How do front gardens impact health and well-being?

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Hypotheses

A front garden horticultural intervention (introducing plants to paved front gardens) will:

1. Improve residents’ subjective well-being and perceived stress levels
2. Improve stress regulation as measured by diurnal cortisol secretion
3. Provide other cultural ecosystem services
Outcome measures

➔ Shortened Warwick-Edinburgh Mental Well-Being Scale (7-35)
➔ Perceived Stress Scale (0-40)
➔ Diurnal patterns of salivary cortisol
  - Decline (12h - 3h) post-awakening
  - Daily average concentration
  - Daily total secretion - Area Under the Curve (ground)
➔ In-depth semi-structured interviews
**Intervention schedule**

42 participants

At each sampling point:

- Semi-structured interviews
- Pen + paper questionnaires
- Salivary cortisol

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<th>Street A</th>
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<td>Before</td>
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<td>Intervention</td>
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Horticultural intervention
Salivary cortisol concentrations (mean ± standard error) pre- and post-intervention; n = 12. Laboratory reference data from comparable healthy participants included for illustrative purposes; n=26, 15 women and 11 men aged 48.6 ± 11.7 years; assayed by the University of Westminster Psychophysiology and Stress Research Group.
Motivation
Relaxing
Pride
Uplifting
Potential for low-cost, small-scale, urban green infrastructure to be replicated elsewhere?
Conclusions and implications

➔ Front gardens are important considerations
➔ Integrated thinking needed
➔ Limits to paving over front gardens
➔ Social case for more street-facing gardens and green spaces
➔ Equitable access to opportunity
Thank you
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References


All photos and data are authors’ own.