

Access to green spaces



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I'DGO: the consortium vision

Consortium established 2003

- Older people are co-researchers; a range of techniques place them at the heart of the research
- How do outdoor environments affect older people's quality of life?
- What aspects of design help or hinder older people in using the outdoors?



EPSRC **EQUAL Programme**

INCLUSIVE DESIGN FOR GETTING OUTDOORS



I'DGO TOO Academics



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Why does the outdoor environment matter?

Healthy activity, wellbeing and quality of life

Older people living in an environment that makes it easy and enjoyable to go outdoors were more likely to be physically active, healthier and more satisfied with life.



Research Questions



- What are the mechanisms through which neighborhood environments enhance health?
- 2. How perceived quality and accessibility of neighbourhood open spaces affect patterns of activity?
- What features facilitate or hinder physical activity in outdoor spaces?
- What are older people's preferred environmental features for their local open spaces?
- 5. How can we create accessible outdoor environments for older people? (examples of design guidelines)

Data Collection Method

Postal questionnaire (2200 older people living in 20 local authorities) $n = 211$

Distribution through local housing associations (older people living in sheltered housing) $n = 102$

Translated sessions (2 minority ethnic groups) $n = 22$

Total Sample Size $n = 335$

Choice-based conjoint questionnaire $n = 237$

Objectives



- Investigate the relative importance (i.e. utilities) of outdoor environment attributes
 - Examine change in the levels of the attributes
 - Examine whether utility scores represent a homogeneous group or whether there are distinct subgroup preferences
- 4) Map potential trade-off scenarios among diverse open space features (e.g., facility, nuisance, trees along footpath, car park, and water features).

Methodology



- Choice-based conjoint questionnaire
- Partial profile design by use of Sawtooth software

For details see forthcoming paper:

Alves, S., Aspinall, P., Ward Thompson, C., Sugiyama, T., Brice, R. and Vickers, A. (2008 in press) **Preferences of Older People for Environmental Attributes of Local Parks: The Use of Choice-Based Conjoint Analysis** *Facilities* vol 26

Questionnaire Design: Attributes & Levels



Distance

0-5 minutes walk

5-10 minutes walk

10-15 minutes walk

15 minutes or more

Facility

Café/Toilets

No special facility

Pavement

existence

Pavement all the way

Pavement part of the way

No pavement

Nuisance

Youngsters hanging around

Dog fouling

Signs of vandalism

No particular nuisance

...

Questionnaire Design - Example

❖ QUESTION 1 ❖

<input type="checkbox"/>	Heavy traffic (including lorries)	Few seats in the park
Nothing special to watch	Signs of vandalism	

<input type="checkbox"/>	Medium traffic on route	Many seats in the park
Other's activities to watch	No particular nuisance	

❖ QUESTION 2 ❖

<input type="checkbox"/>	Takes 10-15 min walk to get to	No seats en route
Many, well-spaced trees and plants	Wildlife in the park	

<input type="checkbox"/>	Takes 5-10 min walk to get to	Some seats en route
Some trees and plants	Good views from the park	

