Being, belonging and becoming through PLAY: an affective neuroscience perspective of early childhood social and emotional development

Abstract

This study explores how affective neuroscience can inform early childhood education by investigating the emotional and developmental significance of play. Building on Jaak Panksepp's (1998) theory of primary emotional systems—particularly the PLAY circuit—the research distinguishes between spontaneous child-led play and structured, teacher-guided instruction, addressing how their conflation creates uncertainty in pedagogical practice. The study introduces the PLAY–RfE model (Reading for Emotion; Lian, 2017, 2024), which integrates unstructured play with narrative-based emotional reflection. Using a quasi-experimental, mixed-methods design, it tracks change in children's engagement, emotional regulation, and social understanding across a 20-week period. Findings will inform neuroscience-aligned practices within the EYLF (AGDE, 2022), supporting emotionally attuned, developmentally appropriate education.