



Mental health and wellbeing benefits of engaging with nature

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Mental health in young people



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What do we know?

Global societal challenge

- 1 in 5 sixteen + years experience symptoms of anxiety and depression
- 10% of 5-16 year olds have a clinically diagnosable mental health condition
- Wellbeing declines between 10-12 years

Yet, child with anxiety disorders are unlikely to access support services.

- 1 in 5 access mental health services



Well-being and mental health benefits of engaging with nature

- Attention restoration
- Stress reduction
- Biophilia

Nature connectedness

- Links with mental health and wellbeing
- Reports indicate that 90% of UK population is in urban environments and that children growing up in urban environments are less likely to enjoy the natural environment, have less contact with green areas and native wildlife.



What about nature in schools



Often untapped natural environment

- Many schools have outdoor space that they are not using, or space where they could make slight modifications to allow for the exploration of biodiversity in their school yard

Opportunity to engage students with nature through hands on engagement

- Evidence supports that hands on engagement with nature and science tasks benefits children's knowledge development

Biodiversity focused outdoor education program



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Collaboration with Dr Deborah Harvey, Dr Louise Montgomery and Prof Alan Gange

- 549 eight- to 11-year-olds participated from 11 schools (459 took part in the education program, 90 were in a control group)

Education program

- 21 one-hour sessions designed (discovering and monitoring species, building new habitats/food sources) across school year

Assessed mood, wellbeing, and connection to nature





Findings indicated that following taking part in the outdoor education program:

- Children's wellbeing improved
- Children's mood improved following the activities as they took part in more sessions
- Connection to nature improved, only for those initially with low connection to nature

For children initially low in connection to nature...

- A stronger connection to nature was associated with improvement in wellbeing



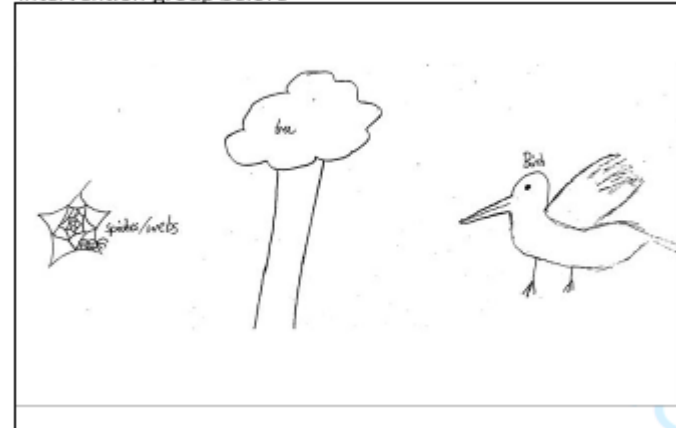
Perception of biodiversity in school grounds: links to wellbeing and resilience



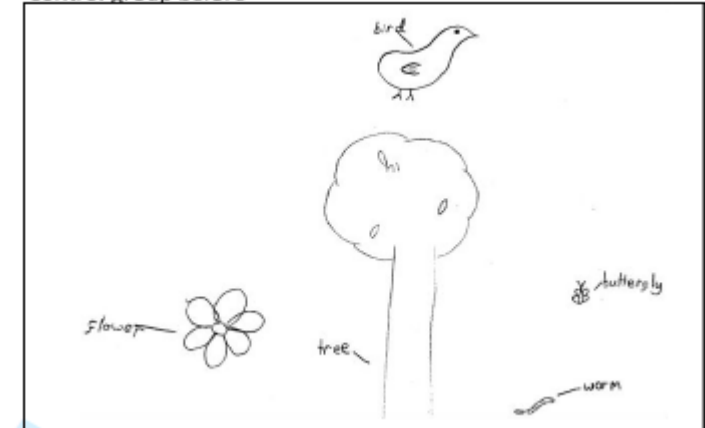
Data from 509 eight- to 11-year-olds who participated in the outdoor education programme was assessed to understand:

