



# Outdoor learning and young people, away from the classroom

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## Abstract

Outdoor activities are highly encouraged for reasons such as improvement of health, well-being, and learning capabilities. A number of initiatives have been taken to encourage implementing outdoor activities in school programmes. Parental concerns over the safety of outdoor activities should be addressed. More resources and training are needed to encourage outdoor activities. Similarly, research is needed on how outdoor learning benefits school children over the long term. Taking factors such as gender, socioeconomic status, and minority groups should be considered in evaluating outdoor activities and education.

## Keywords

Outdoor activities, health, youth, green/blue spaces, education

## Key points

- Outdoor activities are beneficial to children
- More resources need to be invested into outdoor programmes.
- More research is needed to establish long term benefits of outdoor programmes on children.

## Background

The exposure to natural environments or green-blue spaces (parks and beaches) can help in increasing health and well-being. Specifically, outdoors exposure to green spaces, such as parks, community gardens and ponds in urban areas can encourage physical activity, social contact and reduce stress (Hartig et al. 2014; Hartig and Kahn 2016). Other potential benefits of exposure to nature, for adults, include lower risk of cardiovascular disease, obesity, diabetes, and mental distress (White et al. 2019). Exposure to nature during childhood has been associated with a lower risk of developing psychiatric disorders during

adolescence and adulthood (Engemann et al. 2019). The necessity for nature for a healthy lifestyle has been described as Vitamin G (“G” for green) (Groenewegen 2010).

The duration of exposure to nature similarly has a positive impact on well-being. This was noted by, for instance, White et al. (2019) following a survey of 20,000 people in England. The type of activity also may affect the impact such exposure has on wellbeing. For example, Coventry et al. (2019) reported that walking improved well-being. However, socially interactive and restorative

activities such as citizen science (e.g. looking for signs of pests and disease on trees, studying lichens on trees to assess local air quality on the environment) and undertaking conservation tasks (e.g. flood mitigation, scything, pruning and creating wildlife habitats) gave more meaning and purpose to participants than walking and, thus, had an even higher impact on their well-being.

There are many reviews published on the topic of nature and impact on health. The majority of the research is focused on green spaces (parks, forests) in urban areas and less research has been conducted in rural areas and community gardens (see Hartig et al. 2014). The studied populations were predominantly children, with less research conducted on the relationship between nature and health in groups related to gender, ethnicity and socioeconomic status (Hartig et al. 2014). The main health-outcomes of these reviews were amount of physical activity, social contact, changes in physiological activity (e.g. cardiovascular), emotional state (e.g. happiness) and not disease/mortality measures (Hartig et al. 2014).

Furthermore, there is a link between better health, wellbeing and education (OECD 2006). It has been found that children that are healthier and happier have better educational achievements (OECD 2006). The following brief review focuses on the benefits of outdoor learning for children and young people.

## **Benefits of outdoor learning for children and young people**

Learning outdoors involves various activities such as reading books,

outdoor sports, to fieldtrips to natural environments (e.g. forests). Marchant et al. (2019) indicate that both students and teachers noted improvements in students learning abilities, health and wellbeing in outdoor settings. In line with technological advances, children spend more time in front of screens (e.g. computers, video games, television) which has benefits, but also encourages sedentary behaviour, leading to poor health outcomes. Thus, outdoors activities amongst children and young people are encouraged. In fact, several studies link the exposure of children and young people to nature to positive physical, mental, and social and educational health outcomes (Malone and Waite 2016).

### **A. Health benefits**

Obesity is on the rise amongst school children. Sedentary lifestyles, lack of exercise, and unhealthy diets have been associated with, for instance, diabetes (Type II), as well as lower school achievements (Malone and Waite 2016). Developing short-sightedness has also been associated with reduced exposure to nature and light and higher exposure to screens amongst children (Malone and Waite 2016). Spending more time outdoors allow children to be active, reducing the risk of developing health issues and improving their performances in school. Symptoms of attention deficit disorder and anxiety could also be reduced when children are exposed to green spaces. Encouraging green school grounds provides children with more opportunities for physical activities. Promoting outdoor activities, such as gardening, similarly teach children how to grow their own food and increasing the

likelihood of them developing healthier diets that includes more fruits and vegetables (Malone and Waite 2016). Other benefits on well-being for children exposed to nature include increased self-control, discipline and inner peace (Malone and Waite 2016).

