



# Valuing Nature



## Enhancing wellbeing: Can engaging with nature in the school grounds improve children's mood and wellbeing

Dr Deborah Harvey & Dr Dawn Watling, Royal Holloway University of London, Egham, Surrey TW20 0EX

**Summary** Recent years have seen a decline in both biodiversity and children's mental health. Evidence supports the importance of spending time in nature for good wellbeing, but little research has been done with typically-developing children, and most of what is available is not specifically focussed on engaging in a focussed way with everyday nature.

This placement aimed to address whether getting children into their school grounds to engage with nature in a hands-on way - learning about the species present and how learning to identify, improve and maintain biodiversity - would improve children's mood (proximal effect) and subjective wellbeing (distal effect).

I recruited 8 schools, visiting them weekly for an average of 7 weeks to lead biodiversity-themed activities for year 5 and 6 classes. The children completed weekly mood surveys, before and after each session, and a subjective wellbeing assessment at the beginning and end of the project.

Preliminary results suggest that the sessions had a beneficial effect on mood.

### Method

**Participants** - 258 year 5 and 6 students from 8 schools, with varying socio-economic and ethnic backgrounds

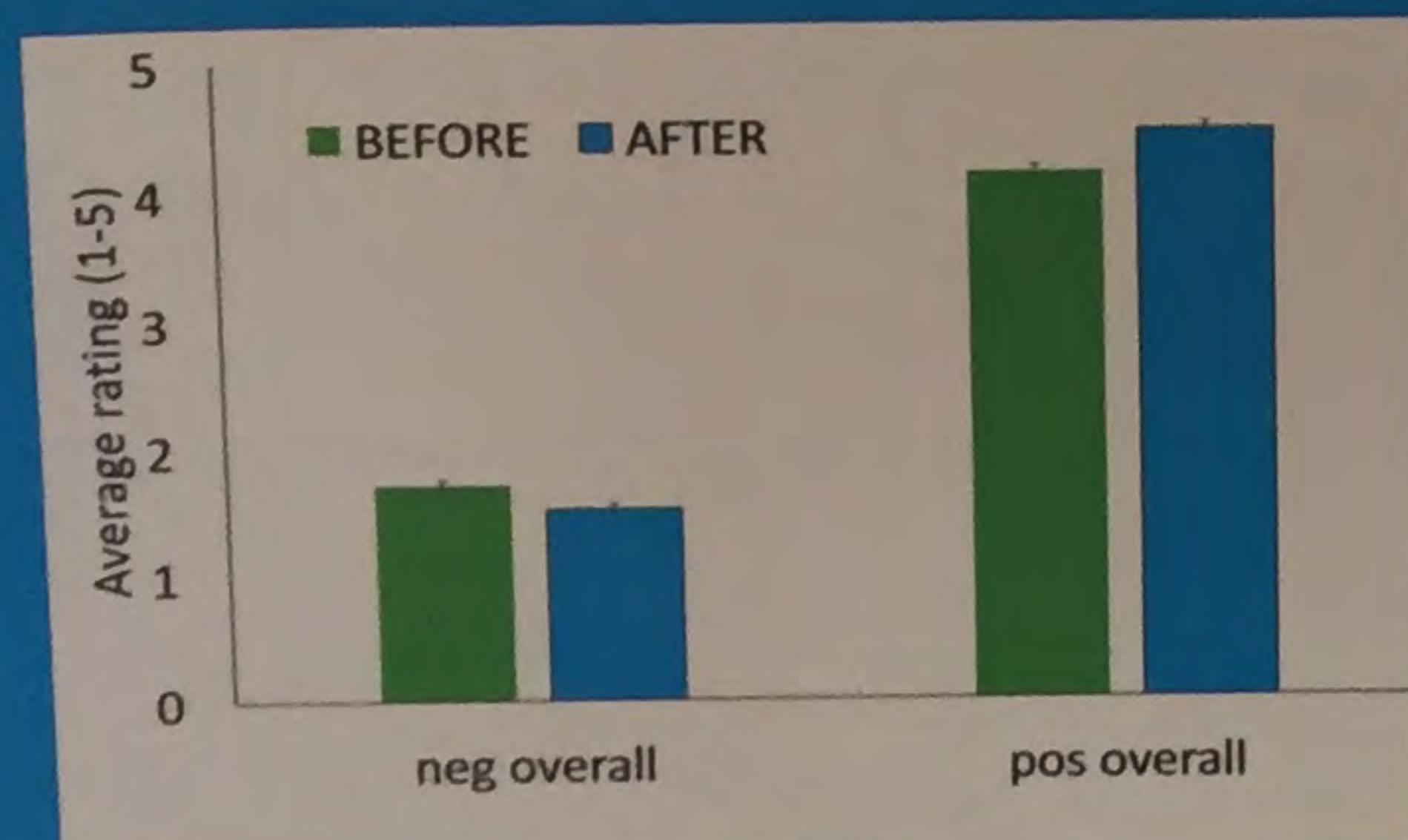
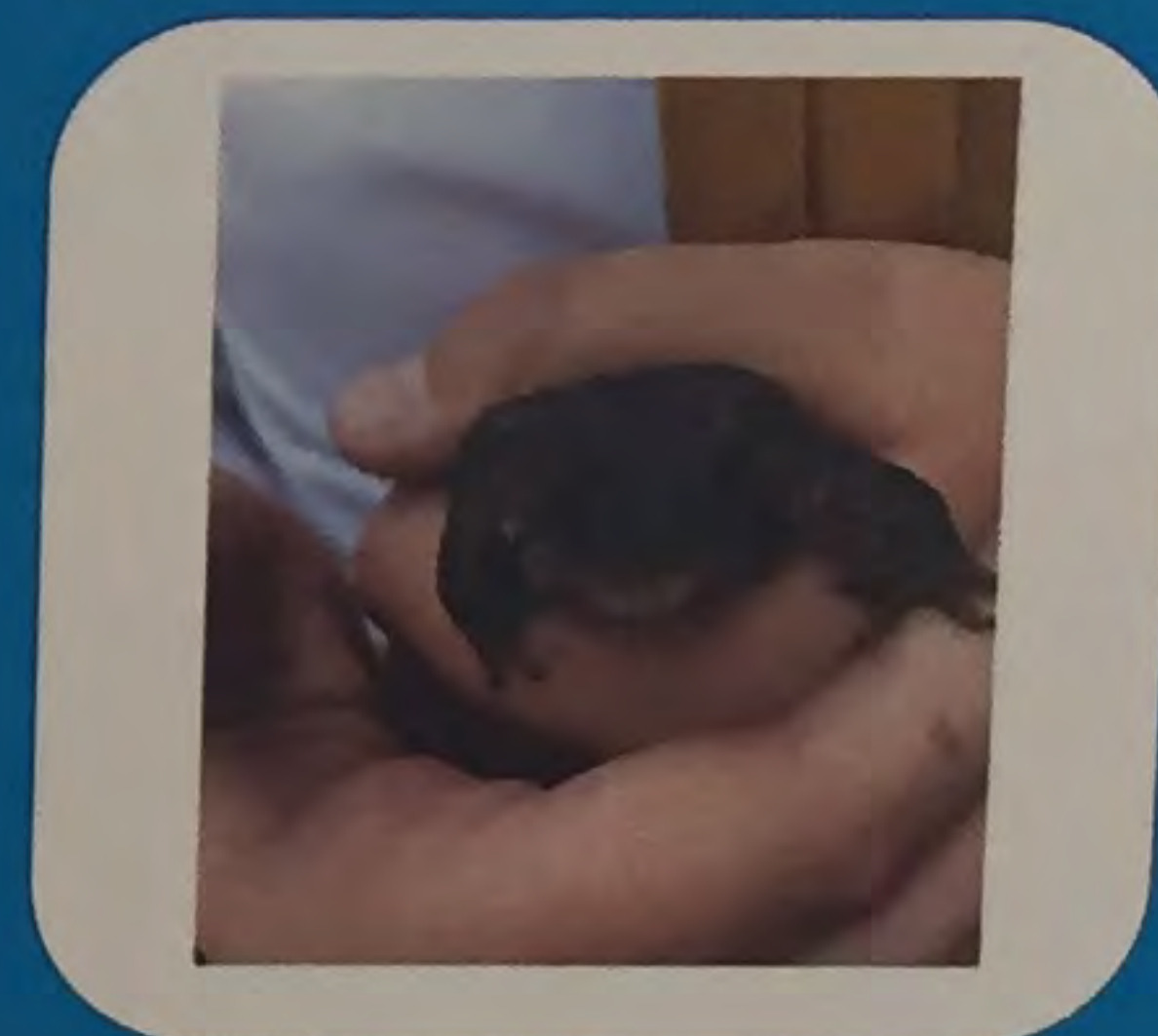
**Assessments** - Adapted version of the Positive and Negative Mood survey (15 moods, 5-point emoji rating scale) and KIDSCREEN-52 wellbeing survey (10 areas of enquiry; e.g. physical health, general mood, school)