- Impact of the nature engagement sessions on perceptions of biodiversity in the school grounds
- Links between perceptions of biodiversity and wellbeing and resilience

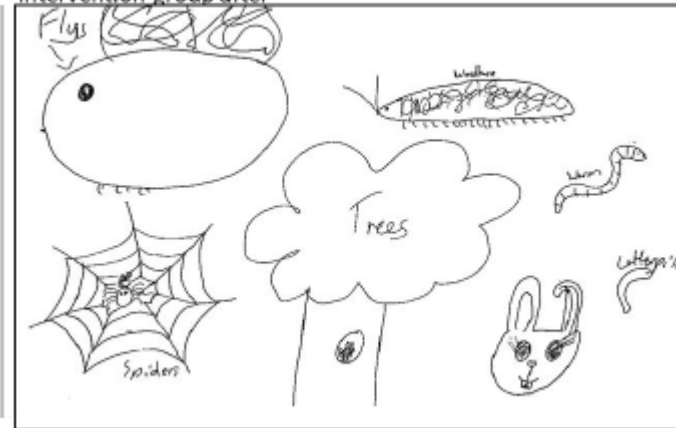
Intervention group before



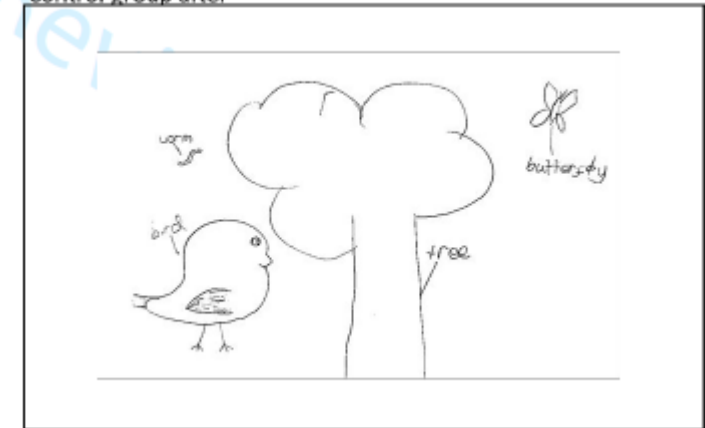
Control group before

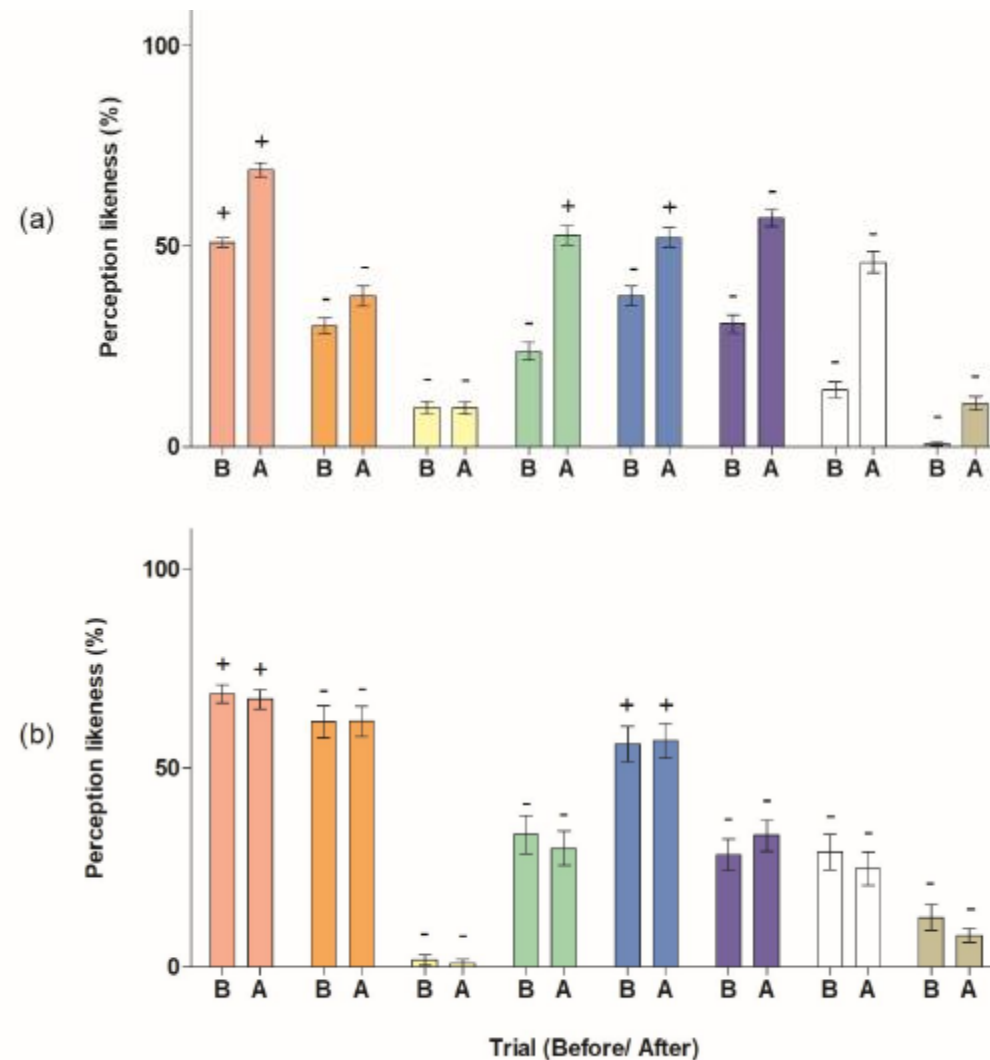
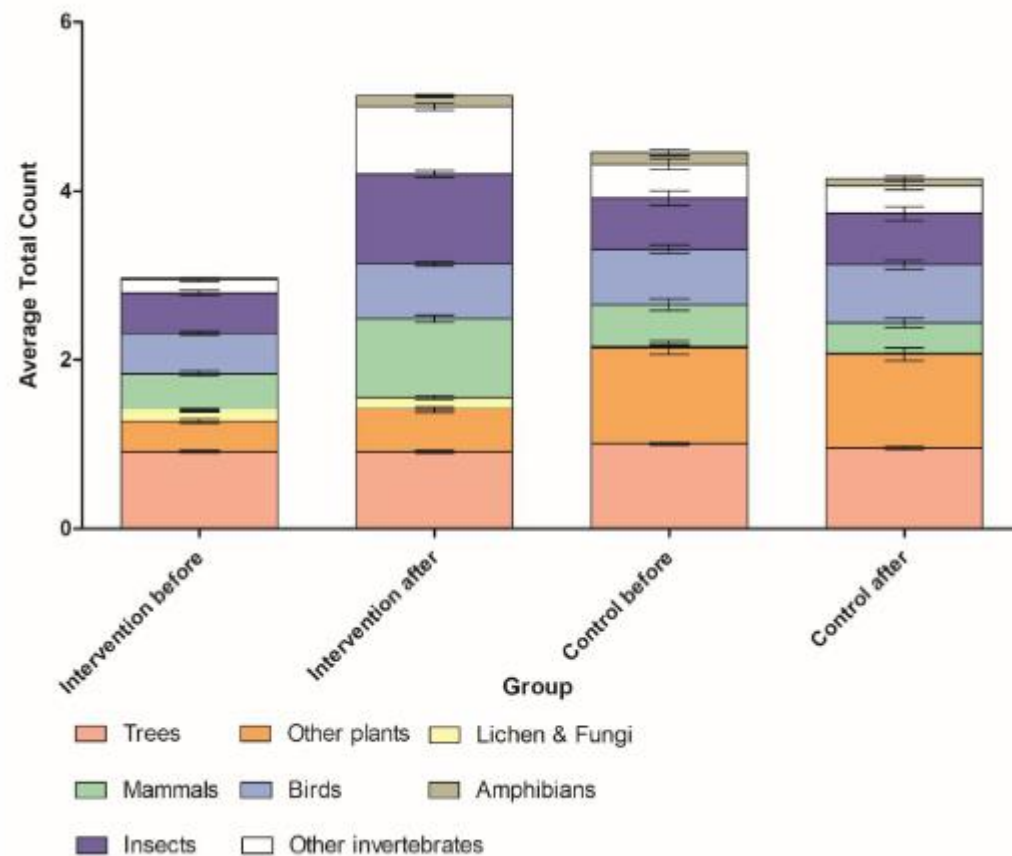


