

Nature-based early childhood education and children's social, emotional and cognitive development: A mixed-methods systematic review ^[1]

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AVAILABILITY

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Abstract

This systematic review synthesised evidence on associations between nature-based early childhood education (ECE) and children's social, emotional, and cognitive development. A search of nine databases was concluded in August 2020. Studies were eligible if: (a) children (2–7 years) attended ECE, (b) ECE integrated nature, and (c) assessed child-level outcomes. Two reviewers independently screened full-text articles and assessed study quality. Synthesis included effect direction, thematic analysis, and results-based convergent synthesis. One thousand three hundred and seventy full-text articles were screened, and 36 (26 quantitative; 9 qualitative; 1 mixed-methods) studies were eligible. Quantitative outcomes were cognitive (n = 11), social and emotional (n = 13), nature connectedness (n = 9), and play (n = 10). Studies included controlled (n = 6)/uncontrolled (n = 6) before-after, and cross-sectional (n = 15) designs. Based on very low certainty of the evidence, there were positive associations between nature-based ECE and self-regulation, social skills, social and emotional development, nature relatedness, awareness of nature, and play interaction. Inconsistent associations were found for attention, attachment, initiative, environmentally responsible behaviour, and play disruption/disconnection. Qualitative studies (n = 10) noted that nature-based ECE afforded opportunities for play, socialising, and creativity. Nature-based ECE may improve some childhood development outcomes, however, high-quality experimental designs describing the dose and quality of nature are needed to explore the hypothesised pathways connecting nature-based ECE to childhood development (Systematic Review Registration: CRD42019152582).

Region: International ^[4]

Tags: early childhood education ^[5]

nature-based ^[6]

children's development ^[7]

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