GHIA - Reconnect dementia walks to nature

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Aims and Research Questions

AIM

To understand how urban ecosystem processes could help people living with early-stage dementia by evaluating the responses to different sensory landscapes resulting from different urban ecosystem processes

RESEARCH QUESTIONS
1. What people do (i.e. behaviours)?
2. Where do they do it (i.e. locations)?
3. Is there an association between what people do and where they do it (i.e. behaviours and locations)?

Method

Research design: **descriptive case study**

Data collection: **structured observations**

Data collected: **sensory zones** (physical senses), and
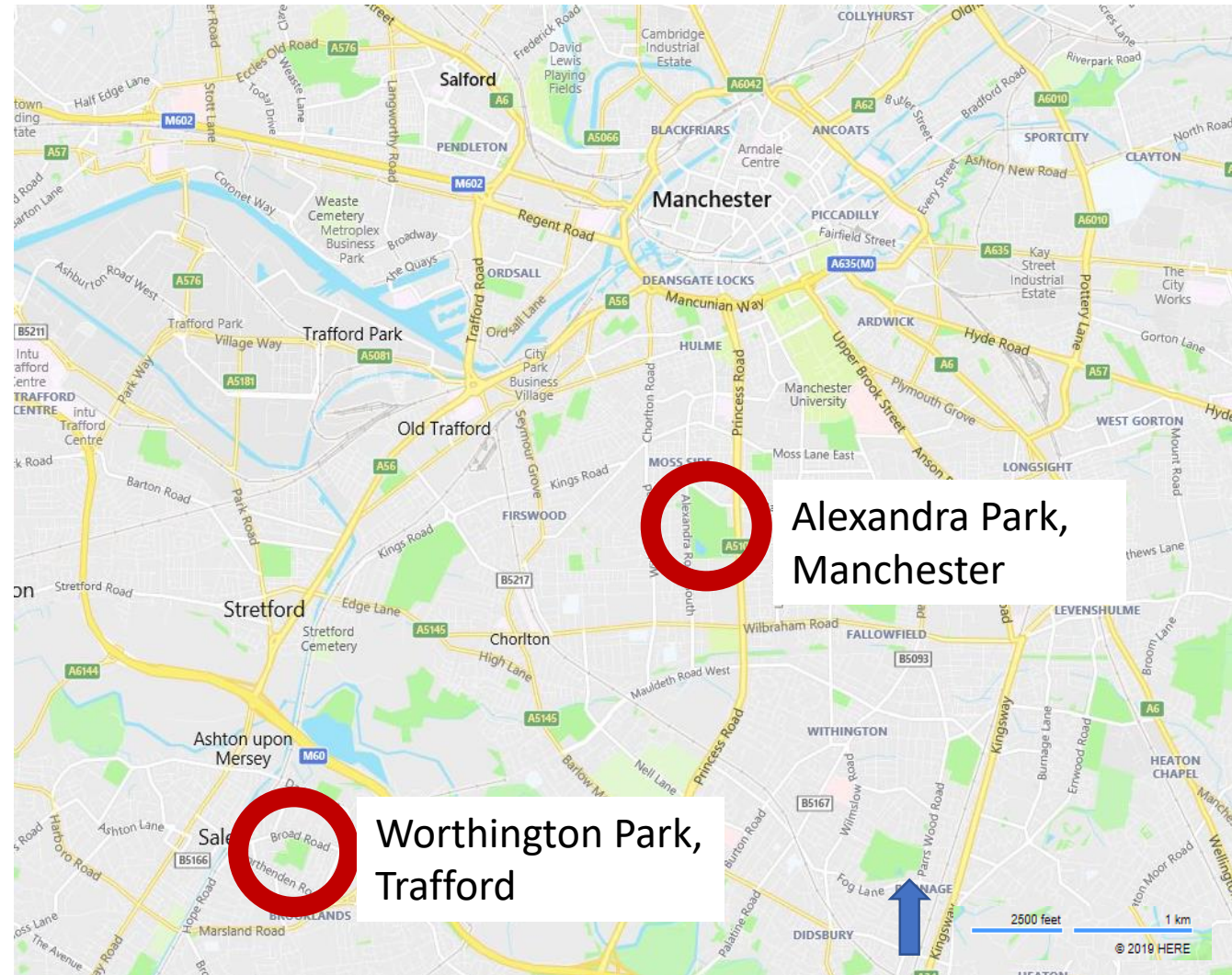**behaviours** (responses)
Also recorded but not covered in detail this presentation **route**
(free flows), **path** (easy movement), **design** (habitat types),
weather (ambient conditions)

