

the wonders of nature

Written by Keryn O'Neill MA, PGCertEdPsych, Knowledge Manager



Well-being of tamariki is important to us all. One of the things that supports this is time in nature. Māori have always recognised the importance of hononga ki te taiao (connection to the environment). It is vital to health and well-being. A growing body of research also shows the benefits to tamariki of time spent in nature; benefits for many areas of their lives.2

Nature is full of rich sensory experiences that are so vital for healthy brain development.³ The feel of the wind, the texture of grass, the sounds of a stream or the scent of fresh manure, provide rich stimulation of the senses that can only be found out of doors.

> The mental health of tamariki and rangatahi benefits from spending time in nature.

We are fortunate in Aotearoa to have beautiful beaches, maunga, bush and other natural areas to enjoy. Nature experiences will differ for different tamariki. They might include helping grow veges at home or in a community garden, exploring rock pools at the beach, caring for animals, family bush walks, and more. What these all share is a lot of "natural features such as water, grass or trees".4

Hauora tinana/ Physical health

When tamariki are climbing trees, jumping in the waves, or rolling down a grassy hill, not only are they having fun (important in itself!), they are also looking after their physical health.

When outside, tamariki tend to move more and play for longer than when they are inside. Researchers have also seen that children move more in green spaces than in paved areas.⁵ This helps in many ways such as improving cholesterol levels, blood pressure, and fitness.⁶ More time outside protects against vision problems too.7 Other benefits include increased physical activity and better sleep.8

- McLachlan et al., 2021
- Chawla, 2020 Kuo et al., 2019
- Weeland et al., 2019, p. 1
- Raney et al., 2019 Tremblay et al., 2015
- Lingham et al., 2020 Moore et al., 2020







Hauora hinengaro/ Mental health

The mental health of tamariki and rangatahi benefits from spending time in nature. Examples include fewer symptoms of ADHD, lower rates of depression, less anger and fewer difficulties with behaviour. 10 Simply put, enjoying nature makes tamariki feel happier.

Time spent with trees and grass and water supports children's ability to regulate their emotions and behaviour.¹¹ The more frequently tamariki experience nature, the better.12

The past two years have been particularly challenging as we deal with the Covid pandemic. Tamariki lost their planned activities and their routines, and spent far less time socializing. Many wonder about the impact of this on the mental health of our tamariki.

Tamariki who had an increased connection with nature during lockdown were less likely to have emotional or behavioural difficulties. 13 Of course, tamariki enjoy it too: for example, hearing and seeing more birds during their time in lockdown.14



Tamariki show greater curiosity in natural areas than they do in manufactured play structures, such as playarounds. 15 Nature is constantly changing, providing ongoing discoveries for tamariki.¹⁶ The open-endedness of the natural world is part of its magic. This requires tamariki to use their creativity, imagination, and problem solving. Tamariki with lots of these experiences tend to do better at school.¹⁷

Natural settings provide a wide variety of objects, encouraging tamariki to use their imagination in choosing how they will use them.¹⁸ Sticks, rocks, pinecones and shells provide endless possibilities.

> Time to play in nature as tamariki is an important way to grow the kaitiaki of the future.

The whole whanau benefits

It isn't only tamariki who gain from spending time outside and in nature. There are advantages for people of all ages. Being in the natural environment can lower stress levels and improve well-being.¹⁹ It is also linked to lower blood pressure, a stronger immune system and recovery from stress, as well as less anxiety and depression.²⁰

When we join tamariki in their nature play and exploration, everyone gains.



Growing future kaitiaki

As awareness of the need to care for te taiao (the environment) becomes more widespread, raising tamariki with an appreciation of the earth increases the chance they will look after it, now and in the future. When tamariki have had plenty of opportunities to enjoy time in nature and form an emotional connection to nature, they are more likely to take care of the environment.21 Time to play in nature as tamariki is an important way to grow the kaitiaki of the future.

Conclusions

The early years of a child's life lay the foundation for their later development. Supporting their well-being through lots of time with nature when they are young helps set them up well for their future.

Just know that the time you spend encouraging (or patiently waiting) while your tamariki are climbing rocks, collecting shells, or making a tree hut, is providing them with priceless opportunities that support their development. The extra washing afterwards, is well worth it!

Mā te huruhuru, ka rere te manu. Feathers enable the bird to take flight.

