Social and Therapeutic Horticulture: Practice, evidence and need for research
Social & therapeutic horticulture (STH): a definition...

...guided and structured participation in groups and communities...

...whose activities are centred around horticulture and gardening
Social and Therapeutic Horticulture: a brief journey through UK practice
Social and Therapeutic Horticulture

- **Structured intervention** as distinct from ‘leisure’ or ‘domestic’ gardening
- Origins in 1950s US and 1970s UK
- Recognised practice and pedagogy
- Trained and experienced therapists
- Goals and assessments
- Guided process of interaction and experience
- Draws on models and frameworks from Occupational Therapy (and could be seen as a specialised form of OT)
## Disability groups

<table>
<thead>
<tr>
<th>Disability Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autism</td>
<td>20</td>
<td>8.0</td>
</tr>
<tr>
<td>Brain Injury</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>Dementia</td>
<td>7</td>
<td>2.8</td>
</tr>
<tr>
<td>Drug/Alc Misuse</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td>Hearing Impaired</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Learning Disability</td>
<td>101</td>
<td>40.4</td>
</tr>
<tr>
<td>Mental Health</td>
<td>101</td>
<td>40.4</td>
</tr>
<tr>
<td>Rehabilitation - Neuro Stroke</td>
<td>6</td>
<td>2.4</td>
</tr>
<tr>
<td>Rehabilitation - Other</td>
<td>7</td>
<td>2.8</td>
</tr>
<tr>
<td>Visually Impaired</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>250</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
‘STH’ – a guided process

- **client**
- **therapist**
- **social environment**
- **‘natural’ environment**
- **activities occupation**

**outcomes** → **goals**
Outcomes arise as the consequence of all of the dimensions, there is no single ‘active ingredient’…
STH: outcomes and benefits

Benefits associated with occupation and social opportunities
Social inclusion

“an individual is socially *excluded* if he or she does not participate in key activities of the society in which he or she lives”

Social inclusion

“an individual is socially excluded if he or she does not participate in key activities of the society in which he or she lives”

four key dimensions of social inclusion:

*Social interaction, Production, Consumption, Political engagement*

Social interaction..

Within the group…

…and outside
<table>
<thead>
<tr>
<th>Rating</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Not seen at all, no response or interest in others, avoids others</td>
</tr>
<tr>
<td>1</td>
<td>Shows some interest in others/group – watches from a distance – stays on edge of group</td>
</tr>
<tr>
<td>2</td>
<td>Works alongside others in group, each focused on own task</td>
</tr>
<tr>
<td>3</td>
<td>Pays attention to what others doing/saying and responds when prompted to e.g. pass plants or tools</td>
</tr>
<tr>
<td>4</td>
<td>Works collaboratively with member of staff on joint task (i.e. task that needs two to do) when asked</td>
</tr>
<tr>
<td>5</td>
<td>Works collaboratively with another known (i.e. familiar) client on joint task (i.e. task that needs two to do) when asked</td>
</tr>
<tr>
<td>6</td>
<td>Works collaboratively with another known (i.e. familiar) client on joint task (i.e. task that needs two to do) without being prompted</td>
</tr>
<tr>
<td>7</td>
<td>Volunteers/offers to work with other. Initiates group work. Asks other client for help.</td>
</tr>
<tr>
<td>8</td>
<td>Works collaboratively with an unfamiliar client or volunteer on joint task (i.e. task that needs two to do) when prompted</td>
</tr>
<tr>
<td>9</td>
<td>Approaches and talks to member of public appropriately (e.g. at plant sales, working off-site)</td>
</tr>
</tbody>
</table>
Social interaction & communication

All conditions:
excluding participants who had attended > 3 months
Participants with learning disabilities: excluding participants who had attended > 3 months
Social interaction & communication

Participants with mental health problems: excluding participants who had attended > 3 months
Cross-sectional analysis

Social Interaction

Time at Thrive

- 6 months or less: 131
- 6 – 12 months: 20
- 1-2 Years: 18
- more than 2 years: 40

* indicates a statistically significant difference.
Production

- Perception of role as a *gardener or worker*
- Visible output
- Daily routine, common purpose
Motivation & task engagement

All conditions: excluding participants who had attended > 3 months
Motivation & task engagement

Participants with learning disabilities: excluding participants who had attended > 3 months
Cross-sectional analysis

Task Engagement

<table>
<thead>
<tr>
<th>Time at Thrive</th>
<th>6 months or less</th>
<th>6 – 12 months</th>
<th>1-2 Years</th>
<th>more than 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>147</td>
<td>20</td>
<td>17</td>
<td>41</td>
</tr>
</tbody>
</table>

* indicates a significant difference.
Production

- Perception of role as a gardener or worker
- Visible output
- Daily routine, common purpose
- Empowerment through use of tools and machinery
Consumption

- Opportunity to engage in a leisure activity
- Access to high quality produce
- But…
“When I talk about consuming nature I’m not talking about eating strawberries, we are consuming it with our eyes, ears and all our senses... nature is coming at us from all directions”

Maureen, therapist
Belfast, May 2015
“… we have a site meeting here every week and try to get trainees, that’s myself, and other trainees, involved. They do, they definitely do that, the staff do that, that’s the focus here.

…I think that’s very important, and you’re encouraged to take on responsibility, you know, you’re encouraged in many, many ways, so that’s very important too, I think.”

(Sam, project client, with mental ill health in: Sempik et al, 2005, p95-96)
Benefits associated with interaction with the natural environment

Benefits associated with occupation and social opportunities
Experiencing & shaping the natural green environment

- Organic gardening – no chemicals, pesticides etc
- Environmental education and guidance
- Sustainable practices
- Mutual benefit to the environment and to the individual: the principle of ‘eco-therapy’
Experiencing & shaping the natural green environment

- Aristotle: ‘Eudaimonic’ happiness from a virtuous life
- Green care: sense of wellbeing derived from nurturing the environment
- Mutual benefit is a key principle of ‘ecotherapy’
- Most green care is ecotherapy

Aristotle (384 – 322 BC)
Green care: outcomes and benefits

Benefits associated with interaction with the natural environment

Benefits associated with occupation and social opportunities (e.g. Gonzalez et al, 2011)
STH: conclusions

- Complex intervention with a variety of activities, elements and dimensions
- Although individual elements can be active (e.g. contact with nature), benefits of STH derive from the ‘complex sum’ of elements, not from a single active ingredient
- Interaction with nature is guided by therapists (and cultural influences need to be considered)
Nidotherapy: why it is new and exciting and why you should take notice
Green Care…
nature-based *interventions*

- **Green Care**
  - **Horticultural Interventions**
    - Horticultural Therapy, Therapeutic Horticulture, STH
  - **Care Farming**
  - **Nature Conservation**
  - **Animal-assisted Interventions**
    - Green Gyms
    - Animal Assisted Therapy
  - **Green Exercise**
  - **Wilderness Therapy**
nidotherapy: a holistic view of environments as therapy

- Green Care (using the natural environment as therapy)
  - Care farming
  - Horticulture
  - Animal-assisted interventions
  - Other green care activities

- Individual nidotherapy
  - Shaping the individual environment

- Creative therapies (interacting with social, visual, tactile and sound environments)
  - Music therapy
  - Art therapy
  - Drama therapy
  - Other creative therapies

- Occupational therapy
  - Promoting Performance through interactions of Person-Environment-Occupation

- Shaping social environments and interactions
  - Therapeutic communities
  - Psychotherapies