation decile, England, 2013 to 2015



Female life expectancy and healthy life expectancy at birth by deprivation decile, England, 2013 to 2015

Determinants of health



Barton, H. and Grant, M (2006) A health map for the local human habitat. *Perspectives in Public Health*, Vol. 126, No. 6, 252-253 (2006)

Green & Blues Spaces: Social Inequalities in the WHO European Region



Table 4. Summary of relationships between measures of SEP and environmental resources.

SEP Dimension	Individual Data Analyses	Ecological Data Analyses
High deprivation (Index) [35,36,39–43,45]	↓*	↓* ↓* ↓ ↓ ↓ ↓ ↓* --
Low income [34,37,42,46,47]	↑ ↓ ↓* ↓* ↓* ↓* ↓* -	-
Low education [34,46]	↓ ↓ ↓* -	-
No employment [34,44,46,47]	↓ ↑* ↑* --	↓
With migration background [34,38,46]	↓* ↓ ↓ -	↓
Foreign nationality [34,39,46]	↓ ↓ ↓ -	↓*
Black and minority ethnic groups [40]	↓	-
Gender: female [34,47]	↓* ↑*	-
Old age [34,38,47]	↑ ↑* ↑*	↑
With children in household [34]	↓* ↓*	-
Single parent household [39]	-	-
No car [47]	↓*	-
No home ownership [47]	↓*	-

Inequalities in the quality of urban park systems in the USA

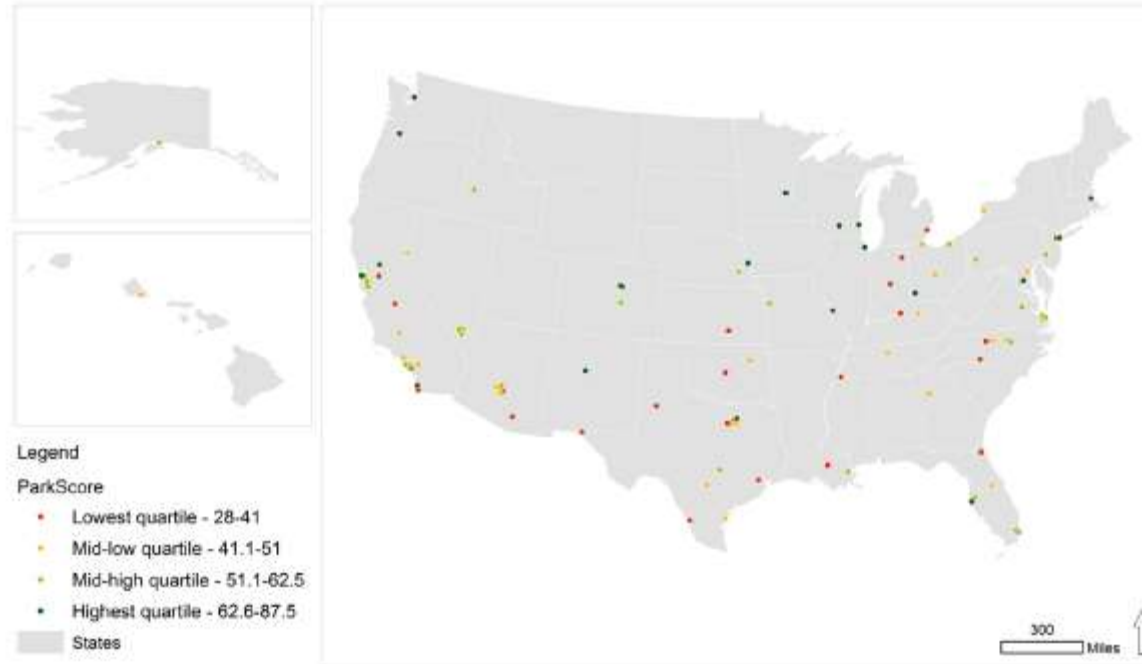


Fig. 1. Location and ParkScore of the 99 selected cities in the U.S.

