Designing and Planning for Green Space as a Health-Promoting Environment

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How can we enhance peoples' use green space for health & wellbeing?

Potential green space health benefits

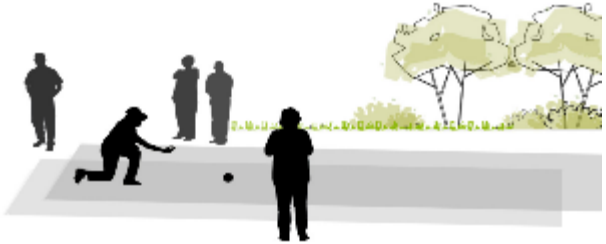
Promotes physical activity: creating spaces for play, recreation, walking and cycling within a safe environment

Enhances mental wellbeing: creating urban refuges and providing a restorative environment through increased contact with nature

Enhances social interaction: providing opportunities for social contact and community building activities

Reduces environmental risks from pollution: mitigating air and noise pollution

Mitigates environmental risks from extreme weather: e.g. urban flooding or heat-island effects



Planning and green space

Planning approaches are often focused on **quantum** of green space provision and **accessibility**

BUT ----

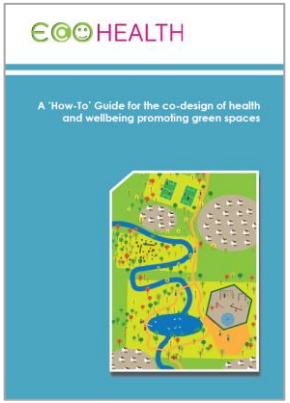
- Quality versus quantity
- Diverse users and environmental contexts
- What green space attributes promote health?