## **B. Learning benefits**

The learning benefits emanating out of a closeness to nature includes better focus and cognitive abilities (Malone and Waite 2016). Children spending more time in green spaces has been shown to be associated with the development of creativity, problem-solving and intellectual skills (Malone and Waite 2016). Lovell (2016) reported higher achievement was noted in subjects such as reading, mathematics, science and social studies in school children that were participating in learning outdoors compared to children who did not (Lovell 2016). Children that have been attending forest kindergarten/school have been shown to be linked to higher rates of physical activity, good mental health, advanced motor skills (Lovell 2016). Improvement in attendance rate has also been reported when children attended outdoor programmes (Lovell 2016). Lovell (2016) noted that children from poorer families and minority groups may have less opportunities to participate in outdoor learning programmes, leading to increased inequalities in these aspects. However, regardless of socioeconomic/minority status, when greener spaces are closer to schools and homes it has been shown to positive impact on children's well-being overall (Strife and Downy 2009).

## **C. Social and emotional skills**

Children playing in nature have been associated with them being more physically active and social, leading to them being more adaptable, healthier, happier and more willing to work in teams (Malone and Waite 2016). Other character attributes found in children exposed to nature include openness to experience, conscientiousness, extraversion, agreeableness and emotional stability (Heckman and Kautz 2013). Bento and Dias (2017) noted that it is important to encourage children to take risks by participating in outdoor activities. For example, climbing a tree would pose a challenge for children which may be interpreted as risky but that can similarly be beneficial in developing skills such as persistence, entrepreneurship, self-knowledge and problem solving (Bento and Dias 2017). Playing outdoors can also allow different aspects of a child's character to develop, which may not be possible in indoor settings (Bento and Dias 2017). For example, playing outdoors has shown to encourages cooperative behaviour which allows the development of empathy, which refers to the understanding of other people's feelings and needs (Bento and Dias 2017).

## **Some charities promoting outdoors learning**

Interest by education experts and government officials in including outdoor learning in the education curriculum has increased over the last years (ESTYN 2011). The interest in outdoors learning can also be reflected in a number of initiatives taken by various organisations, set up to encourage outdoor learning. Such

initiatives includes, for instance [Every Child Should](#) which is a UK campaign to encourage outdoor learning amongst children up to the age of 18; [Children and Nature Network](#), a US based global movement established to encourage the exposure of children to the natural environment; [Outdoor classroom day](#) another global movement encouraging outdoors learning. Furthermore, [Earth restoration service](#) encourages nature conservation and involves various schools throughout the UK; [Institute of Outdoor Learning](#) is dedicated to increasing outdoor learning across the UK; [Council for learning outside the classroom](#) is another charity for promoting outdoors learning.

All these charities/networks have been effective in campaigning for outdoors learning which expands creativity, knowledge in culture, adventure and the natural world amongst young people. Lastly, [A touch of the wild](#) is yet another charity that supports schools with outdoor activities curriculum to schools and families.

### **Limitations to outdoor learning**

Although there are a number of positive effects of outdoors learning children have been shown to be less exposed to nature, since parents are concerned over issues related to safety, crime and traffic (Fiennes et al. 2015). Some other obstacles in implementing outdoor

learning is curriculum pressure and limited teacher time, cost and access to resources (Marchant et al. 2019). Therefore, more research should to be conducted to understand whether the benefits outweigh some of these concerns related to outdoor learning. More empirical studies are similarly needed (Malone and Waite 2016). Developing common tools to measure wellbeing are also needed so that robustness of findings could be possible or to replicate studies in different settings (Malone and Waite 2016).

### **Conclusions and recommendations**

The evidence indicate that exposure to the natural environment is associated with positive health/wellbeing outcomes amongst school children, as well as other age groups (Lovell 2016). Furthermore, as outdoors learning has an array of benefits for school children, there is increased effort made to include it in educational curriculums. Training and resources are needed to promote outdoor learning. Based on various reviews there is a need for long term comparative studies in different cultural contexts assessing the benefits of outdoor learning (Malone and Waite 2016). It is of high importance to provide access of green and blue spaces to children from poor backgrounds and minority groups in order to address existing inequalities (Lovell 2016).

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