



@agnes\_vdberg

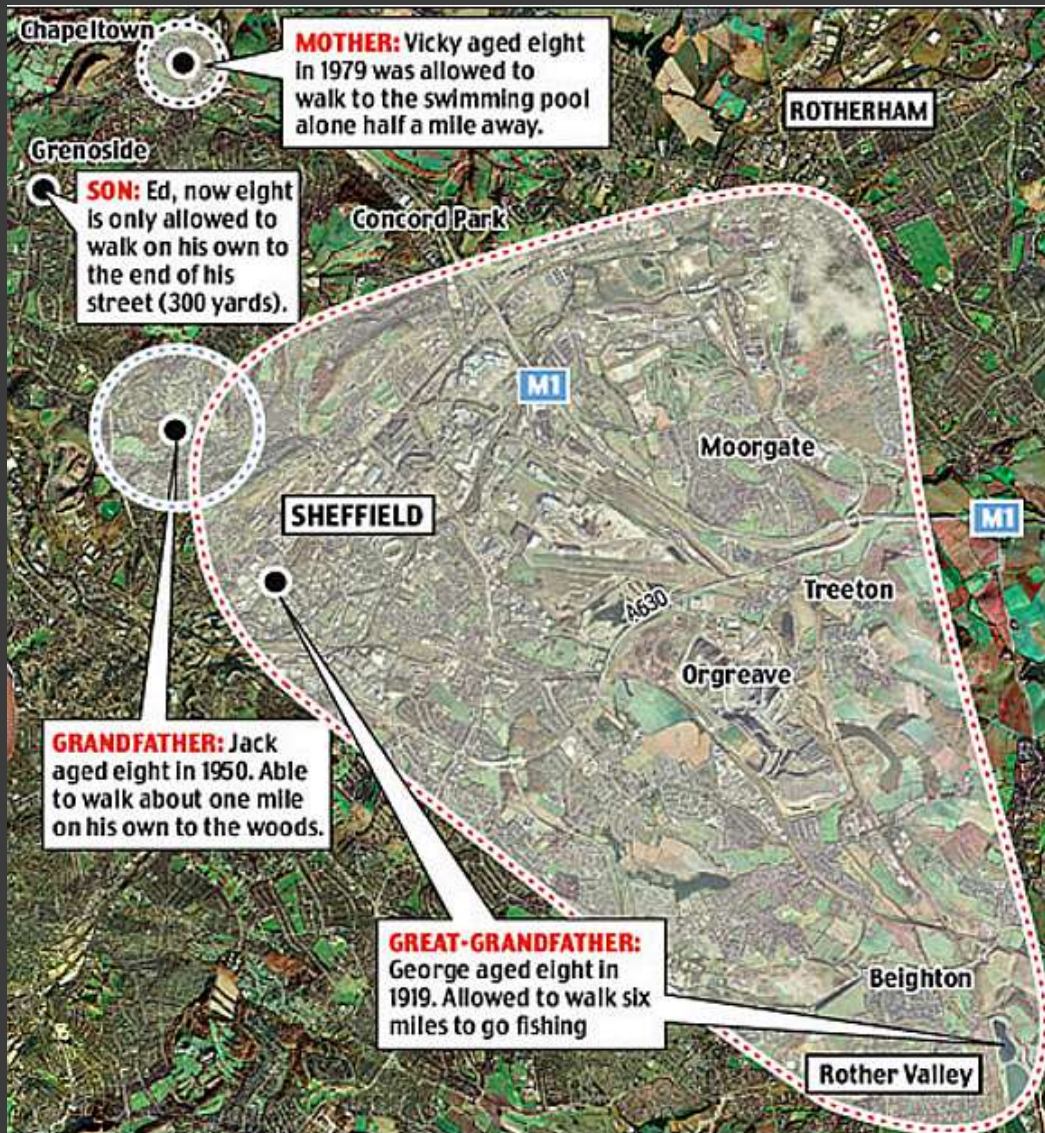


# Benefits of urban greening for children

*Agnes van den Berg 27 September 2016*



# How children lost the right to roam





# Causes



## Stranger Danger



# “Nature deficit disorder”





# Social inequity in nature deficit



## Little nature deficit

- Privileged background
- Garden at home
- Family trips to nature



## High nature deficit

- Deprived background
- No garden at home
- No family trips to nature

# Solutions

**Green → children  
“greening”**



**Children → green  
“green care”**





# Evidence

**Added value** of engaging with green space for children's health and well-being



# Added value green space for children

<b>Health</b> Mental health Physical health Healthy eating	<b>Well-being</b> Quality outdoor play Psychosocial functioning	<b>Exercise</b> Physical activity Motor development
<b>Social</b> Social skills	<b>Emotional</b> Self-control Self-esteem Self-awareness	<b>Attitude</b> Environmental concern Connectedness Sense of place