Research Framework

Literature Review

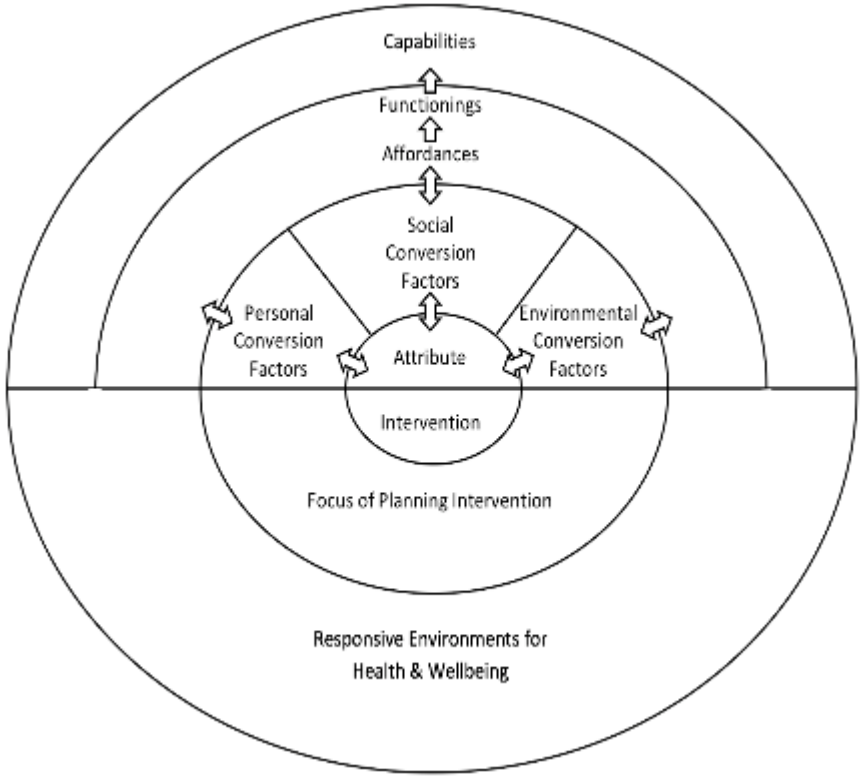
Interviews

Survey



Choice Experiment

Workshops



Conversion Factors

‘Personal’ conversion factors

‘Social’ conversion factors

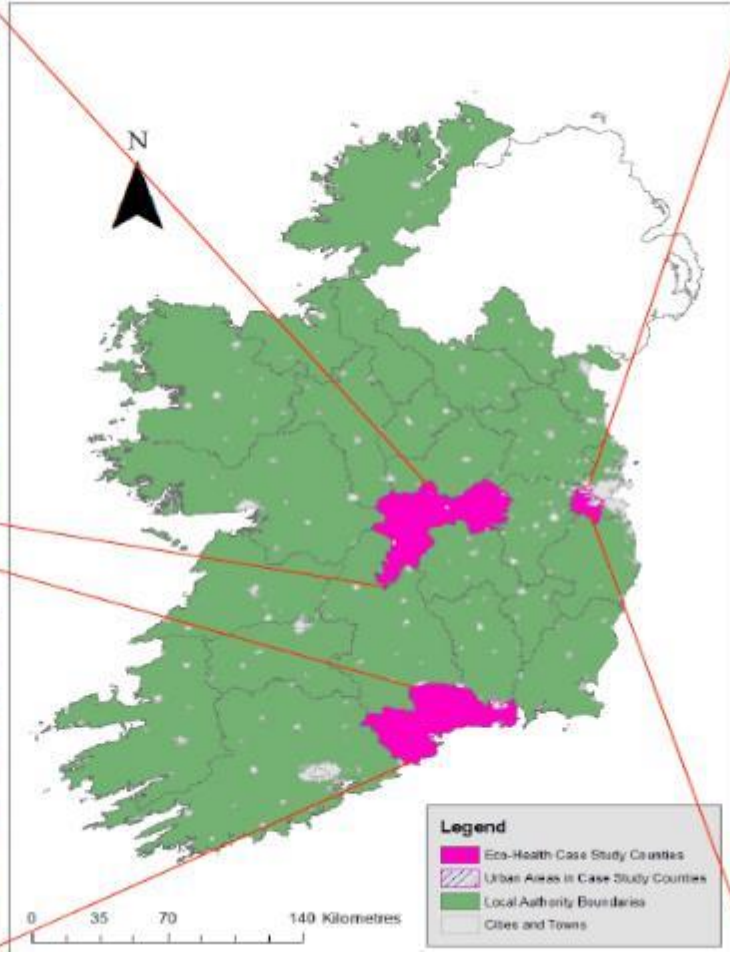
‘Environmental’ conversion factors

Rural - Offaly

- Satellite Towns and Rural Villages

Peri-Urban - Waterford

- Regional City and Coastal Tourism



Urban - South Dublin

- High density residential and commercial development

- Low-density suburbs

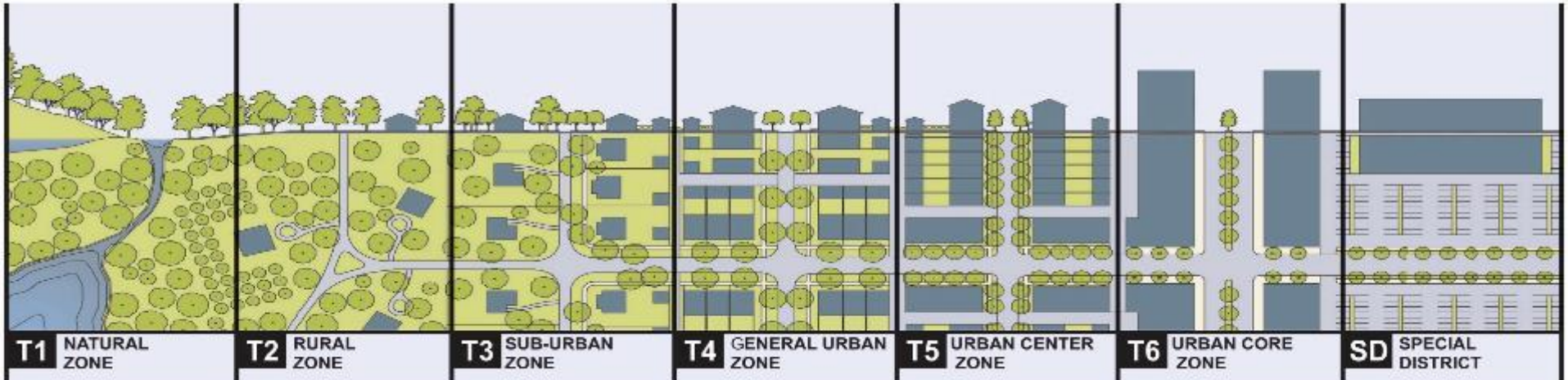
Research approach and data collection

Documentary: (1) Life-course analysis of literature, (2) Analysis of policy drivers

