

Neighbourhood Environments, Physical Activity and Health for Older People: what have we learned from the I'DGO Project?



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Project vision

The I'DGO project is an on-going, three-year, consortium project funded by EPSRC

The aim is to identify the most effective ways of ensuring that the outdoor environment is designed inclusively, to improve the quality of life for older and disabled people

Key outputs include guidance on the design of neighbourhood environments.



The I'DGO Consortium



OPENspace Research
Centre
Edinburgh College of Art
Heriot-Watt University



Housing
Corporation



Oxford Institute for
Sustainable Development
Oxford Brookes
University



Sensory Trust

Sensory Trust



Ricability



SURFACE
University of Salford



Dementia
Voice

OPENspace: the approach



OPENspace has a multidisciplinary team researching planning, design and management of the environment

Constructivist approaches to understand people's transactional relationship with their environment, based in PCT (Kelly, 1955)

People's engagement with place (Canter, 1977)

Personal Projects (Little 1983) - a set of goal oriented, self-generated activities a person is planning

Conjoint analysis to look at trade-offs in real life decisions

Our approach treats respondents to surveys as co-investigators.

Background

Abundant evidence shows that a physically active lifestyle provides health and mental benefits for older people.

However, going outdoors can be difficult due to increasing frailty and environmental barriers.

A neighbourhood environment facilitating older people's outdoor activities will most likely enhance their well-being.



Objectives



Our purpose is to know what are the environmental attributes and through which mechanisms they make a difference in older people's health and well-being.

Research Questions

1. What are the mechanisms through which neighborhood environments enhance health?
2. How perceived quality and accessibility of neighbourhood open spaces affect patterns of activity?
3. What features facilitate or hinder physical activity in outdoor spaces?
4. 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 $n = 237$

Measures & Instruments



Activity : The frequency and duration of walking (to go places, for recreation, gardening and other activities)

Health : The number of days (in the last 30 days) poor health prevents the person from doing daily activities

Happiness : Life satisfaction (5-item scale: SWLS)

Supportiveness : A 30-item scale to measure the quality of a local open space and neighbourhood area

Preferred local open space: Choice-based conjoint questionnaire (preference judgments on 14 paired comparisons of local open spaces)

Demographics : Gender, age, living arrangement, postcode, functional status, education, occupation