Intervention group after



Control group after





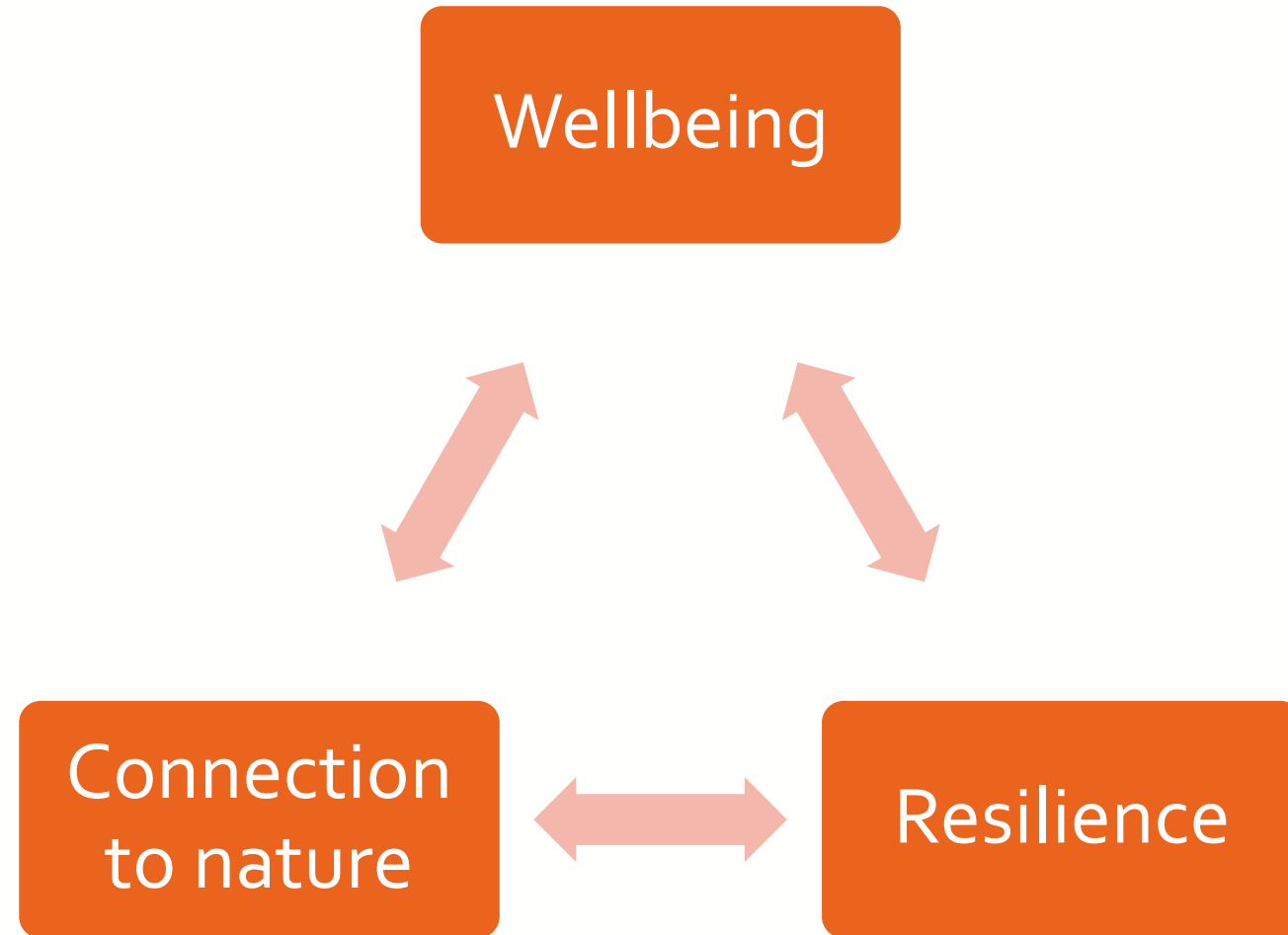


Children initially scoring lower on the wellbeing measure had improvements in wellbeing when:

- Perceived a great number of trees
- Perceived fewer insects
- Perception of insects was less reflective of actual surveyed abundance

Children initially scoring lower on the resilience measure had improvements in resilience when:

