



Inclusive Design for Getting Outdoors

Consortium Project

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Engineering and Physical Science Research Council

EPSRC

EQUAL Programme

Extending Quality Life for older and disabled people

INCLUSIVE DESIGN FOR GETTING OUTDOORS



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Consortium Partners



Sensory Trust

Sensory Trust - Jane Stoneham: accessible and inclusive environmental design, therapeutic environments and outdoor experience; based at the Eden Project



The Housing Corporation - Steve Ongeri: expertise in housing for older people, dissemination of research findings

Ricability

RICAbility - Lindsey Etchell: Research Institute for Consumer Affairs, expertise in research and dissemination work for older people



Dementia Voice - Jane Gilliard/Simon Evans: innovative information, training, research and development work for people with dementia

Project vision

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



The research challenge

- The relationship between older people and their environment is increasingly recognised as important for QOL
- Very little research has addressed engagement with the outdoor environment for older people
- Designers, planners and developers are hampered by a lack of support to make good design decisions in order to improve accessibility of complex and varied outdoor environments



Triangulation of methods

- Focus groups, semi-structured interviews and workshops with end-users and with designers/providers of open space
- Questionnaire surveys of end-users and designers/providers
- On-site analysis of urban form and behaviour-setting surveys of site use
- Analysis and comparison of good practice



Key outputs

- A review of the guidance on inclusive design of outdoor environments
- QOL criteria for older people in relation to outdoor environments.
- Tools for measuring outdoor environments in relation to their use
- Identification of the aspects of design that help or hinder older people in accessing the outdoors and achieving a good QOL.
- Guidance for developers, designers and planners, appropriate to their working methods and needs
- Information/guidance for lay people



The research centre for inclusive access to outdoor environments



Edinburgh College of Art and Heriot-Watt University

Researchers:

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www.openspace.eca.ac.uk

Three broad areas of work: disability and social inclusion, health and restorative environments, and tourism

Brings together leading researchers in landscape architecture, environmental psychology, quality of life (QoL) measures, visual impairment and inclusive design

Background

The literature suggests that outdoor environments have various benefits for older people:

- physiological benefits - maintenance and enhancement of physical health and functioning
- psychological benefits - stress reduction, satisfaction with life and sense of well-being.

Three different modes of engagement with outdoor environments seem to be involved:

- participation in physical activity in outdoor environments
- exposure to outdoor natural elements
- social interaction with friends and neighbours in outdoor places.

Theoretical Context

People's engagement with place (after Canter, 1977)

- physical qualities of place
- activities and behaviours
- perceptions and beliefs

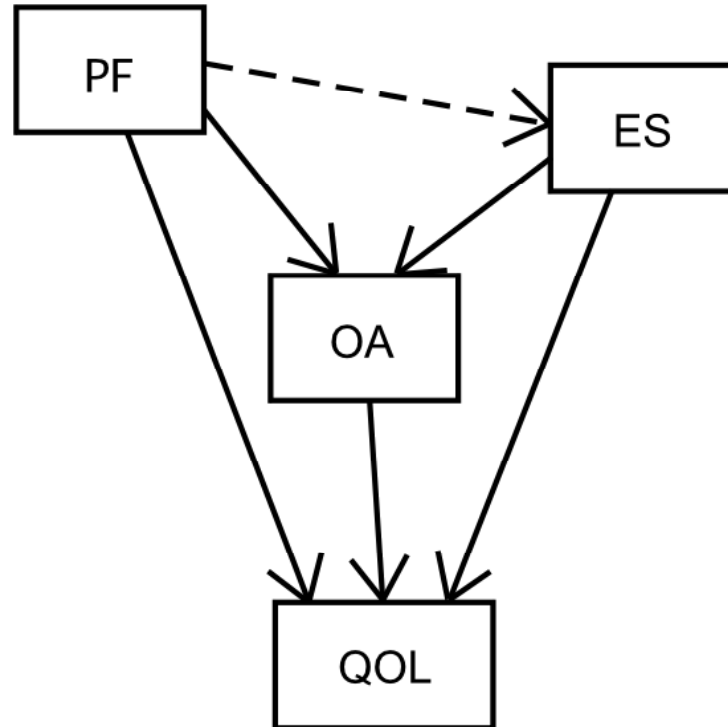
Social cognitive theory (after Bandura, 1986); people's activity patterns are influenced by:

- individuals' recognition of opportunities for activities
- their own skills to conduct them
- expected benefits from them

Self-efficacy - a belief in one's ability to perform a particular activity in a particular setting