1. What are the mechanisms through which neighborhood environments enhance health?

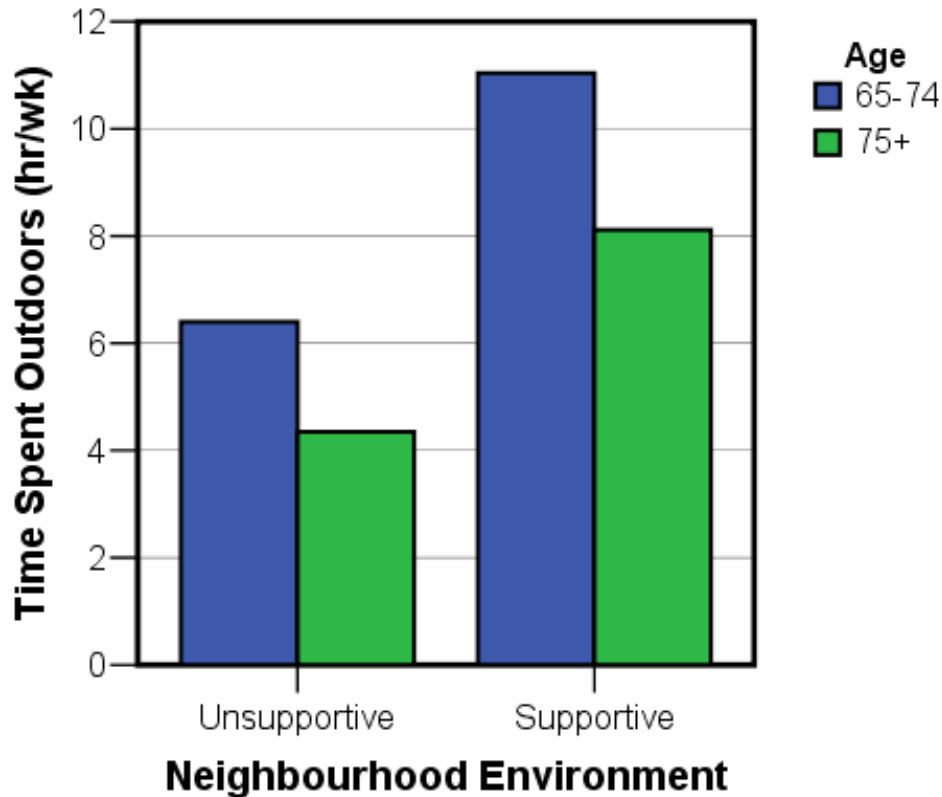
Through time spent on outdoor activity

- Time spent outdoors
- Walking outdoors

Through the quality of the outdoor experience

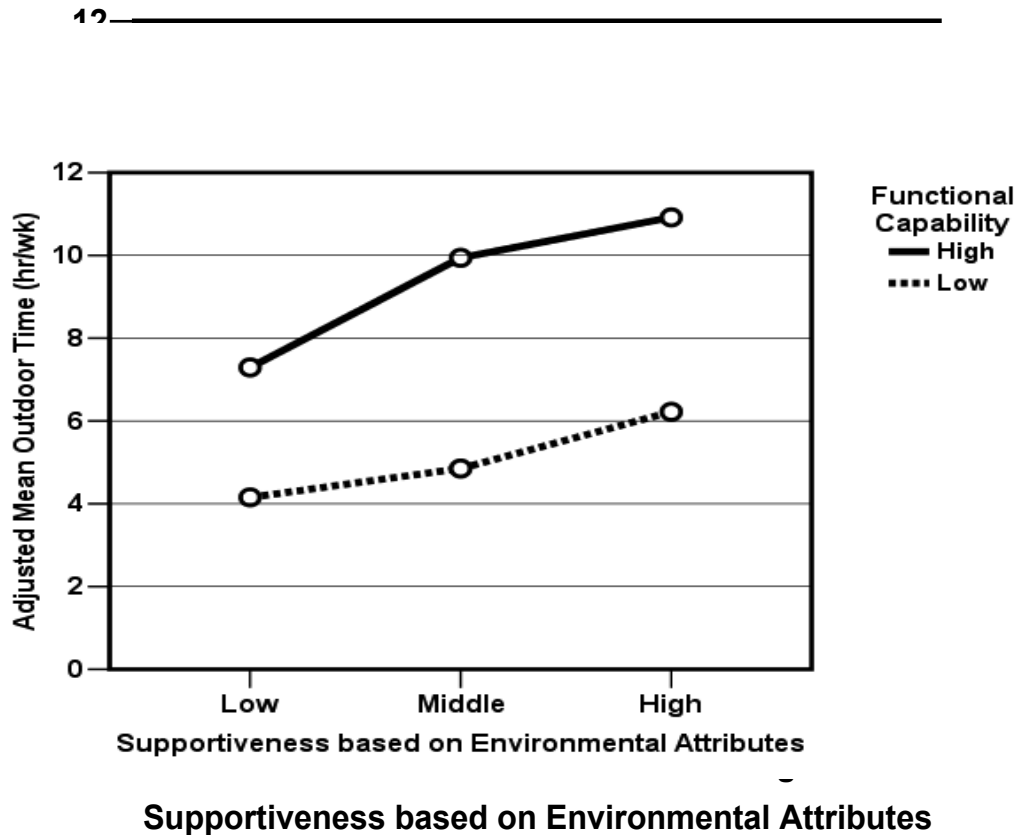
- Processes of perception, i.e., perception of the supportiveness of the environment

Supportive Neighbourhood Environments & Time Spent Outdoors



Older people who perceived their neighbourhood environments as fairly or very supportive exhibited a higher likelihood of being a high-level walker (WT \geq 2.5hour/week)