- Tillmann et al., 2018
 Chawla et al., 2014
- Chawla, 2020; Weeland et al., 2019
- 12. Razani et al., 2019 13. Friedman et al., 2022
- 14. Smith et al., 202215. Tremblay et al., 2015
- 16. Dowdell et al., 2011 17. Weeland et al., 2019
- 18. Chawla et al., 2014 19. Razani et al., 2018
- 20. Chawla et al., 2014; O'Malley, 2020 21. Chawla, 2020; Friedman et al., 2022; Kuo et al., 2019

Glossary of te reo Māori words

Kaitiaki guardian, caregiver, steward

Maunga mountain

Rangatahi youth, younger generation

Tamariki children Tamaiti child

Te taiao the environment Whānau extended family

If you enjoyed this article, you may also be interested in

Everyday opportunities: Lots of learning

https://www.brainwave.org.nz/everyday-opportunities-lots-of-learning/

Supporting tamariki with their feelings

https://brainwave.org.nz/article/supporting-tamariki-with-their-feelings/

Learning is child's play

https://brainwave.org.nz/article/learning-is-childs-play/





References

Chawla, L. (2020). Childhood nature connection and constructive hope: A review of research on connecting with nature and coping with environmental loss. *People & Nature*, 2, 619-642.

Chawla, L., Keena, K., Pevec, I., & Stanley, E. (2014). Green schoolyards as havens from stress and resources for resilience in childhood and adolescence. *Health & Place*, 28, 1-13.

Dowdell, K., Gray, T., & Malone, K. (2011). Nature and its influence on children's outdoor play. *Journal of Outdoor and Environmental Education*, 15(2), 24-35.

Friedman, S., Imrie, S., Fink, E., Gedikoglu, M., & Hughes, C. (2022). Understanding changes to children's connection to nature during the Covid-19 pandemic and implications for child well-being. *People & Nature*, 4, 155-165.

Kuo, M., Barnes, M., & Jordan, C. (2019). Do experiences with nature promote learning? Converging evidence of a cause-and-effect relationship. *Frontiers in Psychology*, 10(305).

Lingham, G., Mackey, D. A., Lucas, R., & Yazar, S. (2020). How does spending time outdoors protect against myopia? A review. British Journal of Opthamology, 104, 593-599.

McLachlan, A., Waitoki, W., Harris, P., & Jones, H. (2021). Whiti Te Rā: A guide to connecting Māori to traditional wellbeing pathways. *Journal of Indigenous Wellbeing*, 6(1), 78-97.

Moore, S. A., Faulkner, G., Rhodes, R. E., Brussoni, M., Chulak-Bozzer, T., Ferguson, L. J., . . . Tremblay, M. S. (2020). Impact of the COVID-19 virus outbreak on movement and play behaviours of Canadian children and youth: a national survey. International Journal of Behavioral Nutrition and Physical Activity, 17(85).

O'Malley, A. (2020). Nature as ally in our chronic disease epidemic. Ecopsychology, 12(3), 180-187.

Raney, M. A., Hendry, C. F., & Yee, S. A. (2019). Physical activity and social behaviours of urban children in green playgrounds. *American Journal of Preventive Medicine*, 56(4), 522-529.

Razani, N., Morshed, S., Kohn, M. A., Wells, N. M., Thompson, D., Alqassari, M., . . . Rutherford, G. W. (2018). Effect of park prescriptions with and without group visits to parks on stress reduction in low-income parents: SHINE randomized trial. *Plos One*, 13(2).

- Razani, N., Niknam, K., Wells, N. M., Thompson, D., Hills, N. K., Kennedy, G., . . . Rutherford, G. W. (2019). Clinic and park partnerships for childhood resilience: A prospective study of park prescriptions. *Health & Place, 57*, 179-185.
- Smith, M., Donnellan, N., Zhao, J., Egli, V., Ma, C., & Clark, T. (2022). Children's perceptions of their neighbourhoods during COVID-19 lockdown in Aotearoa New Zealand. Children's Geographies.
- Tillmann, S., Tobin, D., Avison, W., & Gilliland, J. (2018). Mental health benefits of interactions with nature in children and teenagers: a systematic review. *Journal of Epidemiology and Community Health*, 72(10), 958-966.
- Tremblay, M. S., Gray, C., Babcock, S., Barnes, J., Costas Bradstreet, C., Carr, D., . . . Brussoni, M. (2015). Position statement on active outdoor play. International Journal of Environmental Research and Public Health, 12, 6475-6505.
- Weeland, J., Moens, M. A., Beute, F., Assink, M., Staaks, J. P. C., & Overbeek, G. (2019). A dose of nature: two three-level meta-analyses of the beneficial effects of exposure to nature on children's self-regulation. *Journal of Environmental Psychology*, 65.

