

The impact of nature on children's wellbeing

Richard Sheldrake and Michael J Reiss

Engaging with nature has been found to be associated with various benefits, including benefits for physical health and self-reported well-being (e.g. Rogerson, Barton, Bragg, & Pretty, 2017). However, most of the research to date has been undertaken with adults and much less is known about the benefits to children. Here we report on a project funded by The Wildlife Trusts in which we undertook research to investigate what children felt they got from participating in outdoor activities.

Our research approach

We studied children who took part in outdoor activities with their local Wildlife Trust. Some of these activities lasted less than a day; at the other extreme, some took place over the course of several weeks. The outdoor activities involved children learning about nature while in nature, such as identifying plants and trees and considering the needs of different wildlife habitats.

In all, 451 children (mostly 8-9 years of age) in 12 areas across England took part by completing surveys before and after they participated in their activities. The research outcomes focused on: children's self-reported health and well-being measured through questionnaire items such as 'My health is good' and 'I generally feel happy'; children's connection to nature measured through items such as 'Being outdoors makes me happy' and 'Humans are part of the natural world'; and children's pro-environmental values measured through items such as 'People should protect plants and animals' and 'People should care for the environment'.

Our analysis was able to take account of the fact that children who undertook different activities sometimes had different characteristics (such as their age and gender) and also different levels of prior engagement with nature-related aspects of life and different initial levels of well-being, nature connection and pro-environmental values.



An example of a Forest School. Image: Ruth Amos

Our findings

The analysis revealed overall increases after undertaking the activities for the children's personal well-being and health, nature connection and pro-environmental values. Encouragingly, children with the lowest initial levels of well-being, nature connection and pro-environmental values were found to show the greatest increases. Boys and girls had similar changes.

These findings were affirmed through the children's reflections on their experiences, expressed through the questionnaire that they completed after undertaking the activities. The majority of children reported positive experiences and believed that they gained benefits. These included: 'I enjoyed it' (where 94% of children expressed agreement or strong agreement); 'It showed me that people should care for the environment' (90%); 'It showed me that people should protect plants and animals' (89%); 'I enjoy being outdoors more' (83%); 'It made me feel calm and relaxed' (81%); 'It made me feel refreshed and revitalised' (79%); and 'I would like to spend more time in nature in the future' (78%).

The majority of the children indicated that they gained various educational benefits. These included: 'I learned something new about the natural world' (where 90% of children

expressed agreement or strong agreement); 'I learned something new that might help my school work' (79%); 'I think I will be better at my school work' (77%); and 'I think I will enjoy my school work more' (73%). The majority of the children also believed that they gained wider personal benefits via the activity that they undertook, including that 'It showed me that I can do new things if I try' (84%) and 'I now feel more confident in myself' (79%), together with wider social benefits including that 'I get on better with my teachers' (81%), 'I get on better with other people in my class' (79%), and 'It helped me feel part of my school' (76%).

Implications

Overall, the findings indicate that experiences in and of nature can help support children's well-being and aspects of their connections to nature.

Benefits to health or well-being from nature may arise in various ways. It has been proposed that nature may help to facilitate recovery from stress and from fatigue. Concurrently, well-being is thought to follow from achieving underlying needs, such as for autonomy, competence and also relating, connecting and belonging with others. Autonomy involves someone being able to follow their intrinsic motivations towards doing activities that are personally enjoyable and rewarding. People can also undertake activities in order to help realise their self-identity and/or to help express their identity to others, in order to become who they want to be in life. Someone's well-being may link with their nature connection, given that nature connection encompasses an intrinsic motivation towards enjoying and engaging with nature (through expressions such as 'Being outdoors in nature makes me feel peaceful' and 'When I feel sad, I like to go outside and enjoy nature'), together with a perceived responsibility and sympathy towards nature.

Supporting children's well-being, and benefits to well-being arising from nature, are likely to be helped by the following:

- Further opportunities for children to engage with nature. Children's accessibility to nature can be limited by their location and by various other barriers. For some children, visiting nature through their school may provide opportunities that they would not otherwise be able to have. For children at school, learning about nature while learning within nature can help cover aspects of the National Curriculum while providing enjoyable and beneficial experiences.
- Support to foster children's motivations to engage with nature. Children will likely want to engage with nature if they think that they will enjoy it and/or if they are interested in doing so. Positive early experiences and support may be important. Explaining that nature can be beneficial to health and well-being offers an initial extrinsic motivation for someone to engage with nature, which can develop into intrinsic motivation when engaging with nature is found to be enjoyable and has increasing internalised personal meaning.
- Support to foster links between children's personal identities and nature. Supporting children's varied interests, and also recognising and supporting the diverse ways in which someone can be a 'nature person', are important. Some children may prefer

outdoor activities and adventure, for example, while others may prefer learning about plants and animals.

- Support to increase accessibility. Wider socio-cultural norms, stereotypes and/or expectations may facilitate or constrain people's motivations and/or developing personal identities. Recognising the diverse ways in which people can engage with nature, and the diverse people who do so, may help ensure that more children can see that nature is accessible for 'people like me'.

References

Rogerson, M., Barton, J., Bragg, R., & Pretty, J. (2017). *The Health and Wellbeing Impacts of Volunteering with The Wildlife Trusts*. Newark: The Wildlife Trusts.

Richard Sheldrake is a Research Associate at UCL Institute of Education and **Michael J Reiss** is Professor of Science Education at UCL Institute of Education.

Contact: r.sheldrake@ucl.ac.uk

More information: The research was undertaken between spring 2017 and spring 2019 by Dr Richard Sheldrake, Ruth Amos and Professor Michael J. Reiss, who work at University College London in its Institute of Education. Data were obtained from twelve of the 37 Wildlife Trusts in England. A full report is available at <https://www.wildlifetrusts.org/sites/default/files/2019-11/Children%20and%20Nature%20-%20UCL%20and%20The%20Wildlife%20Trusts%20Full%20Report.pdf>.