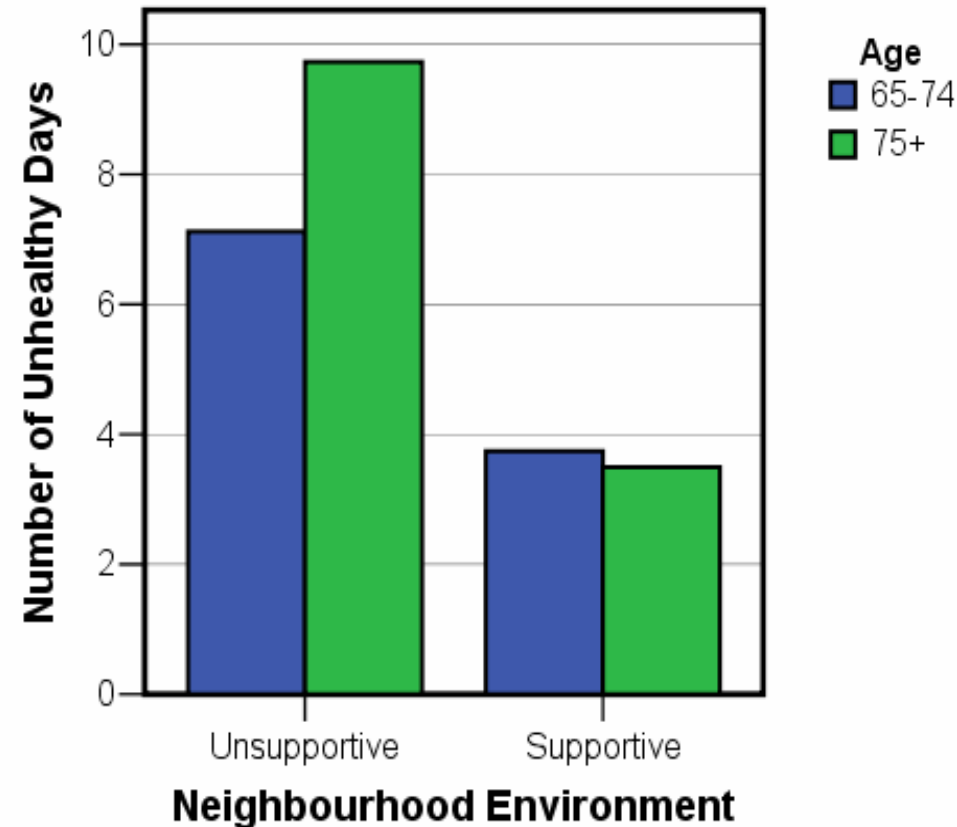
Supportive Neighbourhood Environments & Time Spent Outdoors