Urban Green space availability in European cities

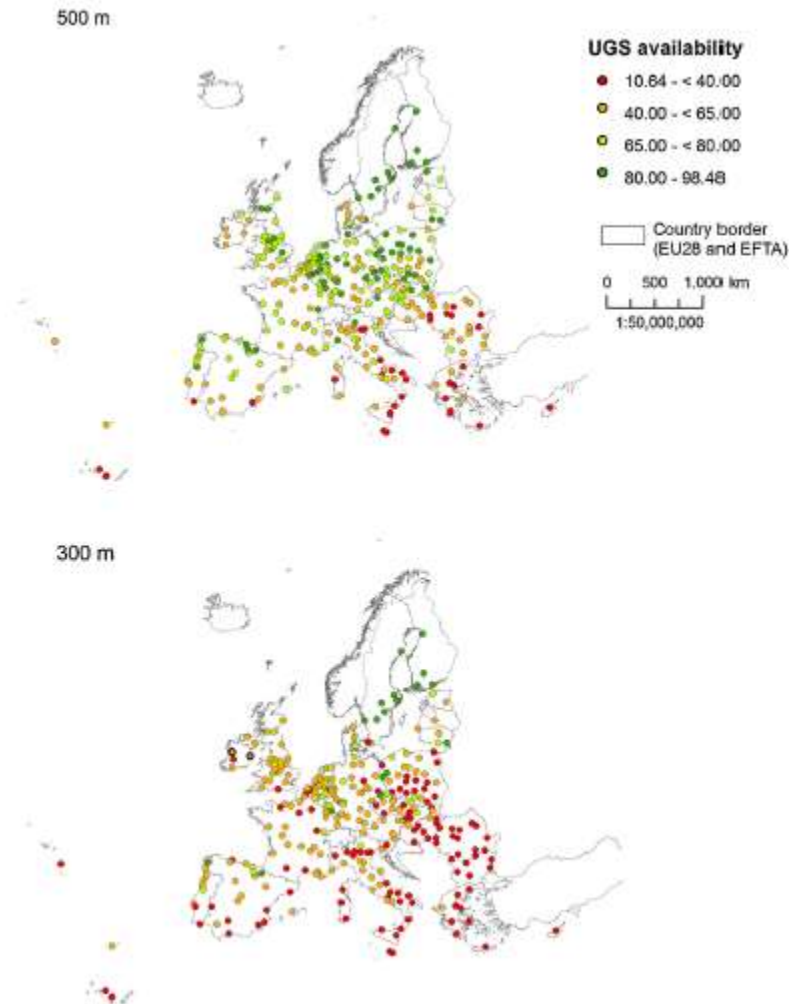
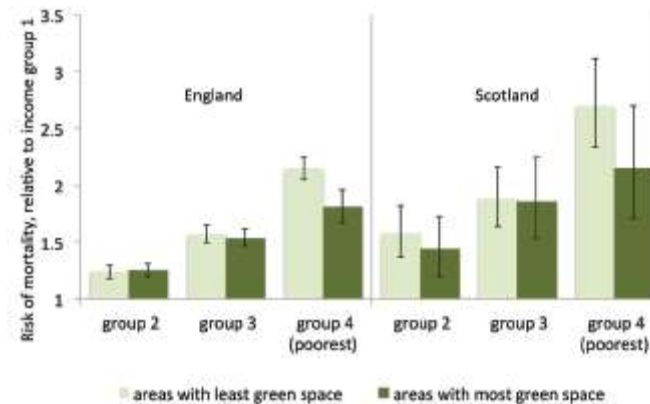


Fig. 3. Share of the population (%) with UGS (≥ 2 ha) available within 500 m and 300 m in administrative city boundaries

Urban green space , mortality and morbidity - Scotland vs England comparison.