Qualitative: in-depth interviews with key informants

Quantitative: (1) household survey, (2) choice experiments

Participatory: design workshops with local citizens



Household survey and Choice Experiments

- **Key green space attributes:**
  - Water
  - Café or place for social interaction
  - Natural surroundings/'nature' (meadows, trees)
  - Looped trails/several looped trails
  - Greenways popular (except for older people)
  - Ability to use green space to get to work/shops etc (even if journey time increased)
  - Quietness
  - Maintenance/litter free
  - Outdoor gym equipment

Interactive Design workshops

Card Sorts

Aerial Stickies

Scenarios


Institute of Technology
Waterford Fire Station
Waterford Nature Park
Ballybeg Community Centre

HEALTH

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BALLYBEG, WATERFORD

ait
urbanism + landscape

Example of findings

- **Rural context:**
  - Underutilization of existing green spaces – better not more
  - Enhance linear features e.g. river corridors, disused rail lines – greenways suitable to rural context
  - Linkages – linking amenities (natural, cultural), segregated walkways

Examples of findings

- **Suburban context**
  - Anti-social behaviour
  - Priority given to green space as a focal point for social interaction and community building
  - Intergenerational contact
  - Informal surveillance based on multifunctional use e.g. community gardens, bowling, playground

Examples of findings

- **Urban context:**
  - Green spaces as an urban refuge
  - Passive relaxation
  - Green spaces as destinations
  - Greening a car dominated environment e.g. connecting parks to a wider greening of the public realm
  - Co-locating café kiosks and play areas
  - Pedestrian links

Evidence-informed design

Evidence-based Design principles

- ***Accessible*** spaces with good links (pedestrian and cycleways) to nearby neighbourhoods

- A ***networked approach***: emphasising green infrastructure networks (rather than isolated parks); connecting existing and new green spaces; and creating new linkages between urban and rural areas.

  - greenways and linear parks,
  - local greenways or cycleways that link to regional and national greenways,
  - de-culverting watercourses to provide new blue corridors.

- ***Inclusive in design***, catering for local needs from young to old and all physical abilities (*e.g. 8:80 parks*). Green spaces that are designed to support very specific functions tend to attract limited groups of users

Evidence-based Design principles

- Well ***managed and maintained*** creating a high quality environment: poorly managed spaces or vandalism prompt negative perceptions among potential users

- ***Multifunctional*** uses: examples include spaces that encourage active mobility, physical activity and sports, relaxation and tranquillity, and opportunities for social exchange

- Enhance urban greening through ***planting strategies*** that mitigate noise and air pollution and maximise local biodiversity gain and facilitate sustainable drainage

- *Create multisensory* ***restorative environments*** that help mitigate the psychological stresses of modern living through the provision of ‘restive places for rejuvenation’.

Policy support

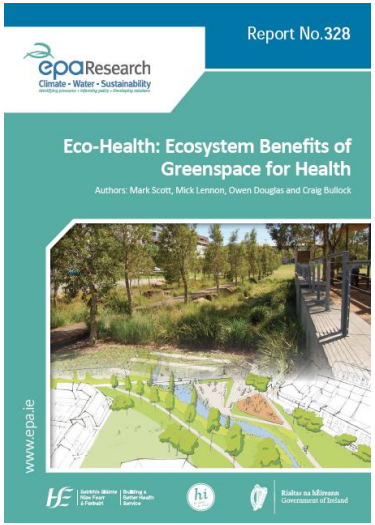
- Green space **as public health infrastructure**
  - **Valuing green space** for the services and functions they provide

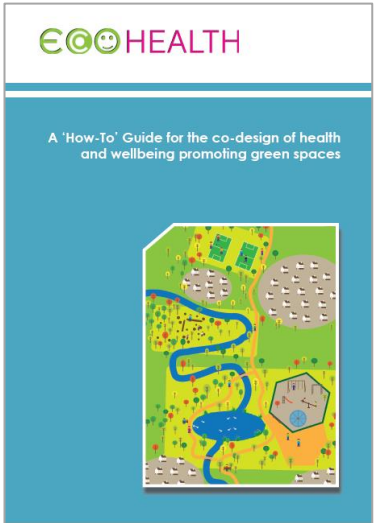
- **Integrate health promotion with green space management** – e.g. Healthy Cities and Counties Network

- **Planning policy**:
  - Integrate Health Impact Assessment with Environmental Assessment
  - Green Infrastructure approach
  - Networked and multi-scalar
  - Retrofit --- *making better places + designing health promoting environments*

- **Co-design** green space with end-users

- **Capacity building**





Thank You

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