Functional Capability
High
Low

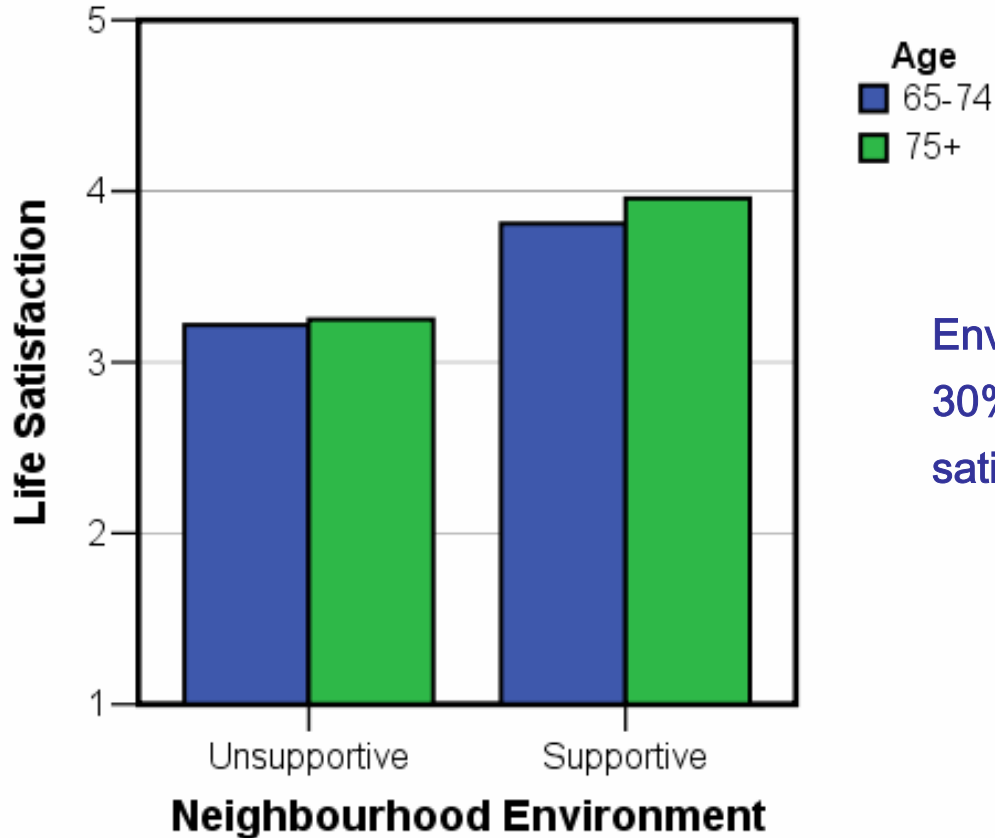
Supportiveness based on environmental attributes (comfort, pleasantness, safety, nuisance, etc.) is a significant predictor of the time spent outdoors.

Supportive Neighbourhood Environments & Health



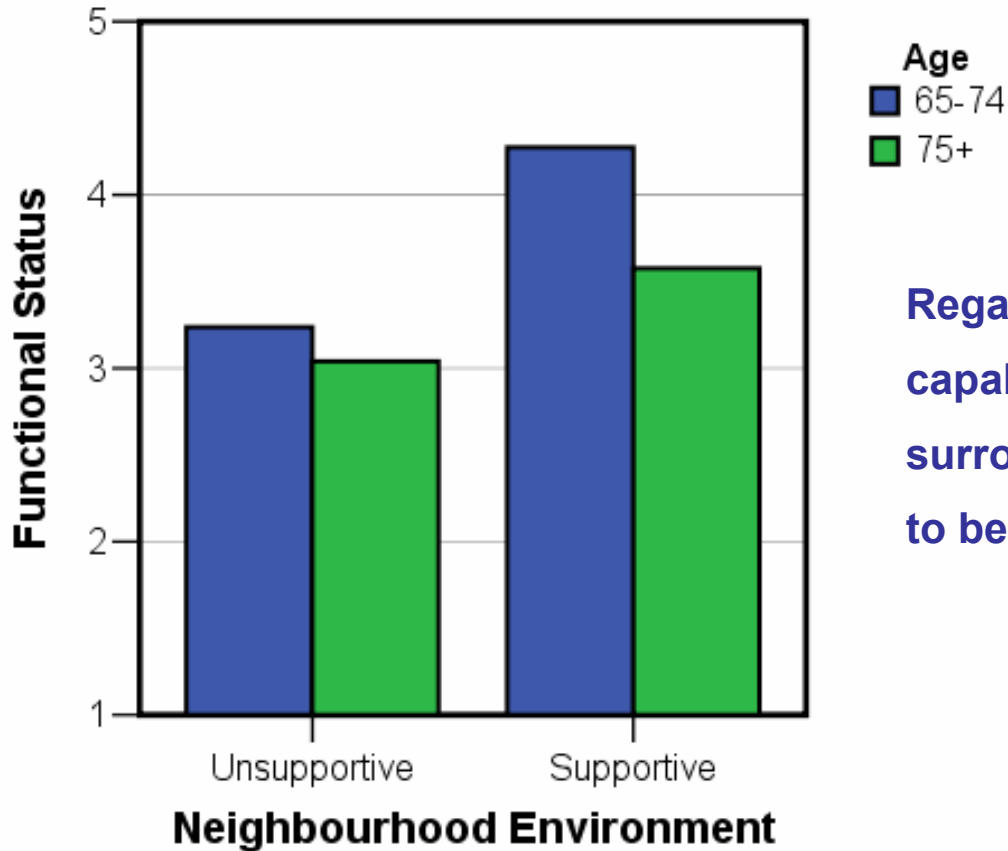
Older people who perceive their neighbourhood as supportive report less unhealthy days