Gill, T. (2014). The benefits of children's engagement with nature: A systematic literature review. *Children Youth and Environments*, 24(2), 10-34.



# Factsheet



Jeugd, natuur,  
gezondheid 

FACTSHEET



Green space as activity space

Green space as space for  
relaxation

Green space as healthy living  
space

# Green space as activity space

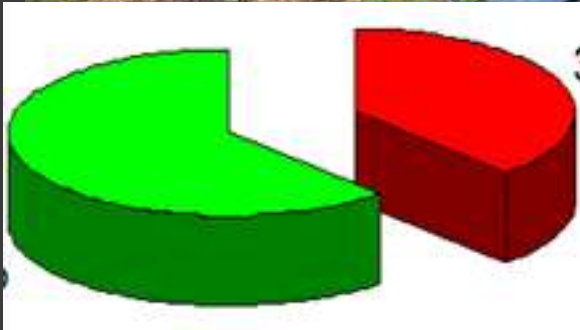
**Parks and other natural play areas encourage physical activity and stimulate children to play more creatively. This supports children's motor development and reduces the risk of overweight and obesity**



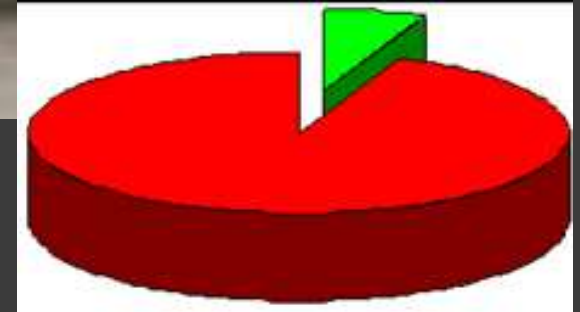


# Playing in a natural playground (7-9 yrs)

More creative (constructive, dramatic, exploratory) play in natural playground than in indoor sports hall



■ creative  
■ functional



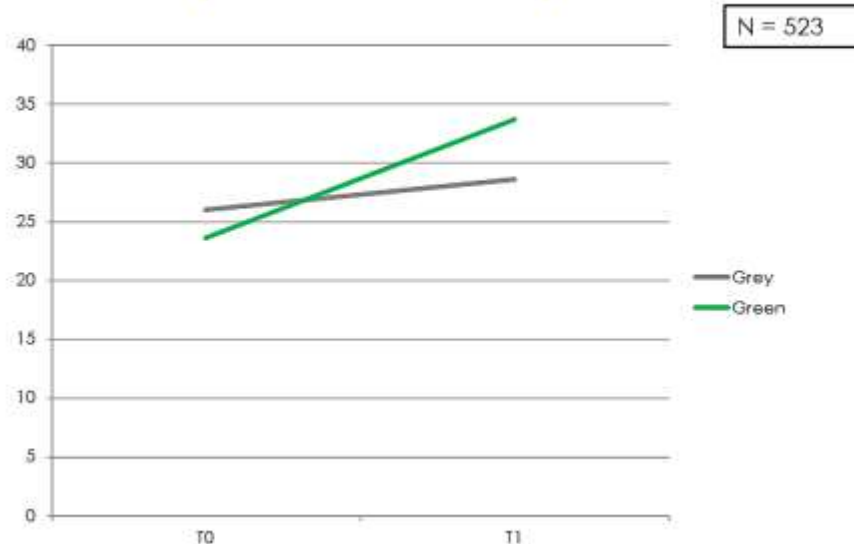
# From grey to 'green' (6-12 years)

