
Spring 2024 Virtual OTD Capstone Symposium

OTD Capstone Symposia

Spring 4-10-2024

Integrating Nature-Based Occupational Therapy in Traditional Clinical Settings: Addressing Adverse Childhood Experiences

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Recommended Citation

Duong, R., & Park, K. (2024, April 10). Integrating Nature-Based Occupational Therapy in Traditional Clinical Settings: Addressing Adverse Childhood Experiences. Poster presented at the Virtual OTD Capstone Symposium, University of St Augustine for Health Sciences. Retrieved from <https://soar.usa.edu/otdcapstonesspring2024/52>

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Integrating Nature-Based Occupational Therapy in Traditional Clinical Settings: Addressing Adverse Childhood Experiences

Renee Duong OTS; Karen Park OTD, OTR/L, BCP

BACKGROUND

- Adverse childhood experiences impact various parts of the limbic system, resulting in increased emotional reactivity, memory impairment, and emotional regulation challenges (Herzog & Schmahl, 2018).
- Pediatric occupational therapy practitioners play a vital and distinguishing role in immersing children in daily activities in natural settings where they may gain experience, learn and develop (Folha & Della, 2022).
- Engaging in nature play offers neurodivergent children's opportunities for risk-taking, and developing social relationships, and increases their connection with their external environment (Bradley & Male, 2017).
- Risky play has been found to contribute to children's physical activity levels, foster independence, enhance confidence and resilience, and facilitate the development of self-regulation skills (Natsuko et al., 2022).
- The development of urbanization has led to a rise in the population of children who are born and raised in urban environments. The urban way of life is often linked to high-stress levels and a sedentary lifestyle (Sakhvidi et al., 2023).

PROBLEM

Implementing a nature-based OT program in traditional pediatric clinics is limited; therefore, this project presents an opportunity to test the feasibility of nature-friendly interventions.

PURPOSE

To develop and implement a nature-based program that brings nature into traditional clinics to enhance occupational engagement and overall health and wellness for children exposed to ACEs.

Acknowledgement: Special thanks to Lorelei Woerner OTR/L & Renee Faulkner OTR/L.

METHODS

Setting: Outpatient Pediatric Therapy Clinic

Development & Implementation:

- Structured observation were conducted during individual sessions at the clinic within the span of four weeks.
- Extensive chart review to understand patient goals and diagnosis.
- Windshield & walking survey assessment of the exterior and interior structures of the clinic.
- Pre-survey questionnaire for staff members at the clinic to acquire the knowledge and limitations of resources and tools of nature-based activities.

Outcome Measures:

- Critical Appraisal Form
- Informal Program Evaluation Response
- Data collection from progress notes and post-survey information concluded that the implementation of nature-based interventions made an impact on occupational engagement, regulation skills, and overall well-being.
- The program helped provide resources and client-centered interventions to address the lack of needs and tools of nature-based interventions.

PROGRAM DESCRIPTION

A nature- based OT program was implemented at an outpatient pediatrics clinic for six weeks. The program was offered to children who have been impacted by adverse childhood experiences.

THEORETICAL FRAMEWORK

- Occupational Adaptation (Schkade & Schultz, 1992)
- Occupational Empowerment (Fisher & Hotchkiss 2008).

General Program Goals:

- 1) Develop a 6-week program to enhance confidence, skills, and therapeutic outcomes when implementing nature-based activities.
- 2) Increase awareness and knowledge of nature-based interventions
- 3) Apply evidence-based research to support interventions the stakeholders are implementing into their practice.
- 4) To enhance functional skills, occupational engagement, and overall well-being.
- 5) To provide a nature-based guidebook for OT practitioners and students.