Black lines (I) are 95% confidence intervals

Figure 3: Socio-economic inequalities, by amount of green space (urban areas, working age men only)

Green space distribution with urban densification

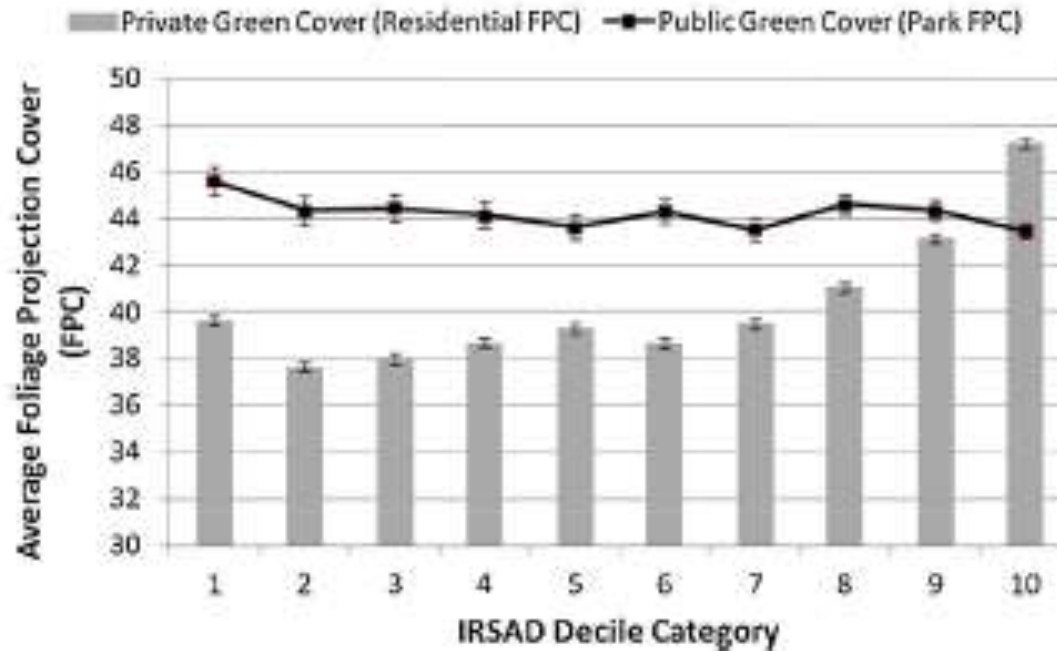


Fig. 4. Patterns of socio-economic disadvantage/advantage using the IRSAD Decile Categories at the SA1 scale (the smallest unit for the census data) in relation to private green cover (FPC of residential land) and public green cover (FPC of parkland). Patterns show an increase in private green cover ($p < 0.0001$) and a slight declining trend in public green cover ($p = 0.0274$) with increasing socioeconomic advantage.

With greater dwelling density, both types of green infrastructure decrease. However, availability of private versus public green infrastructure, differs according to socio-economic advantage

Contrasting distributions of greenspace across social and ethno-racial groups: a Bradford case study

