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# Altercentric interference vs. bias in 7.5 month-old infants: a pupillometry study

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## Abstract

In a preregistered pupillometry study we tested whether a perspective cue can both increase and decrease 7.5-month-olds' surprise. In the congruent condition infants saw an agent watching a ball roll behind an occluder. After the agent left, infants saw the ball rolling outside the stage (an informational asymmetry). In the baseline the agent watched the final event as well. At outcome, the occluder was lowered to reveal empty space: congruent with reality, as the ball is out. In the incongruent condition the outcome is identical, but the ball should have been there. Informational asymmetry was manipulated again. We found overall larger pupil dilation in the incongruent condition, indicating infants' remembering the ball's existence. As hypothesised, we could increase their surprise in the congruent condition by having the agent last see the ball inside, but found mixed results when trying to use the perspective cue to also decrease infants' surprise.