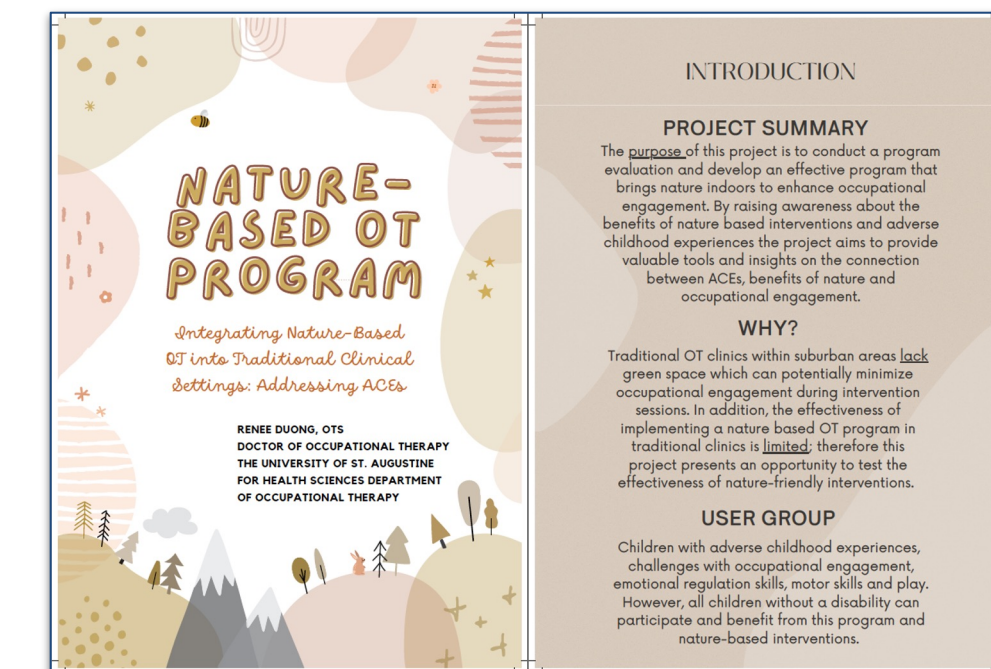
This project does not involve human subjects and does not require IRB approval.

DESIGN

- Week 1: Sensory Integration
- Week 2: Fine motor
- Week 3: Gross motor
- Week 4: ADLs
- Week 5: Handwriting
- Week 6: Feeding

DELIVERABLES

- User-friendly Nature-Based OT curriculum guidebook for occupational therapists.
- An introductory video on the benefits of nature and Integrative Wellness Therapy collaboration.



Scan here to interact with the guidebook:



FUTURE IMPLICATIONS

- Develop an interdisciplinary team approach to address complex client needs and optimize treatment outcomes since the setting provides OT, speech, and PT services.
- Nature-based home program for parents and caregivers to improve client outcomes and quality of life for children impacted by ACEs.
- Continue to advocate for non-traditional OT practices.
- The program can be continued and adapted to enhance program outcomes and effectiveness.

REFERENCES

- Bradley, K., & Male, D. (2017). 'Forest school is muddy, and I like it': Perspectives of young children with autism spectrum disorders, their parents, and educational professionals. *Educational & Child Psychology*, 34(2), 80–96.
- Fisher, G., & Hotchkiss, A. (2009). A model of occupational empowerment for marginalized populations in community environments. *Occupational Therapy in Health Care: A Journal of Contemporary Practice*. 22(1), 55-71. https://doi.org/10.1080/1003v22n01_05
- Folha, D. R. S. C., & Della Barba, P. C. S. (2020). Knowledge production on occupational therapy and childhood occupations: a literature review. *Cadernos Brasileiros de Terapia Ocupacional*. 28(1), 227-245. <https://doi.org/10.4322/2526-8910.ctoAR1758>
- Herzog, J. I., & Schmahl, C. (2018). Adverse Childhood Experiences and the Consequences on Neurobiological, Psychosocial, and Somatic Conditions Across the Lifespan. *Frontiers in psychiatry*, 9, 420. <https://doi.org/10.3389/fpsy.2018.00420>
- Imai, N., Shikano, A., Kidokoro, T., & Noi, S. (2022). Risky Play and Social Behaviors among Japanese Preschoolers: Direct Observation Method. *International Journal of Environmental Research and Public Health*, 19(13), Retrieved from <http://dx.doi.org/10.3390/ijerph19137889>
- Schkade, J. K., & Schultz, S. (1992). Occupational adaptation: toward a holistic approach for contemporary practice, Part 1. *The American journal of occupational therapy : official publication of the American Occupational Therapy Association*, 46(9), 829–837. <https://doi.org/10.5014/ajot.46.9.829>
- Zare Sakhvidi, M. J., Mehrparvar, A. H., Zare Sakhvidi, F., & Dadvand, P. (2023). Greenspace and health, wellbeing, physical activity, and development in children and adolescents: An overview of the systematic reviews. *Current Opinion in Environmental Science & Health*, 32. <https://doi.org/10.1016/j.coesh.2023.100445>