- Perceived a greater number of invertebrates over time
- Perceived a greater number of mammals over time





Spending a small amount of time engaging with nature benefits:

- Wellbeing
- Mood
- Resilience
- Connection to nature
- AND, learning

In particular, for those initially low on these measures

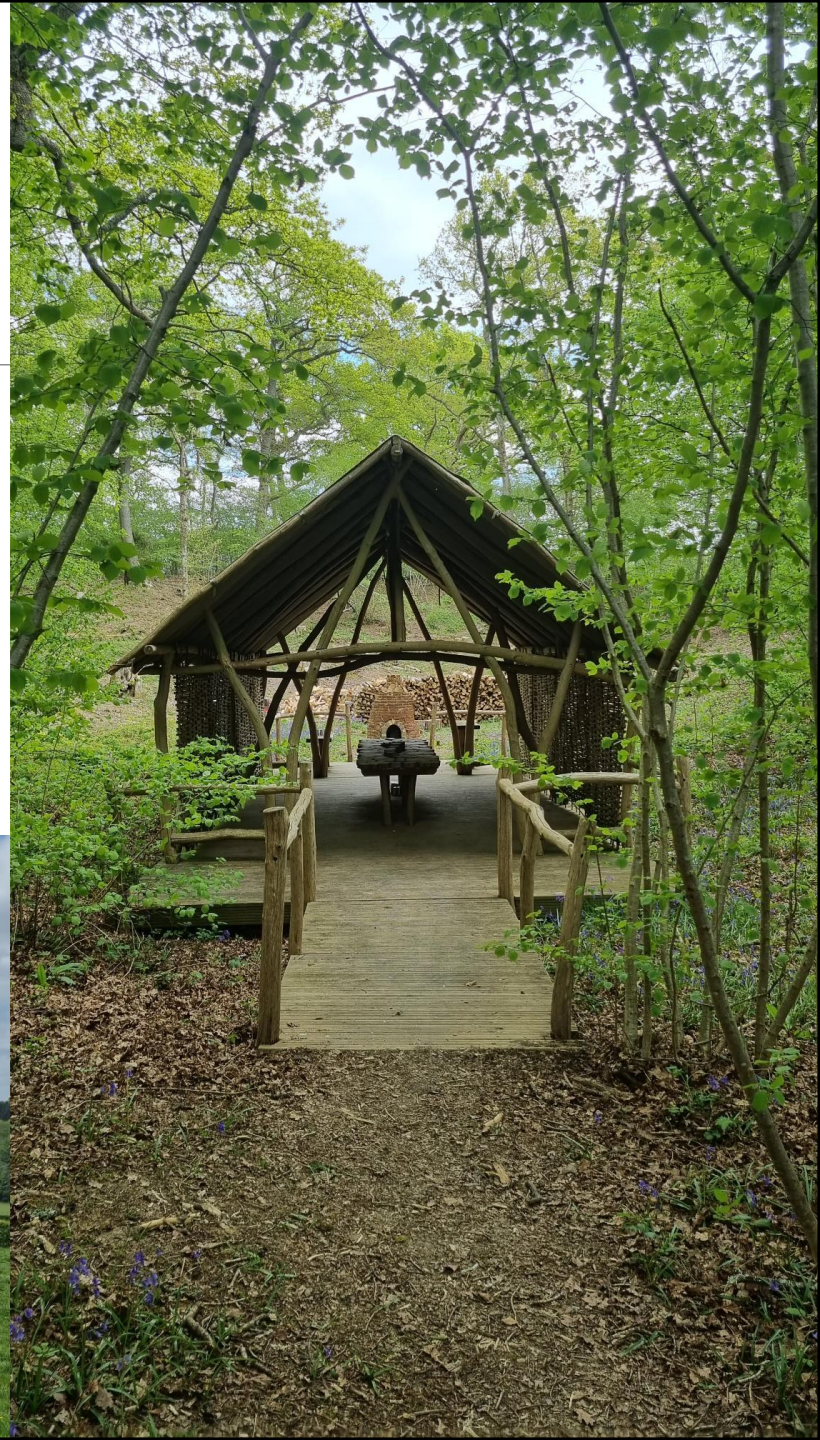
The majority of schools have outside space that can be developed for nature learning.

