Going outside to reach inside

Nature and animal-assisted interventions (NAAI) - A bridge to our embodied experiences

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The international master program *Outdoor Environments for Health and Well-Being* leads to a Master of Science degree specializing in Environmental psychology. The program covers topics on health-promoting outdoor environments throughout the lifespan, evidence-based health design, occupational aspects and the One Health concept. One of the courses offered is *Nature and Animal-Assisted Interventions* (MP0009), which focuses on occupations, occupational performance and values performed with natural elements and/or animals in indoor or outdoor settings, i.e. a place independent occupational performances for health promotion. The abstract and the poster in this fact sheet were presented at the course conference, the final moment at the NAAI course spring 2024.

Abstract: Emerging studies on nature and animal-assisted interventions (NAAI) are revealing a transformative potential, showing significant improvements in emotional, physical, and psychological well-being, and a notable reduction in stress levels. As mental disorders continue to rise globally, these findings offer a beacon of hope, indicating the potential for effective interventions and treatments within schools and healthcare systems.

Embodied experiences in a safe and restorative natural environment awaken the interest and curiosity in the body and may have several therapeutic effects. Embodied experiences within NAAI can be connected to our sensory experiences and perceptions of the surrounding environment. Our internal interoception experience is the bodily perception of the body's internal state, needs, and emotions. By being attentive to the needs of nature and animals through horticultural activities, animal care or forest bathing, we can reach heightened awareness of our own basic needs, thus enabling a connection to nature and our bodies. Additionally, interaction with nature and animals can benefit health through temperature, low-intensity touch, pressure, smell, sound, sight, taste and spontaneous physical activity.

NAAI allows a person to find safe spaces in the natural environment for self-rewarding activities and rest. The outdoor space may support feeling less emotionally and physically confined than indoors. As "nature belongs to all," it's tolerant

of mistakes. It does not demand results, which are used within NAAI to adapt activities, be sensitive to different needs, and create an undemanding atmosphere. This can open up curiosity and interest in new meaningful activities and increase confidence and self-esteem. Positive nature experiences, particularly through touch and temperature, influence the oxytocinergic system, which is important for reducing and coping with stress. Stress reduction and reaching the body's calm- and connection system is a foundation for effective interventions and therapies.

NAAI allows a participant to feel calm and connected and utilize the person's inherent capacity. The natural outdoor environment has a value that is hard to create within a school building or a psychiatric care unit, and NAAI creates more opportunities for a salutogenic approach. Moving from a chair inside the school, psychiatric care unit, or therapy room to the outdoor natural environment and connection with animals may increase the possibility of multiple sensory experiences. Connection to nature, guided or self-guided, through knowledge and experiences in place enables us to become aware of our bodies' inherent possibilities and learn new emotional regulation skills and coping with stress.

Keywords: Embodied experiences, interoception, mental health, nature connectedness, stress reduction, oxytocin release, therapy



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NAAI offers a pathway to stress-reduction within schools and the healthcare system. connection system which is foundational to effective interventions and therapies and reaching the body's calm- and







CONCLUSION





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Mental health disorders are increasing and therefore also the need to develop effective

interventions and treatments, within schools and healthcare systems.





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