Greening of schoolgrounds encourages moderate to vigorous physical activity

Before

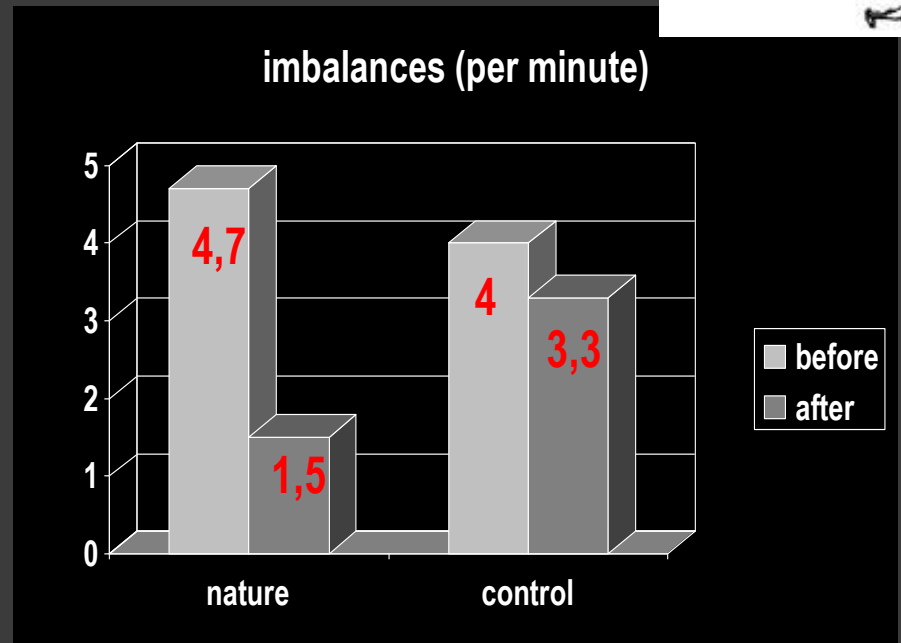
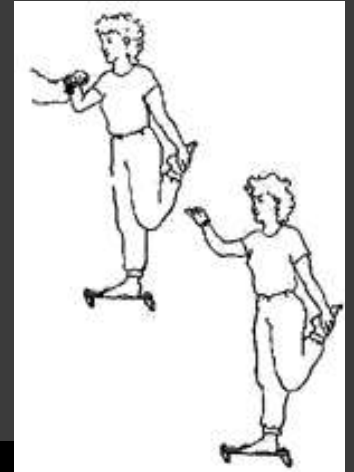
After

## Preliminary results: Physical Activity





# Motor development (5-7 years)



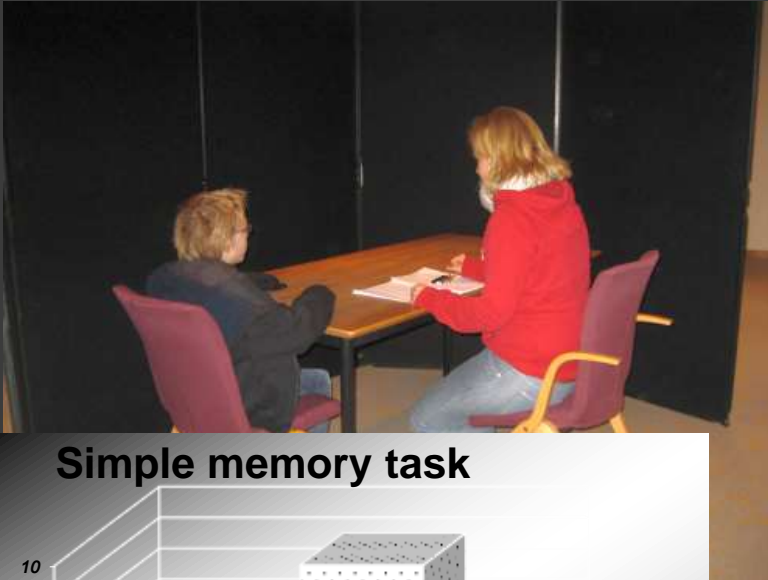
# Green space as space for relaxation

Natural environments are a powerful source of fascination. Flowers, butterflies and other natural elements automatically draw attention without taking up all resources. This makes children feel happy, and it may also lead to better concentration, more self-control, and improved mental health