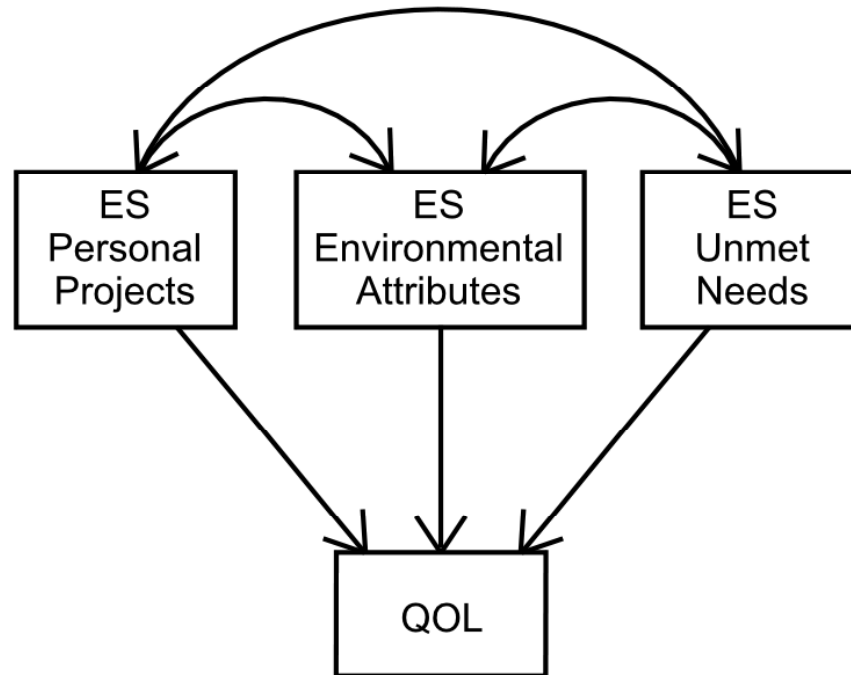
Environmental factors can act as either barriers or facilitators; 'Environmental support' conceptualises interaction at the level of a physical setting such as a neighbourhood or park.

A model for linking the outdoor environment and quality of life



QOL predicted by Outdoor Activity (OA)
 Environmental Support (ES), and Personal Factors (PF)

Comprehensive assessment of environmental support in relation to quality of life



QOL predicted by Three Different Types of Environmental Support (ES)

Methods : Personal Projects and Conjoint Analysis

- Personal Projects (Little 1983) - a set of goal oriented, self-generated activities a person is doing or thinking of doing
Transactional, contextual, based on a constructivist approach (Kelly, 1955)
Treats respondents as co-investigators
- Conjoint analysis to look at trade-offs in real life decisions



Preliminary Focus Group Results 1

Quality of Life:

- Good health
- Family and friends
- Independence
- Nice, quiet neighbourhood
- Enjoyment of activities and entertainment

“You’ve got to feel you’re still in command... got your own autonomy and able to make your own decisions.”

“Quality of life to me is being able to go out, walk about and see things.”

Preliminary Focus Group Results 2



Benefits of getting outdoors:

- Meeting people
- Enjoying fresh air
- Walking
- Feeling good/healthy
- Enjoying beauty

“You’ll go for a walk, and you feel better when you come back.”

“There is something aesthetic about going out.”

Preliminary Focus Group Results 3



Problems with going outdoors

- Bad pavements
- Fear of crime/strangers/young people
- Lack of benches
- Poor access to toilets
- Crossing the road
- Poor mobility, negotiating kerbs etc..

“Pavements are dreadful. Absolutely dreadful.”

“When they wear trainers, you can’t hear their footsteps.”

“You don’t hear the bicycles coming.”

Pilot Questionnaire Results



58 people, aged 65 +, mostly from urban contexts

Questionnaire covering environmental support, QOL,
functional capability and sociodemographic information

Environmental support measured in two ways:

1. Participants list their outdoor activities and evaluate
 - how the environment makes it difficult/easy to carry out the activity,
 - personal importance
2. Evaluation of neighbourhood environments, 18 item scale
 - outdoor spaces around one's house (3 items),
 - a local open space e.g. park or riverside walk (11 items)
 - larger neighbourhood area (4 items).

QOL: 5-item Satisfaction With Life Scale (Diener, 1985)

Functional Capability: six IADL (Jette et al., 1986).

Initial results: Correlations

Bivariate Correlation

	SWL	ESP	ESN	FC	NOA
QOL - Satisfaction With Life (SWL)	1				
Environmental Support Projects (ESP)	.55***	1			
Environmental Support Neighborhood (ESN)	.57***	.48***	1		
Functional Capability (FC)	.40**	.63***	.39**	1	
Number of Outdoor Activities (NOA)	.43**	.26	.48***	.22	1

* $p < .05$, ** $p < .01$, *** $p < .001$

Partial Correlation Controlling for FC

	SWL	ESP	ESN	NOA
QOL - Satisfaction With Life (SWL)	1			
Environmental Support Projects (ESP)	.44**	1		
Environmental Support Neighborhood (ESN)	.50***	.35*	1	
Number of Outdoor Activities (NOA)	.40**	.17	.43**	1

* $p < .05$, ** $p < .01$, *** $p < .001$

Initial results: Bivariate Correlations 2



Bivariate Correlation for People aged 65-74 (n= 24)

	SWL	ESP	ESN	FC	NOA
QOL - Satisfaction With Life (SWL)	1				
Environmental Support Projects (ESP)	.62**	1			
Environmental Support Neighborhood (ESN)	.64**	.26	1		
Functional Capability (FC)	.13	.30	.43*	1	
Number of Outdoor Activities (NOA)	.43*	.45*	.49*	.46*	1

* $p < .05$, ** $p < .01$, *** $p < .001$

Bivariate Correlation for People over 75 (n=28)

	SWL	ESP	ESN	FC	NOA
QOL - Satisfaction With Life (SWL)	1				
Environmental Support Projects (ESP)	.61**	1			
Environmental Support Neighborhood (ESN)	.53**	.54**	1		
Functional Capability (FC)	.51**	.68***	.37	1	
Number of Outdoor Activities (NOA)	.46*	.12	.45*	.16	1

* $p < .05$, ** $p < .01$, *** $p < .001$

Places for people

