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Can visual cues help children's understanding of support

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Abstract

Within the study of children's knowledge of physics, there is considerable disagreement as to when children come to understand support and balance; while some research suggests that children as young as one year old understand support, other studies show that preschool aged children struggle with the same task. The current study builds on prior work through a modified block task where children aged 2-7 years old overtly predict if a block will fall or not fall off of a platform. Accuracy improved reliably with age, but contrary to predictions, symmetry, perceptual cues, and placement did not significantly affect performance. Children performed above chance yet well below ceiling throughout early childhood, even with familiar block-like stimuli. These findings suggest gradual developmental improvement in reasoning about support and challenge claims of early mature physical understanding inferred from infant looking-time studies.