Choice-Based Conjoint Analysis



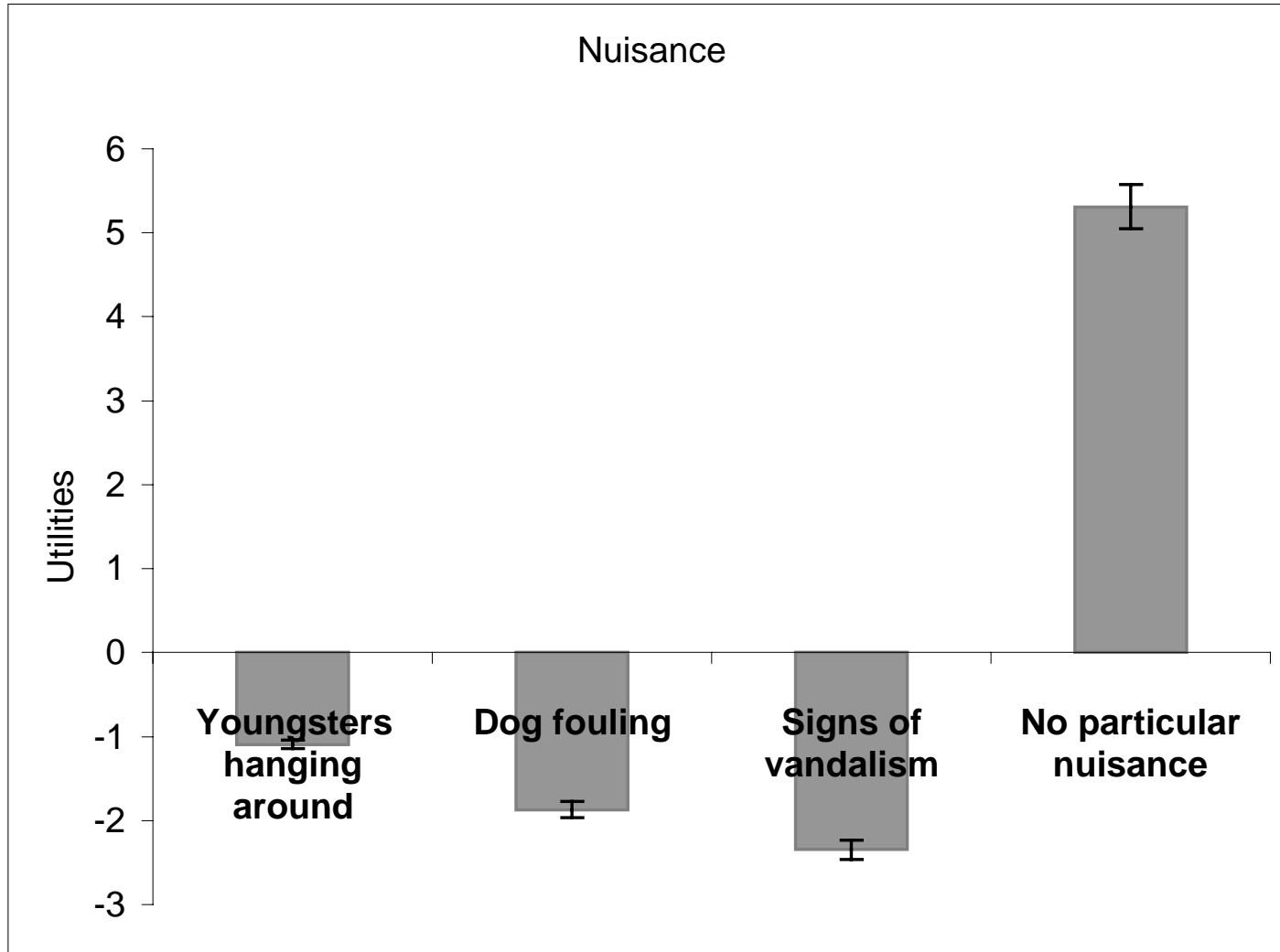
- Provides information on the relative impact of change of one attribute versus another
- Full set of preference scores (part-worth utilities)
- Utilities generated in conjoint are based on relative consideration of all attributes
- Choice task is more realistic
- Allows for scenario modelling

What environmental features do older people prefer for their local open space?

Participants preferred an open space:

- without nuisance
- with cafes and toilets
- with dense trees and plants
- light traffic
- wildlife to watch
- well maintained

What are participants' preferences for environmental features within attributes?



Are there distinct subgroup preferences?

1. Whether or not people live alone

- Those who live with someone: provision of facilities and car park.
- Those who live alone: distance and trees along the footpath.

2. Whether or not they have difficulty in getting around

- provision of seats both at the open space and en route

Potential trade-off scenarios among diverse open space features

Scenario 1: Facilities vs. Trees/plants

- **Facilities (seats, toilets, shelters, etc.)**



▪ Trees/Plants



Potential trade-off scenarios among diverse open space features

Scenario 2: Nuisance vs. Facilities

- **Lack of nuisance**



- **Facilities (seats, toilets, shelters, etc.)**



Home Zones and shared spaces



Are Home Zones a good solution for an ageing population?

How does implementation of shared space projects such as Home Zones affect older people's access outdoors and quality of life?

Does implementation of such schemes result in environments where older people

- Go outside more often?
- Spend more time outside in the local environment?
- Have better social networks?
- Have a better quality of life?

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