Data recorded: **categorical and qualitative**

Analysis: **logistic regression and coding**

The study

- Parks: Alexandra Park, Manchester and Worthington Park, Trafford

- Period: **May-Dec 2018**

- Walks: **36**

- Observation time: **15 hours**

- Observation entries: **2158**

- Observation notes: **3701**

- Observation entries **used: 2048**

- Observation notes **used: 3459**

Alexandra Park

Worthington Park

Locations

Park design = Habitat types
- **Canopy**: wood, enclosed canopy
- **Savannah**: grass, scattered trees
- **Open**: forbs, shrub, no trees
- **Prospect**: prospect refuge areas

Plus **quality of path**: wide; even; slope; dark; obstacles

CANOPY

SAVANNAH

OPEN

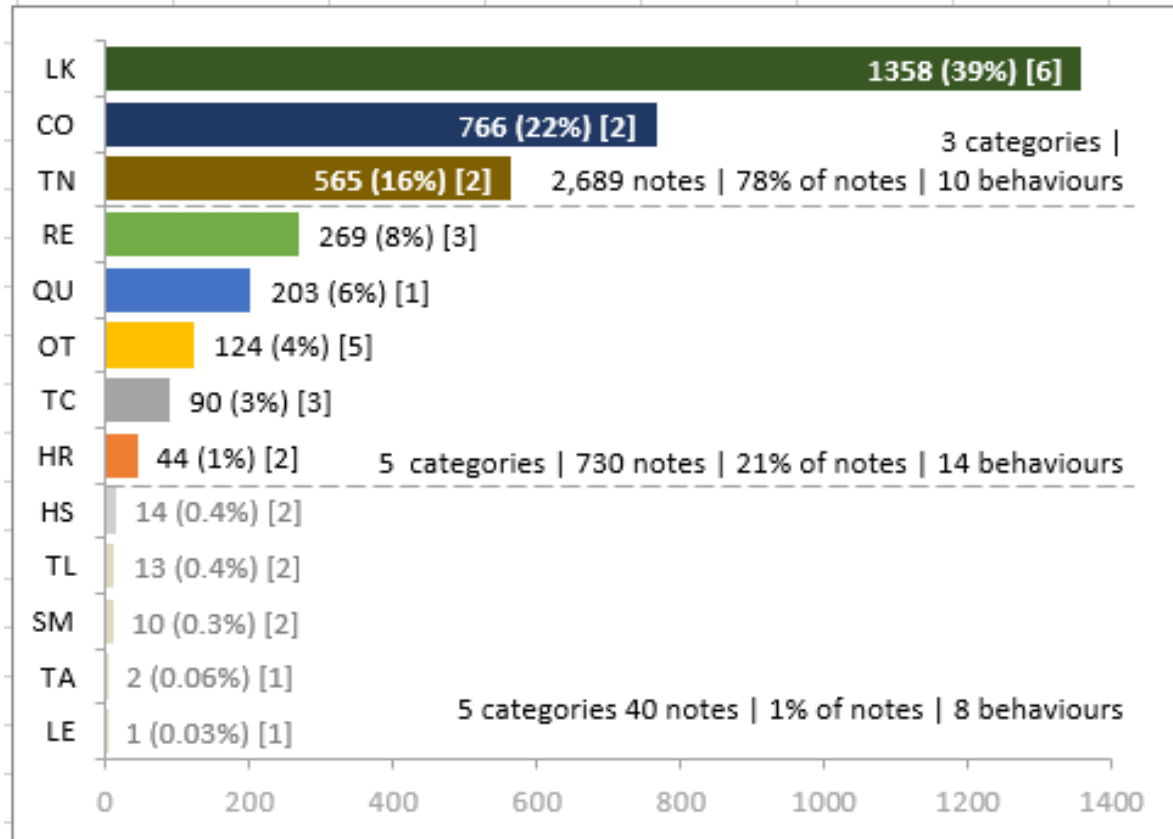**Sensory Landscapes** = Level of environmental and social cues

LOW

MEDIUM

HIGH

Behaviours

- Thirteen behaviours were recorded:
- QU: walking quietly, no or rarely talking, no animated gestures
- TN: walking and talking normally, subtle animated gestures
- TL: walking and talking lively, obvious animated gestures
- CO: connecting, holding hands, sharing, hugging, linked arms
- RE: resting, sitting, standing, playing table games
- HS: hesitating, freezing, avoiding, stopping, need encouraging