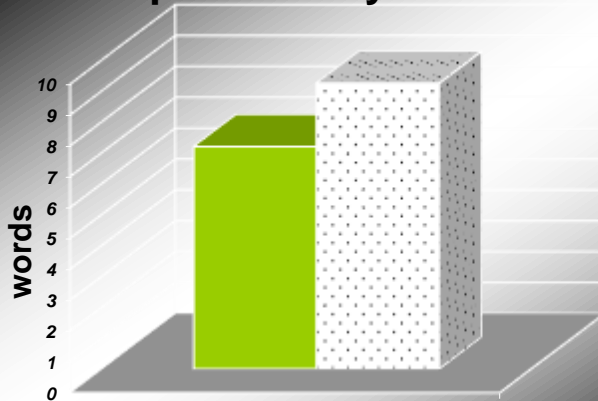




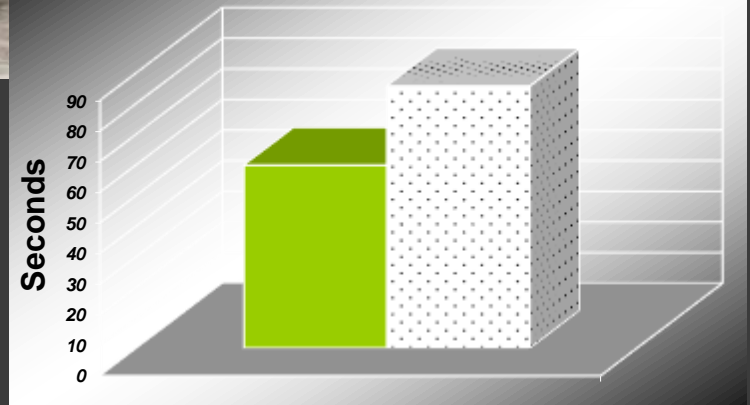
# Attentional performance of children with ADHD (8-12 years)