A vibrant, sunlit forest scene. In the foreground, a large, mature tree with a thick, textured trunk stands prominently. The ground is covered in a dense carpet of small, purple-blue flowers, likely bluebells, interspersed with green grass. A narrow, dirt path winds through the field of flowers towards the right. The background is filled with a variety of trees, their leaves in various shades of green, creating a thick canopy. The sky is visible through the branches, showing a clear blue color. The overall atmosphere is peaceful and natural.

Nature
connectedness

Collaboration with Wakehurst – Kew's Royal Botanical Garden

Exploring role of engaging in
biodiverse landscapes on
connectedness to nature,
mental health and wellbeing



Young persons nature project



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Aim

Participants

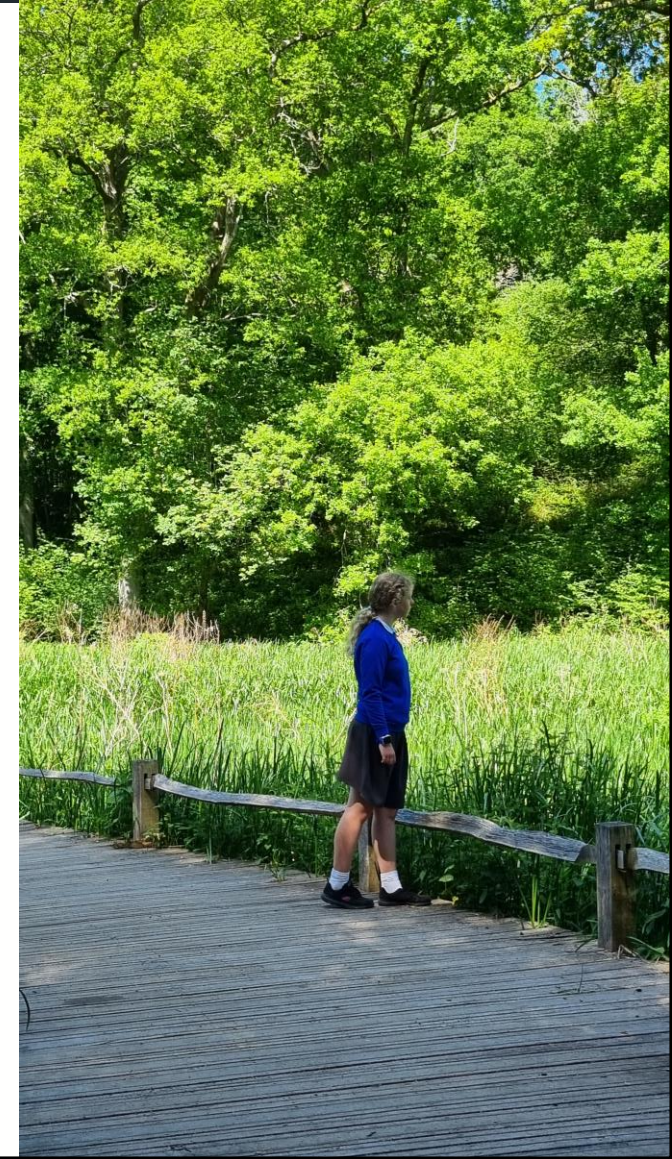
- 36 groups; 12 from years 3 & 4, from years 5&6, and from 7 & 8
- 10 schools involved across East Sussex