- LE: leaving, refuse to follow the group, follow own route
- LK: looking intently, taking pictures, observing, watching
- TC: touching, collecting, petting, tending, holding, leaning
- SM: smelling, protecting or bringing to nose, drinking, eating
- TA: tasting, drinking, eating, bringing things to mouth
- HR: hearing, bringing hands to ears, turning towards a sound
- OT: other e.g. physical activity, buying things, using amenities
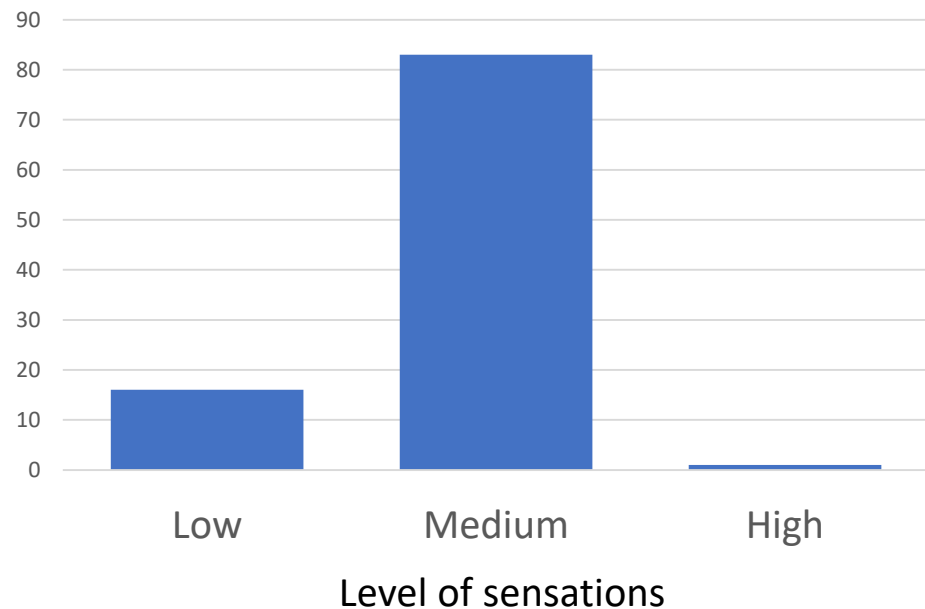
WHAT PEOPLE DO?
(i.e. behaviours)

Findings (n=3459 notes used)
Group members were mainly connecting with people (20%), talking within the group (15%), and looking at nature (11%). The remaining 54% of notes reflects a range of 29 other different behaviours (i.e. occasional and rare).

For people with early stage dementia the walks are mainly about connecting, talking, and looking.

The role of nature appears to be secondary to the social and physical activity elements of the walks.

CATEGORIES OF BEHAVIOUR

WHERE DO THEY DO IT?
(i.e. locations)

Findings (n=2048 observation)
The walk locations are characterised by medium levels of sensory stimulation, and by being supportive of movement, flows and different habitat types.

IS THERE AN ASSOCIATION BETWEEN WHAT PEOPLE DO AND WHERE THEY DO IT?
(i.e. behaviours and locations)

Finding
Associations indicate:
(a) interrelationships – Look more near a fences, flower beds, play ground etc.
(b) specific circumstances – Something happened to cause looking rather than the actual position e.g. somebody walking by or a dog walking by, and
(c) potential for unanticipated links – places that one might consider to be barriers e.g. dark paths and obstacles did not appear to be barriers

Key message
Participants of dementia walks may gain more social and physical activity wellbeing outcomes than outcomes relating to contact with nature
Walks could be designed and delivered in bespoke ways i.e. interweave the needs of walk participants with opportunities in local parks

Summary

The **MORE** enclosures, path wide, path even, path dark, obstacles, open, savannah, prospect, high zone

the **MORE** looking, talking, resting, touching, walking quietly, hearing

The **MORE** enclosures, path wide, path even, path dark, obstacles, canopy, savannah, prospect, high zone

the **LESS** looking, talking, resting, touching, walking quietly, talking lively, connecting

Recommendations

- Behaviours - There are missed opportunities to engage with and derive further benefits from contact with nature

- Locations - Urban parks provide accessible and easy, but sometimes monotonous routes

- Associations –
  - Walks could be designed and delivered in bespoke ways i.e. interweave the needs of walk participants with opportunities in local parks;
  - Local authorities design and keep suitable parks; carers explicitly engage participants in direct contact with nature during the walks