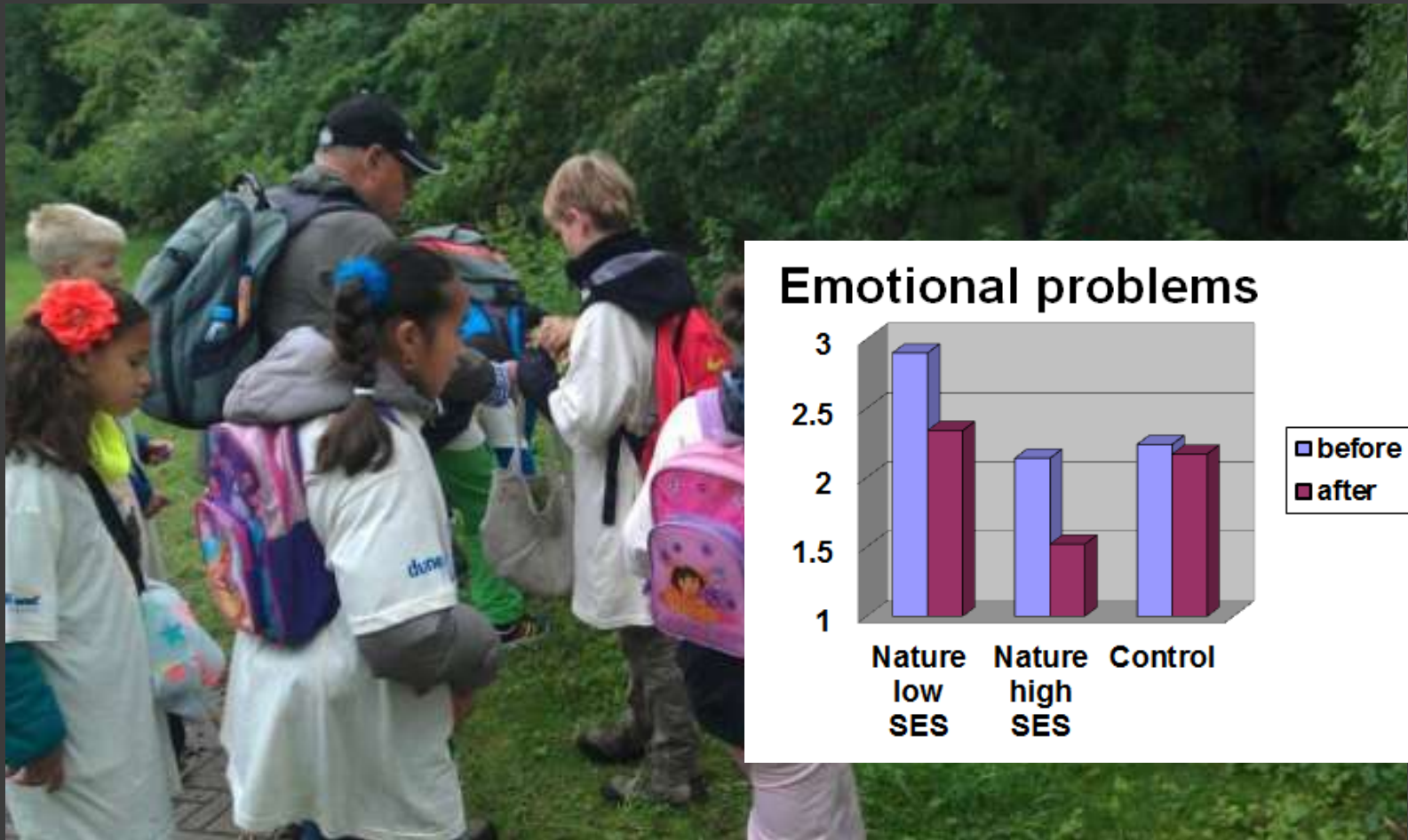
**Simple memory task**



**Complex attentional task**

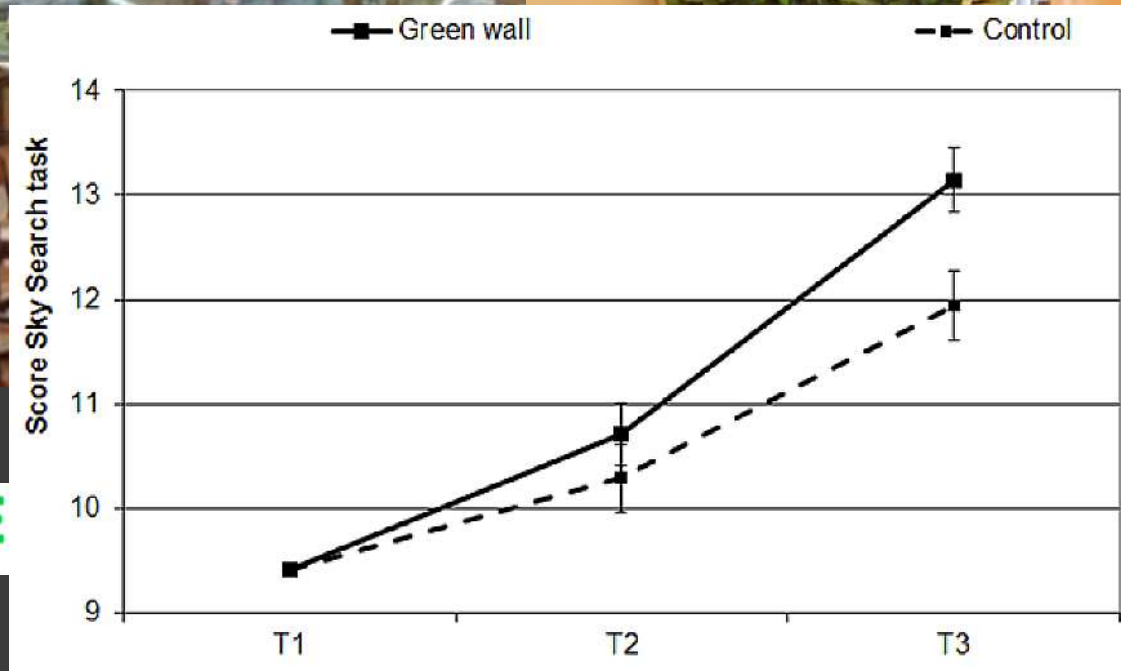


# Nature experience program (7-9 years)





# Green walls for a restorative classroom (7-9 yrs)



INTOGREE



Van den Berg, A. E., Wesselius, J. E., Maas, J., & Tanja-Dijkstra, K. (2016). Green walls for a restorative classroom environment: A controlled evaluation study. *Environment and Behavior*