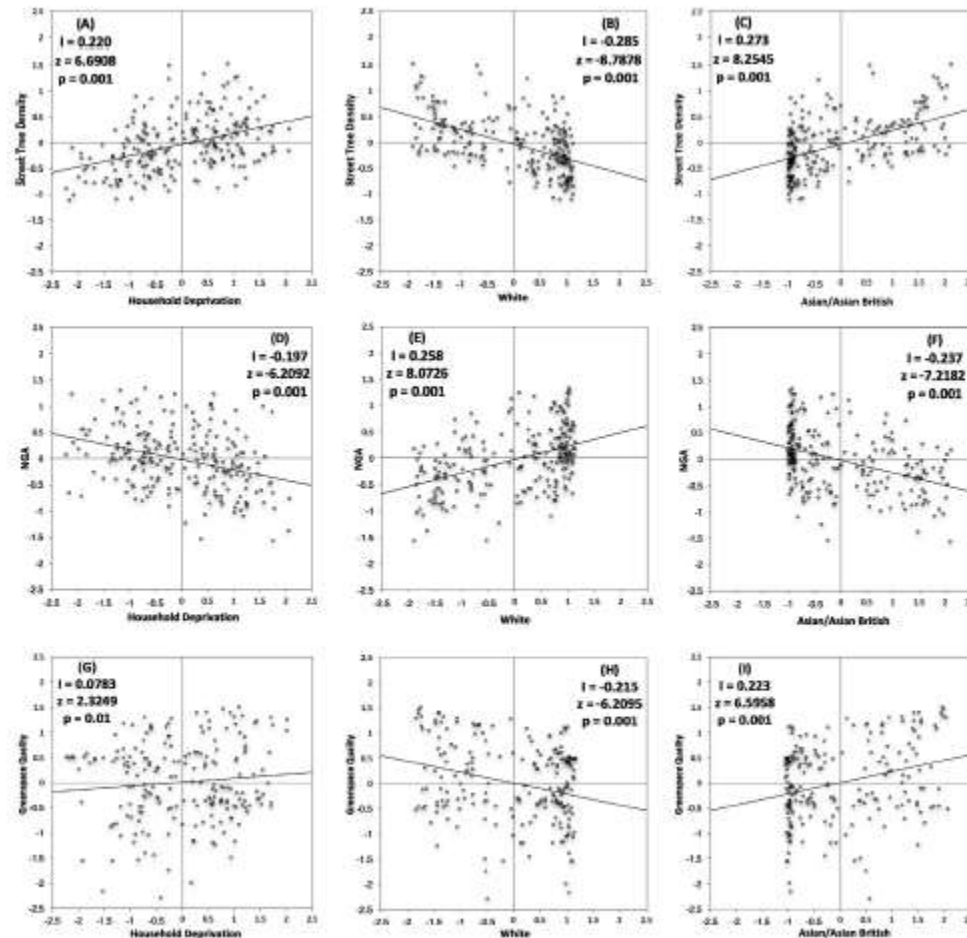
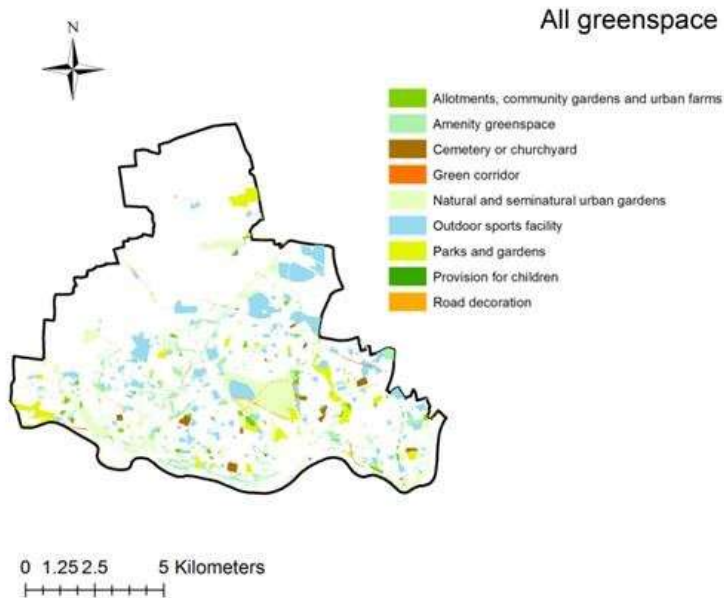


Fig. 5. Bivariate Moran's I scatterplots illustrating association between standardized values for each socio-demographic variable and spatially weighted urban green infrastructure (UGI) values, for: (A) Street tree density and household deprivation, (B) street tree density and White, (C) street tree density and Asian/Asian British, (D) neighbourhood greenspace accessibility and household deprivation, (E) accessibility and White, (F) accessibility and Asian/Asian British (G) greenspace quality and household deprivation, (H) greenspace quality and White, (I) greenspace quality and Asian/Asian British.

Green space and environmental justice: Newcastle upon Tyne case study



distribution, recognition,
participation, responsibility and
capabilities

It is not just about where greenspace is located in a city, but concerns the characteristics of the greenspace itself, how these relate to the characteristics of local communities, their wellbeing and opportunities.

Ref: Brooks & Davoudi, 2018,
DOI:
10.3351/ppp.2018.3835242525

How can green space be made to contribute to the reduction of health inequalities?



- To mitigate the potential of green spaces exacerbating health inequalities there are several things that planners and managers of green space need consider:
 - Green Space spatial distribution – how much, where, how accessible
 - Green space quality – not just about biodiversity, but about investment, facilities, and meeting the needs of the community
 - Recognition of the rich and varied cultures in our urban areas
 - Meaningful involvement of communities in decision making
 - Fairness with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies