

Title: The Effects of Outdoor School Programmes on the Resiliency of Five Year Olds

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Summary

Our study was conducted to understand how Outdoor School (OSS) programmes support the development of five-year-old children, particularly in the aspects of resilience. Engaging in nature hikes and outdoor activities exposes young children to authentic challenges, such as changing weather conditions, uneven terrain, encountering wildlife and natural obstacles. These experiences provide rich opportunities that engage children in problem-solving, as well as safe decision-making skills in real-world settings.

Understanding Mastery Motivation in Young Children

Mastery motivation refers to a child's inner drive and determination to engage with tasks independently, even when they are moderately challenging. This focus on effort rather than outcome is a key building block of resilience, and helps children develop confidence, persistence, and problem-solving skills that carry forward into future learning experiences.

About the Study

Our study recruited 294 children and 42 teachers. We used a mixed-methods approach, combining questionnaires completed by teachers, and observations with child-friendly interviews conducted with a subset of 12 children. The questionnaire instrument used, Dimensions of Mastery Questionnaire (DMQ-18), invites teachers to record their observations of the children before and after their participation in the OSS programme. Their recordings are then analyzed across five scales including persistence, engagement, and affective responses towards moderately challenging tasks. The children's interview narratives and drawings supported a more in-depth understanding and recount from children of their experiences, and allowed the study to explore how children approached challenges, persisted in tasks, and reflected on their learning.

Research Findings

OSS programmes provide young children with opportunities to face real-world challenges in authentic learning settings, thereby effectively fostering essential life skills that extend beyond the classroom. Our results showed children demonstrated improvements in Cognitive Object Persistence, Gross Motor Persistence, Mastery Pleasure, and General Competence, while Negative Reactions to Challenges remained stable. This refers to a growth in the children's abilities to persist with tasks, take on challenges, and approach problems with increased competence. Our findings after the OSS programme participation also showed an increase in the children's willingness to maintain focus and determination on tasks at hand, and a greater expression of confidence and joy towards mastering new skills.

In addition, insights from the drawings and interviews with the children revealed that participants formed meaningful connections with their outdoor experiences. Through their narratives, children captured how they had explored new skills, learned in nature, and developed personal strategies for managing moderately challenging tasks. Navigating uneven terrain in nature and adapting to unfamiliar outdoor environments were some of the challenges identified by the children, and the children shared their approach and determination to navigate through these obstacles and proudly expressed a sense of satisfaction towards their successes. Overall, OSS nature-based outdoor experiences play key roles in cultivating confidence, persistence and resilience, supporting children in both their learning and growth.

Why It Matters

In Singapore, learning outdoors supports nation-wide initiatives such as ECDA's *The Outdoors - Our Classroom, Our Playground*, offering children meaningful experiences in natural environments. The insights from the study highlight the value of nature-based learning in supporting children to develop resilience, problem-solving and emotional regulation skills, laying the foundation for holistic growth and lifelong resilience. supporting children in their development of resilience, problem-solving and emotional regulation skills.

To find out more, you may [email](#) us.

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