# Green space as healthy living space

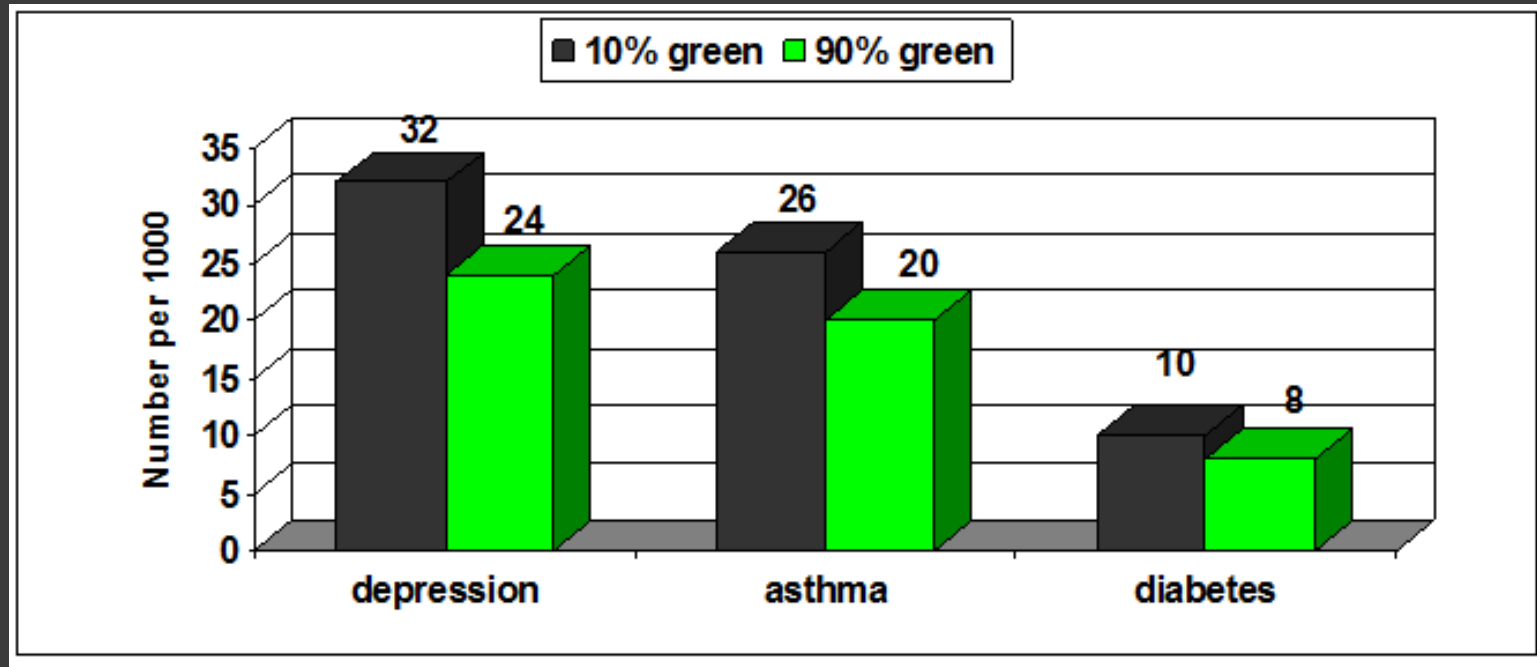
**Children who grow up in a green living environment tend to have less mental and physical health problems. They are also more likely to develop a bond with nature that has life-long positive impacts on their quality of life.**