**Biodiversity sessions** - A bespoke range of cross-taxa activities designed for this project, lasting 1 hour, for children aged 9-11 of varying ability, involving surveying and creating new habitats and/or species identification in their school grounds - e.g. making bird feeders, lightbox moth trapping. An average of 7 sessions was completed by each school.

**Procedure** - Children completed mood surveys before and after each session, and the wellbeing survey at the beginning and end of the project.

- Calm
- Cheerful
- Excited
- Friendly
- Happy
- Active
- Pleased
- Annoyed
- Bored
- Cross
- Unhappy
- Fearful
- Lonely
- Sad
- Tired

Emoticon guided mood assessment



### Results

#### Mood

Significant improvement in mood ratings across the sessions, with increase in positive and decrease in negative affect.

#### Subjective wellbeing

No significant difference before/after on any subscale or overall.

### Discussion

We found that, as we predicted, children's moods were improved by going outside and engaging with nature in a directed, hands-on way, with a significant increase in positive mood and decrease in negative mood ratings after each session. This needs to be extended to compare with a control group who do not experience the sessions.

We did not find any effect of the sessions on subjective wellbeing across the duration of the programme. We feel this is likely because the duration of the study was too short to show any difference. Furthermore, some schools failed to complete the final assessment, meaning that we may not have had sufficient statistical power to reveal an effect, and the initial scores were very high (average score 4/5), so our results may have been constrained by a ceiling effect.