Quality of Neighbourhood & Life Satisfaction



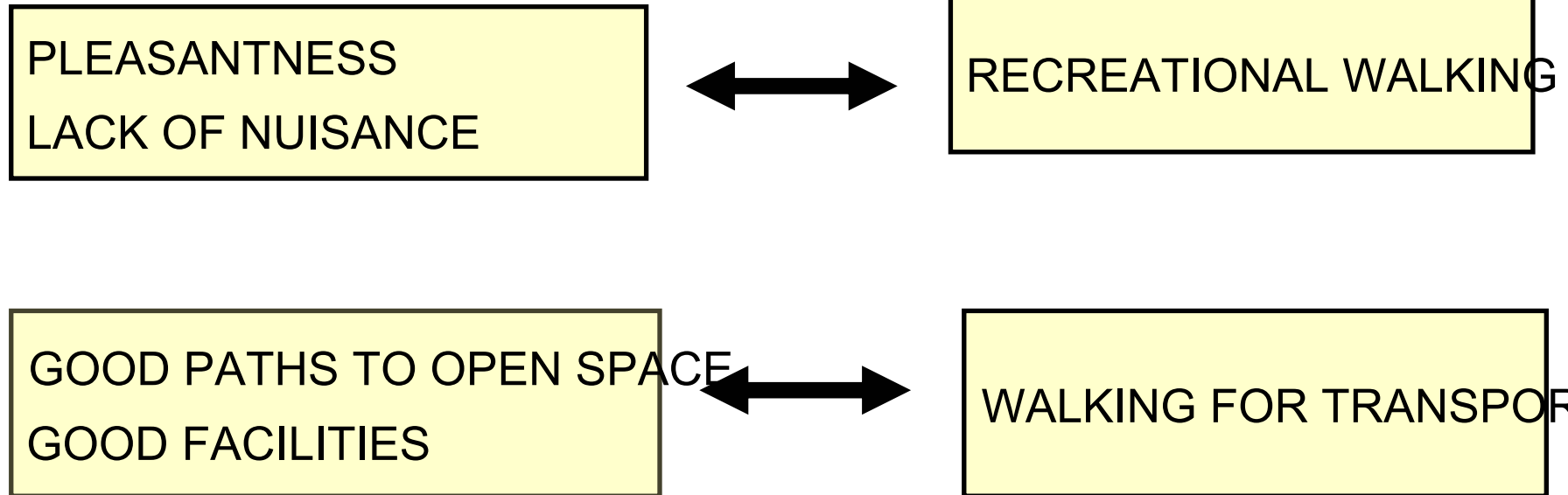
Environmental support accounts for about 30% of the total variance in life satisfaction.

Link between Neighbourhood Environment and Life Satisfaction Maintained?



Regardless of older people's functional capability, those who perceive their surroundings as more supportive are likely to be more satisfied with life.

2. How perceived quality and accessibility of neighbourhood open spaces affect patterns of activity?



3. What features facilitate or hinder physical activity in outdoor spaces?

- Perceived quality of paths to local open spaces
- Pleasantness
- Good facilities
- Water features