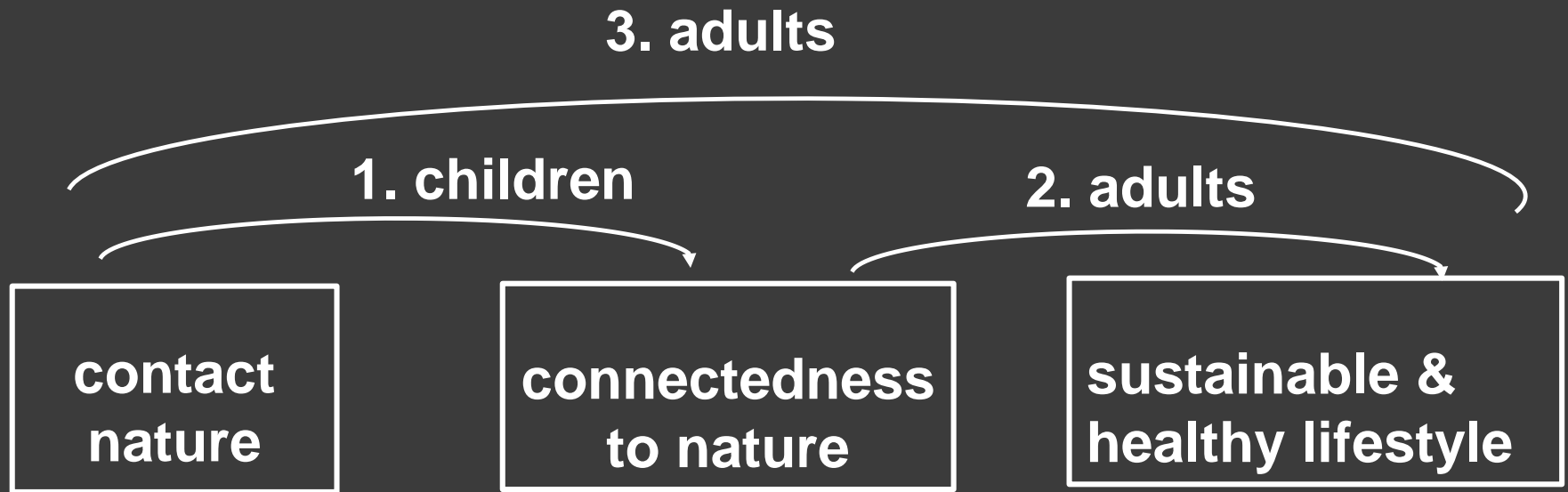


# Vitamine G research program

Positive relationships between green space and health

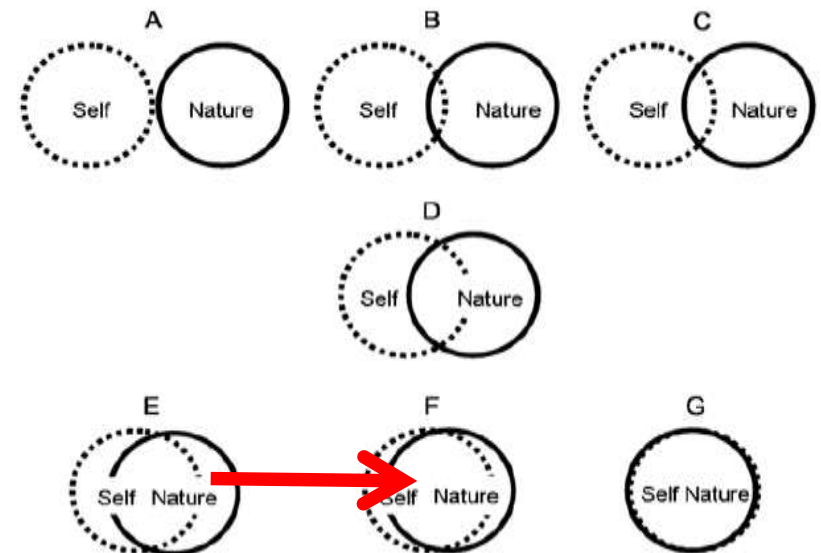


# Long-term effects

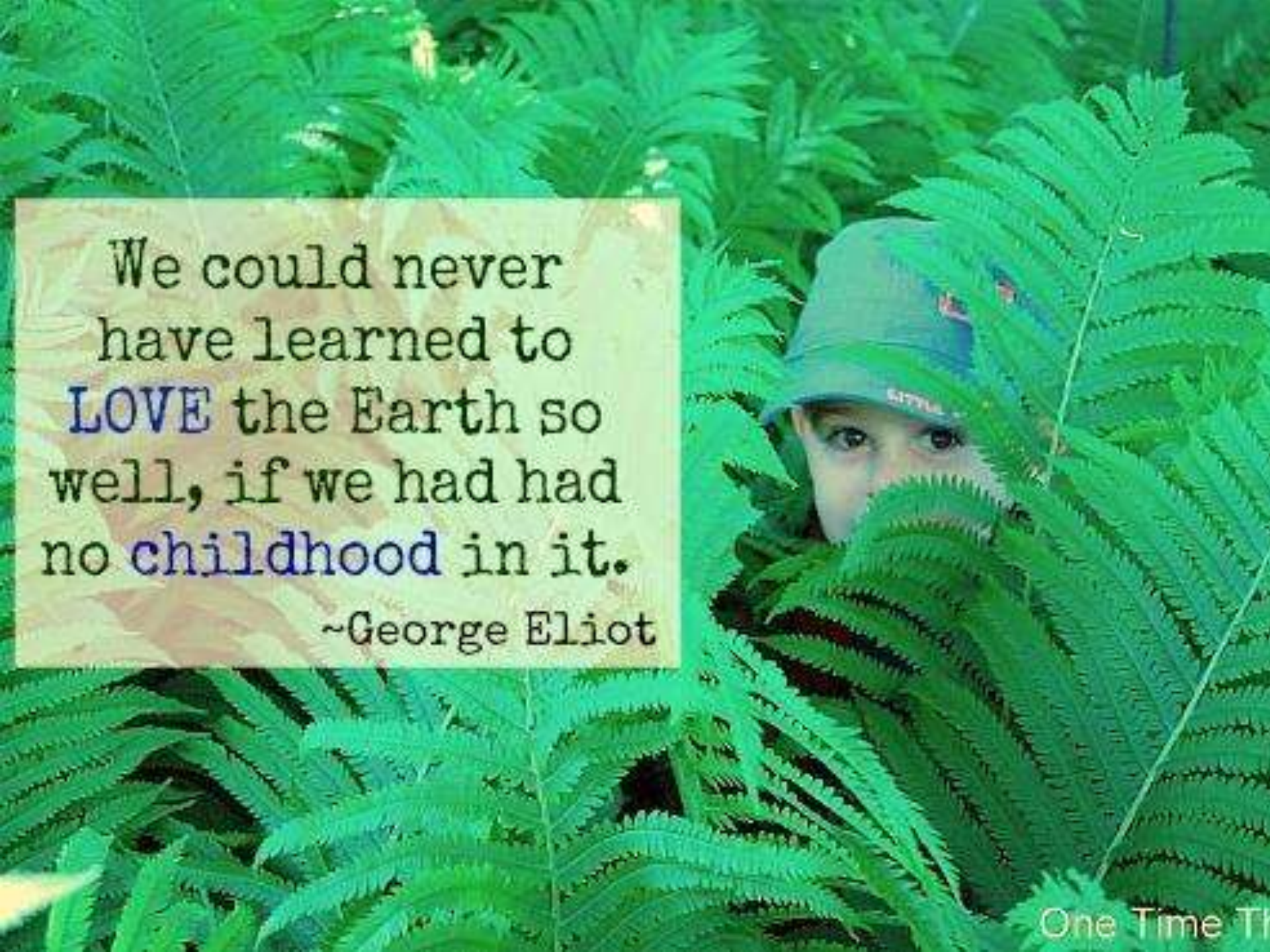


# Connectedness to nature (9-10 years)

Children consider themselves more part of nature after 4-day nature program







We could never  
have learned to  
**LOVE** the Earth so  
well, if we had had  
no **childhood** in it.  
~George Eliot

The end – thank you for your attention  
[www.agnesvandenbergh.nl](http://www.agnesvandenbergh.nl)