Assessing (on two occasions)

- Wellbeing
- Mental Health
- Connectedness to Nature

Nature-experience walk

- Takes place in 1 of three biodiverse locations



Young persons nature project: preliminary findings



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418 children with pre-visit data sets completed

- Predicting feelings of anxiety: After accounting for age, sex, and feelings of depression ...
 - higher connection to nature scores predicted higher anxiety scores
 - higher wellbeing predicted lower anxiety scores
- Accounts for 48% of the variability in the anxiety scores

Project ongoing until November 2022, so more to come!



Summary and thoughts

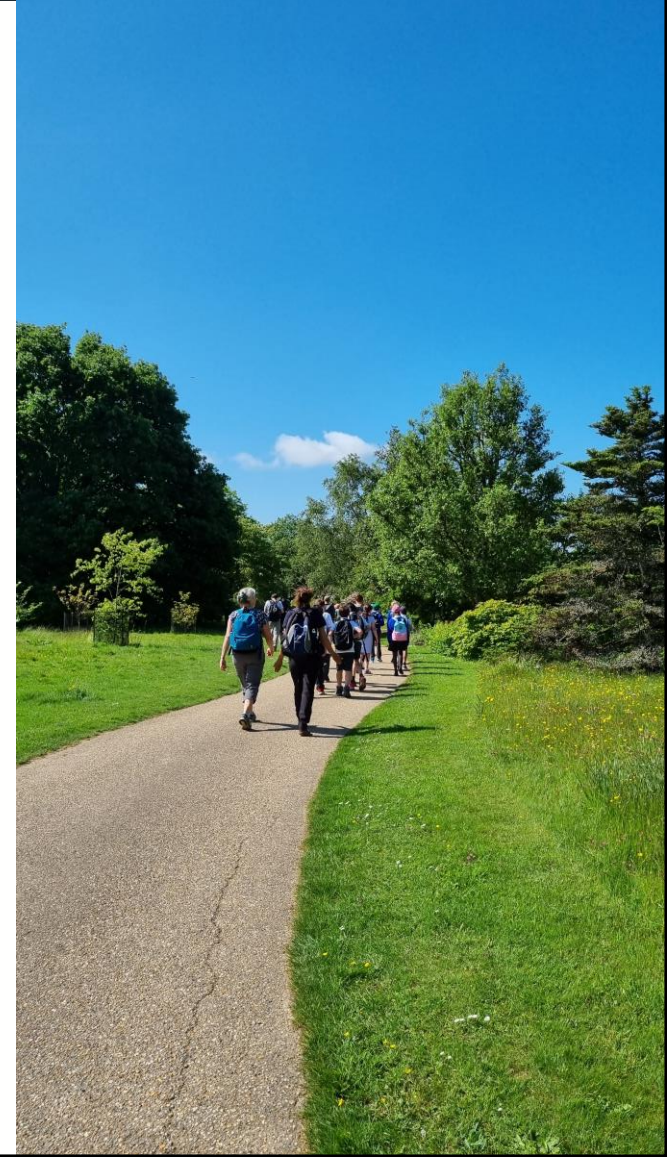


Shown links between connection to nature and mental health

- We need to get children engaging with nature!

Important to build a connection to nature

- Research shows connection to nature dips throughout adolescence
- Links to sustainability





Thank you for listening.

Please contact me with any questions or if you would like to get involved in any of our work! Dawn.Watling@rhul.ac.uk



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