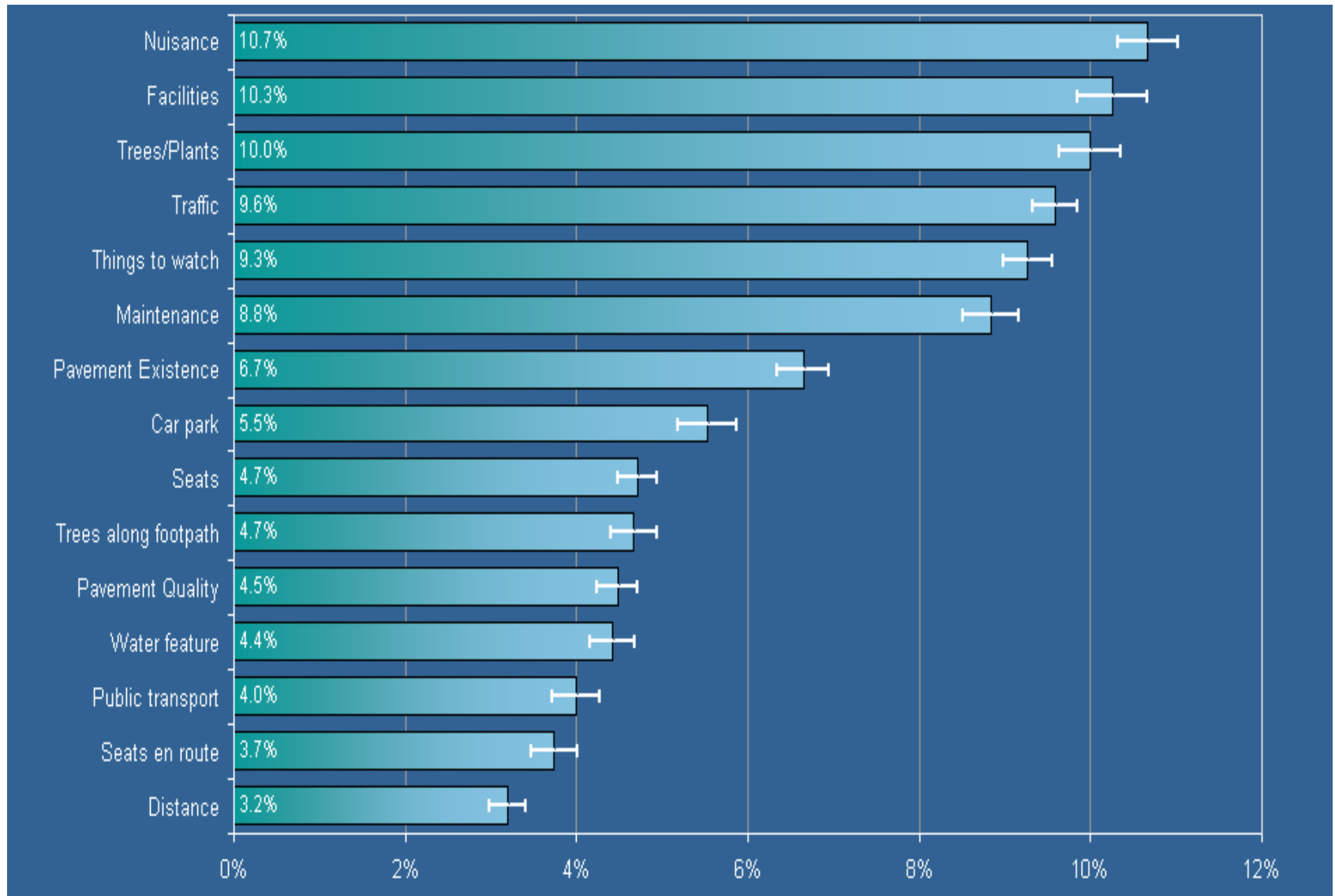
4. What are the most important environmental features for older people in their local open space?

Choice-based conjoint questionnaire

Older people prefer an open space:

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

Preferred environmental features for local open space



Implications

People living in a supportive outdoor environment tend to be more active, healthier and happier than those living in an unsupportive environment.

Improving the quality of the outdoor environment (making the choice of going outdoors easy and enjoyable) may be an effective way to encourage an active lifestyle and conducive to a better QoL.



Design Guidance

[Based on overall study]

- **Lack of nuisance**
- **Facilities (e.g., café/toilets)**
- **Presence of trees and plants**
- **Pleasant open space**
- **Light traffic**
- **Things to watch (e.g., waterscapes, wildlife)**

- **Lack of nuisance**



- **Trees and plants**
- **Pleasant open space**



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



▪ Light traffic



- **Things to watch**
- **Waterscapes**



Good paths

